OAKLAND UNIVERSITY

2009-2011
GRADUATE PROGRAM CATALOG

September 2009

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The **Graduate Program Catalog** is the listing of academic programs, degree requirements, policies, and related information. It is available online and in print. The online **Graduate Course Description Catalog** includes course listings and descriptions. Together, they comprise the Oakland University Graduate Catalog. All data in this Oakland University Graduate Catalog reflects information as it was available at the publication date. Changes and updates to the Graduate Catalog made after the publication date are posted on the Graduate Study and Lifelong Learning Web site at www.oakland.edu/gradstudy.

It is the responsibility of each student to be aware of and understand university regulations as published.

www.oakland.edu/gradstudy

Oakland University is a legally autonomous state institution of higher learning. Legislation creating Oakland University as an independent institution, separate from Michigan State University, was established under Act No. 35, Public Acts of 1970. The university is governed by an eight-member board of trustees appointed by the governor with the advice and consent of the Michigan Senate.

Oakland University, as an equal opportunity institution, is committed to compliance with all federal and state laws prohibiting discrimination. Oakland University prohibits discrimination on the basis of race, sex, color, religion, national origin or ancestry, age, height, weight, familial status, marital status, disability, creed, sexual orientation, veteran status and other prohibited factors in employment, admissions, educational programs and activities. Inquiries or complaints should be addressed to: Director, Office of University Diversity and Compliance, 203 Wilson Hall, 2200 North Squirrel Road, Oakland University, Rochester, Michigan 48309-4401.

Oakland University is accredited by the North Central Association of Colleges and Schools Commission on Institutions of Higher Education (30 N. LaSalle St., Suite 2400, Chicago, Illinois 60602-2504, 800-621-7440).

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■ OAKLAND UNIVERSITY

Oakland University is a doctoral/research public university of more than 18,000 students that offers a diverse set of academic programs, from baccalaureate to doctoral levels. In all its activities, Oakland University strives to exemplify educational leadership. Anchored by a strong liberal arts program, the university is organized into the College of Arts and Sciences, Schools of Business Administration, Education and Human Services, Engineering and Computer Science, Health Sciences and Nursing, The Honors College, and Graduate Study and Lifelong Learning. All academic programs of the university are accredited by the North Central Association of Colleges and Schools.

The university's full-time faculty, which now numbers more than 460, has a distinguished record of research and scholarship. Faculty members have won some of the most prestigious awards made by government agencies and private foundations. External funding support for academic, student, and university projects totals $7.3 million. The Fastening and Joining Research Institute, a collaboration between Oakland University, the U.S. Congress and the National Science Foundation, is the only facility of its kind in the world. Researchers explore the fundamental and applied research to develop and disseminate new technology for the fastening and joining of metals, composites and polymers. Other noted research centers include the Center for Robotics and Advanced Automation, the Pawley Learning Institute and the Eye Research Institute, among others. The university takes pride in the many scholarly books and articles written by its faculty and in their contributions to pedagogy and the creative arts. Wherever possible, students are involved in research projects; the results of research and scholarship are integrated into related courses of instruction.

Resources available to support scholarly activities of students and faculty include both library and computing facilities. The central university library is the Kresge Library, which has additional specialized collections and services in performing arts and education. Computing resources include a distributed environment on a variety of operating system platforms, connected across campus by a high-speed fiber optic network.

Complementing its academic programs, Oakland University collaborates actively with business and industry to foster economic development in southeastern Michigan and provide internships and research opportunities for students and faculty. The university provides major public service offerings with emphasis on the professional performing arts. Meadow Brook Hall, former home of the university's benefactors, now serves as a conference and cultural center. Oakland University Art Gallery houses the university's permanent collection of African art and presents a variety of special exhibits annually. Meadow Brook Theatre, a professional theatre, is located in Wilson Hall. Meadow Brook Music Festival brings a summer program of world-class entertainment to campus.

Oakland was created in 1957 when the late Alfred G. and Matilda R. Wilson donated their 1,500-acre estate and $2 million to Michigan State University to begin a new college in Oakland County. Named Michigan State University-Oakland, the new campus enrolled its first students in 1959. In 1963, its name was changed to Oakland University and in 1970 the Michigan Legislature recognized the maturity and stature of the university by granting it autonomy. The governor appointed Oakland University's first board of trustees in 1970.

From its beginning, the university has emphasized academic quality, concentrating on providing a dynamic, student-focused learning environment with integration of liberal and professional studies by a faculty of dedicated scholar-teachers.

Located in suburban Oakland County, Michigan, Oakland University is easily accessible to millions of Detroit metropolitan area residents. The natural beauty of the campus, much of it still wooded and undeveloped, is enhanced by comprehensive recreational facilities and modern buildings that house the university's many academic and public service programs as well as some 2,000 residential students. Adjacent to the campus is the Oakland Technology Park, a research park where private-sector companies work hand-in-hand with higher education. Student research and internship opportunities are also enhanced by the proximity of many Fortune 500 companies. The newly launched OU INCubator manages and operates the SmartZone Business incubation program, creating jobs, stimulating the economy, and playing an integral role in technology transfers and commercialization, leading to a better future for the state of Michigan.

■ Role and Mission

The following role and mission statement for the university was adopted by the Oakland University Board of Trustees on July 21, 1982. It emphasizes four essential ingredients for the direction of the university: excellent and relevant instruction; high quality basic and applied research and scholarship; responsive and effective public and community service; and a comprehensive schedule of student development activities.

As a state-supported institution of higher education, Oakland University has a three-fold mission. It offers instructional programs of high quality that lead to degrees at the baccalaureate, master's and doctoral levels, as well as programs in continuing education; it advances knowledge and promotes the arts through research, scholarship, and creative activity; and it renders significant public service. In all its activities, the university strives to exemplify educational leadership.

Instruction

Oakland University provides rigorous educational programs. A strong core of liberal arts is the basis on which undergraduates develop the skills, knowledge and attitudes essential for successful living and active, concerned citizenship. A variety of majors and specialized curricula prepare students for post-baccalaureate education, professional schools, or careers directly after graduation. Each program provides a variety of courses and curricular experiences to ensure an enriched life along with superior career preparation or enhancement.

The university offers master's programs that meet demonstrable needs of Michigan residents and that maintain excellence. Doctoral programs are offered which are innovative and serve needs that are not adequately met elsewhere in the state.

Offerings in continuing education provide Michigan residents with high quality coursework for professional development and personal enrichment.

Oakland University is selective in its admission standards and seeks both traditional and nontraditional students, ensuring equal opportunity to all who can profit from its offerings. While serving principally Michigan residents, it welcomes qualified applicants from other states and countries. A special effort is made to locate and admit disadvantaged students with strong potential for academic success and to provide the support conducive to the realization of that potential. The faculty and staff cooperate with nearby community colleges to ensure that their students who seek to transfer to Oakland University are well prepared for work at a senior college. In recruiting and admitting students, enrollments are not permitted to exceed numbers consistent with preserving the high quality of instruction.

The university strives to remain current and relevant through an adequate program of continuing faculty development and the exploration of innovative schedules, methods, and curricular design in keeping with the various needs of its diverse students, many of whom commute, work or are older than the traditional college-age student.

Oakland University offers, and will continue to offer, only those programs for which adequate resources and well-prepared faculty are available and for which a demonstrable need is expressed through the attraction of qualified students.

Research and scholarship

Oakland University assumes an obligation to advance knowledge through the research and scholarship of its faculty and students. The university's research and scholarship mission takes expression in a variety of forms ranging from basic studies on the nature of things to applied research directed at particular problems to contributions to literature and the arts. Within its means, the university provides internal financial support for research and scholarship. Simultaneously, it pursues with vigor external sources of support. Research institutes, financed primarily by outside grants, make an important contribution to this mission.

In addition to their intrinsic value, research and scholarship reinforce the instructional mission of the university. Wherever possible, students are involved in research projects, and the results of research and scholarship are integrated into related courses of instruction.

In carrying out its research and scholarship mission the university seeks especially to be responsive to the needs of Michigan, particularly of the populous southeastern sector. Application of research and scholarship to problems and concerns of the state's business and industry and to its scientific, educational, governmental and health and human-service agencies serves also to reinforce the public service role of the university.

Public service

Oakland University serves its constituents through a philosophy and program of public service that is consistent with its instructional and research missions. It cooperates with businesses, governmental units, community groups, and other organizations on research, technical development and problem-solving enterprises in an attempt to apply the expertise of the university to the issues of society in general or the region in particular so as to further enhance the quality of life in the service areas of the university. It attempts to maintain the degree of flexibility necessary to respond with innovative instruction, research and other service to rapidly changing needs. It makes its facilities available for a multitude of activities of agencies and community groups whose purposes are compatible with the mission of the university. It provides access to its programs and campus, insofar as is consistent with the role and scope of the institution, for the recreational and physical enrichment of area citizens. Cultural enrichment is provided for the community through the Meadow Brook enterprises, on- and off-campus presentations by faculty and students, and other campus events. The university aims to provide a model of socially responsible decision-making and ethical institutional behavior, recognizing that institutional strength derives from an effective interaction with the institution's diverse external environs.

Student development

In direct support of its academic mission, Oakland University provides basic services and experiences which integrate cognitive learning with the personal growth of the individual student in the emotional, social, physical, cultural, ethical and interpersonal domains. In so doing, the university seeks to facilitate the development of those personal skills which will contribute to informed decision making and productive citizenship. This objective is accomplished through a variety of student enterprises, including campus organizations, athletics and other sponsored activities and events.

Key to its achievement is the provision of a governance system in which students play a meaningful role in the institutional decision-making processes.

The university takes particular cognizance of its considerable enrollment of older and nontraditional students and provides advising, counseling and other services of special value to such students in effecting career changes and developing additional personal competencies. Through the maintenance of complementary academic and extracurricular environments, Oakland University assists students in the realization that life is a continuum of growth, change and adaptation and provides them with the skills essential to the achievement of their fullest potential.

■ University Information

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Julie H. Voelck, Dean of Kresge Library
Robert Folberg, Dean of the Oakland University William Beaumont School of Medicine

Graduate Council for 2009-2010

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Donna K. Free, School of Business Administration
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Open Position, School of Engineering and Computer Science
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* Susan M. Awbrey, Senior Associate Provost, chair
* Claire K. Rammel, Executive Director of Graduate Study and Lifelong Learning
* Mildred Merz, Kresge Library
**ex officio*

Oakland University
Rochester, MI 48309-4401
(248) 370-2100
http://www.oakland.edu

Academic Units

Dean of the College of Arts and Sciences: (248) 370-2140
Dean of the School of Business Administration: (248) 370-2957
Dean of the School of Engineering and Computer Science: (248) 370-2217
Dean of the School of Education and Human Services: (248) 370-3050
Dean of the School of Health Sciences: (248) 370-3562
Dean of the School of Nursing: (248) 370-4081

Admissions Information

Graduate Admissions: (248) 370-3167
Undergraduate Admissions: (248) 370-3360

Service Offices

Academic Skills Center: (248) 370-4215
Alumni Relations: (248) 364-6130 or toll free (877) 445-ALUM
Athletics: (248) 370-3190
Book store: (248) 370-2404
Campus Recreation: (248) 370-4732
Career Services and Graduate Placement: (248) 370-3250
Cashier's Office: (248) 370-4396
Catalogs (Graduate): (248) 370-3167
(Undergraduate): (248) 370-3360
Center for Multicultural Initiatives: (248) 370-4404
Cooley Law School: (248) 751-7800
Counseling (Psychological): (248) 370-3465
Credit Union:
Credit Union One: (248) 475-2607
MSU Federal Credit Union: (248) 364-4708 or toll free (800) 766-6828
Dean of Students: (248) 370-3352
Disability Support Services: (248) 370-3266 (voice) or (248) 370-3268 (TDD)
Financial Aid: (248) 370-2550
Golf Course: (248) 364-6300
Graduate Assistantships: (248) 370-2962
Graduate Study and Lifelong Learning: (248) 370-4156
Grants, Contracts and Sponsored Research: (248) 370-2552
Health Center: (248) 370-2341
ID Card Office: (248) 370-2291
International Students: (248) 370-3358
Library: (248) 370-2471
Lowry Early Childhood Center: (248) 370-4100
Meadow Brook Hall: (248) 364-6200
Meadow Brook Theatre: (248) 377-3300
Police: (248) 370-3331
Registration: (248) 370-3450
Residency: (248) 370-3455
Schedule of Classes: (248) 370-3450
SEHS Educational Resource Lab: (248) 370-4230
Student Accounts: (248) 370-2550
Student Employment: (248) 370-2550
Student Housing: (248) 370-3570
Teacher Education Advising and Teacher Certification: (248) 370-4182
Transcripts and Academic Reports: (248) 370-3452
University Diversity and Compliance: (248) 370-3496

Academic Calendar 2009-2010

Fall 2009

New Student Convocation	Wednesday	September 2
Classes begin	7:30 a.m., Thursday	September 3
Labor Day holiday	Monday	September 7
Thanksgiving Recess begins	10:00 p.m., Wednesday	November 25
Classes resume	7:30 a.m., Monday	November 30
Classes end	10:00 p.m., Saturday	December 5
Study period	Sunday	December 6
Exams begin	7:30 a.m., Monday	December 7
Exams end	10:00 p.m., Saturday	December 12
Fall Commencement	Saturday	December 12
Grades submission deadline	5:00 p.m. Monday	December 14

Winter 2010

Classes begin	7:30 a.m., Tuesday	January 5
Martin Luther King, Jr. Day	Monday (Classes suspended)	January 18
Winter Recess begins	10:00 p.m., Saturday	February 20
Classes resume	7:30 a.m., Monday	March 1
Classes end	10:00 p.m., Monday	April 19
Study period	Tuesday	April 20
Exams begin	7:30 a.m., Wednesday	April 21
Exams end	10:00 p.m., Tuesday	April 27
Grades submission deadline	5:00 p.m., Thursday	April 29
Spring Commencement	Saturday	May 1

Summer Full Session 2010

Classes begin	7:30 a.m., Monday	May 3
Memorial Day holiday	Monday	May 31
Summer recess (full session)	Monday-Saturday	June 21-26
Classes resume	7:30 a.m., Monday	June 28
Classes end	10:00 p.m., Saturday	August 14
Final exams	Monday-Saturday	August 16-21
Grades submission deadline	5:00 p.m., Monday	August 23

Summer Session I 2010

Classes begin	7:30 a.m., Monday	May 3
Memorial Day holiday	Monday	May 31
Classes resume	7:30 a.m., Tuesday	June 1
Classes end	10:00 p.m., Saturday	June 19
Final exams	Monday-Wednesday	June 21-23
Grades submission deadline	5:00 p.m., Friday	June 25

Summer Session II 2010

Classes begin	Monday June 28	
Independence Day holiday	Monday	July 5
Classes resume	7:30 a.m., Tuesday	July 6
Classes end	10:00 p.m., Saturday	August 14
Final exams	Monday-Wednesday	August 16-18
Grades submission deadline	5:00 p.m., Friday	August 20

Note: Consult the Registrar's Web site for the 2010-2011 Academic Calendar.

Admission Deadlines

This is a general guide for submission of application material. Some programs have earlier closing dates for admission. Applicants should check the specific admission deadlines and requirements for the program they wish to enter at www.oakland.edu/grad. If no dates are given, the following schedule will apply.

Term for which admission is requested:

	Regular Applicants	Special Graduate Applicants	International Applicants
Fall Semester	August 1	August 15	May 1
Winter Semester	December 1	December 10	September 1
Summer I	April 1	April 10	
Summer II	June 1	June 10	

Prospective students whose applications for program admission are incomplete on the designated date may be considered for special graduate admission if the program area permits admission in such status. Applications postmarked after the date designated for receipt of special graduate admission requests may be processed in time for late registration if the applicants so desire.

Applicants for special graduate status must submit an application for admission and a transcript that posts evidence of a bachelor's/master's degree. Admitted applicants to graduate programs who do not enroll for the term in which they were admitted must contact Graduate Admissions, 160 North Foundation Hall, (248) 370-3167. If done within five terms of the date of original admission term, the student's application will be updated to a new term of admission. Thereafter, a new application and documentation are required. Inactive application files are destroyed after five terms.

Application for Degree Deadlines*

Students must submit an online Application for Degree for the term in which they will complete degree requirements. A graduation audit is conducted during that semester to verify that the student has met all academic requirements for the degree. If students are completing a thesis or dissertation, they must follow the deadlines for format review, defense and submission for binding as published in the *Schedule of Classes*.

Winter Semester	Last Friday in January
Summer I	Last Friday in January
Summer II	Last Friday in June
Fall Semester	Last Friday in September

* Subject to change. Confirm with Academic Records or consult the *Schedule of Classes*.

■ GRADUATE STUDY

Graduate Study and Lifelong Learning is dedicated to academic excellence in graduate education at Oakland University and advocates for support for graduate programs and graduate students. Under the direction of the Senior Associate Provost and working in consultation with the Graduate Council of the University Senate, Graduate Study and Lifelong Learning has responsibility for ensuring the highest standards in student admission; for providing academic records management, academic standing and degree services for currently enrolled students; and for the authorship, maintenance and oversight of graduate policy and standards that promote high quality in educational programs and curricula.

Graduate Study and Lifelong Learning works with faculty, academic departments and the deans of the college and schools to recruit and develop a graduate student body across disciplines and professional fields reflective of academic strength and the university's commitment to diversity, and to design programs to support student achievement and success.

Graduate Study and Lifelong Learning also partners with departments and university governance in program review, accreditation, registration, and evaluation efforts conducted locally and by external authorities, and thereby contributes to the ongoing campus-wide commitment to assessment.

Graduate governance

Oakland University graduate governance is shared by several decision-making bodies, each with areas of authority and responsibility. The following provides a guide to these decision-making bodies and helps to explain how the policies and procedures that govern graduate education are created and managed at Oakland University.

Board of Trustees

Oakland University is governed by an eight-member Board of Trustees appointed by the governor to serve eight-year terms. The board provides general supervision of the university, including control and direction of all expenditures from the institution's funds. The board also appoints the university president as well as the secretary to the board and treasurer.

University Senate

The University Senate is an all-university governance body whose membership includes administrative officers, students and faculty members elected for two-year terms to represent their academic units. The Vice President for Academic Affairs is its presiding officer. It serves as a legislative forum that meets monthly during the academic year. The Senate recommends new degree programs to the president and the board and must approve the constitutions of colleges and schools. It determines academic policies and provides opportunity for public deliberation on issues of importance to the university.

Graduate Council

The Oakland University Graduate Council is a permanent standing committee of the University Senate with responsibility for graduate education as established in Article VI of the Oakland University Senate Constitution. The Graduate Council is chaired by the Senior Associate Provost, with its membership otherwise consisting of one representative from each organized faculty currently sponsoring a graduate degree program, plus three other representatives to be appointed by the Senior Associate Provost

Graduate Catalog

The Graduate Program Catalog is the listing of academic programs, degree requirements, policies, and related information. It is available online and in print. The online Graduate Course Description Catalog includes course listings and descriptions. Together, they comprise the Oakland University Graduate Catalog. All data in this Oakland University Graduate Catalog reflects information as it was available at the publication date. Changes and updates to the Graduate Catalog made after the publication date are posted on the Graduate Study and Lifelong Learning Web site at www.oakland.edu/gradstudy.

Graduate Degree Programs

Graduate programs, with philosophical foundations in the university's role and mission, are directly linked to the research, scholarship and public service activities of the university. New knowledge is produced and directed toward the solution of technological, social, economic and political problems and issues. Students, educated in intellectual inquiry and critical analysis, are full partners in graduate programs structured to maximize personal growth and achievement as specific career-related goals are obtained. Dynamic relationships with regional companies provide real advantages in pursing career options through work-study, internships, project involvement and community action.

Program Development and Review

New programs are developed along established guidelines and within the framework of the university's role and mission statement. The approval process is monitored by Graduate Study and Lifelong Learning. It includes evaluation by and endorsement from several designated internal and external bodies. Once in place, graduate programs are reviewed on a regularly scheduled basis by faculty program review committees, Graduate Study and Lifelong Learning and Graduate Council. At the time of publication of this catalog, several programs are in various stages of review. Program or course changes resulting from these reviews will be announced. Students should maintain contact with their advisers and Graduate Study and Lifelong Learning to be fully aware of the current status of programs to which they have been admitted.

Accreditation

Oakland University is accredited as a doctoral degree-granting institution by the Higher Learning Commission of the North Central Association of Colleges and Schools (http://www.ncahigherlearningcommission.org/). In addition, specific programs and curricula are accredited individually by specialized or professional accrediting agencies. The principal accreditation agencies are as follows:

Arts and Sciences

Chemistry: American Chemical Society*
Linguistics: American Association of Intensive English Programs
Music: National Association of Schools of Music
Political Science (Master of Public Administration): National Association of Schools of Public Affairs and Administration

Business Administration
Accreditation Council of the American Assembly of Collegiate Schools of Business (AACSB)

Education
Teacher Education Programs: National Council for Accreditation of Teacher Education
Graduate Counseling: Council for Accreditation of Counseling and Related Educational Programs

Engineering*
Division of Engineering (undergraduate): Accreditation Board for Engineering and Technology – Engineering (ABET)

Health Sciences
Physical Therapy: Commission on Accreditation in Physical Therapy Education (CAPTE)

Nursing
Commission on Collegiate Nursing Education (CCNE)
Nurse Anesthesia: American Association of Nurse Anesthetists (Council on Accreditation of Nurse Anesthesia Educational Programs)

*Accreditation limited to only one degree per level per institution

Graduate Programs

College of Arts and Science

Doctoral degrees
Applied Mathematical Sciences, Ph.D.
Biomedical Sciences: Health and Environmental Chemistry, Ph.D.
Biomedical Sciences: Medical Physics, Ph.D.
Biomedical Sciences: Biological Communication, Ph.D.
Music Education, Ph.D.

Master's Degrees
Applied Statistics, M.S.
Biology, M.A.
Biology, M.S.
Chemistry, M.S.
English, M.A.
History, M.A.
Industrial Applied Mathematics, M.S.
Liberal Studies, M.A.L.S.
Linguistics, M.A.
Mathematics, M.A.
Music, M.M.
- Conducting
- Instrumental Performance
- Music Education
- Piano Pedogogy
- Piano Performance
- Vocal Pedogogy
- Voice Performance

Public Administration, M.P.A.
Physics, M.S.

Graduate Certificates
Conducting
Instrumental Performance
Local Government Management
Music Education
Nonprofit Organization and Management
Piano Pedogogy
Piano Performance
Statistical Methods
Teaching English as a Second Language
Vocal Pedogogy
Voice Performance

School of Business Administration

Master's Degrees
Accounting, M.Acc.
Business Administration, M.B.A
Information Technology Management, M.S.

Graduate Certificates
Accounting
Business Economics
Entrepreneurship
Finance
General Management
Human Resources Management
International Business
Marketing
Management Information Systems
Production/Operations Management

School of Education and Human Services

Doctoral Degrees
Education: Counseling, Ph.D.
Education: Educational Leadership, Ph.D.
Education: Early Childhood Education, Ph.D.
Reading Education, Ph.D.

Education Specialist

Master's Degrees
Counseling, M.A.
Early Childhood Education, M.Ed.
Educational Studies, M.Ed.
Educational Leadership, M.Ed.
Elementary Education, M.A.T.
Reading and Language Arts, M.A.T.
Secondary Education, M.A.T.
Special Education, M.Ed.
Teacher Leadership, M.Ed.
Training and Development, M.T.D.

Graduate Certificates
Advanced Microcomputer Applications
Advanced Reading, Language Arts and Literature
Higher Education
International Education
Microcomputer Applications
Reading, Language Arts and Literature

School of Engineering and Computer Science

Doctoral Degrees

Computer Science and Informatics, Ph.D.
Electrical and Computer Engineering, Ph.D.
Mechanical Engineering, Ph.D.
Systems Engineering, Ph.D.

Master's Degrees

Computer Science, M.S.
Electrical and Computer Engineering, M.S.
Embedded Systems, M.S.
Engineering Management, M.S.
Industrial and Systems Engineering, M.S.
Mechanical Engineering, M.S.
Systems Engineering, M.S.
Software Engineering and Information Technology, M.S.

School of Health Sciences

Doctoral Degrees

Physical Therapy, D.P.T.
Physical Therapy, D.Sc.P.T.

Master's Degrees

Exercise Science, M.S.
Physical Therapy, M.S.
Safety Management, M.S.

Graduate Certificates

Clinical Exercise Science
Complementary Medicine and Wellness
Corporate and Worksite Wellness
Exercise Science
Neurological Rehabilitation
Orthopedics
Orthopedic Manual Physical Therapy
Pediatric Rehabilitation
Teaching and Learning for Rehabilitation Professionals

School of Nursing

Doctoral Degrees

Nursing Practice, D.N.P.

Master's Degrees

Adult Gerontological Nurse Practitioner, M.S.N.
Family Nurse Practitioner, M.S.N.
Nurse Anesthesia, M.S.N.
Nursing Education, M.S.N.
RN/MSN

Graduate Certificates

Adult Gerontological Nurse Practitioner
Family Nurse Practitioner
Nurse Anesthesia
Nursing Education

■ Admission Policies

Admission requirements

The graduate admission policy of Oakland University is selective, and the process is competitive. Applicants for graduate admission must present evidence that they have had the necessary academic preparation to enable them to pursue the graduate program for which they are applying

General admission requirements

The general admission requirements listed below represent the minimum requirements for admission to graduate study. The academic departments are responsible for establishing additional program admission requirements specific to their graduate degree or graduate certificate program.

1. An Application for Admission to Graduate Study.

   An International Supplemental Application for international applicants with an Affidavit of Financial Support and a notarized bank statement in U.S. dollars for the required amount.
2. A baccalaureate degree awarded from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing. The date the degree was conferred must precede the date of enrollment in the graduate degree program.

   In addition to a degree equivalent to a four-year U.S. baccalaureate degree, some graduate programs may require an applicant to submit satisfactory scores from the Graduate Record Exam (GRE), including advanced (subject) exams.
3. Official transcripts from all post-secondary educational institutions from which the applicant earned a degree (beginning with first baccalaureate) and official transcripts for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service that is a NACES member.

   Unofficial transcripts may be accepted for admissions evaluation purposes. When only unofficial transcripts are received, a student's acceptance will be regarded as limited standing pending receipt of an official transcript within a specific time frame.
4. Two letters of recommendation.
5. Proof of program prerequisite courses (undergraduate) required for admission into a specific degree program. Undergraduate prerequisite courses that are preparatory to the degree are not considered part of the degree requirements.
6. Proof of English competency for students for whom English is not their native language.

Program admission requirements

In addition to meeting the General Admission Requirements, Graduate admission decisions are based on a combination of qualitative and quantitative program admission requirements that may include, but are not limited to, the following:

- Career goal statement
- Personal goal statement
- Letters of recommendation
- Academic record
- Relevant professional activities and achievements
- Previous grades and GPA
- Interviews
- Audition
- Essays
- Portfolios
- Supplemental applications
- Standard admission test scores

  Some graduate programs may require an applicant to submit satisfactory scores from the Graduate Record Exam (GRE), including advanced (subject) exams.

  In lieu of the GRE, applicants to the MBA program submit the Graduate Management Admission Test (GMAT). The GRE and GMAT are administered worldwide by Educational Testing Service (ETS).

Admission requirements specific to the graduate program for which students are applying, may be found in the program/ department section of this catalog, as well as the online Graduate Program Catalog.

Graduate admission deadlines and review

After the application is received in the Graduate Admissions office, it is entered into the university student system, and an admission file is established. Thereafter, academic credentials are confirmed for eligibility and the requisite documents for general admission and the intended program are reviewed for completeness. Completed admission files are shared with the intended program for admission review. Admission deadlines vary by program. Applicants are advised to confirm the admission deadline for the intended program of study in the Graduate Program Catalog or on the Graduate Admissions Web site.

International applications are reviewed for fall and winter admission only. To ensure adequate time for review, international applications must be completed at least six months before the desired date of intended enrollment to the University. All international application materials must be submitted by May 1 for fall admission and by September 1 for winter admission

Graduate admission documents

All graduate admission documentation, including letters of recommendation, standardized test scores and academic transcripts from other institutions, become part of the official admission file and can neither be returned to the applicant nor duplicated for any purpose.

Application

Oakland University accepts an online Application for Admission to Graduate Study via www.oakland.edu/grad. To make the online application process convenient, the applicant creates a PIN and password so information can be entered over several sessions. Online information is stored and transmitted through a secured server. Once the online application is submitted, it is available for initial processing by the Graduate Admissions office.

Although the online application is the process method preferred by the university, paper applications will be provided the same consideration as applications submitted online.

Applicants who have been previously admitted and have not enrolled for two years must submit a Request for Graduate Readmission form.

Baccalaureate degree

Applicants must have earned a baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.

In addition to a degree equivalent to a four-year U.S. baccalaureate degree, some graduate programs may require an applicant to submit satisfactory scores from the Graduate Record Exam (GRE), including advanced (subject) exams.

In lieu of the GRE, applicants to the MBA program can submit the Graduate Management Admission Test (GMAT). The GRE and GMAT are administered worldwide by Educational Testing Service (ETS).

Prospective students may apply for admission to graduate study at Oakland University during their final year of undergraduate study, but must furnish proof of baccalaureate degree during their first semester of enrollment in a graduate program at Oakland University. Enrollment for a second semester will not be permitted unless proof of the baccalaureate degree is received by Graduate Admissions.

The date the baccalaureate degree was conferred must precede the date of enrollment in the graduate degree program.

Official transcripts

According to the guidelines set by the American Association of College Registrars and Admissions Officers (AACRAO), an official college transcript is one that has been received in a sealed envelope directly from the issuing college or university. It must bear the college seal, current date and an appropriate signature. Additionally, transcripts providing certification of the degree earned must include the degree and the date the degree was awarded. Transcripts received that do not meet these requirements are not considered official. All transcripts become the property of Oakland University and will not be returned to an applicant, or sent to another institution.

All transcripts are purged by Oakland University Academic Records or Graduate Study and Lifelong Learning seven years after the last date of enrollment.

Minimum transcript requirements

Official transcripts are required from all post-secondary educational institutions from which the applicant earned a degree (beginning with first baccalaureate) and all enrollments in graduate level coursework beyond the bachelor's degree.

Unofficial transcripts may be accepted for admissions evaluation purposes. When unofficial transcripts are received, the student's acceptance should be regarded as limited standing pending receipt of an official transcript within a specific time frame.

Standards beyond minimum transcript requirements

As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate degree and all enrollment in coursework both pre- or post-baccalaureate degree.

Letters of recommendation

In most cases, graduate programs require an applicant to submit a minimum of two letters of recommendation. The total required letters of recommendation is published in the Application Requirements specific to the graduate program for which the applicant is requesting admission. Unless the applicant has been out of school for more than five years, at least one of the recommenders should be a faculty member who is able to judge the applicant's preparation and ability to undertake graduate study.

Substitutions for a faculty recommendation may include work supervisors or approved others who can comment on the applicant's academic potential for graduate work.

All letters of recommendation must be submitted on the recommendation forms provided on the Graduate Admissions Web site. The letter of recommendation forms should be sent directly by the writer to the Graduate Admissions office.

The letters of recommendation become part of the student's official admission file. The Family Education Rights and Privacy Act of 1974 provides a student access to his/her educational record; however, the student retains the right to waive access to specific documents in his/her record. Students admitted to graduate study at Oakland University, will be permitted access to letters of recommendation unless the student voluntarily waived this right as an applicant. Students who waived this right will not be permitted access to the letters of recommendation.

Undergraduate preparatory courses

Undergraduate preparatory coursework refers to courses an applicant must complete in order to be eligible for admission into a graduate program. Preparatory courses are required for admission to the intended program and are NOT considered part of the degree requirements.

Graduate applicants, who do not meet the undergraduate coursework required for admission to a specific graduate program will be given a delayed graduate admission status and admitted to Oakland University at the post-baccalaureate level (PB) with a Graduate Preparatory (GP) student classification.

Financial aid eligibility can be granted for one calendar year to delayed graduate applicants admitted to Graduate Preparatory student classification. The student must produce for the Financial Aid Office an official letter and plan of study that lists the undergraduate preparatory courses required for the program. Only those undergraduate courses listed on the program plan of study can be used for calculation of loan eligibility.

Once the preparatory coursework is completed the student may be admitted to the degree program if the undergraduate preparatory courses are completed with the required grade.

International applicants admission requirements

International supplemental application

In addition to the Application for Admission to Graduate Study, international applicants must submit an international supplemental application. The international supplemental application is available on the Oakland University Web site: www.oakland.edu/grad.

International university transcripts

The Graduate Admissions office does not evaluate foreign academic degree programs or coursework. International university

transcripts must be evaluated by a professional credential evaluation service. The credential evaluation provides the university with required degree equivalency information, as well as verification of the authenticity of original documentation. Graduate Study and Lifelong Learning will accept any transcript evaluation prepared by a National Association of Credential Evaluation Services (NACES) member, or can recommend a professional credential evaluation service.

Graduate programs requiring more detailed information may require an applicant to submit a course-by-course (or detailed) evaluation report rather than the general evaluation report. Official foreign transcripts will not be required by Oakland University since official transcripts must be submitted to the evaluation service.

Notarized bank statement and affidavit of financial support

International applicants who are applying for graduate admission with a F1 or J1 visa status must certify sufficient funds for university expenses including tuition, books, supplies, insurance, and living expenses (travel is not included). To certify finances, the applicant must submit an affidavit of financial support and a notarized bank statement in U.S dollars for required published amount. These documents are required for the student F-1 or J-1 visa petition at the American embassy or consulate in the home country. The affidavit of financial support can be downloaded at www.oakland.edu/grad.

English language proficiency

International applicants, other visa holders, permanent residents, and exchange students whose native language is not English must submit the TOEFL (Test of English as a Foreign Language / Internet Based Test) as proof of English language proficiency. The TOEFL is administered worldwide by Educational Testing Service (ETS).

A native language is a language that is acquired naturally during childhood and is usually spoken at home, as opposed to a language that is learned later in life, for example, as part of a person's formal education. Students whose native language is not English are encouraged to visit the Center for American English to discuss any language difficulties they may have while attending Oakland University.

The TOEFL scores must be two years old or less at the time of the applicant's intended enrollment at Oakland University.

Minimum proficiency requirements

1. TOEFL: 550 minimum on paper-based TOEFL; 213 minimum on computer-based TOEFL; or
2. MELAB: 77 minimum; or
3. 24 transferable credits, excluding ESL coursework from a U.S. community college or baccalaureate institution; or
4. baccalaureate or master's degree from a regionally accredited U.S. college/university; or
5. One year of study at, and a diploma from, a U.S. high school

Some programs at Oakland University may require a higher level of proficiency than listed above. Applicants should examine the program description for their field of study for information about additional English proficiency requirements and furnish proof as part of the admission process.

Below minimum proficiency requirements

ESL courses are required for students below the minimum proficiency.

1. TOEFL: 520-549 on paper-based TOEFL; 192-212 on computer-based TOEFL; or
2. MELAB: 73-76

Applicants not meeting the minimum score requirement, but within the range of scores specified above, must register for ESL courses as part of their coursework starting in their first semester of registration. ESL placement is done by the Center for American English (CAE) using the Institutional TOEFL and other assessment tools.

Upon completion of the individualized ESL instruction sequence, students' English proficiency will be evaluated using the Institutional TOEFL to determine whether additional ESL coursework is necessary to achieve English proficiency. The individualized ESL instruction sequence designed by the Center for American English is not negotiable.

Satisfactory completion of the individualized ESL instruction sequence is expected within one year, but ESL coursework is required until minimum proficiency is demonstrated.

Admission to Intensive English Program

Prospective students who do not have adequate English proficiency for graduate admission or for admission with ESL coursework to the university can be admitted to the Intensive English Program. ESL placement is done by the Center for American English (CAE) using the Institutional TOEFL and other assessment tools.

The individualized ESL program sequence determined by the CAE is not negotiable.

Upon completion of the Intensive English Program, students may (re)apply for admission to Oakland University; applicants are evaluated using the admission criteria described above.

International applicants already studying in U.S.

International applicants who are presently in the United States on a student status may be required to provide a statement from the International Student Adviser at their current institution. International students who do not enroll during their indicated semester of admission must submit an application to update at least eight weeks prior to the start of the term (fall or winter) in which they wish to enroll.

Graduate students admitted at OU

Readmission

Applicants who have been previously admitted to and have enrolled in a graduate program at Oakland University should not complete a new application for admission to graduate study. Instead, previously enrolled graduate students should submit a Request for Graduate Readmission form to Graduate Study and Lifelong Learning, 520 O'Dowd Hall. Please refer to the Inactive Student Program Status section of the graduate catalog for more information.

Transferring to a new program

Current graduate students who have been admitted to a graduate degree at OU and wish to transfer to a different OU graduate degree should not complete a new application for admission. Instead, these students should submit a Program Transfer Request form to Graduate

Study and Lifelong Learning. The form is available on the Web site www.oakland.edu/grad. Please refer to the Change of Status – Program Transfer section of the graduate catalog for more information.

Graduate students admitted at another institution

Transferring to OU

Students interested in "transferring" from a graduate program they are currently attending at another institution to Oakland University must complete the online Application for Admission to Graduate Study and meet the same admission requirements as any other graduate applicant. Upon admission to graduate study, previous graduate coursework will be evaluated by the faculty adviser to determine transfer to Oakland University. A maximum of nine (9) credits may transfer to the OU graduate program. Students should be familiar with the sections of the graduate catalog Course Content and Course Waiver Substitution and consult with their faculty adviser.

International students interested in transfer to Oakland University should refer to the section of the graduate catalog International Applicants Already Studying in U.S. to maintain immigration status.

Graduate admission process

Overview

Applicants seeking graduate admission with full standing to a degree or graduate certificate program must submit all required documentation by published deadlines to ensure proper processing and evaluation by the school or department and Graduate Admissions for the selected semester. Even though an applicant may meet the general requirements for admission to graduate study, each graduate program reserves the right to recommend a denial or admission with limited standing based upon the evaluation of documentation supplied by the applicant, as well as the standing of the applicant relative to others who have applied to the specific graduate program. Graduate students are permitted to matriculate into only one graduate degree program at a time.

Responsibility for graduate admission

Graduate Study and Lifelong Learning is responsible for the interpretation and administration of regulations governing the admission of graduate students.

The Graduate Admissions office is assigned the responsibility of collecting, processing and reviewing completeness of the applications for admission to graduate programs.

Each graduate program is responsible for establishing its own program admission requirements and for the application review and admission assessment process.

Admission process flow

After the application is received in the Graduate Admissions office, it is entered into the university student system and an admission file is established.

Thereafter, academic credentials are confirmed for eligibility and the requisite documents for general admission and the intended program are reviewed for completeness. Completed admission files are shared with the intended program for admission review.

In many cases the admission decision is made very quickly; however, when a program admission requirement stipulates an applicant interview, the amount of time increases before a final admission decision can be made by the program. Some of the Graduate Programs with established admission deadlines will not begin the review process until after the program deadline has passed and the entire applicant pool has been ascertained.

Graduate admission decisions are not released to applicants via the Web or over the phone. All admission decisions are communicated directly to the applicant via mail. Online applicants will be able to see that an admission decision has been made by reviewing the on-line application status.

Confidentiality of admission process

Oakland University maintains the confidentiality of both the information submitted by an applicant and the status of their application during the graduate admission process. This information can only be shared with the applicant or someone the applicant has designated in writing as their proxy. Any applicant whose personal circumstances require that someone else contact Graduate Admissions in conjunction with their application must send a signed letter formally designating that person as their proxy. Graduate Admissions cannot discuss an application with anyone but the applicant without this document.

Offer of admission

Formal admission to a graduate program at Oakland University is offered by Graduate Study and Lifelong Learning. The offer of graduate admission is extended to the applicant for a specified semester. An admitted student who wishes to change the semester of entry must request to update their admission to graduate study. Graduate Study and Lifelong Learning will permit an admitted applicant to update within five terms of the original admission term; thereafter, a new application will be required. Graduate students are admitted to either full or limited standing as described below.

Update semester of admission

The offer of admission is extended to the applicant for a specified semester. An admitted student who wishes to update their semester of entry must notify the Graduate Admissions office in writing.

Contingent upon the approval of the graduate program, admitted students are permitted four (4) successive semester updates to their original admission semester. Thereafter, any further changes will require a new graduate application, admission documentation, transcripts and standardized test scores. Admission records, for admitted students who do not enroll, are purged four (4) semesters after original offer of admission.

Example

Original offer of admission (Fall 2009); successive semesters to update are Winter 2010, Summer 2010, Fall 2010 and Winter 2011; admission record purged after Winter 2011.

Denial of admission

The graduate admission process at Oakland University is competitive. The competitiveness of admission is determined by the number of applications received and the academic qualifications of the applicant pool; therefore, talented scholars may possibly be denied admission to some graduate programs.

Each graduate program is responsible for its own application review process and the admission recommendation made to the

Graduate Admissions office. Applicants who are unsuccessful in gaining admission to a graduate program are notified in writing by the Graduate Admissions office.

Specific information regarding the applicant review and assessment process, or insight into an applicant's denied admission status, must be discussed directly with the graduate program.

Appeal of admission decision

Unsuccessful applicants have an avenue to appeal their admission decision if the appeal holds merit. For an appeal to have merit, it must document new and compelling academic information or extenuating personal circumstances that were not included in the original application. Please keep in mind that this information may or may not result in a reversal of the original decision. To ensure all appeals receive thorough and equal consideration, all appeals must

1. be submitted in writing 15 working days from the date of the denial letter
2. document all new information cited as the basis for the appeal.

Appeal process

- The written appeal must be submitted to Graduate Admissions, 160 North Foundation Hall.
- Graduate Admissions will forward the appeal request to the program department chair.
- Within 15 working days from receipt of the written appeal, the department will submit a recommendation to the Executive Director of Graduate Study and Lifelong Learning to either admit the applicant or to sustain the original denial.
- The Executive Director of Graduate Study and Lifelong Learning shall review the recommendation and notify the applicant in writing of the final decision within 10 working days from the departmental recommendation.
- The decision of the Executive Director of Graduate Study and Lifelong Learning is final.

Degree seeking graduate admission classifications

Full standing classification

An applicant seeking graduate admission with full standing to a degree or graduate certificate program must meet the criteria specified under general admission requirements and, in addition, must:

1. satisfy the specific program admission requirements as stated in the graduate catalog; and
2. achieve a satisfactory score on the GRE or GMAT if required.

Admitting an applicant to a graduate program with full standing does not imply the student will be advanced to candidacy for an advanced degree.

Limited standing classification

An applicant who meets the general admission requirements as stated in the graduate catalog for a graduate program, as well as the specific program admission requirements, will be granted graduate admission with limited standing when:

1. Degree credential requirements are pending (the applicant is pending graduation and cannot submit an official transcript to furnish proof of an earned bacalaureate degree) and/or
2. Additional academic requirements are imposed by the graduate program.

Applicants admitted to a graduate program with limited standing are approved to enroll in advanced degree curricula. Those students who do not satisfy the requirements of limited standing within the time period as specified in the graduate catalog and set forth in the offer of admission letter are dismissed at the end of the term in violation and denied further registration in the graduate program.

Degree credential requirement

An applicant admitted to a graduate program with limited standing is notified of the specific degree credential requirement in the written offer of admission letter.

Degree credential requirements must be met by:

1. submitting an official baccalaureate degree transcript as certification of degree received, including the date the degree was conferred from a regionally accredited institution; and
2. submitting the official transcript by a deadline no later than 45 days from the first day of class for the initial term of enrollment.

Failure to submit the official, final degree transcript by the stated deadline will result in adjustments to financial aid and cancellation of future graduate enrollment.

Academic requirement

An applicant admitted to a graduate program with limited standing has up to three academic terms (fall-winter; summer excluded) from the time of initial enrollment to complete the academic requirements specified in the written offer of admission letter.

Academic requirements must be met by:

1. enrollment in not more than 12 credits of additional graduate coursework, within three terms from the initial term of enrollment and/or
2. achieving a minimum grade requirement of 3.0 or above in each graduate course taken during the first 12 credit hours of enrollment.

Applicants requiring undergraduate course preparation (graduate preparatory coursework) cannot be admitted to a graduate program with limited standing. Graduate preparatory coursework is defined as prerequisite undergraduate courses an applicant is required to complete in order to be eligible for admission into a graduate degree program. These courses are preparatory to the degree.

Post-baccalaureate classification (graduate preparatory coursework)

Undergraduate course preparation or graduate preparatory coursework refers to prerequisite undergraduate courses an applicant is required to complete in order to be eligible for admission into a graduate degree program. These undergraduate courses are preparatory to the degree and not included as part of the graduate degree requirements.

Graduate applicants who do not meet the undergraduate coursework required for admission to a specific graduate program will be given a delayed graduate admission status and admitted to

Oakland University at the post-baccalaureate level (PB) as a Graduate Preparatory (GP) student.

A student taking Graduate Preparatory coursework must provide a financial aid officer an approved plan of study, signed by a graduate program coordinator, that identifies the specific undergraduate courses required for admission to the graduate program. Upon completing the preparatory course requirements, the student will be reviewed for regular admissions to the graduate program.

A Graduate Preparatory (GP) student who enrolls in preparatory coursework required for admission to the graduate program may be eligible to apply for financial aid for one consecutive 12-month period. The 12-month period will begin the first day of the loan period in which the student is enrolled half time. Should the student decrease their enrollment to less than half time after the first day of that term, the 12-month consecutive period will continue to run. Preparatory coursework that exceeds the 12-month consecutive period will not be eligible for financial aid.

Special graduate classification

Applicants who are seeking a graduate degree or graduate certificate, but who are unable to meet the deadline for filing all required application materials or credentials for graduate admission may be granted temporary admission, provided they submit a copy of a transcript providing evidence of a bachelor's degree awarded and any specific evidence concerning their qualifications for graduate study as required by the department.

Students admitted to Special Graduate classification are not eligible to receive financial assistance.

Students granted admission in the Special Graduate classification may take no more than a total of 12 credits and must meet the criteria specified for general admission requirements and specific program admission requirements before completing the second semester of registration.

Up to 12 credits earned in the Special Graduate classification may be applied toward degree or graduate certificate requirements if:

1. a student is later admitted to a degree or graduate certificate program, and
2. the credit is approved by the graduate program as appropriate to the degree or graduate certificate objective.

Admission as a special graduate student in no way assures subsequent admission to a degree or graduate certificate program. Degree or graduate certificate course requirements and program regulations prevailing for the semester of formal admission to a graduate program will govern the student's program.

Inactive or Active student classification

Inactive student status

At Oakland University, a matriculated graduate student is a student who has been previously admitted to and has enrolled in a graduate program. Graduate Study and Lifelong Learning classifies inactive, matriculated students into two categories: one category permits readmission to a graduate program, and the other category requires reapplication before an inactive student can re-enroll in a course. The periods of inactivity used to classify inactive students into the appropriate category are defined as follows:

Readmission

Students who have not enrolled for six or more consecutive semesters are permitted to submit a Request for Graduate Readmission form. Each request is evaluated in terms of the time limit established for completing degree requirements, performance in previous coursework, and progress made toward the degree. Students will not be readmitted to programs that have been suspended or discontinued. The catalog current at the time a student is readmitted will govern program requirements, policies and procedures.

Reapplication

Students who have not enrolled for seven consecutive years are considered inactive and their graduate student files are destroyed. These students are considered new applicants and must submit a new Application for Admission to Graduate Study and new supporting documents as specified in both the General Admission Requirements and the Program Admission Requirements.

Active student status

Program transfer

Graduate students, in good academic standing, who have been admitted to a graduate degree program and wish to transfer to another graduate program or pursue a new degree level must submit a Request for Program Transfer form to Graduate Study and Lifelong Learning. Admission to a new program and/or new degree level is not granted automatically. Each program transfer request is subject to review and approval of the prospective new graduate program.

Program transfer review process

The prospective new program will review the student's original admission documentation, supporting credentials, and any materials relevant to the student's subsequent academic progress at Oakland University. In addition, the prospective new program may request new letters of recommendation and/or a new goal statement specific to the new program which the student desires to transfer. A graduate program transfer is subject to minimum Graduate Admissions requirements and deadlines. A student should review the program admission requirements detailed in this catalog.

Program transfer deadlines

A student must be approved to transfer to the new program PRIOR to the beginning of an academic term in order for the admission to be effective for that term. If the admission process is completed after that deadline, whether because the file was not completed or because departmental action was not taken earlier, the admission will be effective for the next academic term. The term for which the applicant is admitted is stated in the official admission letter from Graduate Study and Lifelong Learning.

If the student is not admitted to the desired new program, admission to the original graduate program will stand.

Policy governing graduate programs requires that all credit applied toward a degree must be earned within six calendar years of the awarding of the degree.

Non-degree seeking graduate admission classifications

An applicant holding a baccalaureate degree, who wishes to enroll in graduate courses but does NOT have immediate graduate degree objectives, may request graduate non-degree status.

International students seeking F-1 or J-1 visas or those holding F-1 or J-1 visas are not eligible to apply for graduate non-degree admission. Non-degree students do not qualify for financial aid.

Graduate non-degree admission has two classifications: 1) Graduate Guest; and 2) Professional Development. The graduate non-degree classifications with the minimum admission requirements are described below.

Graduate guest classification

Applicants admitted to degree programs at other accredited institutions wishing to take courses at Oakland University for purposes of credit transfer should apply as a Guest Student in one of two ways: Regular Guest Student or Michigan Intercollegiate Graduate Studies (MIGS) Guest Student. Enrollment for all guest students is limited to 12 credits. Graduate guest students are typically admitted to Oakland University for one semester only.

Regular guest student

Graduate guest students are admitted to degree programs at institutions other than the Michigan institutions listed below. Applicants must apply as a Regular Guest Student using the Application for Admission to Graduate Study. A letter from the applicant's home institution confirming that the applicant is in good academic standing must also be submitted. Students should consult their advisers at their home institutions regarding the ability to transfer specific credits to their programs.

Michigan Intercollegiate Graduate Studies (MIGS) guest student

The Michigan Intercollegiate Graduate Studies (MIGS) program is a cooperative inter-institutional arrangement which permits graduate students to take advantage of educational offerings available at other participating institutions but not available at their own. It is open to any student in good standing in a graduate program at a member institution. Courses must be numerically graded courses (not graded P/F, S/U or CR/NC) approved in advance by the student's graduate adviser and the MIGS liaison officer at both the home institution and the host institution. Admission by the host university is contingent on the availability of space and resources.

The member institutions are Andrews University, Aquinas College, Calvin College, Central Michigan University, Eastern Michigan University, Grand Valley State University, Madonna University, Marygrove College, Michigan State University, Michigan Technological University, Northern Michigan University, Oakland University, Saginaw Valley State University, Siena Heights College, University of Detroit Mercy, University of Michigan, Wayne State University and Western Michigan University.

Additional information is available from Graduate Study and Lifelong Learning.

Professional Development classification

The Professional Development classification is for students who are NOT interested in applying for an Oakland University graduate degree program. This classification of student typically belongs to one of the following categories:

- Seeking career advancement, professional development, or personal enrichment,
- Satisfying accreditation/licensure requirements,
- Applying for certification through the state of Michigan or an outside agency.

To be admitted into the graduate non-degree Professional Development classification at Oakland University, the applicant must submit the following documentation:

- Professional Development Application for Admission to Graduate Study
- Baccalaureate degree awarded from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing. The date the degree was conferred must precede the date of enrollment in the graduate degree program.
- Official transcript providing evidence of an earned terminal degree (i.e., baccalaureate, master's or doctoral degree)

  Unofficial transcripts or photocopies of diplomas will be accepted along with the graduate Professional Development Application for evaluation purposes. The student must submit an official transcript and copies of any program required documents before the end of the first semester of enrollment.

Applicants admitted to the graduate non-degree Professional Development classification are subject to the following stipulations:

- Admission is granted to a particular school or college, but NOT to a specific graduate program.
- There is no limitation on the number of graduate credits that may be earned in this status.
- Departmental permission must be obtained, prior to enrolling for graduate courses, to assure proper academic preparation.
- There is no assurance that credits earned in this status will be approved and applied toward a graduate program.
- Not more than 12 credits would be eligible for review, approval and application toward a graduate program at a later date. These credits must comply with requirements published in the time limit section of the Graduate Catalog.
- Graduate non-degree students who later decide to seek admission to a graduate program must submit an Application for Admission to Graduate Study and adhere to all admission requirements specified by the program.
- Graduate courses completed in a graduate non-degree admission classification will appear on a graduate transcript.

■ Code of Student Conduct and Rights

Code of student conduct purpose

Oakland University students are expected to practice civility and uphold the highest standards of academic and personal integrity. These campus community values are reflected through campus standards and regulations. The purpose of Oakland University's Code of Student Conduct is to foster the growth and development of students by encouraging self discipline, assist in creating an educationally supportive environment, and to protect the well-being of the campus community.

This code includes nonacademic and academic conduct and applies to all undergraduate students, graduate students and student organizations at Oakland University. It is the responsibility of all university students and organizations to familiarize themselves with the conduct code at the beginning of each academic year. The conduct code is set forth in writing to give students general notice of the conduct expected of them. The code is not written with the specificity of a criminal statute and is not designed to define misconduct in exhaustive terms. The Code of Student Conduct shall apply to a student's conduct even if the student withdraws from class or school while a disciplinary matter is pending.

Non-academic conduct regulations

Jurisdiction

The university reserves the right to take necessary and appropriate action to protect the mission of the university or the safety of its members. This may include taking disciplinary action against students whose behavior off university premises or between academic periods violates university ordinances and regulations, federal, state, or local laws; or which materially and adversely affects the individual's suitability as a member of the campus community.

If a student breaks a law that also violates university standards of conduct, the student may be held accountable by both external authorities and the university. The university may at its sole discretion elect to pursue disciplinary action against the student either before, during or after administrative, civil or criminal proceedings arising out of the same or other events and shall not be subject to challenge on the ground that external charges involving the same incident have been dismissed, reduced or are pending.

Imminent danger/emergency suspension

Sometimes, the nature of a reported incident may require immediate action be taken by the university to protect the members of the community. Such a situation occurs when the nature of the allegation brings into reasonable question the prudence of permitting the accused student to continue as a member of the university or residence halls community prior to a formal hearing. To protect the safety and well-being of university students, faculty, staff or university property, the student may be temporarily suspended prior to formal adjudication of the case. In any such instance, the university will promptly implement its judicial procedures to address the conduct in question.

University ordinances and regulations

Acting under the authority granted by Act 35 of the Public Acts of 1970 of the state of Michigan, the Board of Trustees has enacted ordinances to provide for the health, safety, welfare and protection of persons and property at Oakland University. The ordinances regulate the conduct of persons on the campus of Oakland and supplement state statutes and local ordinances relating to such conduct. A partial list of pertinent parts of ordinances particularly applicable for new students follows. A complete set of ordinances can be viewed in the Dean of Students Office, 144 Oakland Center.

Violation of ordinances may subject persons to criminal prosecution and/or disciplinary proceedings under university judicial systems administered by the Department of University Housing and Dean of Students personnel.

University rules

Students are expected to adhere to the following university rules:

- All students are expected to comply with the direction of university officials or law enforcement while performing their duties on university property or within specified boundaries.
- No person shall enter into or use any university premises or property for which it was not intended or without authorization. Nor shall any person remain in any area that is officially restricted or closed.
- No person shall engage in any activities that obstruct or interfere with the free, normal and uninterrupted process of student government elections or student organization elections.
- No person shall use another person's SpiritCard, credit card, secured card, debit card, charge card or any other such instrument of credit.

Academic conduct regulations

All members of the academic community at Oakland University are expected to practice and uphold standards of academic integrity and honesty. Academic integrity means representing oneself and one's work honestly. Misrepresentation is cheating since it means the student is claiming credit for ideas or works not actually his or her own and is thereby seeking a grade that is not actually earned.

Faculty standards

Faculty members are expected to maintain the following standards in the context of academic conduct:

- to inform and instruct students about the procedures and standards of research and documentation required to complete work in a particular course or in the context of a particular discipline.
- to take practical steps to prevent and detect cheating.
- To report suspected academic misconduct to the Dean of Students, 144 Oakland Center, for consideration by the Academic Conduct Committee of the University Senate.
- To present evidence of plagiarism, cheating on exams or lab reports, falsification of records, or other forms of academic misconduct before the Academic Conduct Committee.

Student standards

Students are expected to abide by the following standards in the context of academic conduct:

- To be aware of and practice the standards of honest scholarship.
- To follow faculty instructions regarding exams and assignments (including group assignments) to avoid inadvertent misrepresentation of work.
- To be certain that special rules regarding documentation of term papers, examination procedures, use of computer-based information and programs, etc., are clearly understood.
- If a student believes that practices by a faculty member are conducive to cheating, he or she may convey this information to the faculty member, to the chairperson of the department, or to any member of the Academic Conduct Committee either directly or through the Dean of Students Office.

Examples of academic dishonesty

1. Cheating on assignments and examinations. This includes, but is not limited to the following when not authorized by the instructor: the use of any assistance or materials such as books and/or notes, acquiring exams or any other academic materials, the use of any other sources in writing drafts, papers, preparing reports, solving problems, completing homework or carrying out other assignments. No student shall copy from someone else's work or help someone else copy work or substitute another's work as one's own. No student shall engage in any behavior specifically prohibited by an instructor in the course syllabus or class discussion.
2. Plagiarizing the work of others. Plagiarism is using someone else's work or ideas without giving that person credit. This can occur in drafts, papers and oral presentations. By doing this, a student is, in effect, claiming credit for someone else's thinking. Whether the student has read or heard the information used, the student must document the source of information. When dealing with written sources, a clear distinction should be made between quotations, which reproduce information from the source word-for-word within quotation marks, and paraphrases, which digest the source of information and produce it in the student's own words. Both direct quotations and paraphrases must be documented. Even if a student rephrases, condenses or selects from another person's work, the ideas are still the other person's and failure to give credit constitutes misrepresentation of the student's actual work and plagiarism of another's ideas. Buying a paper or using information from the Internet without attribution and handing it in as one's own work is plagiarism.
3. Cheating on lab reports by falsifying data or submitting data not based on the student's own work.
4, Falsifying records or providing misinformation regarding one's credentials.
5. Unauthorized collaboration on assignments. Individual (unaided) work on exams, lab reports, homework, computer assignments and documentation of sources is expected unless the instructor specifically states in the syllabus that it is not necessary. This also includes unauthorized access to and use of computer programs, including modifying computer files created by others and representing that work as one's own.
6. Use of original work. If the instructor assigns a special project, other than or in addition to exams, such as a research paper, original essay, or a book review, the instructor intends that work to be completed for his/her course only. Work students may have completed for a course taken in the past, or may be completing for a concurrent course, must not be submitted in both courses unless they receive permission to do so from both faculty members.

If the Academic Conduct Committee determines that misconduct has occurred, the Committee assesses sanctions ranging from academic disciplinary reprimand to academic probation, to suspension or expulsion (dismissal) from the university. All conduct records are maintained in the Dean of Students Office.

Graduate student rights

Oakland University students shall enjoy certain rights as members of the academic community in addition to those rights that they enjoy as citizens or residents of the United States and the state of Michigan.

While the following is not intended to be an exhaustive list of all rights supported by the university, it does reflect principles that are essential to the maintenance of an environment that is conducive to the pursuit of learning and the development of students as scholars and citizens.

- Students have the right of free inquiry, expression and association, and students are expected to exercise their rights within the bounds of civility and community responsibility.
- Students have the right to participate in university-sponsored services and activities without discrimination or harassment based on a student's race, creed, color, sexual orientation, national origin, age, sex or other classification that deprives the person of consideration as an individual.
- Students have the right to protection against improper disclosure of their student record as provided in the Family Educational Rights and Privacy Act (FERPA).
- Students have the right of access to their personal records and other university files as provided for under the Family Educational Rights and Privacy Act and the Michigan Freedom of Information Act.
- Students have the right to join associations without fear of harassment or intimidation.
- Students have the right to petition for change in either academic or non-academic regulations, procedures or practices.
- Students accused of misconduct or of violating university policy have the right to have their responsibility determined in accord with university procedures and standard due process protections.

Family Educational Rights and Privacy Act

The federal Family Educational Rights and Privacy Act of 1974 pertains to confidential student educational records. This legislation allows students the right to view upon request their own confidential educational records and defines the use of these records by others.

The dean of students is the university compliance officer for the Family Educational Rights and Privacy Act. Students who do not want directory information to appear on the Oakland University Web site can restrict release of such data by doing the following:

1. Login to SAIL
2. Click on Login to Secure Area
3. Complete the User Login

4. Select Personal Information
5. Select Directory Profile
6. De-select the Display in Directory option for items you wish to not appear in the Web directory.

Students who do not want directory information released in any other form must notify the Office of the Registrar in writing. Forms for this purpose are available in 101A O'Dowd Hall. Upon receipt of the completed form or a letter, directory information will be withheld until the student requests in writing that it be released. Requests for privacy may also be faxed to the Registrar at (248) 370-3461.

The university considers student theses and dissertations to be public statements of research findings. Therefore, students who submit such work in fulfillment of degree requirements shall be deemed to have consented to disclosure of the work.

A full statement of students' rights is available in the Office of the Dean of Students, 144 Oakland Center, (248) 370-3352

Any questions, grievances, complaints or other related problems may be addressed to the Dean of Students, 144 Oakland Center, 2200 North Squirrel Road, Oakland University, Rochester, Michigan 48309-4401, (248) 370-3352 and/or filed with the U.S. Department of Education.

Campus Sex Crimes Prevention Act

Oakland University shall comply with the applicable requirements of the new "Campus Sex Crimes Prevention Act," beginning in 2002, which states that every sex offender registered under "Megan's Law" provide information of his/her enrollment or employment by a college or university. Names of registered sex offenders enrolled or working at Oakland University is provided by the Oakland University Police Department (OUPD) with campus jurisdiction from the State government. To obtain this information, please contact the OUPD, 3 Police and Support Services Building, (248) 370-3331 or the police Web site: http/mirage.otus.oakland.edu/oupd/oupd.htm.

Questions or further information regarding the Campus Sex Crimes Prevention Act may be obtained by contacting the Vice President for Student Affairs, (248) 370-4200 or the Chief of Police, (248) 370-3000. In accordance with the "Family Educational Rights and Privacy Act," nothing may be construed to prohibit Oakland University from disclosing information provided to the university concerning registered sex offenders. Finally, it is required that the Secretary of Education take appropriate steps to notify Oakland University that disclosure of this information is permitted.

■ Student Responsibility

Graduate students are governed by the policies of the University, Graduate Council and their academic program. It is the responsibility of the graduate student to comply with theses policies and procedures and all applicable graduate program requirements that govern the individual program of study. Graduate Study and Lifelong Learning administers academic policies and procedures and enforces graduate degree requirements which are determined by the Graduate Council and are applicable to all graduate students.

Degree Program Requirements, Policies and Regulations

Graduate Catalog

The Graduate Catalog in effect when a student is granted an offer of admission to the graduate program is the primary source of degree and program requirements. Students readmitted to a degree program must meet the degree requirements of the catalog in force at the time of the readmission. In addition to the degree and graduate program requirements in effect at the time of admission, all graduate students are subject to the policies and regulations stated in the current graduate catalog. The Oakland University 2009-2011 Graduate Catalog, along with archived Graduate Catalogs beginning with the 1999-2001 catalog, is available on the Web site www.oakland.edu/gradstudy.

Most graduate programs also have supplementary student handbooks that provide students procedures and requirements specific to their discipline. It is important that graduate students adhere to all degree program requirements and policies and regulations to ensure satisfactory academic performance and subsequent graduation.

The Graduate Program Catalog and the Graduate Course Description Catalog together comprise the Oakland University Graduate Catalog. All data in this Oakland University Graduate Catalog reflects information as it was available at the publication date. Changes and updates to the Graduate Catalog made after the publication date are posted on the Graduate Study and Lifelong Learning Web site at www.oakland.edu/gradstudy.

Graduate Program Catalog

The Graduate Program Catalog is the listing of academic programs, degree requirements and academic policies and regulations for graduate study at Oakland University. Individual graduate program requirements are published in the specific academic school or college section of the graduate program catalog.

Graduate Course Description Catalog

The online Graduate Course Description Catalog includes course listings and descriptions.

The online Graduate Course Description Catalog is updated daily and represents the most accurate source of graduate course information in effect for any given term. Although all courses appearing in the online Graduate Course Description Catalog are approved to be taught; not all courses will be offered each term. For a listing of courses offered for the current term, consult the Online Class Schedule through Oakland University SAIL.

Student responsibility for monitoring current information

The University reserves the right to make changes in its programs, policies, rules, regulations, procedures, fees, tuition, housing rates, organizational structure, faculty and staff through the appropriate University processes. Every effort will be made to give as much advance notice as possible and publicize such changes. Because responsibility for complying with all applicable degree requirements ultimately rests with the student, Graduate Council urges all students to maintain close contact with their faculty adviser and appropriate administrative offices. Graduate Study and Lifelong Learning is the authoritative office for verifying deviations from provisions in the Graduate Catalog.

Exception to Graduate Catalog policy

Graduate students are expected to follow the policies and regulation in the Graduate Catalog. However, in unusual circumstances, an exception to policy may be requested.

Exceptions to policies contained in the Graduate Catalog require the student to initiate a written Petition of Exception. The petition must be approved by the faculty adviser, graduate program coordinator or GCOI and Graduate Study and Lifelong Learning. Exceptions will not be granted because a student pleads ignorance, or contend that they were not informed of policies or regulations.

Faculty adviser

Each degree student is assigned a faculty adviser upon admission to a graduate program. Faculty advisers can provide students with assistance in developing a Plan of Study and selecting appropriate graduate courses that adhere to program curriculum, as well as discussing career options and alternatives after graduation. It is the responsibility of the graduate student to comply with the policies, procedures and degree requirements published in the Graduate Catalog.

Plan of study

The Graduate Catalog defines the policies and program requirements for completion of each graduate degree program at Oakland University. A graduate student is governed by the degree program requirements published in the graduate catalog in effect at the time the student is admitted to the graduate program.

Some graduate degree programs establish a framework of general course requirements that expects a graduate student to select specific courses and/or research exit options. Other graduate degree programs establish explicit course requirements that extend a graduate student few or no course and/or research exit options.

Purpose for a Plan of Study

A Plan of Study, completed in consultation with the faculty program adviser, details specific courses, research exit options and the specific graduate catalog a graduate student will use to satisfy their degree program requirements in a timely manner and in accordance with all appropriate rules and guidelines of the graduate program.

The Plan of Study, submitted to Graduate Study and Lifelong Learning, will be placed in the graduate student's academic file and used during the graduation audit process to approve graduate program degree requirements.

Most faculty advisers use a Plan of Study template designed for their specific graduate program. Should that not be the case, Graduate

Study and Lifelong Learning publishes a general graduate program template available on the Web site www.oakland.edu/gradstudy.

Recommended timeline

It is the recommendation of Graduate Council that each graduate student consult with their faculty adviser during the first semester, and no later than the end of the first year in their graduate program to develop a written Plan of Study. This Plan of Study, approved by their graduate program adviser, must be submitted to Graduate Study and Lifelong Learning.

Updates to an approved Plan of Study

A Plan of Study may be amended at any time using a Request to Update Approved Plan of Study form. Until formal approval of an updated Plan of Study is made, the original or current modification of the plan will be in effect. Graduate students are responsible for meeting with their faculty program adviser on an ongoing basis to keep their Plan of Study updated, as needed. Graduate students, who do not submit a Plan of Study to Graduate Study and Lifelong Learning, will be approved against program degree requirements published in the graduate catalog in effect at the time the student was admitted to the graduate program.

Credit and course information

Credit

At Oakland University, the unit of credit is the semester hour. A credit (credit hour) is defined as one class hour per week or its approved equivalent requiring a minimum of two hours of preparation per week carried through a semester.

Course load

The University considers full time for graduate students as enrollment in 8 credits in each fall and winter semesters. Graduate Assistants are required to register for at least 8 credits each semester of their appointment.

The maximum number of credits for fall and winter semester is 12 credits. No graduate student may register for more than 12 credits, without written authorization. Students may request an exception to University policy by completing the online form Request to Exceed Maximum Credits.

Course numbering system

Oakland University assigns a three-digit number to courses according to the level of the course.

- Courses numbered 100 to 299 are introductory or intermediate undergraduate courses and cannot be used toward a graduate degree.
- Courses numbered 300 to 499 are advanced courses primarily for undergraduates. A graduate student, with the approval of departmental adviser, may use a maximum of 12 credits of 400-499 courses taken at Oakland University toward a graduate degree.

  Some graduate programs adopt standards that set a credit limit less than the 12 credit maximum. In such cases, the graduate program standard will take precedence over the graduate catalog.

  In a limited number of approved interdisciplinary degree programs, graduate credit may be granted for up to12 credits in select courses numbered 300-499. These courses may NOT be in the students' major field of study.
- Courses numbered 500 and above are primarily for graduate students. Qualified undergraduates may enroll in a class numbered 500 to 599 provided they have obtained written permission to do so from the department or school offering the class.
- Courses numbered 600 and above are restricted to graduate students.
- Courses numbered 700 and above are primarily for doctoral students, but qualified master's students may enroll provided they have obtained permission from the department or school offering the class.
- Course numbers followed with the letter suffix "N" (500N and above) are identified as non-degree graduate courses in which a student earns graduate credit. These courses are approved by an academic department in accordance with University policy and governance for graduate credit courses. Such course offerings are most often aimed at upgrading skills and maintaining licensure and do not meet the requirements for credit toward a graduate degree at Oakland University.
- A course number suffix of "C" indicates that a course is offered for Continuing Education units (CEU). These non-degree, non-credit courses have no restrictions.

Slash courses (400/500)

Slash courses (400/500) are courses simultaneously offered at both the upper-division undergraduate level and graduate level within the same department. Students requiring undergraduate credit register for the 4xx number and those requiring graduate credit register for the 5xx number. Only 400-level undergraduate courses may be slash-listed with 500-level graduate courses.

Slash courses must provide students who are enrolled for the 500-level credit with education and training that satisfies all of the following conditions. Approval of slash courses will be contingent on meeting the following requirements:

- The courses must contain the same title, credits, description, prerequisites and grade options;
- Credits for slash courses must be the same for both course components;
- Slash courses must provide two separate syllabi, undergraduate and graduate, each clearly differentiating learning outcome criteria for 400-level and 500-level credit;
- Students enrolled for the 500-level credit component must present work that is significantly more rigorous in both depth of study and methodology (analysis, synthesis and evaluation of knowledge or skills) contrasted to the students enrolled for the 400-level credit component;
- When making qualitative evaluations of students, the instructor must hold students enrolled for the 500-level credit component to a standard higher than those students enrolled for the 400-level credit component;
- A distinctive statement must be included at the end of the catalog course description that identifies the 400-level and 500-level course as a slash course;
- Students may not register for one course (SYS 569) if the other course has been completed (SYS 469).

■ Academic Service Offices and Regulations

The subsequent Academic Service offices work together to meet the needs of students, faculty and academic programs; to support the learning process; to cultivate an environment that promotes quality education; to assist students with academic regulations; and to connect students with the resources that enable students to maximize their educational opportunities and ensure successful completion of their degree program.

Office of the Registrar

101 O'Dowd Hall

The Registrar is responsible for several academic services that include university student records, grading; transcripts; diplomas; certifying enrollment, including athletic eligibility; processing registrations, drops and adds; determines residency, and reviews all appeals for exceptions to University enrollment policies. The Registrar Web site (www.oakland.edu/registrar) provides 24/7 access to forms and information regarding these functions.

Students will not receive credit for any course for which the registration is not completed according to university procedures. Likewise, it is not legitimate to attend a course in which one is not officially enrolled.

OU student portal - SAIL

Upon admission to the university, all new students are given a NetID username and password which allows them access to SAIL, the OU student portal. Through SAIL, students are able to access all university systems requiring special log-ins through one main site. The student portal acts as a one-stop-shop for class registration, billing, grades, online course information and news and information.

SAIL also immediately connects students to their OU e-mail account, which the university uses to send official information. Students are responsible for the e-mail sent to their OU account and should check it at least twice weekly to receive tuition bills, financial aid information, grades, class schedules and more. Visit SAIL at http://portal.oakland.edu or click on SAIL on the OU homepage at http://www.oakland.edu.

Computing resources

Through OU's SAIL (Student and Administrative Information Link) system, you can check the course catalog, see grades and track financial aid status. Moodle's online learning network offers full online courses as well as supplemental resources for classroom instruction. Webmail allows you to access your OU e-mail account from any computer with Internet access, and an extensive wireless network keeps you connected from many campus locations.

Grizzly ID and PIN

To begin using computing resources at Oakland University, you need a Grizzly ID number. The Grizzly ID is included in the offer of admission letter and a random PIN assigned. To protect the security of the Grizzly ID, the random PIN is NOT included in the letter. Students must go to the OU Reset PIN Web page and provide select confidential data on the Web page before creating a new six-digit PIN.

Forget PIN

If you forget your PIN, you can reset it to any six digits by going to the OU Reset PIN Web page. If you cannot complete the process online, please contact the Office of the Registrar, 101 O'Dowd Hall, (248) 370-3455.

NetID and password

The Grizzly ID and six-digit PIN, is required to create an OU NetID. The NetID and password support access to SAIL, Moodle, e-mail and logon to the university network. These four pieces of information (Grizzly ID, PIN, NetID and password) are critical for your access to OU resources. You can find directions for setting up your passwords and user IDs by following the steps in Activate Your Accounts or go to netid.oakland.edu and click on Need to Change Your Password? Click on Obtain Your Account or Reset Your Password.

OU e-mail

Oakland University automatically creates an e-mail account for each active student. The e-mail account is one of several directory services provided under the NetID Account profile. Students can begin to use their e-mail account by obtaining their NetID and password at https://ouca.oakland.edu. Student e-mail accounts will be deleted if a student has not registered for one year.

Students are responsible for checking and reading their Oakland University e-mail according to University policies. Many important announcements are delivered to the student e-mail account. University policy requires that all students regularly check their university e-mail and be responsible for messages sent using this system (http://www2.oakland.edu/audit/POLICY1160.htm).

SAIL

Students log into SAIL to view the course catalog and register for classes, see grades, and check financial aid status. Students can access all the features of SAIL with their OU NetID.

Moodle

Moodle is the course management system used at OU to offer online courses. In addition, Moodle may be used by professors to post course assignments, readings, syllabi and other course materials as well as conduct online quizzes, forums, wikis and chats. Students can access Moodle using their OU NetID. For more information on e-learning, go to the e-Learning and Instructional Support Web site.

Online Courses

Each online course is designed differently. Some require three or less on-campus meetings on specific dates for testing. Some require regular synchronous meetings for chat sessions. Some don't have many set time requirements at all but can be worked on asynchronously, whenever you like. Specific information about any of the e-learning courses is available through SAIL. Kresge Library offers distance education services, which includes activating your library card, remote access to databases, document delivery, getting help over live chat, mailing services and interlibrary loan, and online instruction about the library.

eBill

To provide quick, convenient service and eliminate mailing delays, Student Business Services sends billing notifications electronically to each student's OU e-mail address. Students are

responsible for accessing their eBill account each month to view their account balance and confirm payment due dates. eBill is the preferred way for students to pay their bill. For more information on eBill, refer to the Student Business Services Web site.

Computing resource policy

Student access to university resources comes with responsibilities. To keep the network safe, OU maintains a detailed computing policy that you must follow. The following top 10 list provides only the highlights. For more information, refer to the full policy.

- Sharing and downloading movies, music, games and software that you don't own and/or without permission of the owner is a violation of university policy as well as copyright and federal law.
- Important OU information will only be delivered to your OU e-mail account.
- Using e-mail or any IT tool to harass, intimidate or bother someone is not acceptable. If someone asks you to stop, you must comply.
- You are responsible for maintaining your computer. That means you must install anti-virus software, maintain system patches and use appropriate system protection like a firewall.
- Limited game playing on university computers is OK as long as it does not disrupt or limit resources for others.
- Sharing your IDs and passwords is not a good idea; you are responsible for what happens from your account. Sharing also puts you at risk of identity theft.
- Using the Internet for research can be useful, but copying material from Web sites without properly citing your sources is plagiarism. As you surf for information, keep track of the sites you visit so you can properly cite the sources in your assignment.
- Political campaigns, commercial advertising campaigns and personal businesses cannot be run using university computing resources.
- You must have prior approval to install wireless network devices in your campus residence.
- Breaking the rules can result in a variety of consequences, depending on the offense. Consequences may include disconnection from the network or referral to the dean of students for appropriate judicial processing.

The student is responsible to understand and follow the entire IT policy.

Tuition information

Tuition

The Oakland University Board of Trustees reserves the right to change any and all tuition rates when circumstances make such a change necessary. Tuition rates quoted in this catalog are from the Fall 2009 semester. The current tuition rate chart can be found on the Student Business Services Web site at www.oakland.edu/sbs or in the online *Schedule of Classes* at www.oakland.edu.

Senior Citizen tuition discount program

Michigan residents who are senior citizens may participate in Oakland University's Senior Citizen Tuition Discount Program.

- Non-matriculated (non-degree seeking) Michigan residents 60 years of age or older receive a 50% reduction in tuition.
- All courses may be taken for credit or audit.

Eligible applicants must submit a completed admissions application form to either the undergraduate or graduate admissions office. The Undergraduate Admissions Office is located in 101 North Foundation Hall, and the Graduate Admissions Office is located in 160 North Foundation Hall.

Students register for classes online through SAIL or in person at the Registration Office, 100 O'Dowd Hall. With written permission of the instructor, students may also register to audit a course for non-credit during the late registration period for each semester or session. Late registration fees will be waived for such students. The Office of the Registrar provides a list of eligible students to Student Business Services which applies the Senior Citizen Tuition Discount for each eligible student.

Course competency by examination charge

Students who have been approved to update Oakland University credit, which is beyond the six-year time limit, must register for course competency examination credit. The course competency by examination charge will be assessed $34 per credit.

Residential service charges

Residence halls and apartments are financially self-supporting. Housing charges, including room and board, reflect the actual cost of operation and are established by the Oakland University Board of Trustees. The 2009-2010 rate for double room and board is $7,350, and is for fall and winter combined. Single room charges, if available, are an additional $640. Residence halls offer three meal options:

Block 285 Plus 50 Plan

Students selecting this plan can enjoy:

- 285 meals each semester in Vandenberg Dining Center;
- three meal transfers per week in Pioneer Food Court;
- 50 declining balance points (meal dollars) per semester to purchase food at any Chartwell's food facility on campus.

Block 210 Plus 100 Plan

Students selecting this plan can enjoy:

- 210 meals each semester in Vandenberg Dining Center;
- three meal transfers per week in Pioneer Food Court;
- 100 declining balance points (meal dollars) per semester to purchase food at any Chartwell's food facility on campus.

Block 150 Plus 250 Plan

Students selecting this plan can enjoy:

- 150 meals each semester in Vandenberg Dining Center;
- 250 declining balance points (meal dollars) per semester to purchase food at any Chartwell's food facility on campus.

University Student Apartments are available for single students who are at least 20 years old. Students can select from 2-bedroom, 3-bedroom (handicapped accessible), or 4-bedroom apartment styles. The 2009-2010 academic year rate for a 4-bedroom apartment is $5,825. Students living in the apartments are not required to have a meal program. Voluntary meal plans are available for purchase.

A $100 non-refundable down payment is due with all housing contracts. This down payment will be credited against the first housing payment. Students who sign a housing contract are committing to a binding agreement for the contract period. The

housing charges may be paid in full at registration or paid in installments as specified in the *Schedule of Classes*.

If students withdraw from Oakland University, room and board charges are refunded on a prorated basis less penalty charges as described in the terms and conditions of the contract. Formal notice of withdrawal must be given to the Housing Office.

Billing and payment information

Tuition and university housing charges are generally due three weeks into a semester. Student Business Services will send billing notifications electronically to each student's official Oakland University e-mail address. Students also may access their student account information, including bills, via the eBill system. Questions about your bill may be addressed to the Office of Student Financial Services. Visit the Billing Cycle and Due Date Calendar for more information.

Failure to receive an electronic notification does not excuse students from required payment on the specified due date.

For more information on billing, payment or eBill, visit the Student Business Services Web site at www.oakland.edu/sbs, e-mail ebill@oakland.edu, or call the Office of Student Financial Services at (248) 370-2550.

Financial Planning Tools at Oakland University

Oakland University offers tools and services to students and their families to help them manage their finances. To continue their education at Oakland University, students must be in good financial standing with the university. For more information, visit www.oakland.edu/financialplanningtools.

Non-payment and de-registration policy

All registrations for a given semester are considered to be temporary and tentative, based on satisfactory academic progress and total satisfaction of all financial obligations to the university. Oakland University will reverse the future semester registration of any student, if the student has a delinquent account balance from a prior semester. For more information, please see the De-Registration Policy link on the student Business Services Web site at www.oakland.edu/sbs.

Late penalty payment

Payment in full of the total balance due will avoid assessment of a 1.5% monthly late payment fee. Student accounts must be paid in full by the established due dates in order for students to be eligible to register during the next registration period. Transcripts, diplomas, or other statements of record will be withheld, and students will be ineligible to enroll and/or continue to be enrolled in future terms until the obligations have been fulfilled. If an account is not paid in full by the end of the semester, it will be referred to an outside collection agency that will report it to the Credit Bureau.

Refund of tuition

Students who withdraw from Oakland University or drop courses that reduce their total credit load may be eligible to receive a refund of tuition. Failure to drop or withdraw formally will result in forfeiture of any refund. Official drops and complete withdrawals from all courses must be submitted either in person or by certified mail to the Registration Office, 100 O'Dowd Hall, or by fax, (248) 370-3461. Students may drop courses or withdraw from Oakland University up to the last day of official withdrawal as published in the *Schedule of Classes* and the Office of the Registrar Web site at www.oakland.edu/registrar. See Adjusting courses (add and drop). The date that notification is received in the Registration Office determines the applicable refund. A specific schedule of refunds, with qualifying dates, is published each semester and session in the *Schedule of Classes* and the Office of the Registrar Web site at www.oakland.edu/registrar. Information regarding the method of calculating refunds for financial aid recipients can be found in the current Focus on Financial Aid pamphlet, which is provided to financial aid recipients and available to others upon request. Refund checks will be mailed approximately two weeks after a withdrawal has been filed with the Registration Office (with the exception of September and January when refunds are held until after the date of record for release).

Non-dischargeable educational benefits

Oakland University ("University") may provide, extend or advance funds, credits and/or other financial accommodations to students, to be applied toward their tuition and/or charge, with the understanding that students will re-pay those amounts. All such amounts, other than scholarships, fellowships, stipends and/or tuition waivers, are loans and/or educational benefits which students must repay to the University together with late payment charges as established by the University. In consideration for allowing students to attend classes, students agree to repay the University for those loans and/or educational benefits and acknowledge that their repayment obligation is not dischargeable in bankruptcy.

Oakland University expelled or suspended student refund policy

When a student is expelled or suspended from the university for disciplinary reasons (either academic or non-academic), the date of the disciplinary violation will be used to determine whether the student is entitled to a refund of any tuition according to the current University Tuition Refund Schedule. Additionally, residence halls and apartment room and board charges will be pro-rated on the student's room check-out date.

Taxpayer identification numbers

University requirement to collect Taxpayer Identification Numbers (SSN/TIN)

The University is required to collect a student's SSN/TIN for various reasons:

- Students applying for any form of on-campus employment.
- Students must provide an SSN/TIN when they apply for financial aid.

The Taxpayer's Relief Act of 1997 was passed by the Congress and signed into Federal Law by the President in 1997 to offer the American taxpayers some relief if they made payments during the tax year to a qualified university. Part of this law is a requirement that the university receiving such payments report annually to the taxpayer and the Department of the Treasury the taxpayer's identification number (for individuals, this is their social security number), the taxpayer's name, qualified tuition and charges billed and grants or scholarships received, and the student's enrollment status. This information is to be reported regardless of the taxpayer's intention to

actually take a credit or deduction under this law. The university must therefore receive your TIN before it can conduct billing and receipting transactions with you. You can find more information about this law on the Web at www.nacubo.org/edtaxcredits.xml or by going to the Internal Revenue Service site www.irs.gov and refer to the "Tax Regs" section. This public law is in the Internal Revenue Code, Section 6050S.

You may use an IRS Form W-9S to submit this information. This form may be obtained at www.irs.gov. Please submit your completed form W-9S to Student Business Services:

Via fax:	(248) 370-4661
Via US Mail:	Attn: 1098T Student Business Services Oakland University 2200 N. Squirrel Road Rochester, MI 48309-4401
Drop off at:	Cashier's Office 120 North Foundation Hall Oakland University

IRS Form 1098-T

To assist you in taking a tax credit or deduction for qualified tuition and charges paid, the university will issue an IRS Form 1098-T to students each January. The 1098-T reports the amount of qualified tuition and charges billed and grants or scholarships received for the previous tax year. You may obtain your 1098-T electronically by visiting sail.oakland.edu, click 'Login to Secure Area', click 'Student Services & Financial Aid', click 'Student Records', and then click 'Tax Notification'.

Residency classification for admission and tuition purposes

For University purposes, "domicile" is defined as the place where an individual intends his/her true, fixed and permanent home and principal establishment to be, and to which the individual intends to return whenever away. Upon admission to the University, a student is classified either as a Michigan resident or a nonresident based upon information relating to the student's domicile. A determination of Michigan domicile is required for in-state tuition rates to apply, except as stated below. An individual whose activities and circumstances, as documented to and found by the University, demonstrate that the individual has established a Michigan domicile will be classified as a resident. An individual whose presence in the state is based on activities or circumstances that are indeterminate or temporary, such as (but not limited to) educational pursuits, will be presumed not to be domiciled in Michigan and will be classified as a nonresident. To overcome a presumption of nonresident status, a student must file an Application for Reclassification of Residence Status and document with clear and convincing evidence that a Michigan domicile has been established. The burden of proof is on the applicant.

Evidence of domicile

Certain circumstances, although not controlling, support a claim of domicile. Other circumstances create a presumption against domicile.

Circumstances supporting a claim of domicile include:

- Dependence upon a parent domiciled in Michigan as demonstrated by permanent employment and establishment of a household in the state;
- Employment of the student or the student's spouse in Michigan in a full-time, permanent position, and that employment is the primary purpose for the student's presence in Michigan;
- Residence with Michigan relatives who provide more than half of the student's support including educational costs. This necessarily means that no non-Michigan resident claims the student as a dependent for income tax purposes.

The fact that certain indications of domicile may apply to a student does not mean that the student automatically will be classified as a resident or that the student is relieved of the responsibility for filing an application. See *Residency application process* below.

Circumstances that do not in themselves support a claim of domicile include:

- enrollment in high school, community college or university;
- employment that is temporary;
- employment in a position normally held by a student;
- ownership or lease of property;
- presence of relatives in the state, except as described above;
- possession of a Michigan driver's license or voter's registration;
- payment of Michigan income or property taxes;
- the applicant's statement of intent to be domiciled in Michigan.

In cases where the university determines that an applicant has not demonstrated establishment of Michigan domicile, unless substantial and new information arises that clearly demonstrates the establishment of domicile, the university will require the applicant to document one year of continuous physical presence in the state as one of the criteria for determining eligibility for resident classification in any subsequent application. The year of continuous presence is never the only criterion used for determining resident eligibility, and, in itself, will not qualify a student for resident status. In documenting the year of continuous physical presence in Michigan, the applicant will be expected to show actual physical presence by means of enrollment, employment, in-person financial transactions, health care appointments, etc. Having a lease or permanent address in the state does not, in itself, qualify as physical presence. A short-term absence (summer vacation of 21 days or less, spring break and break between fall and winter term), of itself, will not jeopardize compliance with the one-year requirement. In determining the effect of a short-term absence, the nature of the absence will be assessed to determine whether it is contrary to an intent to be domiciled in Michigan.

Presumption of domicile

Certain circumstances create a presumption of domicile. However, the presence of such a circumstance does not mean that the student will be classified automatically as a Michigan resident or that the student is relieved of the responsibility to file an application. These circumstances include:

Dependent students

A student is presumed to be a dependent of his or her parents if the student is 24 years of age or younger and has been primarily involved in educational pursuits or has not been entirely financially self-supporting through employment.

(a) Residents

The following applies only if the student has not taken steps to establish a domicile outside of Michigan or any other action inconsistent with maintaining a Michigan domicile.

- A dependent student whose parents are domiciled in Michigan is presumed to be eligible for resident classification.
- A dependent student whose parents are divorced is presumed to be eligible for resident classification purposes if one parent is domiciled in Michigan.
- A student who is living in Michigan and is permanently domiciled in Michigan does not lose residence status if the parents leave Michigan, provided: (i) that the student has completed at least the junior year of high school prior to the parents' departure, and (ii) that the student remains in Michigan, enrolled as a full-time student in high school or an institution of higher education.

(b) Non-residents

A dependent student whose parents are domiciled outside the state of Michigan is presumed to be a nonresident.

Absences from the state

Individuals domiciled in Michigan immediately preceding certain types of absences from the state may retain their eligibility for resident classification under the following conditions:

- An individual domiciled in Michigan for 5 years just prior to leaving the state for less than one year may return to the university as a resident for admission and tuition purposes.
- An individual domiciled in Michigan at the time of entry into active missionary work, Peace Corps or similar philanthropic work does not lose eligibility for resident classification as long as he or she is actively and continuously performing philanthropic work and continuously claims Michigan as the state of legal residence for income tax purposes. Dependent children of such an individual also are eligible for resident classification provided: (i) that they are coming to the university directly from high school or they have been continuously enrolled in college since graduating from high school, and (ii) that they have not claimed residency elsewhere for tuition purposes.
- An individual who is domiciled in Michigan immediately preceding an absence from the state for full-time enrollment in school or for a medical residency program, internship or fellowship does not lose eligibility for resident classification provided that the individual has maintained significant ties to the state during his or her absence (e.g., parents still in the state, payment of state taxes, active business accounts), and that the individual has not claimed residency for tuition purposes in another state.

Resident status of aliens

Notwithstanding the above, except for those aliens holding a permanent resident visa, the only aliens eligible for consideration for classification as a resident are those who are on a visa other than a student visa; and who are engaged in permanent employment in the United States; and whose employer has filed or is in the process of filing for permanent resident status on behalf of the alien. An alien will be eligible for consideration if the alien's parents or spouse meet(s) the alien requirements above and dependent status also exists.

Application of in-state tuition rates in special circumstances

Regardless of domicile, in-state tuition rates apply to the following persons:

- Graduate students who hold an assistantship or fellowship awarded through Oakland University;
- Students employed in Michigan in full-time, permanent positions;
- Students admitted to approved on-line degree or certificate programs; and
- Students who are active duty members, or the spouse or dependent child of an active duty member, of the Armed Forces of the United States, while that active duty member is stationed in Michigan and during the student's continuous enrollment in the academic degree program in which he or she is enrolled if that active duty member is transferred to an active duty location outside Michigan; or if the student is the child of an active duty member of the Armed Forces of the United States who was stationed in Michigan but is transferred to an active duty location outside Michigan within the one-year period preceding the student's initial enrollment and the student continues to live in Michigan.

Appeal process

Any student desiring to challenge his or her initial residency classification may appeal the determination to the Residency Reclassification Appeals Office, 101A O'Dowd Hall, (248) 370-3455. The Associate Registrar makes the initial determination of residency. The Registrar is the second level of appeal and the Residency Reclassification Appeals Committee is the third level of appeal. The committee convenes only as necessary. The determination of the Residency Reclassification Appeals Committee is final.

Residency application process

It is the student's responsibility to apply for admission under the proper residency classification. If a student indicates Michigan resident status on the admissions application and the admissions office questions that status, the student will be classified as a nonresident and notified of the need to file an Application for Reclassification of Residence Status with the Residency Appeals Office. The fact that a student's claim to residency for university purposes is questioned does not necessarily mean that he or she will be ineligible for resident status; it simply means that the student's circumstances must be documented and reviewed. Failure on the part of admissions staff to question a student's claim to resident eligibility does not relieve the student of the responsibility to apply and register under the proper residency classification. Furthermore, the university may audit enrolled or prospective students at any time with regard to eligibility for resident classification and may reclassify students who are registered under an improper residency classification.

The presence of any of the following factors will result in an initial classification as a nonresident:

- Out-of-state employment within the last three years;

- Living out of state at the time of application to the university;
- Attendance or graduation from an out-of-state high school (applies if the individual is 24 years of age or younger);
- Attendance or graduation from an out-of-state high school and involvement in educational pursuits for the majority of time since graduation from high school.

Residency reclassification documentation

The following are required:

- a completed application,
- a written, signed statement explaining why Michigan is one's true home,
- a letter from the employer of the family member providing the major support for the student, stating the family member's position title, when the Michigan employment began, and, for aliens, the status of any application for permanent residency; and
- documentation of the Michigan home (lease or home purchase document) must be included.

Applicants also are responsible for providing any other documentation necessary to support their claim to resident eligibility. Additional documentation may be required by the university.

Misrepresentation and falsification of information

Applicants or students who provide false or misleading information or who intentionally omit relevant information in any document relevant to residency eligibility may be subject to legal or disciplinary measures including revocation of admission or expulsion. Students improperly classified as residents based on this type of information will have their residency classification changed and may be retroactively charged nonresident tuition for the period of time they were improperly classified.

Enrollment information

Add courses

Prior to the first day of classes, students may add courses without faculty signature by using SAIL Web registration. Beginning with the first day of class for a semester, students must have an add/drop form signed by the faculty member teaching the course. Students may secure the appropriate form from the Registration Office or from the academic office of the area in which they are enrolled. Students should then bring the signed form to the Registration Office, 100 O'Dowd Hall.

Drop courses

After registration, students may drop a course via SAIL Web, by fax or by certified mail at any time for a given semester until the semester begins. After classes begin, students may withdraw from courses via SAIL Web, by fax or by certified mail until the last day withdrawals are accepted.

Restrictions and holds

Students may not register for classes if their student status has been restricted and holds placed on their records for failure to pay, to submit complete application forms or to satisfy admission or retention conditions.

Withdraw from all courses

Graduate students wishing to withdraw from all of their courses for a given semester must officially withdraw for the semester. Simply notifying faculty or ceasing to attend courses does not relieve students from the obligation of officially withdrawing.

To officially withdraw, students must submit an Official Withdrawal Form at the Registration Office, 100 O'Dowd Hall, by certified mail, fax or by SAIL Web. Information about each option is provided in greater detail in each term's *Schedule of Classes*, or at www.oakland.edu/registrar.

Resignation from the university

A graduate student wishing to terminate his or her graduate student standing with the university may do so by submitting a letter to Graduate Study and Lifelong Learning. Graduate Study and Lifelong Learning will cancel the student's admission status, effective the date the letter is received. If the student is registered for classes at the time of his or her resignation, Graduate Study and Lifelong Learning will ask the Office of the Registrar to withdraw the student effective the date of the resignation. The University Refund Policy applies for resignation after the first day of classes. If a refund is due, it will be mailed to the student.

A graduate student, who after resigning from the university later wishes to return to a graduate program, must reapply for admission. The former student is subject to all graduate admission general and program requirements. Should the student be admitted to a graduate program, he or she may be required to repeat previously completed courses (see time limits for relevant degree or certificate programs).

Enrollment and degree verification

Oakland University has authorized the National Student Clearinghouse to provide degree and enrollment verification. Students may access the National Student Clearinghouse through the secure SAIL system. Once in SAIL students can select from a number of services that include:

- Obtain Enrollment Certificates for Current or Historical Enrollment;
- View all enrollment information on file;
- View lender information;
- View a listing of companies requesting information about his/her enrollment;
- View Loan Locator information.

Veteran certification

Students receiving Veterans Affairs (VA) education benefits must complete a request for enrollment certification with the Office of the Registrar at the beginning of each semester. Students must have all eligibility documents on file with that office, as well as an academic plan of work. Students receiving benefits must report promptly all changes in enrollment. Students on probation for two consecutive terms cannot be certified for benefits. For further information, please contact the certification official at the Registrar's Office, 101A O'Dowd Hall, (248) 370-4010 or veterans.oakland.edu.

Prerequisite course checking

Graduate programs continue to expand the number of course prerequisites that are automatically confirmed by the Banner SAIL system at the time of registration. When a student attempts to register

through SAIL for a course with a prerequisite rule, Banner will check current registration and Banner academic history for that student.

- If the student meets the prerequisite requirements, registration is permitted.
- If a student fails the prerequisite check in Banner, an error message "Prereq and Test Score Error" is returned and registration is denied.

A graduate student who fails the prerequisite check in Banner, but believes the prerequisite course has been satisfied, must obtain approval for a prerequisite override from the chairperson of the department offering the course (Prerequisite Override Form).

In most cases the form is approved by the department chairperson, but in some cases approval is required by the faculty teaching the course or a student's faculty adviser. Once the form is completed and approved it should be brought to Graduate Study and Lifelong Learning, 520 O'Dowd Hall. Approved forms will be reviewed and a prerequisite override entered into Banner. A student is then able to register for the course in Banner Sail.

Academic Records Office

101 O'Dowd Hall

Address and name changes

Oakland University students may submit their address changes online through the secure SAIL system using the Personal Information Link. The SAIL system allows convenient 24/7 online access from anywhere with an internet connection as well as keeping your information safe and secure through our password protected system. Online address changes through the secure SAIL system is the university's preferred way for students to submit their address changes.

The student academic record is under the name provided at the time of admission. All name change requests must be in person. To process a name change, a driver's license and either a marriage license, a Social Security card or a court order that reflects the new name are necessary.

Transcripts

Academic records are maintained in the Academic Records Office, 102 O'Dowd Hall, (248) 370-3452.

There is no transcript fee at Oakland University.

Transcripts for current students may be requested via the SAIL system. Select Student Services & Financial Aid, then Student Records, then Request Printed/Official Transcript. You must provide a complete mailing address for the recipient of the record.

Requests are also accepted by writing to: Transcript Request, Office of the Registrar, Oakland University, 2200 North Squirrel Road, Rochester, Michigan 48309-4490. Requests should include the name under which the student attended, the student's Oakland University student number, the date the student last attended, date of degree (if applicable) and the address to which the transcript is to be sent. Students whose enrollment was completed prior to 1987 must mail or fax a transcript request form, available online at http://www2.oakland.edu/registrar/transcripts.cfm. The mailing address and fax number are included on the form.

Transcripts will not be issued for students who have delinquent indebtedness to the university or who are delinquent in repaying a National Direct Student Loan (NDSL), a Perkins Loan or a Nursing Student Loan (NSL).

Grading

To qualify for a graduate degree, a student must have an overall average of at least 3.0 in all courses taken at Oakland University as a graduate student. No grade below 2.0 may be applied toward a graduate degree. Many programs have more stringent grade requirements for credit and retention. Specific information may be found under the appropriate program area of this catalog. The graduate grading system, implemented fall 1984, is described below.

1. The basic graduate grading system at Oakland University is a 32-point system of numerical grades of 0.0 and 1.0 through 4.0 by tenths and non-numerical grades of (W), (I), (P), (U), (S), (R), and (Z).
2. The meanings of non-numeric grades are as follows:
   a. The W (Withdraw) grade is assigned by the registrar if a student withdraws officially from a course or all courses between the end of the no-grade period and the last day for withdrawal specified in the *Schedule of Classes* each term.
   b. The I (Incomplete) grade is temporary and may be given only after the cut-off date for use of the (W) grade. It is used in the case of severe hardship beyond the control of a student that prevents him or her from completing course requirements. Coursework to remove an (I) grade must be completed during the first eight weeks of the next semester (fall or winter) for which the student registers unless a student-initiated extension is approved by the instructor and the Graduate Study and Lifelong Learning. If course requirements are not completed within one year and no semester has been registered for, the Incomplete (I) grade shall become permanent. A student who wishes to receive an Incomplete (I) grade in a course must present a Student Request for Incomplete (I) Grade form to the instructor by the day of the scheduled final examination. This form, which indicates the instructor's willingness or unwillingness to grant the (I) and the schedule he or she sets for completing the term's work, is available in department offices.
   c. The P (Progress) grade is a temporary grade that may be given only in a course that cannot be completed in one semester. Prior approval must be obtained from the appropriate committee on instruction and the Graduate Study and Lifelong Learning for each course in which (P) grades are to be assigned. The (P) grade is given only for satisfactory work. (P) grades must be removed within two calendar years of the date of assignment; otherwise the (P) converts to a permanent Incomplete (I) which remains on the transcript.
   d. The grade of (S) is given in certain selected courses and is meant to imply 3.0 or better. Courses in which S/U grading is used must be approved by the appropriate committee on instruction and the Executive Director of Graduate Study and Lifelong Learning, who will notify the registrar.
   e. The grade of (U) is given to graduate students only when a course is graded S/U and implies a non-passing grade of less than 3.0.
   f. The Satisfactory Progress (SP) grade is a permanent grade that may be given only in selected research courses. The grade of (SP) is given for satisfactory progress made toward

completion of a thesis, dissertation or doctoral project. Courses in which (SP)/(NP) grading is used must be approved by the appropriate committee on instruction and the Executive Director of Graduate Study and Lifelong Learning, who will notify the registrar.

g. The Unsatisfactory Progress (NP) grade is a permanent grade that may be given only in selected research courses. The grade of (NP) is given for unsatisfactory progress made toward completion of a thesis, dissertation or doctoral project.

h. The grade of (R) is a temporary grade assigned by the registrar in the absence of a grade from the instructor or in the case of the award of an inappropriate grade.

i.. The final grade of (Z) is assigned upon registration for a course as an auditor. The student's declaration of intention to audit is required at the time of registration, and it is understood that no credit for the course is intended that term. An audit registration for a course is permitted only during the late registration period each term. Permission of the instructor to audit and admission to the university are both required before such a registration will be permitted. Regular tuition applies to all courses.

3. All grades and marks assigned will appear on a student's transcript. However, only numerical grades are used in computing the student's grade-point average.

Incomplete (I) grade contract

An instructor may award an incomplete grade to a student whose work in a course has been qualitatively satisfactory, but who is unable to complete some portion of the work required because of illness or other circumstance beyond the control of the student.

Student responsibility

A student who wishes to receive an Incomplete (I) grade in a course must present a Student Request for Incomplete (I) Grade Contract to the instructor AFTER the cut-off date for awarding a (W) grade. The Incomplete (I) grade is offered entirely at the instructor's discretion as a temporary measure for extenuating circumstances beyond the control of the student.

Instructor responsibility

In awarding the temporary grade of Incomplete (I) for graduate courses, the instructor must complete the Student Request For Incomplete (I) Grade Contract submitted by the student requesting the Incomplete (I) grade. The contract will specify the work remaining to be completed. It must be signed by the instructor and the student and maintained by the department offering the course. The student is responsible for providing a copy of the contract to the Executive Director of Graduate Study and Lifelong Learning.

An Incomplete (I) can remain in place on a student's transcript for a maximum of one year.

Appeal of final grade

The evaluation of academic work is the prerogative of the instructor and the rules for determining final course grades should be established by the instructor and given to the students in a course syllabus at the beginning of the semester. All final course grades assigned by instructors are considered final, except Incomplete (I) and Progress (P) grades.

The assignment of final course grades requires an appeal procedure to ensure that the rights and responsibilities of faculty and students are properly recognized and protected. The grade appeal procedure is not to be used to review the judgment of an instructor in assessing the quality of the student's work.

No changes to a final course grade will be approved on the basis of course improvement or re-examination.

Timeline to appeal a final grade

A student who believes grounds exist for an appeal of a final course grade must complete the appeal process within the semester time limits specified in the table below AND within the time limits specified in the various steps below. These time limits represent the maximum time limit for a student to appeal a final course grade. In the event that a graduate program publishes more stringent time limits, the graduate program time limits will take precedence. Once the appeal process is initiated, the burden of proof is on the student. Written verification of each step below is critical.

Semester Final Course Grade Posted on SAIL	Maximum Time Limit to Complete Final Course Grade Appeal
Fall semester	End of subsequent Winter semester
Winter semester	End of subsequent Fall semester
Summer semester	End of subsequent Fall semester

Step 1 – Informal discussion with instructor

Student responsibility

Students who have questions about final grades for the semester are required to contact the instructor who issued the final course grade by e-mail or in writing to request a review of the grade.

STEP 1, an informal conference with the instructor, must be initiated no later than 10 working days after final grades are posted on SAIL to determine if an error has been made.

If the instructor is on leave, on sabbatical, or is not currently on the faculty during the time range stipulated in STEP 1, the student should contact the chair of the academic department that offered the course.

Instructor responsibility

The instructor must respond to the student within 10 working days of being contacted by the student and explain to the student how the grade was determined. If an error was made in calculating the grade, the instructor submits a Grade Change Request to the Office of the Registrar modifying the final grade.

If a resolution with the instructor is not reached (STEP 1), the student can initiate a Formal Grade Appeal Review (STEP 2). The grade appeal procedure is not to be used to review the judgment of an instructor in assessing the quality of the student's work. The burden of proof, however, rests with the student to demonstrate that the grade decision was made on the basis of any of the following conditions:

1. The student believes that the grade received conflicts with the grading policy on the syllabus;
2. The student believes that there is an error in calculation with the grade;
3. The student believes that the grade was given arbitrarily, or with capriciousness or prejudice.

Step 2 – Formal appeal
Chair of the academic department

Student responsibility

The STEP 1 review MUST be concluded before the student can initiate the Formal Grade Appeal Review.

The request for a Formal Grade Appeal Review of a final course grade must be submitted to the chair of the academic department that offered the course no later than 10 days after contact with the instructor.

The student must identify one of the three reasons permissible for the grade appeal review, and submit the Grade Appeal form, along with the following documentation:

1. A thorough explanation of the reason identified for this review, including any relevant written materials—letters, memos, e-mails, or notes;
2. A brief outline of the outcome of the grade review contact/meeting with the instructor;
3. A copy of the course syllabus outlining assignments, tests, and examinations, along with their respective weights to the final grade calculation; and
4. A demonstration of the error in calculation by which the final grade was determined.

Since the written appeal will be the basis for the Grade Appeal Review, the student should ensure that it is clear, complete, and inclusive of all documentation the student wishes to have considered in the appeal process. It is the student's responsibility to present written evidence that the instructor made an error or acted arbitrarily or capriciously in assigning the grade.

Chair responsibility

STEP 1 review MUST be concluded before the student can initiate the Formal Grade Appeal Review.

The chair of the academic department will discuss the Formal Grade Appeal with the instructor. In departments that have a committee charged with the responsibility of hearing student grade appeals, the chair may refer the matter to the committee. The role of the chair is to ensure procedural process; it is not to re-grade the work completed by the student for the course.

If the instructor is also the chair of the academic department, the dean of the school (or the dean's designee) will discuss the Formal Grade Appeal with the instructor.

The chair of the academic department and the instructor of the course must review the Formal Grade Appeal before the Official Withdrawal date in the semester subsequent to the semester the final grade was posted in SAIL.

- Fall Semester Final Grade Posted in SAIL
  Official withdrawal date in subsequent Winter semester
- Winter Semester Final Grade Posted in SAIL
  Official withdrawal date in subsequent Fall semester
- Summer Semester Final Grade Posted in SAIL
  Official withdrawal date in subsequent Fall semester

At the conclusion of this review, a written and dated decision must be provided to the student. If the student does not receive a response from the chair by the Official Withdrawal date, the student may advance their written grade appeal to the next level.

Step 3 – Formal appeal
Dean of the school offering course

Student responsibility

A student who does not believe their final course grade concerns were resolved in review with the chair of the academic department (or academic department committee) may advance their written grade appeal to the dean of the school (or the dean's designee) that offered the course.

The request for a Formal Grade Appeal of a final course grade must be submitted to the dean of the school that offered the course no later than 10 working days after the written decision of the chair of the academic department.

Dean responsibility

The dean may utilize any resources available to resolve the grade appeal before the end of the semester class date. When appropriate, the dean shall convene a committee to review the case. Within the structure provided by the dean, the committee shall design its own rules of operation and select a chair other than a faculty representative from the department concerned.

If feasible, the committee should meet with the student and the instructor together in an attempt to resolve the difference. The committee shall consider all aspects of the case before making its recommendation. The committee shall make a written report with recommendations and provide copies to the dean. The dean shall make a final decision after full consideration of the committee's recommendation.

The dean must provide a written, dated decision to the student, instructor and chair of the academic department before the end of the semester class date. The decision of the school dean is final and ends the grade appeal process for the student; there is no higher level of appeal.

- Fall Semester Final Grade Posted in SAIL
  End of class date in subsequent Winter semester
- Winter Semester Final Grade Posted in SAIL
  End of class date in subsequent Fall semester
- Summer Semester Final Grade Posted in SAIL
  End of class date in subsequent Fall semester

Financial Aid Office
120 North Foundation Hall

There are many benefits to earning a graduate degree. Employees –and potential employees–can attain higher-level jobs at a higher rate of pay than those who possess only an undergraduate degree. An Oakland University graduate degree is valuable.

Oakland University is one of the most affordable universities in Michigan. The financial aid programs help students with their educational expenses. A variety of financial assistance options are available through Oakland University, federal, state, local and private

sources. Complete information about the programs is available on the Oakland University Web site at www.oakland.edu/financialaid.

Note that Oakland University does not charge any fees. While other schools charge registration, recreation, course and other fees, Oakland University does not. At Oakland University, students pay one tuition rate per credit hour with no extra fees for anything.

Contacting the Office

The Student Financial Services Office, located at 120 North Foundation Hall, includes financial aid, student billing inquiries, student employment and cashier's office. The office is open from 8 a.m. to 5 p.m., Monday through Friday, and closed during holidays and holiday breaks.

Student Financial Services may be reached by phone at (248) 370-2550, e-mail at finaid@oakland.edu, or online at www.oakland.edu/financialaid.

Financial Aid Eligibility

- Students admitted to a degree-seeking or eligible certificate program of study at Oakland University.
- Students completing undergraduate coursework in order to begin a graduate program (limit of 12 consecutive months of financial aid).

Applying for Financial Aid and Scholarships

To be considered for financial aid, students must complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. To maximize the financial aid award package, complete the FAFSA as soon as possible after January 1 for the upcoming academic year. Since financial aid is awarded on a first come, first served basis, as funding is available, it is beneficial to apply early. Be sure to include Oakland University's federal school code of 002307 on the FAFSA.

Admitted students are provided with an Oakland University e-mail address. Since financial aid is communicated to students through their Oakland University e-mail, it is important for admitted students to access their Oakland University e-mail on a regular basis.

Admitted students may choose to provide a different e-mail address on the FAFSA for the U.S. Department of Education. Because the student may be using multiple e-mail addresses, it is important that each account be checked regularly. It is important for the student to keep the FAFSA e-mail address updated in order to receive communications from them. Students must include their Social Security Number on the FAFSA for the U.S. Department of Education to process the application.

Although students are not required to provide a Social Security Number to Oakland University, it is required in order to be awarded federal and state financial aid and for student employment purposes. If Oakland University does not have the student's correct Social Security Number, the financial aid application and/or request for student employment will not be processed. It is very important that your FAFSA be accurate. Inaccurate information can cause delays in processing. If income is estimated, corrections are required when the tax forms are completed. Initial inaccurate information can change a financial aid package.

Financial aid award notifications for the upcoming academic year are sent through the Oakland University e-mail address beginning in March. These notifications provide information concerning the amount and type of financial aid the student is eligible to receive. Financial aid awards and adjustments continue as needed throughout the year as subsequent funding and information become available. Financial aid is initially offered for the regular academic year of fall and winter semesters. Students interested in receiving financial aid for the summer semester need to complete a Summer Financial Aid Application available on the Financial Aid Web site at www.oakland.edu/financialaid.

A FAFSA must be completed each year a student is interested in receiving financial aid.

Unusual Circumstances

Extenuating family circumstances, such as long term loss of employment or income, death, separation or divorce, or medical/dental expenses not covered by insurance, and dependent care or disability expenses can affect a student's financial aid package. Students with extenuating circumstances can have their financial aid re-evaluated by completing an Unusual Circumstances Form, available on the Financial Aid Web site at www.oakland.edu/financialaid.

Enrollment

The following minimum enrollment requirements at Oakland University determine eligibility for financial aid each semester. Audit courses, competency credit courses, continuing education courses and courses not required for the current degree program do not count in enrollment status and do not qualify for financial aid.

Graduate programs/Graduate Certificates

	Full-time	Half-time
Fall	8 or more credits	4-7 credits
Winter	8 or more credits	4-7 credits
Summer	8 or more credits	4-7 credits

Graduate preparatory coursework*

	Full-time	Half-time
Fall	12 or more credits	6-11 credits
Winter	12 or more credits	6-11 credits
Summer	12 or more credits	6-11 credits

* Financial aid eligibility is based on required preparatory coursework only.

Sources of Financial Assistance

Scholarships

Financial aid that is not repaid, if all requirements are met. Awards are based on merit.

Assistantships

Students gain professional experiences, which enhance graduate instruction and research, and receive financial assistance to the successful completion of a graduate degree.

Fellowships

A fellowship is an endowment for the support of a student scholar who is pursuing a specific research or educational initiative.

Loans
Money that is borrowed and must be repaid. Students and parents of dependent students can borrow. Loans may accrue interest.

Student Employment
Students work and earn money to help pay educational expenses.

Local and Private Sources
Money that may be given by community organizations, businesses and private agencies.

Payment Plans
Oakland University offers various payment plans.

Loans

Federal Direct Stafford Loan Program
The Federal Direct Stafford Loan Program is designed to provide loans to graduate/professional students enrolled at least half time. Eligibility for the subsidized Direct Loan is based on financial need. Eligibility for the unsubsidized loan is not based on financial need. Students are awarded the maximum eligible subsidized Direct Loan before receiving an unsubsidized loan award. The student must complete a FAFSA to be considered for this program. Loans for Graduate Preparatory coursework are available for a maximum 12 month consecutive period.

Graduate preparatory loan chart

Direct loans (subsidized and unsubsidized)	
Eligibility: Enrolled at least half-time in required undergraduate coursework	
Award Amount: Dependent - $5,500. Independent - $12,500; no more than $5,500 of this amount can be in subsidized loans.	
Interest Rates	
7/1/09 to 6/30/10 Disbursements	7/1/10 to 6/30/11 Disbursements
Subsidized: 5.6 percent	Subsidized: 4.51 percent
Unsubsidized: 6.8 percent	Unsubsidized: 6.8 percent

Graduate Student Loan Chart

Loan Program	Eligibility	Award Amounts	Interest Rates
Federal Perkins Loans	Enrolled at least half-time.	Up to $3,000 a year (maximum of $60,000, including undergraduate loans). Amount actually received depends on financial need, amount of other aid, availability of funds at school.	5 percent.
Direct Loans (subsidized and unsubsidized)	Enrolled at least half-time.	Depends on grade level in school and dependency status. Financial need is required for subsidized loans.	Fixed rate of 6.8 percent.
Direct Graduate PLUS Loans	Enrolled at least half-time. Borrower must not have negative credit history.	Student's cost of attendance minus other aid student receives equals maximum loan amount.	Fixed rate at 7.9 percent.

Repayment of Federal Direct Loans begins six months after a student drops below half-time enrollment, withdraws or graduates. A subsidized loan does not accrue interest before repayment begins or during authorized periods of deferment. An unsubsidized loan accrues interest from the time the loan is disbursed until it is paid in full. Interest that accrues while in school or during other periods of nonpayment is capitalized onto the balance of the loan.

Students who receive Direct Loans are required to have entrance loan counseling before they receive their first loan disbursement and exit loan counseling before they leave the university. Entrance loan counseling is available on the Web at https://www.dl.ed.gov. Exit loan counseling is available at https://www.dl.ed.gov. First time borrowers of Federal Direct Stafford Loans are required to complete a promissory note. Promissory notes are available at http://dlenote.ed.gov.

Federal Direct Graduate PLUS Loan Program
The Federal Direct Graduate PLUS Loan Program is not based on financial need and allows a graduate student enrolled at least half time to borrow for education expenses. Graduate students may borrow up to the estimated cost of attendance less other financial aid.

The Request for Federal Direct Graduate PLUS Loan Program for fall, winter and summer is available on the Financial Aid Web site at www.oakland.edu/financialaid. The student must complete a FAFSA to be considered for the program.

Student employment

Student employment jobs are posted at www.OUCareerLink.com. Federal Work Study and Michigan Work-Study eligible students should be prepared to provide the employing department with verification of a Federal or Michigan Work Study award, via a copy of the Financial Aid Award Notification.

There are three types of student employment at Oakland University: Federal College Work-Study, Michigan Work-Study and Regular Student Employment. All three opportunities provide on-campus jobs for graduate students admitted into an eligible degree-seeking program and enrolled at Oakland University at least half-time. A few off-campus jobs are also available.

Federal Work Study and Michigan Work Study awards are listed on your award notifications, if eligible. Additional student employment opportunities are available for students who did not receive a Federal or Michigan Work Study Award. Direct Deposit is available for student paychecks.

Local and private resources

Many organizations and private agencies support student financial aid assistance programs. Some of these are local social groups, professional associations, civic organizations, corporations, churches and unions. Since information on these programs varies greatly, additional information may be obtained from the sponsoring organizations, high school counseling offices and the Financial Aid Web site at www.oakland.edu/financialaid.

Students are encouraged to pursue local and private resources.

Payment plans

Payment plans are available to spread tuition, on-campus housing and other charges into several smaller payments. To learn more, and to enroll in a payment plan, visit www.oakland.edu/paymentplan.

Billing and payments

Oakland University generates a bill each month for which there has been transaction activity of tuition, on-campus room and board and other related educational expenses billed through the student account or if there is a remaining account balance. Billing is done electronically and the bills may be viewed through the university SAIL Web system. An e-mail notice is sent to all students who have billing activity. Paper bills can be obtained by the student accessing SAIL and printing the bill. Finalized financial aid is reflected on the billing notice and deducted from charges.

Oakland University offers payment options. Financial aid is reflected on your electronic bill (eBill) and deducted from any university allowable charges, provided that all financial aid requirements are met. If you have an amount due and are expecting to obtain financial aid to pay your bill and your financial aid is not reflected on your bill, you must pay your bill by the due date.

Payment can be made through eBill at https://ebill.oakland.edu (you will need your Grizzly ID number and six-digit SAIL PIN) or in person at the Cashiers Office, by cash, check, debit card or credit card. Photo identification will be required.

Payments made from a business or corporate account will be reflected as an outside resource and counted as a financial aid resource when determining eligibility. Outside resources will be included in the federal 1098T issued at the end of the calendar year.

Cost of attending Oakland University

The cost to attend Oakland University includes tuition, books, room and board, transportation and personal/miscellaneous expenses. Costs are typically estimated because of the variety of the number of enrolled credits, housing options, class standing, etc. Financial aid packages are created based on an estimate of the average expected cost for a full-time student and a part-time student. For the current cost of attendance at Oakland University, visit www.oakland.edu/financialaid.

Grants, Contracts and Sponsored Research

530 Wilson Hall

The Office of Grants, Contracts and Sponsored Research (Research Office) supports research and scholarship at Oakland University. The Research Office acts as the primary point of contact between Oakland University and the federal and state agencies, foundations and public and private corporations that provide funds for research, education, training and public service programs. The Research Office provides resources to locate funding opportunities, training programs and research compliance oversight. The office is responsible for ensuring that ethical and legal guidelines are adhered to in the performance of research conducted through Oakland University. Research involving human subjects must be reviewed and approved by the university's Institutional Review Board IRB). The IRB ensures that research protocols are designed to protect the rights of individuals who participate as subjects in research projects. The university is responsible to ensure the humane care and use of laboratory animals in research and does so through the Institutional Animal Care and Use Committee (IACUC). The IACUC monitors research projects involving laboratory animals to ensure that the provisions of all applicable laws and regulations are followed.

In 2009 the university received accreditation of its animal care and use program through the American Association for Laboratory Animal Care International, a prestigious assurance of the safety and compliance of its program. The Biosafety Committee is responsible for evaluating all research and teaching that involves recombinant DNA molecules, infectious materials, and/or cultured cell lines. Lastly, the Radiation Safety Committee reviews, approves and monitors all use of radiation in research and teaching on the Oakland campus.

The Office of Grants, Contracts and Sponsored Research oversees the internal awards of research funds to faculty and students. The Research Committee of the University Senate reviews research applications and recommends funding for individual faculty projects and research-related activities, and student research project support. Students and faculty may contact the Office of Grants, Contracts and Sponsored Research for guidelines and application materials. Current information is available on the Research Office Web site at www.oakland.edu/research.

Protective research standards

Protection of human subjects

All research projects involving the participation of human subjects, use of identifiable private information or use of materials of human origin must be submitted for review by the Institutional Review Board for the Protection of Human Subjects (IRB) before the research can be conducted. This requirement includes all research, from low-risk (exempt) investigations such as surveying people on the street about their favorite television shows to high-risk (expedited or full board) studies like clinical trials of experimental medical treatments. Applications are submitted online through the Research Application Manager (RAM) version 2.0 (see "Online Application for Conducting Research" section). All students conducting research must have an Oakland University faculty sponsor. The student and faculty sponsor are jointly responsible for contacting the IRB and for keeping abreast of the approval process as it pertains to the study. To access the Human Subjects Tutorial, click on Compliance Tutorial link on the Research Web page. For more information about human subjects review and to access the Oakland University Guidelines for Research Involving Human Subjects, click on Human Subjects link on the Research Web page or contact Judette Haddad at (248) 370-4898 or haddad@oakland.edu.

Protection of animal subjects

Research using vertebrate animals must have the approval of the Institutional Animal Care and Use Committee (IACUC) and be conducted according to university guidelines. Applications are submitted online by full-time faculty members through the Research Application Manager (RAM) version 3.0. For more information click on Animal Care Use link on the Research Web page or contact Cliff Snitgen at (248) 370-4441 or snitgen@oakland.edu.

Biosafety

All research, teaching and testing at Oakland University involving recombinant DNA, infectious agents, materials of human origin, and/or cultured cell lines must be approved by the Institutional Biosafety Committee (IBC). Approval is obtained through submission of biosafety research applications. Applications are submitted online by full-time faculty members through the Research Application Manager (RAM) version 3.0. To access different biosafety training tutorials, click on Compliance Tutorial link on the Research Web page. For more information, click on the Biosafety link on the Research Web page or contact Dominic Luongo, biosafety officer at (248) 370-4314 or luongo@oakland.edu.

Radiation safety

Radioactive material (including machinery producing ionizing radiation) can only be used by authorized Oakland University permit holders or under the supervision of a permit holder. User permits are issued by the Radiation Safety Committee (RSC) only to full-time Oakland University faculty members or principal investigators. All others must work under the supervision of a full-time faculty member. To access the Radiation Safety Tutorial, click on the Compliance Tutorial on the Research Web page. For more information click on the Radiation Safety link on the Research Web page or contact Dominic Luongo, radiation safety officer at (248) 370-4314 or luongo@oakland.edu.

Online application for conducting research

To access the Human Subject (IRB) application, researchers should visit the Research Application Manager (RAM) version 2.0 at www.oakland.edu/research/appmanager/. Researchers accessing the site for the first time should read the Step-by-Step Instructions and start by creating an account. To access IBC or IACUC applications, faculty researchers need to visit the Research Application Manager (RAM) version 3.0 at www.oakland.edu/research/gcsram/login.cfm

■ Graduate Assistantships, Scholarships, Fellowships and Traineeships

Graduate assistantships

The Oakland University Assistantship programs provide students an opportunity to gain professional experiences, which enhance graduate instruction and research, while contributing financial assistance to the successful completion of a graduate degree. Oakland University budgets financial resources for a number of graduate assistantships that are made available to full-time, degree-seeking graduate students.

Assistantship structure and definition

All graduate assistantships have a service obligation for which the student receives a stipend. Stipends vary according to program and degree level (doctoral and master's). Graduate assistantships are for the 15-week semester or the academic year and are either a full-time appointment, which requires 20 hours per week service obligation, OR a half-time appointment, which requires 10 hours per week service obligation.

An accompanying tuition reduction, which has no service obligation, is awarded to the student for graduate coursework.

Assistantship tuition reduction

Tuition reductions are equal to the full amount of tuition (excluding any special charges) for each semester during the term of the appointment, up to the maximum number of credits per semester identified in the signed agreement. All graduate students holding an assistantship or fellowship awarded through Oakland University are charged in-state rates during the awarded enrollment period.

1. A tuition reduction is provided for graduate courses or research that contributes directly to the satisfaction of degree requirements.
2. In circumstances where undergraduate courses are substituted on an approved Plan of Study, no more than 12 credits will be allowed per graduate policy.
3. Each semester a tuition reduction will be credited to the student's account according to the percentage of the assistantship:
   8 credit tuition reduction = full-time offer
   4 credit tuition reduction = half-time offer
4. Any tuition reduction benefits (credits), which are not used during the term in which the student holds the appointment are lost.
5. Assistantship agreements are subject to cancellation if the student does not meet the minimum enrollment requirement.

Assistantship administration

Graduate Assistants (GA) at Oakland University are under the direct supervision of the department, program, or unit that offers the appointment. The department determines the GA assignment, supervises his or her work, and recommends him or her for reappointment and promotion to various compensation levels. The department is the primary source of information for the details of the assistantship. Within the academic or non-academic unit, the GA work assignment is determined by the faculty member or director assigned to supervise the GA's particular course, laboratory session, or research project.

Assistantship eligibility and requirements

To be awarded an assistantship, the following are required:

1. Students must have full standing admission status to a specific graduate degree program.
2. Students with a limited standing admission status may be considered for an appointment if the conditional requirements can be met within the first semester of the award enrollment period. An assistantship award will be terminated should the conditional requirements not be satisfied.
3. Students must be in good academic standing.
4. All students with graduate assistantships are expected to maintain a full-time enrollment status at Oakland University during the semester(s) for which they are appointed.
5. Graduate Assistants must maintain an overall grade-point average of 3.0 AND show satisfactory progress toward completing degree requirements.
6. Students may not hold other employment positions during the term of appointment, either at Oakland or elsewhere, without prior written permission from their adviser and Graduate Study and Lifelong Learning.

Application for graduate assistantships

Applications for a graduate assistantship are obtained and submitted to the college, school, department or nonacademic unit where employment is preferred. Areas with work opportunities available will provide an applicant with an application form specific to that area.

The Graduate Assistantship Interest form is a convenient way of notifying academic departments of your interest in receiving an assistantship. Although graduate assistantships may be awarded without submission of this form, the information on this form provides academic departments pertinent details often associated with review of assistantship awards.

Eligible graduate students should send their completed copy of the form to Graduate Study and Lifelong Learning, 520 O'Dowd Hall, 2200 North Squirrel Road, Rochester, MI 48309-4401. The Graduate Assistantship Interest form is available at www.oakland.edu/gradstudy.

Graduate assistantship time limit policy

Graduate Assistantship positions, funded by Graduate Study and Lifelong Learning, are limited to two years for master's degree students and four years for doctoral students. If units wish to continue supporting a student beyond this time, it requires position funding from the school or college.

Council of Graduate Schools resolution

Oakland University subscribes to the Resolution adopted by the Council of Graduate Schools which, among other provisions, states students are under no obligation to respond to assistantship offers prior to April 15. In those instances in which the student accepts the offer before April 15 and subsequently desires to withdraw, the student may submit in writing a resignation of the appointment at any time through April 15.

An acceptance given or left in force after April 15 commits the student not to accept an offer from another institution. In order to accept an assistantship offer at another institution after April 15, prospective graduate assistants must first obtain a written release from any other institution to which a previous commitment has been made. Similarly, an offer by an institution after April 15 is conditional on presentation by the student of the written release from any previously accepted offer.

Scholarships

Bennett Scholarship in Chemistry

Extremely well-qualified students are invited to apply to the Department of Chemistry for consideration for the Bennett Scholarship in Chemistry. Awards will be granted to full-time students whose undergraduate records not only give evidence of exceptional past academic achievement, but promise future high accomplishment as well. All decisions will be based on a student's complete record, including grades, courses taken, test scores, letters of recommendation and a personal interview.

Steven and Leah Vartanian Endowment Scholarship

Graduate students who may be physically challenged and confined to a wheelchair may apply to the Steven R. and Leah P. Vartanian Endowment Scholarship fund for financial assistance. Applicants for admission to Oakland University who wish to be considered for this scholarship should file a scholarship application with Graduate Study and Lifelong Learning prior to June 30.

Fellowships

King/Chavez/Parks Future Faculty Fellowship Program

The King-Chavez-Parks Future Faculty Fellowship Program (KCP) was designed to increase the pool of traditionally underrepresented candidates pursuing faculty teaching careers in postsecondary education. We encourage applications from minorities, women, people with disabilities and individuals with cultural, linguistic, geographic and socio-economic backgrounds who would otherwise not adequately be represented in the graduate student and faculty populations. Preference will not be given to applicants on the basis of race, color, ethnicity, sex, or national origin. Future Faculty Fellowship graduates are obligated to teach in a postsecondary institution or administration for three years. For more information, visit the OU-KCP Fellowship Web site.

Federal Traineeship Grants

The School of Nursing applies each year for Federal Traineeship Grants. Funds for the traineeship come from the Bureau of Health Professions, Health Resources and Services Administration (HRSA). The purpose is to support traineeships for licensed registered nurses enrolled as full-time graduate students, first-year Nurse Anesthesia students, part-time students in the last 12 months of their program, or full-time students beyond the twelfth month of study in a master's nurse anesthesia program.

Financial assistance

Additional financial aid available to graduate students includes Federal Perkins Loans, Federal Subsidized and Unsubsidized Stafford Loans, Federal Work-Study employment, and short-term loans. Please refer to the "Financial Aid" section for detailed information on financial aid processing and programs.

■ Graduate Policies

Graduate academic policy

Undergraduates in graduate courses

Upper-division undergraduates with appropriate credentials, permission of their academic adviser and the department offering the course, may enroll in 500-level graduate courses and use them toward their baccalaureate degrees. The student must complete the Permission for an Undergraduate Student to Enroll in a Graduate Course form and submit to Graduate Study and Lifelong Learning for final approval.

Courses completed for graduate credit and used to satisfy baccalaureate degree requirements may not also be used in the future to fulfill the requirements of a graduate degree. Undergraduate students considering a graduate course should consult with their adviser well in advance of the semester.

An undergraduate student enrolled in a graduate course is subject to all university regulations affecting undergraduates. The university, by allowing a student to earn graduate credit while still an undergraduate, makes no guarantee of the student's admissibility to any graduate program.

Undergraduate students, who receive financial aid and do not intend to use the graduate course to satisfy their baccalaureate degree requirement, must be enrolled in a minimum full-time credit-hour load (12 credit hours) of undergraduate courses that apply to their approved degree program in addition to the graduate course(s). Graduate courses that students use toward their baccalaureate degree are counted in this minimum 12 credit hours.

Reserved graduate credit

Up to 12 credits of 500-level graduate coursework, completed by an undergraduate at Oakland University, may be applied to a graduate program if the courses were not used to fulfill the baccalaureate degree requirements. The courses must be applicable to a select graduate program, approved by the faculty adviser, graduate committee on instruction, and Graduate Study and Lifelong Learning. Credit earned more than six years before a master's degree is to be granted may not be used to fulfill the degree or program requirements.

The difference between undergraduate tuition and graduate tuition will be assessed at the time credits are transferred to the graduate academic record. The Transfer Credit Request for Oakland University Courses form is available on the Web site www.oakland.edu/gradstudy.

Reserved undergraduate credit

Up to 12 credits of 400-level advanced undergraduate coursework, completed by an undergraduate at Oakland University, may be applied to a graduate program if the courses were not used to fulfill the baccalaureate degree requirements. The courses must be applicable to a select graduate program, approved by the faculty adviser, graduate committee on instruction, and Graduate Study and Lifelong Learning. Credit earned more than six years, before a master's degree is to be granted, may not be used to fulfill the degree or program requirements.

Transfer Credit Request for Oakland University Courses forms are available on the Web site www.oakland.edu/gradstudy.

Previous graduate degree credit

In no case will credit earned in one master's degree program be transferred to satisfy the requirements of a second master's degree or graduate certificate program. However, the faculty adviser may review the courses completed in the previous master's degree to determine Oakland University course equivalency. Those courses found equivalent to Oakland University courses which satisfy degree requirements in the second master's program may be eligible for course waiver. See the Course Waiver/Substitution section of the graduate catalog.

Doctoral degree programs, which define the minimum credit hours as coursework beyond the baccalaureate, may permit students who have previously earned a master's degree from Oakland University or another regionally accredited university, to reduce the credits required for the doctoral degree up to 32 credits. This policy does NOT pertain to post-master's doctoral degree programs, where an earned master's degree is required in advance of admission to the program. Students should refer to individual graduate program standards and requirements for details.

Transfer credit

With the approval of the faculty adviser and Graduate Study and Lifelong Learning, selected credits for prior graduate coursework earned at another accredited U.S. college or university may be transferred to count toward an Oakland University degree. The student must have earned graduate level credit in the course according to the institution at which the course was taken.

Students must complete one semester in their graduate program at Oakland and be in good academic standing (not on probation or limited standing) before the Transfer Credit Request can be given final approval. Students should be prepared to provide the graduate program advisor a catalog copy of the course description from the former institution and/or a course syllabus.

To receive consideration for graduate work completed elsewhere but not used toward another degree, the student must:

1. submit official transcripts to Graduate Study and Lifelong Learning;
2. request transfer credits for graduate credits earned from an accredited institution that carry a grade of 3.0 (B) or better;
3. request transfer credits for credit earned within 6 years of the time the OU degree will be conferred;
4. request transfer credits for courses labeled "graduate" and numbered 500 and above;
5. not request transfer credits for courses graded pass/fail, credit/non-credit or satisfactory/unsatisfactory

Oakland University does not provide transfer credit for life experience, credit by examination, independent study courses or noncredit courses.

The total number of graduate credits transferred may not exceed nine, and no more than one credit will be awarded per week of instruction (i.e., a 4-credit course must meet a minimum of 14 hours per week for four weeks—a minimum total of 56 class hours or 47 clock hours of instruction).

The Transfer Credit Request form is available on the Web site www.oakland.edu/gradstudy. Approved graduate transfer credit will appear on the student's official transcript.

Course content

It is recognized that some students may have taken courses at another university that are equivalent in level and content to core or required courses in a graduate program. Under these circumstances, with graduate program approval, a core or required course requirement may be waived, allowing the student to substitute a more advanced graduate course which does not duplicate earlier academic content learning in the same area. Similarities in course titles do not necessarily mean the courses have similar content. To be justified as a waiver, the course should have the equivalent content and skill level as the course required for the Oakland University graduate program.

An approved waiver of content does not reduce the total number of credit hours needed to satisfy program requirements. Waiver of content is approved for academic study of the subject. It is not approved for experiential background in the subject area. It should be noted that not all graduate programs permit waiver of content for core course requirements.

Course waiver/substitution

Students admitted to a graduate program are expected to complete the program requirements according to the Oakland University Graduate Catalog. On occasion, a required course in a graduate program may not be available or may no longer be offered due to program changes. With advance approval from the faculty adviser, graduate program, and Graduate Study and Lifelong Learning, the student may request a course requirement be waived and another Oakland University course substituted. The determination of courses suitable for substitution rests with the graduate program.

When there is just cause for the substitution, the student must submit a Course Waiver/Substitution Petition form to their faculty adviser and obtain all approvals for the course substitution prior to enrolling in the proposed course. A course substitution is not a statement of equivalency between two courses; it is a singular substitution for one student. Approval of a course substitution does NOT override any other enrollment criteria such as prerequisites.

Repeating graduate courses

Graduate students, with the permission of the program faculty and Graduate Study and Lifelong Learning, may repeat a course up to two times. The original grade for the course will remain on the student transcript, but the last numerical grade earned in the course will be used in computing the grade-point average. The repeat course must be graded the same (numeric or pass/fail) as the first course attempt. A graduate student who fails the repeat check in Banner must complete the Petition to Repeat a Course and obtain approval from their program faculty. The time required to review the petition and provide final decision varies by each graduate program. A graduate student should plan in advance to be assured the petition is approved BEFORE the intended semester of enrollment. The graduate program committee will forward the completed petition to Graduate Study and Lifelong Learning, 520 O'Dowd Hall. A repeat override will be entered into Banner for approved petitions. Filing of this form is the responsibility of the student.

Time limit for completing degree

Graduate certificate and master's degree

Credit earned more than six years before a graduate certificate or master's degree is to be granted, may not be used to fulfill the degree or program requirements. This means, for example, that a course taken in Fall 2007 may be used to satisfy graduate certificate or degree requirements until the end of the Fall 2013 semester.

Clinical or practice focused doctoral degree

Time limits for clinical or practice focused doctoral programs are found within the program descriptions. Doctoral students with credits earned more than seven years before the degree is granted must request an extension from the academic dean and Graduate Study and Lifelong Learning.

Ph.D. degree

The time limit for completing a Ph.D. degree policy requires a student to achieve candidacy within six years from the first course enrollment in the Ph.D. degree program.

After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense). The maximum time limit for completing a Ph.D. degree is no more than 10 years from the term of the first course enrollment in the doctoral program.

Extension of time to complete degree

Graduate certificate and master's degree

A student who fails to complete all requirements for the graduate certificate or master's degree within 6 years may petition his or her graduate program for an extension of time to complete the outstanding requirements. The student must submit the Extension of Time to Complete Degree request form to their graduate program.

The maximum extension of time is two years; however, some graduate programs may reduce the maximum period of extension.

The graduate program forwards the completed Extension of Time to Complete Degree request form to Graduate Study and Lifelong Learning. Approved requests must include an updated Plan of Study and revalidation or denial of Oakland University courses that will be more than six years old at the time of graduation.

Graduate Study and Lifelong Learning will communicate in writing the final decision to the petitioner with a copy sent to the student's graduate program.

International students should first contact the International Students and Scholars Office to discuss Program Extension regulations monitored through SEVIS.

Clinical or practice focused doctoral degree

A student who fails to complete all degree requirements within seven years may petition his or her graduate program for a one-year extension of time in which to complete the outstanding requirements. The student must submit the Extension of Time to Complete Degree request form to their graduate program.

The graduate program will forward the completed Extension of Time to Complete Degree request form to Graduate Study and Lifelong Learning. Approved requests must include an updated Plan of Study, a time table listing specific goals to be accomplished at various points during the extension period and revalidation or denial of Oakland University courses that will be more than seven years old at the time of graduation.

Graduate Study and Lifelong Learning will communicate in writing the final decision to the petitioner with a copy sent to the student's graduate program.

International students should first contact the International Students and Scholars Office to discuss Program Extension regulations monitored through SEVIS.

Ph.D. degree

A student who does not achieve candidacy within six years will be placed on academic probation and subject to dismissal from the Ph.D. program unless the program petitions Graduate Study and Lifelong Learning to grant a Leave of Absence or request an extension because of extenuating circumstances. If a leave of absence is granted to a doctoral student in precandidacy status, the time limitation for completing coursework and passing comprehensive exams will be extended by the same time as the length of the approved leave.

A doctoral student, advanced to candidacy who has not completed the degree within 10 years, must request an extension, with the support of the department, the Academic Dean and Graduate Study and Lifelong Learning.

A student advanced to candidacy who exceeds the maximum time limit of 10 years from the term of the first course enrollment in the Ph.D. program may be returned to precandidacy status OR placed on academic probation and subject to dismissal from the program.

Revalidating Oakland University overage courses

Often the knowledge content of courses completed eight years and beyond is no longer current enough to be considered relevant toward the degree. Therefore, graduate credit earned more than eight years prior to the date on which the degree is to be granted may not be applied to meet graduation requirements. It is possible, however, that out-of-date Oakland University credit may be revalidated, subject to departmental and Graduate Study and Lifelong Learning approval.

To revalidate out-of-date Oakland University credit, the student must submit an Extension of Time to Complete Degree form. It is the responsibility of the student submitting the request to document how he or she has brought his or her knowledge up to date for each course that was taken beyond eight years. This may include documenting the following: relevant work activities, professional development or continuing education credits, conference attendance, special readings or the passing of qualifying or comprehensive examinations.

In cases where activities have not occurred or where documentation does not exist, it is the responsibility of the adviser to specify how the student will update his or her knowledge in the specific course area(s) for each course completed beyond eight years. The adviser may propose the student register to repeat Oakland University course(s), pass a competency examination for Oakland University course(s), OR be assigned special activities, such as seminars or additional readings in specific course areas. The proposed special activity must include an evaluation of student mastery and be assigned a grade through competency credits.

Course competency credit

Competency examinations are offered by some departments and, with the approval of Graduate Study and Lifelong Learning, can be used to revalidate out-of-date Oakland University credit which is beyond the six-year time limit. Students should consult their advisers for specific information and approval. Students must register during the normal registration period. University legislation stipulates that the examination must be taken not more than six weeks after the close of registration.

■ Graduate Student Academic Standing

The policies and requirements published in the Graduate Catalog represent minimum standards adopted by the Graduate Council for academic standing. In the event that a graduate program adopts standards higher than set forth in the catalog, the graduate program standards will take precedence over the relevant sections of the catalog.

Good academic standing

To be in good academic standing, a graduate student must meet both the standards set by the degree program in which the student is enrolled and those set by the Graduate Council.

1. The graduate student must make satisfactory progress toward fulfilling degree requirements, including the completion of critical degree milestones as set forth by the applicable degree program and by the Graduate Council.
2. The graduate student must maintain an overall grade-point average of 3.0.
3. The graduate student admitted to a graduate program with limited standing must complete the academic requirements specified in the written offer of admission within three academic terms (fall-winter; summer excluded).

All graduate students are expected to remain in good academic standing throughout the entire course of their graduate program.

Academic progress

Graduate program units conduct a review of all graduate students' academic progress in order to identify problems, evaluate chances of successful completion, and encourage timely progress. Expectations include successfully completing critical non-course academic milestones, within the time limits defined by university regulations, graduate council policies and graduate programs.

A student making inadequate progress is placed on academic probation and provided a clear, written explanation of the problems, along with specific recommendations to remedy problems in a timely fashion.

Grade-point average

Overall GPA requirement

To remain in good academic standing, all students admitted to a graduate degree or graduate certificate program at Oakland University must maintain an overall GPA of 3.0 or above. At the end of any semester, a graduate student with an overall GPA below 3.0 is placed on academic probation and provided a second and third (final) probationary semester. A student is subject to dismissal upon failure to raise the cumulative GPA to 3.0 or above by the end of the third (final) probationary semester.

Failure to receive notification does not alter the student's dismissal status. Graduate students are expected to monitor their academic standing and progress.

Individual course grade requirement

No individual course grade below 2.0 may be applied toward a graduate degree or certificate program.

At the end of any semester, a graduate student who earns an individual course grade below a 3.0 will be reviewed by the graduate program unit and subject to academic warning, probation or dismissal, according to published program requirements.

Academic probation

The purpose of placing a student on probation is to allow the student time to correct deficiencies. Students identified as not meeting the academic standards and/or requirements for good academic standing must be provided with written notice by the program, which includes acknowledgement of receipt by the student with a copy to Graduate Study and Lifelong Learning, of their deficiencies, corrective measures, a timeline for completion, and the consequences of not removing the deficiencies.

The decision of a graduate program to remove a student from an internship, practicum, clinical site, or service-learning placement must be appealed within the academic unit.

These academic procedures should be followed PRIOR to a graduate program recommendation to dismiss a student from a degree program. In doctoral programs, advancing candidacy is used to evaluate students in the degree program prior to becoming a candidate for the degree.

Academic dismissal

The graduate program may recommend academic dismissal for unsatisfactory academic performance, lack of academic progress toward degree or failure to meet graduate program requirements within established time limits. Graduate Study and Lifelong Learning, in consultation with the graduate program, may also recommend a dismissal for these reasons.

Dismissals for student behavioral issues or academic conduct are covered by separate policies and procedures.

Recommendation for dismissal

Students placed on academic probation are provided an academic probation period to improve performance. After the probationary period has expired, the student's academic performance will be evaluated by the graduate program unit. Students who do not return to good academic standing are subject to academic dismissal.

A dismissed student is not in good standing and is not eligible to enroll as a student in that graduate program during the dismissal period. A student who has been academically dismissed may be eligible to apply to a different Oakland University graduate program as follows:

- The student may not apply to the graduate program from which the student was dismissed; and
- The student is granted no guarantee of admission to a different graduate program.

Responsibility of graduate program

To initiate academic dismissal, the graduate program must provide Graduate Study and Lifelong Learning written rationale for the action, as well as a copy of the program handbook or other written guidelines that include a description of the procedures provided to the student. The graduate program does NOT dismiss the student from a degree program, but makes the recommendation to Graduate Study and Lifelong Learning which reviews the recommendation and finalizes the action.

Responsibility of Graduate Study and Lifelong Learning

The responsibility of Graduate Study and Lifelong Learning is to affirm that the dismissal procedures followed by the academic department comply with Graduate Council and graduate program policy, not to review faculty judgments as to the quality of a student's academic performance.

The Executive Director of Graduate Study and Lifelong Learning reviews the documentation submitted by the academic department to affirm adherence to published dismissal procedures. Finding no violation of procedural due process and affirming the process was deemed fundamentally fair, the recommendation for academic dismissal submitted by a graduate program will be confirmed. Graduate Study and Lifelong Learning will provide written notice of the decision to the graduate program and to the student within three (3) weeks of receiving the written recommendation to Graduate Study and Lifelong Learning from the graduate program. In the event of a reversal, such written notice shall contain a statement of the basis on which the decision was made.

Appeal procedure for dismissal

The appeal procedure for academic dismissal is a closed, internal proceeding. As such, there is no institutional attorney or other representation at a hearing. The decision to reinstate a student will be made in the sole or absolute discretion of Graduate Study and the Senior Associate Vice Provost.

In general, reinstatement may be granted in cases where either the intent of the procedure was not followed or where there are additional, extenuating circumstances that affected the student's performance that were unknown at the time of the initial recommendation to Graduate Study.

Step 1

Following receipt of a letter of dismissal from Graduate Study and Lifelong Learning, the student has thirty (30) calendar days to appeal the dismissal. If the student wishes to appeal, the student must write a letter to the Senior Associate Vice Provost, with a corresponding copy to the chair of the relevant graduate program or department. The appeal must cite an appropriate cause for consideration of the appeal, providing information on the reason(s) for reinstatement and substantial evidence or extenuating circumstances in support of reinstatement. Disagreements over evaluation of academic quality or the decision of a graduate program unit to remove a student from an internship, practicum, clinical site, or service-learning placement must be appealed within the academic graduate program.

Step 2

Within thirty (30) calendar days of receipt of a student's appeal, the Senior Associate Vice Provost will seek written input from the Chair or Program Coordinator of the relevant graduate program or department. The graduate program or department has fourteen (14) calendar days to send written input to the Senior Associate Vice Provost. The Senior Associate Vice Provost will review the case, based upon the appeal and written input from the graduate program and/or department.

The Senior Associate Vice Provost may either: 1) uphold the dismissal status or 2) reverse the decision of the graduate program and/or department.

If the Senior Associate Vice Provost is satisfied that there is no valued basis for reinstatement and that the proceedings regarding the student have met the stated procedure and requirements, the appeal for reinstatement will be denied. If there is a reason to overturn the dismissal, the student will be reinstated on academic probation until such time as the student meets all academic requirements and standards or is returned to good academic standing.

The decision of the Senior Associate Vice Provost is final.

Reversal of department decision to dismiss

Should the Senior Associate Vice Provost find that the graduate program unit or department did not follow proper procedures, or unprofessional conduct is a concern which might have affected the graduate program decision of dismissal, the appeal may be subject to reversal by the Senior Associate Vice Provost.

In such a case or in any other case deemed appropriate by the Senior Associate Vice Provost, advice from the Graduate Council Subcommittee on Academic Graduate Conduct may be sought at the discretion of the Senior Associate Vice Provost.

Following the investigation or advice from the Graduate Council Subcommittee on Academic Graduate Conduct and the final review by the Senior Associate Vice Provost, the result will be conveyed in writing to the student, the graduate program unit and the dean of the respective College or School.

■ Ph.D. Degree Information

Doctoral education has two stages. During the first stage (precandidacy) a doctoral student enrolls in preliminary coursework to prepare for advanced research. A student who successfully completes this coursework (excluding dissertation credits) and meets program requirements, usually including comprehensive (qualifying) examinations, is advanced to the second stage (candidacy).

Time to degree

The maximum time limit for completing a Ph.D. degree is no more than 10 years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

Time to candidacy

A student who does not achieve candidacy within six years will be placed on academic probation and subject to dismissal from the doctoral program, unless the program petitions Graduate Study and Lifelong Learning to request an extension because of extenuating circumstances. A student advanced to candidacy who exceeds the maximum time limit of 10 years from the term of the first course enrollment in the doctoral program may be returned to precandidacy status OR placed on academic probation and subject to dismissal from the program.

The Continuous Enrollment policy remains in effect through the entire Ph.D. program. Should circumstances arise that may cause an interruption in graduate study, the student must apply for a Leave of Absence. If a Leave of Absence is granted to a doctoral student in precandidacy status, the time limitation for completing coursework and passing comprehensive exams will be extended by the same time as the length of the approved leave. A doctoral student, advanced to candidacy, who has not completed the degree within 10 years, must request an extension with the support of the department, from the Academic Dean and Graduate Study and Lifelong Learning.

Each doctoral program has its own unique requirements, including timelines, for which the student is responsible. These include the monitoring and evaluating of progress toward the degree. A student not making adequate progress may be dismissed from the doctoral program based on recommendation of the department, approval by the Academic Dean and Graduate Study.

Some financial aid has its own requirements concerning time and/or credits per semester. The student is responsible for adhering to these requirements. Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements while working on the dissertation (e.g., Veterans Affairs, Immigration and Naturalization Service for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

A doctoral student who does not maintain continuous enrollment and has NOT been granted an official leave of absence is subject to termination of admission to the program based on recommendation of the department, approval by the Academic Dean and Graduate Study and Lifelong Learning.

Doctoral residency requirement

All doctoral programs have residency requirements. Students are advised to consult the appropriate section of this catalog that pertains to their particular degree program. All doctoral students are required to register for at least one credit of coursework every fall and winter semester after their admission to a program. In cases where the student has completed all of the formal coursework for the degree, the student may register for doctoral or dissertation research. The student must be registered for the semester in which they defend their dissertation.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least one credit hour each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Continuous enrollment is met by registration in a graduate-level course relevant to the student's academic program. Doctoral students who have completed required credits toward their degree may register for GCE 800. This course will be assessed at the "graduate continuous enrollment" rate (equivalent to one credit at the current graduate tuition rate and will not count toward the degree.

Should circumstances arise that may cause an interruption in graduate study, the student must apply for a Leave of Absence. A student on official Leave of Absence is not required to pay tuition for GCE credits, but the student is NOT entitled to any services from the university during the leave, including demands upon faculty or adviser time, or receipt of fellowship, assistantship or financial aid.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, United States Citizenship and Immigration Services (USCIS) for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Doctoral students who do not maintain continuous enrollment and have not been granted an official Leave of Absence are subject to termination of admission to the program based on recommendation of the department and approval by the Academic Dean.

Leave of absence

Doctoral students who are considering a Leave of Absence should seek immediate guidance from their adviser or doctoral committee chairperson. Whenever possible, the request should be made in advance of the anticipated leave or as soon as possible after commencement of an emergency leave. Requests for Leave of Absence will not be granted retroactively. Students who are absent beyond the end of an approved Leave of Absence will be required to apply for readmission to the program.

A student granted a Leave of Absence will have his or her time-to-completion of degree extended by the amount of time granted in the leave of absence. A student on official Leave of Absence is exempted from the requirements set forth in the Continuous Enrollment Policy. While in this status, students are not entitled to any services from the university, including demands upon faculty or adviser time, or receipt of fellowship, assistantship or financial aid during their authorized leave. Leave of Absence Request forms are available through Graduate Study and Lifelong Learning www.oakland.edu/gradstudy.

Admission to Doctoral Candidacy

Preliminary or Qualifying Exam

The Preliminary or Qualifying Examination serves as the last major step toward the Ph.D. degree, except for the completion and defense of the dissertation. The purpose of the examination is to determine the readiness of a pre-candidate to perform dissertation research. Successfully completing preliminary coursework (excluding dissertation credits) and passing the examination constitutes formal Admission to Candidacy. The preliminary examination is distinct from the oral defense of the dissertation project.

Oral Defense of Dissertation

When dissertation research involves human subjects, experimental animals, recombinant DNA, or the use of radioactive substances, special approval is required, as explained under the section Protective Research Standards.

After the student has completed all other requirements for the Ph.D., including the writing of a dissertation, the committee will approve an oral defense of the dissertation to be scheduled. The examining committee will inform Graduate Study and Lifelong Learning in advance of the date, time, place, and dissertation title for the public presentation. Graduate Study and Lifelong Learning will publicize the defense on the Web site www.oakland.edu/gradstudy.

Further research, analysis, or rewriting may be required by the committee as a result of discussions arising during the defense.

A student must be registered in the term of the oral defense of the dissertation and in good academic standing.

Submission of Dissertation

After the examination committee has approved in writing the successful defense of the dissertation, the student submits three (3) approved copies to Graduate Study and Lifelong Learning. The dissertation must comply with the University format standards as published in the "Guide to the Preparation of Theses and Dissertations."

University Microfilms International (UMI) publishing requirement

Graduate Study and Lifelong Learning requires every doctoral dissertation to be published for the purpose of archiving the significant work of Oakland University graduate students.

Doctoral students completing a dissertation are required to publish their dissertations through UMI (a division of Proquest) and to pay the appropriate publishing fee. Publication of the doctoral dissertation through UMI is a graduation requirement for all Oakland University Ph.D. candidates. Dissertations that have been approved for publication by the Thesis/Dissertation Coordinator can only be submitted to UMI by Graduate Study and Lifelong Learning.

Survey of Earned Doctorates (SED)

Doctoral students must participate in the Survey of Earned Doctorates by submitting the online SED questionnaire during the dissertation final approval meeting with the Thesis/Dissertation Coordinator. SED is a long-standing national survey of doctoral students conducted by the National Opinion Research Center (NORC) at the University of Chicago for the National Science Foundation, National Institutes of Health, and other supporting institutions. Student personal data remains confidential.

■ Professional Doctoral Degree

Professional or practice-based doctoral programs culminate in the completion of a terminal doctoral research project. The terminal doctoral research project may be qualitative or quantitative in nature and can include (but is not limited to) randomized clinical trials, intervention studies, comparison studies, single subject methods, meta-analytic designs, integrative literature reviews, or other discipline specific projects demonstrating excellence. Professional or practice-based doctoral students must carefully check individual disciplines for specific graduate program terminal doctoral research project requirements.

Terminal research project

This policy statement provides minimum requirements for submitting the archival copy of the terminal doctoral research project to Graduate Study and Lifelong Learning in partial fulfillment of the professional doctoral degree requirements.

As new professional or practice-based doctoral programs are instituted, this policy may be appended to encompass requirements set forth by the standards of practice recognized by the faculty of those disciplines for terminal doctoral research projects.

Minimum project requirements

1. A professional or practice-based doctoral program requires submission of a terminal doctoral research project rather than a dissertation.
2. The student must form an advisory committee; specific graduate program publications reference the requirements for selection of advisory committee members.
3. The student must submit a terminal doctoral research project "proposal" to the advisory committee for approval.
4. A terminal doctoral research project that involves the participation of human or animal subjects requires approval from the Institutional Review Board (IRB) or Institutional Animal Care and Use Committee (IACUC) prior to beginning subject recruitment.
5. The student may be required to present the doctoral research project in a public forum and/or defend the doctoral research project before the advisory committee; the student must refer to specific graduate program publications for requirements.
6. The advisory committee members are responsible for determining whether both the presentation and the written terminal doctoral research project meet the standards set forth by the specific graduate program.
7. The advisory committee members shall confirm successful completion of the terminal doctoral research project by signing the Terminal Doctoral Research Project title page (available on Web site www.oakland.edu/gradstudy) This written approval indicates that the advisory committee is satisfied with the substance and format of the terminal doctoral research project.
8. The terminal doctoral research project must comply with the format style manual approved by the discipline for publication. Disciplines may require a doctoral research project to be written in a different format, such as a peer reviewed journal article.
9. The doctoral research project must be graded prior to submission to Graduate Study.
10. The final deadline to submit the doctoral research project to Graduate Study depends on the semester the student intends to graduate. The semester deadlines appear in the Important Dates Calendar (published on the registrar Web site) as the thesis/dissertation final submission deadline. Compliance with the semester deadline is compulsory.
11. The student must submit the approved terminal doctoral research project to Graduate Study and Lifelong Learning, 520 O'Dowd Hall.

■ Graduation Information

Information in this section is intended to guide you in completing your degree requirements. It is not a substitute for departmental advising. Students must meet with their departmental adviser to confirm that they have met all the following requirements and to determine what additional departmental requirements may exist.

Online degree evaluation

Graduate Study and Lifelong Learning offers graduate students an online degree evaluation tool (WebCAPP), which is available for most master's and certificate programs, as well as selected doctoral programs. WebCAPP produces a report that shows how Oakland University courses, transfer credits, waivers/substitutions and in progress courses apply toward degree requirements. A CAPP degree evaluation does not take the place of regular academic advising or the Oakland University Graduate Catalog.

To stay on track for graduation, it is recommended that students run a degree evaluation during each registered semester. Please note that these evaluations are considered unofficial and do not replace the official graduation audit conducted by Graduate Study and Lifelong Learning. Final approval for graduation is required by the student's department and Graduate Study and Lifelong Learning.

Any changes to the student's original, approved Plan of Study must be submitted to Graduate Study and Lifelong Learning in order to be incorporated into the online degree evaluation system. Additionally, students should make sure that an updated, adviser-approved plan of study is on file in Graduate Study prior to applying for graduation.

While not a replacement for academic advising, the online degree evaluation tool allows students to self-assess progress toward a degree and can assist with registration and course selection. Students considering a program transfer will be able to determine how previously completed coursework might apply to the new degree program. Undergraduate students considering applying to certain graduate programs, such as the MBA and MPA, can check the status of their admissions prerequisites prior to submitting their application. More information about these features can be found in our online FAQs.

Check your progress toward degree by following these simple steps:

1. Access SAIL at https://sail.oakland.edu or by clicking the SAIL link from inside the student portal.
2. Once logged into SAIL, select Student Services & Financial Aid.
3. Select Student Records, and then select Degree Evaluation.
4. Select the current term and click Submit. (If you are selecting classes for registration, please select the term you are trying to register for.)
5. Your current curriculum information will appear. If your curriculum is not correct, please contact Graduate Study and Lifelong Learning.
6. Select the Generate New Evaluation link at the bottom of the page.
7. Click the radio button next to your curriculum information, select your term of expected graduation, and then click Generate Request.
8. Click the radio button next to "Detail Requirements" and click Submit.

Thesis and dissertation

Students are responsible for obtaining the publication ''Guide to the Preparation of Theses and Dissertations'' from www.oakland.edu/gradstudy. In addition, students must make an appointment prior to and after defense or presentation to assure that the manuscript conforms to university format standards. Three copies of the approved manuscript must be delivered to Graduate Study and Lifelong Learning, 520 O'Dowd Hall, by the date stated in the *Schedule of Classes* for the term in which the student expects to graduate. Doctoral students must submit an additional copy to meet the UMI publication requirement.

The university considers student theses and dissertations to be public statements of research findings. Therefore, students who submit such work in fulfillment of degree requirements shall be deemed to have consented to disclosure of the work.

Application for degree

Formal application for a degree to be conferred must be filed online by the degree candidate. Information and instructions are available at www.oakland.edu/gradstudy. If filing is not timely, conferral is delayed to the next conferral period even though all other degree requirements may have been completed on time.

Application for degree deadlines*

Winter Semester	Last Friday in January
Spring Semester	Last Friday in January
Summer Session	Last Friday in June
Fall Semester	Last Friday in September

* Application for degree deadlines are subject to change. Confirm deadlines with Academic Records or consult the *Schedule of Classes*.

Graduation audit

A formal graduation audit is a required evaluation of the student's academic record and Plan of Study to determine the student's eligibility for graduation. The audit, initiated by a student's application for graduation, determines whether all university, degree and program requirements have been satisfied.

Conferral

Degree conferral requires that the student be in good academic standing and that all requirements for the degree have been completed satisfactorily. Degrees are conferred four times each year: April, June, August and December. Students who qualify for degree conferral receive their diplomas by mail, normally within two months following conferral.

Degree Conferral Date

Oakland University operates as an institution of higher education, providing the Board of Trustees of Oakland University with legal authorization to grant degrees to persons who have met all requirements for the completion of those degrees.

The Board of Trustees of Oakland University confers degrees four (4) times during the year. These four dates are Fall semester (December), Winter semester (April), Summer I (June) and

Summer II (August). These conferral dates represent the official completion date for all degree awards, regardless of the actual date degree requirements are met within the specified term.

When students complete all of their degree requirements well before the next degree conferral date, Graduate Study and Lifelong Learning certifies in a formal letter that all degree requirements have been met and includes the expected date of degree conferral.

Commencement

Commencement ceremonies are held twice each year. A May ceremony recognizes Winter Semester (April) and Summer I (June) master's degree candidates and Winter Semester doctoral degree candidates. A December ceremony is held for Summer II (August) and Fall Semester (December) master's degree candidates and Summer I, Summer II and Fall Semester doctoral degree candidates. For additional information on upcoming commencement ceremonies, please refer to the *Schedule of Classes* or www.oakland.edu.

Doctoral student participation in Commencement

Doctoral students are not eligible to participate in commencement without completing all degree requirements, including the dissertation defense and submission of an approved dissertation to Graduate Study and Lifelong Learning. The dissertation must be signed by all committee members and must comply with the dissertation requirements as outlined in the *Guide to the Preparation of Theses and Dissertations*.

Master's student participation in Commencement ceremony before completion of degree requirements

Within one term of completing their degree requirements, master's students may participate in commencement. A Request to Participate in Commencement Ceremony form must be approved by their academic adviser and department chair and submitted to Graduate Study and Lifelong Learning for final approval.

Graduation checklist for doctoral students

To fulfill their graduation requirements, doctoral students must:

1. File a program of study with Graduate Study and Lifelong Learning, 520 O'Dowd Hall.
2. Submit an online Application for Graduation for the term in which they expect to graduate, by the deadline stated in the *Schedule of Classes.* If graduation requirements are not completed by the stated deadlines, students must change their graduation date by contacting Graduate Study and Lifelong Learning, 520 O'Dowd Hall
4. Review their academic record for any unmet requirements:
   (a) Incomplete (I) or progress (P) grades must be removed.
   (b) Transfer credits must be approved and processed by the beginning of the semester of intended graduation.
   (c) Transfer credits must have been completed within the 6-year time limit to count toward degree requirements.
   (d) An overall 3.0 GPA must be achieved.
5. Submit verification that all comprehensive examinations have been completed to Graduate Study and Lifelong Learning, 520 O'Dowd Hall.
6. Register for the term in which their dissertation will be defended.
7. Complete a successful dissertation defense by the deadline stated in the *Schedule of Classes*.
8. Attain format approval from Graduate Study and Lifelong Learning by the deadline stated in the *Schedule of Classes*.
9. Submit for binding three copies of their format approved dissertation to Graduate Study and Lifelong Learning by the deadline stated in the *Schedule of Classes*.
10. Submit an additional copy of their format approved dissertation to meet the UMI publication requirement.
11. Submit an online Survey of Earned Doctorates (SED) questionnaire.

Graduation checklist for master's students

To fulfill their graduation requirements, master's students must:

1. File a program of study with Graduate Study and Lifelong Learning, 520 O'Dowd Hall.
2. Submit an online Application for Graduation for the term in which they expect to graduate, by the deadline stated in the *Schedule of Classes.* If graduation requirements are not completed by the stated deadlines, students must change their graduation date by contacting Graduate Study and Lifelong Learning, 520 O'Dowd Hall.
3. Review their academic record for any unmet requirements:
   (a) Incomplete (I) or progress (P) grades must be removed.
   (b) Transfer credits must be approved and processed by the beginning of the semester of intended graduation.
   (c) Transfer credits must have been completed within the 6-year time limit, to count toward degree requirements.
   (d) An overall 3.0 GPA must be achieved.
   (e) A Petition of Exception must be filed if the degree will NOT be completed with the university's 6-year time limit (a 2-year extension for a maximum of an 8-year total).
4. Complete a successful defense or presentation, if completing a thesis, by the deadline stated in the *Schedule of Classes.*
5. Attain format approval from Graduate Study and Lifelong Learning, if completing a thesis, by the deadline stated in the *Schedule of Classes.*
6. Submit for binding three copies of their format approved thesis to Graduate Study and Lifelong Learning by the deadline stated in the *Schedule of Classes.*

■ Specialized Research Facilities

Center for Biomedical Research

The mission of the Center for Biomedical Research at Oakland University is to vigorously promote and support biomedical research and education at Oakland University and allied institutions, to recruit and retain outstanding biomedical scientists, to facilitate collaborative biomedical research projects and finally to develop gift, grant and contract support for biomedical research programs, graduate and undergraduate training, as well as core facilities and equipment.

Eye Research Institute

The Eye Research Institute, with laboratories and offices on the third and fourth floors of Dodge Hall, conducts studies on the eye in health and disease. Faculty research is funded primarily by the National Institutes of Health. The research involves a multidisciplinary approach to the study of the lens and cataract, and the biochemistry, physiology and pharmacology of the retina. The institute has tissue culture laboratories and transmission and scanning electron microscopes, maintained in part by a Vision Research Infrastructure Development grant from the National Eye Institute.

Several members of the Department of Ophthalmology at William Beaumont Hospital, which is affiliated with the institute, are members of the institute's clinical faculty. This affiliation provides enhanced educational experience for ophthalmology residents and fellows. The institute also offers qualified undergraduate and graduate students opportunities for research experience.

The programs of the Eye Research Institute are regularly reviewed by a scientific advisory board whose members are nationally recognized leaders in eye research. Further information may be obtained by contacting the Office of the Director. For more information, visit www2.oakland.edu/eri.

Fastening and Joining Research Institute

The congressionally approved Fastening and Joining Research Institute (FAJRI) at Oakland University is the only known facility of its kind in the world: an academic, nonprofit research facility dedicated solely to the fastening and joining of materials. This one-of-a-kind facility pursues fundamental and applied research to develop and disseminate new technologies for the fastening and joining of metals, composites and polymers.

Through basic and applied research, the Fastening and Joining Research Institute will develop and disseminate new, advanced technologies in the areas of automated assembly of bolted joints, adhesive bonding of composites, and resistance welding and riveting – a niche area that significantly impacts the safety and reliability of many products in both the civilian and military sectors of the U.S. economy.

The English as a Second Language Center

The Oakland University ESL Center is an academic unit within the Department of Linguistics charged primarily with monitoring and implementing the English Proficiency Requirement on campus. The ESL Center offers a full range of ESL courses at all skill levels and supervises the ESL Endorsement Program, the ESL Institute Programs, the Individual ESL Instruction Program and the Hispanic Outreach Program. During its eight years of operation, the Hispanic Outreach Program has received financial support from the College of Arts and Sciences, local corporations and Michigan government agencies. For the past four academic years, the program has been supported each year by a $25,000 grant from the Michigan Works! program.

SEHS Educational Resources Lab

The primary mission of the ERL is to provide resources and services that support the curriculum needs of Oakland University's School of Education and Human Services. A secondary purpose is to support the scholarly activity.

The ERL provides:

- State-of-the-art multimedia resources (print and electronic materials, 60+ networked computers with access to the Internet as well as to color and black and white printers). Other equipment includes: laminator, bookbinder, fax machine, Ellison die Cutter, copy machines, printers and scanners.
- Access and guidance to resources and equipment through workshops and consultation with knowledgeable experts.
- Space for students to collaborate with peers as they interact with multimedia resources and equipment for teaching, training and human services.

The ERL is a professional development laboratory. The organization of materials in each area varies. Cross discipline and diversity materials are included in every section. All materials circulate except textbooks, reference and journals. When ERL print materials and technology merge, research, scholarship, and creative activities are transformed into tangible as well as virtual products.

Office of Institutional Research and Assessment

The Office of Institutional Research and Assessment (OIRA) provides student-related information such as enrollment, credit hours, degrees, curriculum, etc., to internal and external data-users and decision makers. Internal requests for information are utilized for academic planning, student program development and budgetary purposes. Externally, the Office of Institutional Research and Assessment is charged with the responsibility for compliance with state and federal statistical reporting requirements for public universities, such as the annual state budget request and the Integrated Postsecondary Educational Data System (IPEDS) submission. OIRA is also responsible for coordination and support of activities related to the assessment of student academic achievement, as specified in the Oakland University Assessment Plan submitted to the North Central Association.

OIRA routinely conducts social science research projects related to the university's overall educational mission, such as student retention tracking and the annual survey of new freshmen, which provides data on career goals at time of admission and other descriptive items.

All student information provided by the Office of Institutional Research and Assessment is in the aggregate and is public and available to administrators, faculty, students and the university community at large at https://www2.oakland.edu/secure/oira/.

■ Student Services and Centers

The Division of Student Affairs provides an array of out-of-classroom support services, leisure activities and educational programs that complement and enhance students' educational experiences. The Office of the Vice President for Student Affairs is located in 144 Oakland Center, (248) 370-4200. Brief descriptions of services for students follow.

Campus Recreation

The Department of Campus Recreation provides facilities, programs and services to meet the recreational, fitness, wellness and personal development needs of the Oakland University community. The goal of campus recreation programs is to enhance the quality of student and campus life through knowledge, opportunities, interests and behaviors that promote healthy lifestyles and to encourage making a regular recreational activity an element of daily life.

Campus Recreation programs include intramural sports, club sports, fitness assessment and programs in group fitness sessions and clinics, wellness programs, aquatic and learn-to-swim programs, and informal sports that are self-directed and self-paced. Recreation Center facilities include the recreation gym with three basketball/volleyball courts; a one-tenth mile, four-lane running track; three racquetball/walleyball courts; four multi-purpose rooms; a 7,500-square-foot fitness center with more than 70 pieces of cardio-vascular and strength equipment; wellness center; 50-meter pool; spa and bubble pool in the aquatic center; two class/meeting rooms; and locker rooms. Campus Recreation also oversees the Upper Pioneer Fields.

For enrolled students, the charge to access the Recreation Center is included in tuition. Further information about eligibility for family members, facility hours or program offerings may be obtained at the facility's Welcome Center or by telephone at (248) 370-4732 or by visiting the Web site at www.rec@oakland.edu.

Career Services

The Career Services Department, 275 West Vandenberg Hall, (248) 370-3250, assists in identifying professional-level, career-related, full-time, part-time and seasonal employment opportunities for both students and alumni. Its Professional Employment unit provides assistance to graduating students and alumni in locating career positions. Its Career Experience unit helps students in arranging internships, cooperative education work experiences and part-time or full-time seasonal employment in positions that complement their classroom work. All students are encouraged to explore these programs.

Career Services provides direct access to job opportunities through on-campus interviews, job referral activities and job vacancy postings daily on the Internet. A computerized system, OUCareerLink, is used to register students and alumni for referral and on-campus recruiting and to produce professional-looking resumes. Individual placement advising and career information are available to both students and alumni, including open advising during designated hours.

The department offers a variety of job fairs and career information/networking programs throughout the year. Special seminars assist students in developing job search skills. In addition, information is publicized about internship/fellowship opportunities generated outside the university. The department also maintains a home page on the Internet that contains career resources and links to other job/career information. The Web address for Career Services is http://www.oakland.edu/careerservices.

The department library contains both printed and videotaped employer information, plus job search information and career publications and periodicals. It also includes the application materials for Graduate Record Examinations (GRE), Law School Admission Test (LSAT), Medical College Admission Test (MCAT), and Graduate Management Admission Test (GMAT), among others.

Center for Multicultural Initiatives

Center for Multicultural Initiatives (CMI) develops and implements strategies and programs in an effort to increase the recruitment, retention and graduation of all students, but particularly underrepresented ethnic groups and to enhance their academic and social success. The CMI assists individual students and organizations in solving university related problems. It administers the Oakland University Trustees Academic Success Fund and oversees several scholarship, loan and peer mentor programs. It works to develop a campus climate that is sensitive and responsive to the issues of cultural and ethnic diversity at Oakland University. The CMI is located in 134 North Foundation Hall, (248) 370-4404.

Child Care Services (Lowry Center for Early Childhood Education)

The School of Education and Human Services operates the Matthew Lowry Center for Early Childhood Education for young children of students, faculty, staff and the community. The center houses three programs (pre-kindergarten, preschool and toddler) and is located on the first floor of Pawley Hall. All programs are accredited by the National Association for the Education of Young Children and are licensed by the Michigan Department of Social Services. The pre-kindergarten program is an early childhood program that offers full (9 a.m. to 4 p.m.) and half day (9 a.m. to noon or 1 p.m. to 4 p.m.) programs for children who are 4 years old by December 1 through 5 years.

The preschool program is an early childhood program that offers full (9 a.m. to 4 p.m.) and half day (9 a.m. to noon or 1 p.m. to 4 p.m.) programs for children who are 3 and 4 years old.

The toddler program is for children 18 months to 3 years old and offers full (9 a.m. to 4 p.m.) and half day programs (9 a.m. to noon or 1 p.m. to 4 p.m.). The curriculum is designed to stimulate and support the developmental growth of young children.

Aside from regular program hours, extended hours are available from 7:30 a.m. to 9 a.m. and 4 p.m. to 5:30 p.m. at an additional cost.

The center operates weekdays from 7:30 a.m. to 5:30 p.m. Space in all programs is limited. Parents are encouraged to inquire about the waiting list if interested in registration. Lowry also offers a summer day camp program for children 18 months to 6 years old. Please call the reception desk for more detailed information at (248) 370-4100.

Counseling Center

The Oakland University Counseling Center, located in the East Wing of the Graham Health Center, just north of Meadow Brook Theatre, has been serving the students and staff of the university for over 30 years. Counseling is provided by licensed psychologists, post-doctoral psychologists, and interns. Staff who are not fully licensed are supervised by licensed psychologists. The Counseling

Center provides a broad range of mental health services which include:

- Personal counseling
- Psychological and psychoeducational testing
- Career testing and counseling
- Substance abuse evaluation, treatment, and prevention
- Consultation and outreach
- Crisis intervention.

Dean of Students

The Dean of Students serves as an advocate for the development of programs and services to meet the developmental needs of students. As such, the dean of students monitors the university environment, administers the conduct code and judicial system, and assists with student life policy development, and serves as an advocate for students facing academic, financial and personal problems while enrolled at Oakland University. The Dean of Students office is located in the Student Affairs Office at 144 Oakland Center, (248) 370-3352.

Disability Support Services

Advocacy and support services are provided through the Office of Disability Support Services located in 121 North Foundation Hall. Services include, but are not limited to, priority registration, alternative testing arrangements, assistive technology, alternative media formats, assistance in identifying volunteer note-takers and readers, electronic door-openers and sign-language interpreting services. Students are encouraged to schedule an appointment six weeks prior to the semester and bring documentation of their disability. To register or for information, contact the DSS Office at (248) 370-3266 (voice) or (248) 370-3268 (TDD) or e-mail dss@oakland.edu. In cases involving alleged illegal discrimination or harassment, the student should contact the Office of University Diversity and Compliance, 203 Wilson Hall, (248) 370-3496.

Graham Health Center

Graham Health Center, located just north of Meadow Brook Theatre, provides convenient, affordable, high-quality health care right on campus. Graham Health Center is staffed by certified nurse practitioners and physician assistants who have extensive education and clinical training. A physician visits weekly to review cases, consult and see patients who require physician care. Services include:

- physical exams
- treatment for illness
- first aid for minor injuries
- chronic disease care
- diagnostic testing
- prescription medication for physical and mental health
- womens health care (pregnancy testing, pap smears, contraception)
- free screening for chlamydia and gonorrhea
- promotion of a healthy lifestyle.

ID Card Office

The SpiritCard, Oakland's official university identification card, is available to all students, faculty and staff. There is no charge for the initial card, but there is a replacement fee for lost, stolen or damaged cards. To avoid a replacement fee, keep your card for the duration of your Oakland University career. ID cards may be obtained at the ID Card office, 112 Oakland Center, (248) 370-2291. A driver's license, state-issued picture ID or passport is required at the time of carding.

The office is open Monday, Tuesday, Thursday and Friday, 9 a.m. to 8 p.m., and Wednesday until 7 p.m. during the fall and winter semesters. Special extended hours for the first week of fall and winter semesters are Monday through Thursday, 8 a.m. to 6:30 p.m.

ID cards are required to access residence hall meal plans and the Recreation Center, gain entrance into some university events, check out library materials from Kresge Library, print in open labs and gain access to the 24-hour computer lab.

Your SpiritCard can also be used as an on-campus debit card by activating your SpiritCa$h account. SpiritCa$h is accepted at various locations throughout campus, including the University Bookstore, Pioneer Food Court, Katke-Cousins Golf Course, PrintWise stations, copy machines at Kresge Library and the Oakland Center, and select vending machines in the Oakland Center.

Students can upgrade to a SpiritCard PLUS by opening a checking account with Credit Union One (conveniently located in the Oakland Center). The SpiritCard PLUS offers students, faculty and staff ATM access and the purchasing power of MasterCard Debit. For more information on the Oakland University SpiritCard, visit www.ouspiritcard.com.

International Students and Scholars

The International Students and Scholars Office, located in 157 North Foundation Hall, provides students the resources for a well-rounded education at Oakland University including academic and social experiences. For more information, contact the ISSO at (248) 370-3358 or isso@oakland.edu. Services include:

- Immigration counseling (student and scholars)
- SEVIS I-20 issuance for undergraduate, graduate, post doctoral students, and dependants
- SEVIS DS-2019 issuance for J-1 Exchange Visitor students, scholars, faculty, staff, and dependants
- Practical training (Curricular CPT and Optional OPT)
- J-1 Employment Authorization Requests
- Assistance requesting a change of non-immigration status
- Canadian border crossing letters
- F-1 and J-1 extensions of stay in the United States
- Reinstatement of status
- Exception requests
- Disability assistance
- Health insurance
- Student transfers
- Informational seminars
- Orientation
- Personal advising
- Monthly newsletters
- Host family information.

Oakland Center

The Oakland Center serves students, faculty, staff, alumni and guests of Oakland University by offering an environment that supports a variety of social, recreational, cultural and entertainment programs. Open seven days a week and located in the heart of campus, the Oakland Center features a food court including brand name eating establishments, such as Chick-fil-A, Famous Famiglia Pizzeria, and Subway. The University Bookstore and Credit Union One are housed in the Oakland Center, as are vending machines, Bumpers Game Room, public telephones, computer labs, e-mail kiosks, Café O'Bear's coffee shop, a TV lounge and meeting/ multipurpose rooms. Also located in the Oakland Center are the offices of Student Activities and Leadership Development, Student Affairs, Dean of Students, Chartwell's Food Service, the ID Card Office, student organizations, University Student Congress, Student Program Board, student newspaper and WXOU-FM, the student-operated radio station.

The Writing Center

The Oakland University Writing Center provides individual and small group support for students, faculty and staff. Consultants and administrators seek to engender independent writing practice. The Writing Center supplements, but does not replace, the array of communication and writing courses offered by various departments. A university program that serves all clients regardless of discipline or task, the Oakland University Writing Center is the "write space" for the entire university community.

All Writing Center services are free to Oakland University students, faculty and staff.

■ Technology at Oakland University

Oakland University E-mail

Oakland provides each student with an e-mail address and service. Instead of sending information through the U.S. Postal Service, Oakland University will e-mail information and direct links to secured Web sites to students via their official Oakland University e-mail address, including grades availability, tuition bills, financial aid, schedule of classes and graduation information. This information is important to maintaining a student's relationship with the university. The university will hold students accountable for the information sent via e-mail. Therefore, students are encouraged to check their Oakland e-mail account, at least twice each week.

Oakland's University Technology Services Web site offers tips and information about activating, accessing and forwarding Oakland University e-mail at www.oakland.edu/uts/ or selecting the Info Tech button from Oakland University's home page, then clicking E-mail Services.

Oakland University will not sell or give away student e-mail information and will not use e-mail to advertise for third parties.

UTS Helpdesk

The Helpdesk helps all members of the Oakland University community connect to Internet resources and utilize Oakland's e-mail system. We also answer general technology questions. The Helpdesk will work only on university-owned equipment.

The UTS Helpdesk is open from 8 a.m. until 5 p.m., on Monday through Friday. You can contact the UTS Helpdesk in several different ways, in person, by phone, by e-mail, or by fax.

- In Person: 220D Dodge Hall
- Phone: (248) 370-4357
- E-mail: helpdesk@oakland.edu
- Fax: (248) 370-4209

Wireless Network

Oakland University provides Internet access to all on-campus residents through a wireless network in the residence halls and Matthews Court Apartments and both wired and wireless Internet in the University Student Apartments. Also, students who visit specific areas on campus, such as Kresge Library, Elliott Hall, the Oakland Center and Recreation Center, will have wireless Internet access.

Student Technology Center (STC)

The STC has 13 PCs and four Macintosh computers. Students can take advantage of the student mentors and group classes that teach them about Windows XP, OS X, the ILife series, Adobe Photoshop Elements, Adobe Premier Elements, Word, Excel, PowerPoint, Access, Macromedia Dreamweaver, Fireworks and Flash at beginner, intermediate and advanced levels. The classes and mentor services are free and available by appointment or on a walk-in basis. The STC also teaches students about integrating interactive media into course-related works by allowing students to borrow digital video cameras or still cameras at no charge from the STC for 48 hours to capture media that can be used to enhance projects. Scanners, CD and DVD burners, fee-based color printers and technology reference books are also available to students in the STC.

■ COLLEGE OF ARTS AND SCIENCES

217 Varner Hall • (248) 370-2140 • Fax (248) 370-4280
www.oakland.edu/cas

Dean:
Ronald A. Sudol

Associate deans:
Kathleen H. Moore
Robert B. Stewart, Jr., Interim

Assistant deans:
Sandra K. Dykstra
Steven R. Meyer

■ College of Arts and Sciences Graduate Programs

The College of Arts and Sciences offers the following programs leading to advanced degrees. College faculty affiliated with each degree program are listed in each departmental area of this catalog as are the specific requirements for each of the degree programs listed below.

Degree programs

Doctor of Philosophy in Biomedical Sciences
with specializations in:
- Biological Communication (Department of Biological Sciences)
- Health and Environmental Chemistry (Department of Chemistry)
- Medical Physics (Department of Physics)

Doctor of Philosophy in Applied Mathematical Sciences
with specializations in:
- Applied Continuous
- Applied Discrete
- Applied Statistics

Doctor of Philosophy in Music Education

Master of Arts in Biology

Master of Science in Biology

Master of Science in Chemistry

Master of Arts in English

Master of Arts in History

Master of Arts in Liberal Studies

Master of Arts in Linguistics with specializations in:
- Linguistic Theory
- Teaching English to Speakers of Other Languages
- Teaching Language Arts

Master of Arts in Mathematics

Master of Science in Industrial Applied Mathematics

Master of Science in Applied Statistics

Master of Music with majors in:
- Conducting
- Music Education
- Pedagogy (piano, vocal)
- Performance (instrumental, piano, voice)

Master of Science in Physics

Master of Public Administration (M.P.A.) with concentrations in:
- Criminal Justice Leadership
- Health Care Administration
- Local Government Management
- Nonprofit Organization and Management

Graduate certificate programs

Graduate Certificate or Post-Master's Graduate Certificate in:
- Conducting
- Music Education (CARMU)
- Pedagogy (piano or vocal)
- Performance (instrumental, piano or voice)

Graduate Certificate in Statistical Methods

Graduate Certificate in Teaching English as a Second Language

Post-master's graduate certificate programs

Post-Master's Graduate Certificate in Local Government Management

Post-Master's Graduate Certificate in Nonprofit Organization and Management

■ Doctor of Philosophy in Biomedical Sciences

Biomedical Sciences Doctoral Program Committee:

Kathleen H. Moore, Professor of Chemistry, Chair
Bradley J. Roth, Professor of Physics
Douglas L. Wendell, Associate Professor of Biological Sciences
Xiangqun Zeng, Associate Professor of Chemistry

The College of Arts and Sciences offers a Doctor of Philosophy in biomedical sciences with specializations in health and environmental chemistry, in medical physics, and in biological communication.

Specialization in health and environmental chemistry

The health and environmental chemistry specialization of the Doctor of Philosophy in biomedical sciences degree requires a strong academic background in the natural sciences. Graduates will have completed a unified program of formal coursework, as well as independent research. Graduates will possess the theoretical background and practical skills necessary for successful contribution to the solution of environmental and health-related chemical problems. Scientists who graduate with this specialization will be capable of applying state-of-the-art methods to the detection, quantification and management of a wide variety of naturally occurring and synthetic chemical substances and the related chemical processes. No other doctoral program in Michigan focuses on these particular areas of chemistry, yet the contribution of highly trained doctoral-level scientists is essential to the resolution of major problems facing the nation in these areas.

Specialization in medical physics

Medical physicists are providing primary contributions to advances in diagnostic and therapeutic medicine. Laser surgery, ultrasonics, nuclear medicine, radio-therapy and nuclear magnetic resonance imaging are examples of medical modalities developed and implemented by medical physicists. The medical physics specialization of the Doctor of Philosophy in biomedical sciences degree is designed for students who plan careers in medical research in industrial, hospital and academic settings. The curriculum is designed to prepare the student to engage in research in areas of physics applied to medicine. Ph.D. candidates may elect to do their research either with one of a number of Oakland University faculty currently involved in biomedical research or with one of the scientists in area hospitals which collaborate closely with the university. Among these are Henry Ford Hospital, Detroit, and William Beaumont Hospital, Royal Oak.

Specialization in biological communication

Biological communication refers broadly to the mechanism underlying the production of and response to signals in biological systems. The processes that it encompasses range from intracellular and intercellular signaling to chemical communication among organisms. Biological communication at the intercellular, intracellular, and molecular level is a component of almost every disease. Many pathological conditions are treated by pharmacological manipulation of intercellular and intracellular communication processes and this continues to be a major area of biomedical research.

Biomedical sciences doctoral program committee

The program committee, appointed by the Dean of the College of Arts and Sciences, consists of one faculty member from each of the specialization areas as well as the coordinator of graduate programs in the College of Arts and Sciences, who serves as chair of the program committee. The program committee advises the Dean of the College of Arts and Sciences on admission of students, selection of student committees, proposals for changes in degree requirements and approval of doctoral dissertations.

Specialization committees

Three specialization committees, appointed by the Dean of the College of Arts and Sciences on recommendations from the chairs of the chemistry, physics, and biology departments, are responsible for preliminary screening of applications for admission, preliminary approval of dissertation committees, approval of course selections by each student, certification of fulfillment of proficiency requirements by each student, administration and grading of preliminary examinations for each student, and proposal of any modifications in degree requirements for students in that specialization. Each specialization committee appoints specific faculty members to advise each incoming student selecting that specialization until the student's dissertation committee is established.

Proficiency of entering students

Each student entering the program must demonstrate proficiency in specific areas of coursework. Upon entering the program the student must consult with the appropriate specialization adviser who will plan a program of coursework to eliminate any deficiencies in the student's preparation.

Detailed information on each specialization can be found in the associated departmental area of this catalog,

■DEPARTMENT OF BIOLOGICAL SCIENCES

375 Dodge Hall • (248) 370-3550 • Fax (248) 370-4225
www.oakland.edu/biology

Chair:
Arik Dvir

Professors emeriti:
Francis M. Butterworth, Ph.D., Northwestern University
William C. Forbes, Ph.D., University of Connecticut; Ed.D., Columbia University
Esther M. Goudsmit, Ph.D., University of Michigan
Egbert W. Henry, Ph.D., The City University of New York
R. Douglas Hunter, Ph.D., Syracuse University
Asish C. Nag, Ph.D., University of Alberta (Canada)
Nalin J. Unakar, Ph.D., Brown University

Professors:
G. Rasul Chaudhry, Ph.D., University of Manitoba (Canada)
George J. Gamboa, Ph.D., University of Kansas
Sheldon R. Gordon, Ph.D., University of Vermont
Charles B. Lindemann, Ph.D., State University of New York at Albany
Virinder K. Moudgil, Ph.D., Banaras Hindu University (India)
John R. Reddan, Ph.D., University of Vermont

Associate professors:
Keith A. Berven, Ph.D., University of Maryland
John D. Cowlishaw, Ph.D., Pennsylvania State University
Arik Dvir, Ph.D., Hebrew University of Jerusalem (Israel)
Thaddeus A. Grudzien, Jr., Ph.D., Virginia Polytechnic Institute and State University
Fay M. Hansen, Ph.D., Medical College of Wisconsin
Anne L. Hitt, Ph.D., Vanderbilt University
Shailesh K. Lal, Ph.D., University of Nebraska
Barkur S. Shastry, Ph.D., University of Mysore (India)
Satish K. Walia, Ph.D., Mahrishi Dayanand University (India)
Douglas L. Wendell, Ph.D., University of California, Davis

Assistant professors:
Amy Banes-Berceli, Ph.D., Michigan State University
Chhabi K. Govind, Ph.D., National Institute of Immunology, India
Lan Jiang, Ph.D., Chinese Academy of Sciences, Beijing (China)
Zijuan Liu, Ph.D., Chinese Academy of Sciences, Beijing (China)
Susmit Suvas, Ph.D., IMTECH (India)
Scott Tiegs, Ph.D., Swiss Federal Institute of Technology (Zurich)

Adjunct professors:
Sitaramayya Ari, Ph.D., Lucknow University (India)
Jeffrey L. Garvin, Ph.D., Duke University
Tom Madhavan, M.D., University of Madras (India)
Ronny Otero, M.D., Wayne State University
Barry S. Winkler, Ph.D., State University of New York (Buffalo)

Adjunct associate professors:
Miguelangelo J. Perez-Cruet, M.D., Tufts University
Andrew F. X. Goldberg, Ph.D., Brandeis University

Adjunct assistant professors:
Sumit Dinda, Ph.D., Oakland University
Daniel A. Degner, D.V.M., University of Saskatchewan (Canada)
Ning Zhang, Ph.D., John Hopkins University

Degree programs
Doctor of Philosophy in Biomedical Sciences: Biological Communication

Master of Science in Biology

Master of Arts in Biology

Research areas and facilities
The Department of Biological Sciences, housed in both Dodge Hall and the Science and Engineering Building, is engaged in a variety of research programs including angiogenesis, sperm motility, aquatic biology, hormone action, microbiology, parasitology, molecular biology, insect behavior, vertebrate ecology, physiology of the eye, cell physiology, gene regulation, genomics and bioinformatics.

■ Doctor of Philosophy in Biomedical Sciences: Biological Communication

Coordinator:
Douglas L. Wendell

Program description
The College of Arts and Sciences offers a doctoral degree in biomedical sciences with a specialization in biological communication that is centered in the Department of Biological Sciences. The program requires a strong academic background in biology including cellular and molecular biology. Biological communication refers to the mechanisms of production of response to signals in biological systems. The processes that it encompasses range from intracellular and intercellular signaling to chemical communication among organisms. Biological communication at the intercellular, intracellular, and molecular level is a component of almost every disease. Many pathological conditions are treated by pharmacological manipulation of intercellular and intracellular communication processes and this continues to be a major area of biomedical research. Graduates of this specialization will be trained in experimental biology through formal coursework and original research.

Admission terms and deadlines

Students enter the program in the fall semester and applications are due August 1, but priority will be given to applications received by May 1. Applications received after the due date may be reviewed, depending on space availability.

Application Requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Official transcripts from all colleges and universities previously attended
- Three letters of recommendation submitted directly by individuals who can evaluate the applicant's potential for graduate-level scientific research
- Official scores from the Graduate Record Examination (GRE)
- An essay describing their interest in the program, expectations of what graduate study entails, and career goals.

Admission requirements

Admission to the Doctor of Philosophy in biomedical sciences: biological communication degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program.

Admission decisions are based on a combination of factors including an undergraduate record showing proficiency in biology including the following courses or their equivalent: cell biology (BIO 309), biochemistry (BIO 325), and genetics (BIO 341). Their undergraduate record should also typically include physics, calculus and statistics.

Transfer credits

A student receiving a master's degree from a college or university in the United States may petition to apply up to 32 credits toward their doctoral degree. This petition must be approved by the Specialization in Biological Communication Committee and Graduate Study and Lifelong Learning. Any credits transferred from an institution other than Oakland University must be graduate level credits with a grade of 3.0 or above in each course, and be approved by the Specialization in Biological Communication Committee and Graduate Study and Lifelong Learning.

Degree requirements

The Doctor of Philosophy in biomedical sciences: biological communication degree is awarded upon satisfactory completion of 90 credits in an approved program of study, successful performance on an oral and written comprehensive examination, and successful completion of a dissertation.

Course requirements

a. Core requirements

BIO 5XX	Four 500-level lecture courses in Biology (excluding BIO 501 and 502) approved by the student's adviser and the Ph.D. committee. An example series is BIO 511, BIO 563, BIO 515, and BIO 517	16
BIO 671	Biological Communication I	4
BIO 673	Biological Communication II	4
SCI 511	Ethics and Practice of Science	2
BIO 690	Graduate Research (1 to 8 per semester)	at least 8

b. Electives

Electives	Additional graduate-level courses may be taken as electives mutually agreed upon by the student, adviser and dissertation committee	variable credits

c. Dissertation

BIO 799	Doctoral Research (1 to12 per semester)	at least 30

Non-Course requirements

Preliminary examination

Within two years after admission into the program, the student must pass a comprehensive written and oral examination. This examination consists of three written exams and an oral exam. The examination is intended to determine the extent of the student's knowledge and fitness for the doctoral degree and will be designed and evaluated by the medical physics specialization committee. If the student does not pass the examination, the specialization committee may allow the student to retake the examination within one year. Failure to pass the examination within two attempts shall constitute failure in the Ph.D. program.

Dissertation committee

A dissertation committee consisting of at least three members, one of whom serves as dissertation adviser, will be chosen by the specialization committee and the student in question. The student's dissertation adviser will be chairperson of the committee. The committee is charged with the guidance of the student in course selection, review of dissertation proposals before initiation of a project, and approval of the completed dissertation.

Research and dissertation

An integral and major component of the program is the successful completion of original research using state-of-the-art experimental or theoretical methods to study a problem of current interest. Each student shall, in consultation with their adviser, prepare a dissertation proposal outlining the problem to be studied, a survey of the appropriate literature, a description of the appropriate techniques, and an outline of the experiments to be performed. The student shall, at the request of the dissertation committee, orally defend the proposal or elaborate on the methods for data collection and analysis. The

project shall be deemed ready for preparation of dissertation at such time as the student's committee agrees that the student has completed the project and that the student is an expert in the use of specific methods required by the project. At that time, the student shall prepare a doctoral dissertation for submission to the committee and shall defend the dissertation in a public oral examination conducted by the committee and attended by the specialization committee. Acceptance of the dissertation by Graduate Study and Lifelong Learning requires favorable recommendations by the dissertation and specialization committee. All dissertations must conform to university standards (see "Thesis and Dissertation" in the "Graduation Information" section of this catalog).

Residence

All students are required to fulfill a residency requirement for this program. Although students may complete some of the program on a part-time basis, continuous full-time enrollment is highly preferred. The minimal residency requirement shall be full-time residency (12 credits per semester) for at least three consecutive full semesters with at least two of these devoted primarily to the student's research project.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

The maximum time limit for completing a Ph.D. degree is no more than 10 years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

■ Master of Science in Biology

Coordinator:

Douglas L. Wendell

Program description

The program leading to a Master of Science in biology provides advanced training to students seeking employment in biological disciplines. The Master of Science in biology also prepares students for entrance into Ph.D. programs.

The Master of Science in biology program consists of two tracks: the cellular/molecular biology track for those students interested in organ systems or lower levels of biological organization, and the ecology, evolution and behavior track for students interested in whole organisms or higher levels of biological organization.

The graduate program affords students the opportunity to interact closely with the biology faculty as they complete their thesis work.

Admission terms and deadlines

All application materials must be received by:

- March 1 for the fall semester
- December 1 for the winter semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Biographical sketch stating career goals
- A minimum of two letters of reference
- Students with an undergraduate degree from a regionally accredited institution must provide official scores for the general Graduate Record Examination (GRE).
- International students must submit official TOEFL scores, scores for both the general and subject GRE, a transcript evaluation, and meet all requirements for admission for international students.

Admission requirements

Admission to the Master of Science in biology degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- A bachelor's degree in biology or related subject (e.g., biochemistry, molecular biology, botany or zoology) from a regionally accredited institution or if the degree is in another

discipline, the candidate must have completeed 20 credits in biology, 8 credits in mathematics, 8 credits in physics and 15 credits in chemistry. Students with deficiencies in these areas may be conditionally admitted with the stipulation that the deficiencies will be corrected.

- An undergraduate grade-point average of 3.0 or better (on a 4.0 scale). Exceptions to the GPA requirement may be made if evidence of the capacity for graduate study is provided.

Transfer credits

Official transcripts must be on file in Graduate Study and Lifelong Learning. The credits earned must be from a regionally accredited institution and must carry a grade of 3.0 (B) or better. Courses graded Pass/Fail or Credit/Non-Credit are not transferable. Credit must be earned within six years of the time the degree will be conferred and may not have been used toward another degree. Only courses labeled "graduate" (numbered 500 and above) may be transferred. The total number of credits transferred may not exceed 9, and no more than 1 credit will be awarded per week of instruction (i.e., a 4-credit course must meet a minimum of 14 hours per week for four weeks –a minimum total of 56 class hours or 47 clock hours of instruction).

Degree requirements

The Master of Science in biology degree is awarded upon satisfactory completion of 36 credits in an approved program of study, and completion of the written thesis requirement.

Course requirements

a. General requirements

1. Cellular/Molecular Biology Track (36 credits)

BIO 511*	Advanced Topics in Cellular Biochemistry and Metabolism	4
BIO 515*	Advanced Topics in Mechanisms of Development	4
BIO 517*	Advanced Molecular Genetics	4
BIO 563*	Topics in Cell Biology	4
BIO 690	Graduate Research	at least 8
Electives		0-11
BIO 691	Thesis Seminar	1

2. Ecology, Evolution, Behavior Track (36 credits)

BIO 581*	Topics in Physiological Ecology	3
BIO 582*	Topics in Evolutionary Biology	3
BIO 583*	Topics in Community and Population Biology	3
BIO 584*	Topics in Behavioral Biology	3
BIO 690	Graduate Research	at least 8
Electives		0-15
BIO 691	Thesis Seminar	1

* or their equivalents as approved by the student's thesis committee and the chair of the Graduate Committee.

b. Exit

Students in both tracks are required to enroll in BIO 691 and present a departmental seminar on their thesis after it has been approved by their thesis committee, and prior to the deadlines for thesis/dissertation public defense published in the *Schedule of Classes*.

Non-course requirements

Thesis requirements

During the first semester of studies, the candidate must choose a thesis adviser with whom he or she will plan and conduct the thesis research. The adviser and candidate will then select a thesis committee. A thesis proposal and a written thesis are required for both tracks. The thesis proposal must be approved by the thesis committee before the end of the student's second semester. When completed, the written thesis must also be approved by the thesis committee before it can be submitted to Graduate Study and Lifelong Learning for approval. All theses must conform to university standards (see "Thesis and Dissertation" in the "Graduation Information" section of this catalog)..

Students of both tracks must attend department seminars during every semester of their graduate studies.

■ Master of Arts in Biology

Coordinator:

Douglas L. Wendell

Program description

The Master of Arts in biology is a non-thesis master's program that has a larger course component, but a lesser research component, than the Master of Science in biology. The Master of Arts in biology is designed for those students who wish to teach at the secondary or community college level and students who hold full-time jobs.

Admission terms and deadlines

All application materials must be received by:

- March 1 for the fall semester
- December 1 for the winter semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Biographical sketch stating career goals

- A minimum of two letters of reference
- Students with an undergraduate degree from a regionally accredited institution must provide official scores for the general Graduate Record Examination (GRE).
- International students must submit official TOEFL scores, scores for both the general and subject GRE, a transcript evaluation, and meet all requirements for admission for international students.

Admission requirements

Admission to the Master of Arts in biology degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- A bachelor's degree in biology or related subject (e.g., biochemistry, molecular biology, botany or zoology) from a regionally accredited institution or if the degree is in another discipline, the candidate must have completeed 20 credits in biology, 8 credits in mathematics, 8 credits in physics and 15 credits in chemistry. Students with deficiencies in these areas may be conditionally admitted with the stipulation that the deficiencies will be corrected.
- An undergraduate grade-point average of 3.0 or better (on a 4.0 scale). Exceptions to the GPA requirement may be made if evidence of the capacity for graduate study is provided.

Transfer credits

Official transcripts must be on file in Graduate Study and Lifelong Learning. The credits earned must be from a regionally accredited institution and must carry a grade of 3.0 (B) or better. Courses graded Pass/Fail or Credit/Non-Credit are not transferable. Credit must be earned within six years of the time the degree will be conferred and may not have been used toward another degree. Only courses labeled "graduate" (numbered 500 and above) may be transferred. The total number of credits transferred may not exceed 9, and no more than 1 credit will be awarded per week of instruction (i.e., a 4-credit course must meet a minimum of 14 hours per week for four weeks – a minimum total of 56 class hours or 47 clock hours of instruction).

Degree requirements

The candidate for the Master of Arts in biology degree must complete 36 credits, including 28 credits of biology graduate-level lecture courses with a minimum of three courses from the cell/molecular track and a minimum of three courses from the ecology, evolution, behavior track. In addition, M.A. students must complete 8 credits of BIO 690 or 4 credits of BIO 690 combined with a relevant, 4-credit course in another discipline (such as education, health sciences, chemistry, physics, mathematics or an additional course in biology).

Course requirements

a. General requirements

1. Cellular/molecular biology track

Students must choose a minimum of three courses from:

BIO 511*	Advanced Topics in Cellular Biochemistry and Metabolism	4
BIO 515*	Advanced Topics in Mechanisms of Development	4
BIO 517*	Advanced Molecular Genetics	4
BIO 563*	Topics in Cell Biology	4

* or their equivalents as approved by the chair of the Graduate Committee.

2. Ecology, Evolution, Behavior Track

Students must choose a minimum of three courses from:

BIO 581*	Topics in Physiological Ecology	3
BIO 582*	Topics in Evolutionary Biology	3
BIO 583*	Topics in Community and Population Biology	3
BIO 584*	Topics in Behavioral Biology	3

* or their equivalents as approved by the chair of the Graduate Committee.

b. Exit (8 credits)

BIO 690	8
or	
BIO 690 (4) plus a relevant 4-credit course (4) in another discipline (such as education, health sciences, chemistry, physics, mathematics or an additional course in biology)	8

M.A. students will earn their 4-8 credits of BIO 690 by working with one or more faculty members on a research project. The student will be required to write a report on their BIO 690 research. The departmental Graduate Committee will determine if students have met the degree requirements for the awarding of the M.A. in biology.

■DEPARTMENT OF CHEMISTRY

260 Science and Engineering Building • (248) 370-2320
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Dagmar R. Cronn, Ph.D., University of Washington
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Roman Dembinski, Ph.D., Polish Academy of Science (Poland)
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Xiangqun Zeng, Ph.D., State University of New York, Buffalo

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Adjunct professors:
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Ghassan M. Saed, Ph.D., University of Essex (United Kingdom)
Stacey K. Seeley, Ph.D., University of Massachusetts

Adjunct assistant professors:
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Gerald Compton, M.S., Oakland University
Naomi Eliezer, Ph.D., Hebrew University of Jerusalem
Jennifer Tillinger, Ph.D., Oakland University

Degree programs
Doctor of Philosophy in Biomedical Sciences: Health and Environmental Chemistry

Master of Science in Chemistry

Faculty research fields

Current research interests of the faculty include: chemistry of free radical species generated from biological intermediates; fate of toxic organic compounds in the environment; electroanalytical and surface chemistry at solid/liquid interface; computational modeling of intermolecular interactions and surface phenomena; metabolism and biological activity of modified fatty acids and xenobiotic carboxylic acids; physiologic and pathologic mechanisms that modulate immune responses; synthesis and characterization of novel organic, organometallic and inorganic compounds with potential biochemical significance; synthetic modeling of metalloenzyme active sites; chemical education software; trace environmental analyses and environmental modeling; novel analytical instrumentation; protein folding and assembly; and development of new organocatalytic methods. For current, detailed information on individual research efforts, please consult the faculty section of the Department of Chemistry Web site at www.oakland.edu/chemistry.

■ Doctor of Philosophy in Biomedical Sciences: Health and Environmental Chemistry

Coordinator:
Xiangqun Zeng

Program description

The College of Arts and Sciences offers a doctoral degree in biomedical sciences with a specialization in health and environmental chemistry which is centered in the Department of Chemistry. The program requires a strong academic background in the natural sciences. Graduates will have completed a unified program of formal coursework, as well as independent dissertation research, and will possess the theoretical background and practical skills necessary for successful contribution to the solution of environmental and health-related chemical problems. Scientists who graduate with this specialization will be capable of applying state-of-the-art methods to the determination, quantification and management of a wide variety of naturally occurring and synthetic chemical substances and the

related chemical processes. No other doctoral program in Michigan focuses on these particular areas of chemistry, yet the contributions of highly trained doctoral-level scientists are essential to the resolution of major problems facing the nation in these areas.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Three letters of recommendation
- Official GRE (general) test scores may be required.
- Official GRE subject scores may be required.
- International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Doctor of Philosophy in biomedical sciences: health and environmental chemistry degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Bachelor's degree in a natural science, mathematics, or other discipline relevant to health and environmental chemistry specialization
- GPA of 3.0 (on a 4.0 scale)
- Proficiency at the undergraduate level in analytical chemistry, biochemistry, and two additional areas (inorganic chemistry, physical chemistry, cell biology or physiology). Students who are not proficient may need to take additional coursework.

Degree requirements

The Doctor of Philosophy in biomedical sciences: health and environmental chemistry degree is awarded upon satisfactory completion of 90 credits in an approved program of study.

Course requirements

a. Core requirements

Analyical chemistry course (3 credits)

Students must select one course from the following:

CHM 521*	Advanced Analytical Chemistry	3
CHM 522*	Topics in Analytical Chemistry	3
CHM 523*	Chemical Separations	3

* or other approved course

Biochemistry course (3 credits)

Students must select one course from the following:

CHM 550*	Science and Business of Biotechnology	3
CHM 553*	Advanced Biochemistry	3
CHM 554*	Topics in Biochemistry	3
CHM 555*	Signal Transduction	3

* or other approved course

Toxicology courses (6 credits)

ENV 446	Industrial and Environmental Toxicology	3
and		
CHM 581	Biochemical Toxicology	3

Environmental science course (3 credits)

ENV 485*	Environmental Fate and Transport	3
or		
ENV 486*	Toxic Substance Control	3

* or other approved course

Doctoral seminar (2 credits)

CHM 685	Seminar in Health and Environmental Chemistry	2

Attendance at departmental seminars is required.

Ethics (2 credits)

SCI 511	Ethics and Practice of Science	2

b. Advanced coursework related to dissertation area (9 credits)

c. Exit (at least 30 credits)

CHM 690	Graduate Research
CHM 799	Doctoral Research in Chemistry

Non-course requirements

Dissertation committee

A dissertation committee consisting of at least three members, one of whom serves as dissertation adviser, will be chosen by the specialization committee and the student in question. The student's dissertation adviser will be chairperson of the committee. The committee is charged with the guidance of the student in course

selection, review of dissertation proposals before initiation of a project, and approval of the completed dissertation.

Research and dissertation

An integral and major component of the program is the successful completion of original research using state-of-the-art experimental or theoretical methods to study a problem of current interest. Students shall, in consultation with their adviser, prepare a dissertation proposal outlining the problem to be studied, a survey of the appropriate literature, a description of the appropriate techniques, and an outline of the experiments to be performed. The student shall, at the request of the dissertation committee, orally defend the proposal or elaborate on the methods for data collection and analysis. Approval of the proposal by the committee is required prior to commencing research. The project shall be deemed ready for preparation of dissertation at such time as the student's committee agrees that the student has completed the project and that the student is an expert in the use of specific methods required by the project. At that time, the student shall prepare a doctoral dissertation for submission to the committee and shall defend the dissertation in a public oral examination conducted by the committee and attended by the specialization committee. Acceptance of the dissertation by Graduate Study and Lifelong Learning requires favorable recommendations by the dissertation and specialization committee. All dissertations must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog).

Residence

All students are required to fulfill a residency requirement for this program. Although students may complete some of the program on a part-time basis, continuous full-time enrollment is highly preferred. The minimal residency requirement shall be full-time residency (12 credits per semester) for at least three consecutive full semesters with at least two of these devoted primarily to the student's research project.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

The maximum time limit for completing a Ph.D. degree is no more than 10 years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

■ Master of Science in Chemistry

Coordinator:

Ferman Chavez (non-thesis)
Roman Dembinski (thesis)

Program description

The Master of Science in chemistry can be viewed as either a terminal or non-terminal degree. By itself it serves as preparation for employment in chemical and related industries, a wide range of government agencies, and two-year college teaching. It also prepares the student for further study toward advanced degrees in chemistry, pharmacology, toxicology, oceanography, medicine, environmental science, and related fields. The program may be adapted to both full-time and part-time students.

The Master of Science in chemistry is offered in both thesis and non-thesis plans. The thesis plan, which includes a significant laboratory or theoretical research component, is particularly valuable for persons planning to pursue a future Ph.D. degree or for those preparing for, or engaged in, industrial laboratory employment. The non-thesis option is designed for those students who either cannot schedule or do not need the thesis research component, and offers opportunity for extended study of advanced chemistry for persons currently employed in industry or teaching professions, or for those who wish a more rigorous technical background ancillary to professional employment in business, law or medicine.

With appropriate course selection, the Master of Science candidate can focus his/her graduate work in a traditional area of chemistry (analytical, biochemistry, inorganic, organic or physical) or in an interdisciplinary area such as environmental chemistry, chemical education, polymer chemistry or toxicology.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

As part of the admission requirements, graduate programs may

require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two letters of recommendation
- The Graduate Record Examination (GRE) may be required, specifically if the applicant does not hold a degree from a regionally accredited institution
- International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in chemistry degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Bachelor's degree from regionally accredited institution
- Strong background in chemistry, mathematics and physics so that they are academically prepared to complete the master's program
- Applicants with degrees over five years old may also need to complete additional coursework
- GPA of 3.0 (on a 4.0 scale) is usually required, but applicants will be considered on their individual merits upon recommendation of persons familiar with each applicant's academic background.

Degree requirements

The Master of Science in chemistry degree is awarded upon satisfactory completion of 32 credits in an approved program of study.

Course requirements

a. Core requirements

All students must take at least one lecture course in each of four different areas chosen from:

Biochemistry

CHM 550*	Science and Business of Biotechnology	3
CHM 553*	Advanced Biochemistry	3
CHM 554*	Topics in Biochemistry	3
CHM 555*	Signal Transduction	3
CHM 581*	Biochemical Toxicology	3

* or other approved course

Inorganic chemistry

CHM 563*	Advanced Inorganic Chemistry	3
CHM 564*	Topics in Inorganic Chemistry	3
CHM 565*	Bioinorganic Chemistry	3

* or other approved course

Organic chemistry

CHM 534*	Advanced Organic Chemistry	3
CHM 535*	Topics in Organic Chemistry	3
CHM 539*	Applied Organic Spectroscopy	3

* or other approved course

Physical chemistry

CHM 540*	Symmetry in Chemistry	3
CHM 541*	Advanced Physical Chemistry	3
CHM 542*	Topics in Physical Chemistry	3
CHM 544*	Computational Chemistry	3

* or other approved course

Polymer/industrial chemistry

CHM 470*	Industrial Chemistry	3
CHM 471*	Structure and Synthesis of Polymers	3
CHM 472*	Chemical and Physical Properties of Polymers	3
CHM 573*	Fundamentals of Materials Chemistry	3
CHM 574*	Polymer Science and Technology	3

* or other approved course

Analytical chemistry

CHM 521*	Advanced Analytical Chemistry	3
CHM 522*	Topics in Analytical Chemistry	3
CHM 523*	Chemical Separations	3

* or other approved course

Environmental science

ENV 446*	Industrial and Environmental Toxicology	3
ENV 485*	Environmental Fate and Transport	3
ENV 486*	Toxic Substance Control	3

* or other approved course

b. Electives

Additional chemistry graduate courses must be selected by student to complete 32-credit requirement. Up to 8 credits may be outside of chemistry with adviser approval.

c. Exit

Degree candidates must choose the thesis or non-thesis exit plan.

Thesis plan

CHM 690	Graduate Research	8 to 20

The candidate for the thesis plan Master of Science in chemistry must complete 32 credits in courses carrying graduate credit, of which 24 credits must be in chemistry.

Courses with 400-level numbers may be included providing they do not duplicate courses in the student's undergraduate degree.

At least one lecture course must be taken in each of four different areas chosen from biochemistry, inorganic chemistry, organic chemistry, physical chemistry, polymer or industrial chemistry, analytical chemistry, and environmental science. At least 8 of the 32 credits must be in CHM 690.

The candidate must have demonstrated accomplishment in research and must complete a thesis approved by a departmental thesis committee before receiving the degree. All theses must conform to university standards (see "Thesis and Dissertation" in the "Graduation Information" section of this catalog).

Students working on a continuing research project should be registered concurrently for at least 1 credit of CHM 690.

Courses taken without an adviser's approval may be excluded from those to be applied to the degree.

Non-thesis plan

No specific requirements. May include:

CHM 690	Graduate Research	up to 6
and/or		
CHM 590	Graduate Projects	up to 6

The candidate for the non-thesis plan Master of Science in chemistry must complete 32 credits in courses carrying graduate credit, of which 24 credits must be in chemistry.

Courses with 400-level numbers may be included providing they do not duplicate courses in the student's undergraduate degree.

At least one lecture course must be taken in each of four different areas chosen from biochemistry (or approved biology courses), inorganic chemistry, organic chemistry, physical chemistry, polymer or industrial chemistry, analytical chemistry and environmental science.

Students might choose either concentration in a specialized area related to employment or a broad background in preparation for teaching.

Courses taken without an adviser's approval may be excluded from those to be applied to the degree.

For students interested in a research experience, up to 6 credits of CHM 690 may be included in the program by arrangement with an individual faculty researcher.

■DEPARTMENT OF ENGLISH

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www.oakland.edu/english

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Susan E. Hawkins

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Robert T. Eberwein, Ph.D., Wayne State University

Professors emeriti:
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Thomas Fitzsimmons, M.A., Columbia University
Nigel Hampton, Ph.D., University of Connecticut
James F. Hoyle, Ph.D., Princeton University
David W. Mascitelli, Ph.D., Duke University
Donald E. Morse, Ph.D., University of Connecticut
Brian F. Murphy, Ph.D., University of London (United Kingdom)
Joan G. Rosen, M.A., Wayne State University
William Schwab, Ph.D., University of Wisconsin

Professors:
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Edward Haworth Hoeppner, Ph.D., University of Iowa

Associate professors:
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Annette Gilson, Ph.D., Washington University, St. Louis
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Susan E. Hawkins, Ph.D., University of Oregon
Niels Herold, Ph.D., University of California, Berkeley
Nancy L. Joseph, Ph.D., Florida State University
Kathleen A. Pfeiffer, Ph.D., Brandeis University

Assistant professors:
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Kyle Edwards, Ph.D., University of Texas at Austin
Jeffrey Insko, Ph.D., University of Massachusetts, Amherst
Andrea Knutson, Ph.D., The Graduate Center, City University of New York
Kevin Laam, Ph.D., University of Southern California
L. Bailey McDaniel, Ph.D., Indiana University
Joshua Yumibe, Ph.D., University of Chicago

Special instructors:
Linda L. McCloskey, M.A., Oakland University
Jimmy T. McClure, M.A., Oakland University
Rachel V. Smydra, M.A., Eastern Michigan University

Degree program
Master of Arts in English

■ Master of Arts in English

Coordinator:
Kevin T. Grimm

Program description
The program leading to the degree of Master of Arts in English provides training for students interested in increasing their proficiency in the study of English and American literature and language.

The basic curriculum emphasizes major critical approaches rather than specialization within historical periods. Opportunity is offered for scholarly, pedagogical and creative application of such approaches to literature and language. The program serves the needs of those whose eventual goal is the Ph.D. degree; those who teach in secondary schools and those who are preparing to teach in junior and community colleges; and those seeking an opportunity to enhance their analytical skills as they study literature from multiple perspectives.

Admission terms and deadlines
The application deadlines for the Master of Arts in English are April 1 for students entering in the fall semester and November 20 for students entering in the winter semester. There are no admits for summer semester. The program does not accept students into the Special Graduate status.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Statement explaining the applicant's reasons for wishing to pursue the advanced study of literature and language
- Three letters of recommendation from professors familiar with the candidate's academic potential. These letters should speak to the candidate's record and potential in literary studies
- Writing sample, a critical or interpretive essay, of no more than eight double-spaced, typed pages, which demonstrates the candidate's qualification for graduate study in literature.

Admission requirements
Admission to the Master of Arts in English degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Chief qualifications are a Bachelor of Arts degree from a regionally accredited institution and academic ability as indicated by the applicant's past record.
- Generally, successful candidates will have earned a 3.5 average in English courses.
- An English major, as such, is not regarded as indispensable background, but a substantial number of undergraduate English courses will normally be expected to appear in the applicant's record.
- When students with specially recommended ability but insufficient background – in extent or balance of previous studies – are admitted, they will be advised to improve their preparation and will usually be asked to take an appropriate number of departmental undergraduate courses before commencing graduate work. Accordingly, their degree programs may require a proportionately longer period to complete.
- All entering graduate students must meet minimal university graduate admission standards. All will be enrolled conditionally until they are admitted by the department to degree candidacy.

Consideration for candidacy comes after the student has successfully completed 16 credits of graduate work at Oakland University including the literary studies core. Normally, all courses offered toward candidacy must be completed with grades of 3.0 or better. Two grades below 3.0 will automatically render a student subject to evaluation and possible dismissal, as will one grade below 2.5. No transfer credits will be evaluated until a student is admitted to degree candidacy.

Enrollment for all courses is subject to the written approval of the chairperson or a graduate adviser.

Degree requirements

The Master of Arts in English degree is awarded upon satisfactory completion of 36 credits in an approved program of study.

Course requirements

a. Core requirements (16 credits)

The following four courses comprise the literary studies core, successful completion of which must occur before a student is considered for candidacy and is a prerequisite for all 600-level English courses.

- ENG 520, Introduction to Graduate Studies
- ENG 533, Critical Theory and Practice
- One of the following courses in Literary History:
  ENG 543, Early British
  ENG 544, Later British
  ENG 545, American
  ENG 546, Special Topics
- One of the following courses in Literary Kinds:
  ENG 563, Fiction
  ENG 564, Drama
  ENG 565, Poetry
  ENG 566, Modes or Special Forms

b. Electives (20 credits)

Upon successful completion of the general core requirements, students must take five additional courses (20 credits). These courses must include:

- Two 600-level seminars or
- One 600-level seminar and ENG 690, Master's Project.

c. Exit

ENG 690, The Master's Project (optional), involves completion of a project of a scholarly or pedagogical nature, proposed initially by the candidate. Any written work to be submitted in partial or total fulfillment of a project should not exceed 7,500 words. Projects normally arise out of graduate coursework. The course is open only to students who can propose an independent project and who have made arrangements with a member of the department interested in supervising it. Students seeking approval to proceed should submit an application for ENG 690 (available in the department office) and a prospectus of the project prior to the beginning of the semester in which they will complete the project. For students undertaking the Master's Project during the winter or summer semester, this application is due four weeks prior to the start of the semester, for fall semester, it is due six weeks prior.

Additional program information

Classification of course offerings

The graduate program of the Department of English offers three kinds of courses.

1. Core courses (500 level)
   500-level courses are designed to familiarize the student with the principal approaches to literature and language and with methods and tools appropriate to those approaches. These courses are central to the graduate program because they prepare the student for the more specialized work of the seminars.
2. Seminars (600 level)
   The graduate seminar allows the student to do independent work in an area in which the instructor has special sophistication, and at the same time to gain criticism and support from other students working in the same area. The instructor will prescribe the subject matter of each course during any given semester. Completion of the literary studies core is a prerequisite for enrollment in a 600-level course. Seminars are limited to 12 students.
3. Summer workshops
   Concentrated four-week workshops on literature, language, writing and other topics of interest to high school teachers and post-baccalaureate students are offered in the summer session. They are designed as refresher courses or as introductions to topics of particular contemporary concern. Workshops grant 1 to 4 graduate credits. Students may not offer more than 4 credits of workshops toward fulfillment of requirements for advanced degrees except by permission of the graduate committee of the department. Candidates for degrees must consult with their advisers before electing summer workshops.

Course repeats

When there is significant change in content, graduate courses may be repeated with permission of the chair of the Graduate Program Committee. This requires submitting a Petition of Exception for approval to count the same course more than once toward degree requirements.

The following courses may be repeated for a maximum of 12 credits, with Graduate Program Committee approval: ENG 500,

ENG 543, ENG 544, ENG 545, ENG 546, ENG 563, ENG 564, ENG 565, ENG 566, and ENG 600.

Cognate courses

Students in the M.A. program may, with written approval of the chairperson of the Graduate Program Committee, offer one graduate course from another department for credit toward their degrees. Such courses should be advanced work in a field relevant to the students' special interests and needs.

Foreign language

Students planning to pursue a Ph.D. should become proficient in at least one foreign language.

■DEPARTMENT OF HISTORY

372 O'Dowd Hall • (248) 370-3510 • Fax (248) 370-3528
www.oakland.edu/history/

Chair:
Karen A. J. Miller

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James D. Graham, Ph.D., Northwestern University
Roy A. Kotynek, Ph.D., Northwestern University
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Karen A. J. Miller, Ph.D., Columbia University
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Derek K. Hastings, Ph.D., University of Chicago
Craig Martin, Ph.D., Harvard University
George Milne, Ph.D., University of Oklahoma

Degree program
Master of Arts in history

■ Master of Arts in History

Coordinator:
Weldon (Don) C. Matthews

Program description
This program may serve either as a terminal degree or as a bridge to more advanced study and is designed to accommodate both full- and part-time students. In addition to a complete daytime schedule, late afternoon and evening courses are also available.

Application terms and deadlines
All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two letters of recommendation which give evidence of academic distinction. (Of the letters of recommendation, at least one should be from the applicant's current or former professor.)
- Detailed statement of purpose or justification for entering the graduate program, which demonstrates that the candidate's interests coincide with the strengths of the department
- Academic writing sample (preferably a history research paper).

Admission requirements
Admission to the Master of Arts in history degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Bachelor's degree in history from a regionally accredited institution. (The department reserves the right to waive the requirement of a history degree for students with outstanding undergraduate records.)
- Grade-point average of 3.5 (on a 4.0 scale) in undergraduate history courses and a GPA of 3.2 in all undergraduate work
- Admitted students will have demonstrated evidence of being able to complete the program efficiently.

- Students of superior promise but with deficient preparation in history may be admitted on condition of completing additional undergraduate history courses or earning grades of 3.5 or above in each of the first two graduate history courses.

Degree requirements

The Master of Arts in history degree is awarded upon satisfactory completion of at least 38 credits in an approved program of study.

In special cases the Department of History Graduate Committee may permit a candidate to substitute up to 12 graduate credits in related fields for history credits.

Course requirements

a. Core requirements

- At least one colloquium (HST 610)
- In preparation for the thesis or field exam, the candidate must complete two research seminars (HST 680), or two research tutorials (HST 681), or one of each.

b. Field options

At the time of admission, each candidate will choose a major field from the following three areas. (The candidate must take at least 20 credits in the major field.)

1. United States
2. Europe
3. Africa, Asia, and Latin America.

c. Exit

Upon the successful completion of three or four graduate courses (12 to 16 credits) candidates will 1) elect to complete their degree by thesis or 2) elect to complete their degree by field examination in the major area. The student must select a departmental mentor and co-mentor, notifying the graduate adviser of their choice.

Candidates who elect to offer a thesis in partial fulfillment of the degree requirements will fulfill all the requirements listed above; they will take research seminars or tutorials in the major field as thesis-writing courses, and their comprehensive oral examination will concentrate on the thesis and historical problems related to it. A detailed thesis prospectus is to be provided to the mentor and graduate adviser, preferably upon completion of 24 credits in the candidate's program. All theses/dissertations must conform to university standards (see "Thesis and Dissertation" in the "Graduation Information" section of this catalog).

Candidates who do not elect to offer a thesis will fulfill all the requirements listed above. They must take at least one seminar or research tutorial in the major field, and their examination will be devoted to the history of the major field, as described below under Field or Thesis examination (HST 600).

Field or thesis examination (HST 600)

The examination is taken in the last semester of the student's program; each student must secure permission of the faculty adviser before registering. Candidates who submit a thesis will be examined orally for up to one hour on the thesis and historical problems related to it. The thesis oral examination may not be retaken. Candidates who do not submit a thesis will be examined on the major field; the examination will be adapted to the student's individual program, and the examining committee may assign special readings to be completed for the examination. Candidates taking the examination will be allowed one week to write take-home essays responding to the committee's questions; if the essays are acceptable, the candidate will be tested in a one-hour oral examination. Satisfactory performance on both written and oral selections is required for graduation. A student who fails may retake the field examination in any succeeding semester.

Non-course requirements

Students may not enroll for graduate courses corresponding in title and/or coverage with undergraduate history courses for which they have previously gained credit at Oakland University.

Additional program information

Foreign language

There is no general foreign language requirement for the M.A. in history, but to study certain fields the candidate may need a reading knowledge of a foreign language. Candidates must consult their advisers for the language requirements of specific courses and programs.

Graduate Student Handbook

The Graduate Student Handbook can be found at the department's Web site: www.oakland.edu/history/gp_masters.cfm.

■ DEPARTMENT OF LINGUISTICS

320 O'Dowd Hall • (248) 370-2175 • Fax (248) 370-3144
www.lin.oakland.edu

Chair:
Samuel Rosenthall

Professors emeriti:
Daniel H. Fullmer (Linguistics and English), Ph.D., University of Michigan
William Schwab (Linguistics and English), Ph.D., University of Wisconsin

Professors:
Peter J. Binkert (Linguistics and Classics), Ph.D., University of Michigan
Michael B. Smith (Linguistics), Ph.D., University of California, San Diego

Associate professor:
Samuel Rosenthall (Linguistics), Ph.D., University of Massachusetts, Amherst

Associated faculty professor:
Alice S. Horning (Writing and Rhetoric, Linguistics), Ph.D., Michigan State University

Assistant professors:
Lisa Levinson (Linguistics), Ph.D., New York University
Kuniko Nielsen (Linguistics), Ph.D., University of California, Los Angeles

Special instructor:
Rebecca Gaydos, M.A.T., Oakland University

Degree program
Master of Arts in Linguistics

Graduate certificate program
Graduate Certificate in Teaching English as a Second Language

Other programs
English as a Second Language (ESL) Endorsement

Teaching English as a Second Language (TESL) Certificate

■ Master of Arts in Linguistics

Coordinator:
Peter J. Binkert

Program description
The Master of Arts degree in linguistics provides post-baccalaureate instruction in current linguistic theory and in applied linguistics. The degree is intended to accommodate students who have done previous work in linguistics, as well as those who have had little exposure to the subject.

Admission terms and deadlines
Students may be admitted during any semester of the university calendar. Applicants to the program must have all their credentials in to Graduate Admissions, 160 North Foundation Hall, no later than six weeks before the beginning of their initial semester of registration. After that time, and until the beginning of classes, they may apply for admissions as special graduate students. However, not more than 12 credits earned as a special graduate can be applied toward the degree; therefore, the application must be completed as soon as possible.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Goal statement
- Two recommendation letters.

Admission requirements
Admission to the Master of Arts in linguistics degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Applicants who hold a baccalaureate degree from a regionally accredited institution and whose credentials, including transcripts and two letters of recommendation, give evidence of academic distinction.
- Applicants must explain, in a statement of purpose, their reasons for wishing to pursue graduate work in linguistics.
- Although an undergraduate major in linguistics is not a requirement for admission, applicants must demonstrate a knowledge of the basic principles of linguistics, as would be encountered in an introductory linguistics course.

- A grade-point average of 3.0 (on a 4.0 scale) in undergraduate work is ordinarily the minimum standard for admission.
- Program prerequisite: LIN 201.

At its discretion, the department may admit students of superior promise but deficient preparation provided that such students correct their deficiencies before commencing graduate work.

Degree requirements

The Master of Arts in linguistics degree will be awarded to the student who earns 36 credits in nine courses as specified below. A minimum of 2.5 in each course and an overall minimum GPA of 3.0 are required for the M.A. degree.

All students must complete LIN 503 (Introduction to Phonology) and LIN 504 (Introduction to Syntax). Upon completion of LIN 503 and LIN 504, students will be evaluated for admission to candidacy and will choose an area of specialization in consultation with the graduate adviser.

Upon admission to candidacy, the student will choose an area of specialization from among the following three: linguistic theory, teaching English as a Second Language or language arts. Non-native speakers of English who wish to specialize in teaching English as a Second Language must satisfactorily complete an oral and written examination in English. Other specializations may be developed in consultation with the graduate adviser. At least 16 credits (four courses) of work must be in the area of specialization.

All students must also complete LIN 680 (Seminar in Linguistics) or LIN 690 (The Master's Thesis).

General requirements

- Nine courses (36 credits)
- No more than 8 credits in courses from other departments
- No more than 8 credits in 400-level LIN or ALS courses
- Either a) two years of foreign language study, or b) one year of foreign language study and LIN 609; in either case, demonstrated first year proficiency in at least one foreign language is required. First year proficiency can be demonstrated by satisfactory completion of a foreign language course at the 115-level.

Course requirements

a. Core requirements (8 credits)

LIN 503	Introduction to Phonology	4
LIN 504	Introduction to Syntax	4

b. Specializations (choose one)

1. Linguistic theory (24 credits)

LIN 603	Phonological Theory	4
or		
LIN 613	Advanced Phonology	4
LIN 604	Syntactic Theory	4
or		
LIN 614	Advanced Syntax	4
LIN 502	Historical Linguistics	4
or		
LIN 507	Introduction to Semantics	4
One (1) of:		
LIN 505	Phonetic Theory	4
LIN 507	Introduction to Semantics	4
LIN 557	Cognitive Linguistics	4
Two (2) electives		8

2. Teaching English as a second language (24 credits)

LIN 505	Phonetic Theory	4
ALS 518	The Teaching of English as a Second Language	4
ALS 519	Practicum (See Practicum eligibility)	4
Two (2) of:		
ALS 535	Psycholinguistics	4
ALS 517	Models of Second Language Acquisition	4
ALS 574	Cross-Cultural Communication	4
One (1) elective		4

3. Language arts (24 credits)

ALS 520	Linguistics and Reading	4
or		
ALS 538	Theory and Practice in Language Testing	4
ALS 534	Language Development in Children	4
ALS 535	Psycholinguistics	4
or		
ALS 518	The Teaching of English as a Second Language	4
LIN 604	Syntactic Theory	4
or		
LIN 614	Advanced Syntax	4
Two (2) electives		8

c. Exit (4 credits)

LIN 680	Seminar in Linguistics	4
or		
LIN 690	The Master's Thesis	4

The requirements for LIN 690 will be a thesis of considerable detail in which students must present the results of their independent research. LIN 690 may be elected only with departmental approval. All theses/dissertations must conform to university standards (see "Thesis and Dissertation" in the "Graduation Information" section of this catalog).

Non-course requirements

- No more than 8 credits in courses from other departments
- No more than 8 credits in 400-level LIN or ALS courses
- Either a) two years of foreign language study, or b) one year of foreign language study and LIN 609; in either case, demonstrated first year proficiency in at least one foreign language is required. First year proficiency can be demonstrated by satisfactory completion of a foreign language course at the 115-level.

300/500-level courses

When graduate courses (500-level) are cross listed with undergraduate course (300-level), graduate students will be required to complete additional work at the graduate level, usually an essay or a project decided in conjunction with the professor.

Practicum eligibility

Eligibility for the Practicum (ALS 519) requires completion of ALS 518 with a grade of 3.0 or higher. Non-native speakers of English must in addition, satisfactorily complete an oral and written examination of English.

■ Graduate Certificate in Teaching English as a Second Language

The Graduate Certificate in Teaching English as a Second Language (TESL) program consists of 20 credits in Applied Language Studies (ALS) and Linguistics (LIN) as set forth below. It is designed for completion in one or two years by individuals who are already teaching and seeking further professional development or by those seeking additional preparation in order to enter the field of English as a Second Language (ESL).

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.

Admission requirements

In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- All applicants with baccalaureate degrees from a regionally accredited institution will be considered.
- Ordinarily, a minimum undergraduate grade-point average of 3.0 is required for admission to the program (as is the case for admission to the Master of Arts degree program in linguistics).
- Applicants who are non-native speakers of English must satisfactorily complete an oral and written examination of English in order to be admitted to the Certificate Program.

Certificate requirements

Course requirements

a. Core requirements

ALS 518	The Teaching of English as a Second Language	4
LIN 503	Introduction to Phonology	4
or		
LIN 504	Introduction to Syntax	4
ALS 517	Models of Second Language Acquisition	4
or		
ALS 538	Theory and Practice in Language Testing	4
ALS 519*	Practicum (see *Practicum eligibility*)	4

* ALS 519 is also required for students with little or no ESL teaching experience.

b. Electives

Students will choose at least 8 additional credits from among the following:

ALS 517	Models of Second Language Acquisition	4
ALS 519	Practicum (See Practicum eligibility)	4
ALS 535	Psycholinguistics	4
ALS 538	Theory and Practice in Language Testing	4
ALS 574	Cross-Cultural Communication	4
ALS 576	Language and Society	4
LIN 503	Introduction to Phonology	4
LIN 504	Introduction to Syntax	4
LIN 505	Phonetic Theory	4
LIN 507	Introduction to Semantics	4

Other ALS or LIN courses may be substituted with the approval of the graduate certificate adviser. Courses included in the graduate certificate should be selected to enhance competency in a specific field of interest and/or application.

A minimum grade of 2.5 in each course and an overall minimum GPA of 3.0 are required for the graduate certificate program.

Practicum eligibility

Eligibility for the Practicum (ALS 519) requires completion of ALS 518 with a grade of 3.0 or higher. Non-native speakers of English must, in addition, satisfactorily complete an oral and written examination of English.

Relationship to the Master of Arts in Linguistics

All courses taken to fulfill the requirements for the graduate certificate will count toward the Master of Arts (M.A.) degree program in linguistics with a TESL specialization. It is anticipated that a graduate of the graduate certificate program who has all the prerequisites for the M.A. in linguistics can apply for admission to the program and complete the additional credits in about two calendar years as a part-time student or in one calendar year as a full-time student. The department will consider applications from students who

complete the graduate certificate program with less than 3.0 grade-point average, on an individual basis.

English as a Second Language Endorsement

The Oakland University English as a Second Language (ESL) Endorsement program is a joint effort between the College of Arts and Sciences' Department of Linguistics and the School of Education and Human Services. The program has received approval from the State of Michigan Board of Education to offer an ESL Endorsement to teacher certification. The program consists of 20 credits taken in five successive semesters.

Program description

The purpose of the ESL Endorsement program is to prepare K-12 teachers to teach ESL classes and to better service LEP (Limited English Proficiency) students presently in K-12 classes. The program is designed for participants who have already obtained a State of Michigan teaching certificate and are interested in this additional endorsement. The courses in the ESL Endorsement program will help teachers understand the linguistic and cultural problems that students have when English is not their native language. With ESL background and training, educators will be able to deal with those problems effectively and help students who speak other languages become more integrated into classroom activities.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Goal statement
- Two recommendation letters.

Admission requirements

Admission to the ESL Endorsement program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- The department will consider applicants who hold a baccalaureate degree from a regionally accredited institution and whose credentials, including transcripts and two letters of recommendation, give evidence of academic distinction.
- Applicants must explain, in a statement of purpose, their reasons for wishing to pursue the ESL Endorsement.
- A grade-point average of 3.0 (on a 4.0 scale) in undergraduate work is ordinarily the minimum standard for admission.

Endorsement requirements

LIN 510	Language Structure, Variation and Change	4
ALS 530	Language Acquisition	2
ALS 570	Language, Culture and Society	2
ALS 630	Language Pedagogy	4
ALS 631	Curriculum and Material Design	2
ALS 632	Assessment and Compliance	2
ALS 640	ESL Practicum	4

Half of the program consists of courses that are offered online (ALS 630, ALS 631, ALS 632, and ALS 570). For further details see www.lin@oakland.edu/endorsement.html.

Relationship to the Master of Arts in Linguistics

All courses listed under the requirements for the ESL Endorsement can be applied toward the Master of Arts degree in linguistics with a TESL specialization. It is anticipated that a graduate of the endorsement program who has all the prerequisites for the Master of Arts in linguistics can apply for admission to that program and complete the additional 16 credits needed for that degree in approximately four semesters as a part-time student or two semesters as a full-time student. The courses that make up the 16 credits of additional work for the M.A. degree are LIN 505, LIN 503, LIN 504, and either LIN 680 or LIN 690. For students completing the endorsement program who have less than a 3.0 grade-point average in courses taken in that program, and who wish to apply for admission to the M.A. program, the Department of Linguistics will consider their applications on an individual basis.

Teaching English as a Second Language Certificate (TESL)

Students may earn a certificate in Teaching English as a Second Language (TESL) by completing the following courses:

LIN 503 or	Introduction to Phonology	4
LIN 504	Introduction to Syntax	4
ALS 518	The Teaching of English as a Second Language	4
ALS 519	Practicum (See Practicum eligibility)	4

In any case, students must complete 12 credits of coursework at Oakland University and must satisfy the eligibility requirements described in "Practicum Eligibility" to obtain the certificate. Students interested in this certificate should contact the graduate adviser in the Department of Linguistics.

Practicum eligibility

Eligibility for the Practicum (ALS 519) requires completion of ALS 518 with a grade of 3.0 or higher. Non-native speakers of English must, in addition, satisfactorily complete an oral and written examination of English.

■DEPARTMENT OF MATHEMATICS AND STATISTICS

368 Science and Engineering Building • (248) 370-3430
Fax (248) 370-4184 • www.math.oakland.edu.

Chair:
Louis J. Nachman

Professors emeriti:
Harvey J. Arnold, Ph.D., Princeton University
J. Curtis Chipman, Ph.D., Dartmouth College
George F. Feeman, Ph.D., Lehigh University
William C. Hoffman, Ph.D., University of California, Los Angeles
G. Philip Johnson, Ph.D., University of Minnesota
Donald G. Malm, Ph.D., Brown University
James H. McKay, Ph.D., University of Washington
Sze-kai Tsui, Ph.D., University of Pennsylvania

Professors:
Kevin T. Andrews, Ph.D., University of Illinois
Baruch Cahlon, Ph.D., Tel Aviv University (Israel)
Eddie Cheng, Ph.D., University of Waterloo (Canada)
Charles Ching-an Cheng, Ph.D., Rutgers University
Jerrold W. Grossman, Ph.D., Massachusetts Institute of Technology
Ravindra Khattree, Ph.D., University of Pittsburgh
Louis J. Nachman, Ph.D., Ohio State University
Subbaiah Perla, Ph.D., University of Rochester
Darrell P. Schmidt, Ph.D., Montana State University
Irwin E. Schochetman, Ph.D., University of Maryland
Meir Shillor, Ph.D., Hebrew University of Jerusalem (Israel)
J. Barry Turett, Ph.D., University of Illinois
Stuart S. Wang, Ph.D., Cornell University
Stephen J. Wright, Ph.D., Indiana University
Wen Zhang, Ph.D., Southern Methodist University

Associate professors:
David J. Downing, Ph.D., University of Iowa
Bo-nan Jiang, Ph.D., University of Texas, Austin
Serge Kruk, Ph.D., University of Waterloo (Canada)
Robert H. Kushler, Ph.D., University of Michigan
László Lipták, Ph.D., Yale University
Theophilus O. Ogunyemi, Ph.D., Kansas State University
Tanush (Tony) Shaska, Ph.D., University of Florida
Peter Shi, Ph.D., University of Delaware
Anna M. Spagnuolo, Ph.D., Purdue University

Assistant professors:
Dorin Drignei, Ph.D., Iowa State University
Xiaoli Gao, Ph.D., University of Iowa
Xianggui Qu, Ph.D., University of Michigan

Full-time adjunct professor:
Gary McDonald, Ph.D., Purdue University

Degree programs
Ph.D. in Applied Mathematical Sciences

Master of Arts in Mathematics

Master of Science in Industrial Applied Mathematics

Master of Science in Applied Statistics

Certificate programs
Graduate Certificate in Statistical Methods

■ Doctor of Philosophy in Applied Mathematical Sciences

Coordinator:
Robert H. Kushler

Program description
The Doctor of Philosophy in applied mathematical sciences degree program is designed with three specialization areas in applied mathematical sciences: applied continuous mathematics, applied discrete mathematics, and applied statistics. The program prepares students for employment in business, industry, or government, as well as traditional academic positions.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Three letters of recommendation from individuals who are capable of evaluating scholarly achievements and potential for independent research
- Official results of the Graduate Record Examination (GRE) may be required.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English
- A brief personal statement (not more than 500 words) describing their goals in pursuing the Ph.D. Applicants who wish to be considered for a teaching assistantship should also describe any prior teaching experience or other potentially relevant background. All application materials must be received no later than the beginning of March in order to be considered for a teaching assistantship appointment for the following academic year.

Admission requirements

Admission to the Doctor of Philosophy in applied mathematical sciences degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- A bachelor's degree from a regionally accredited institution with at least a 3.0 grade-point average, with a major in one of the mathematical sciences, engineering, computer science, the physical sciences, the biological sciences, or the health sciences
- Knowledge of a scientific programming language is strongly recommended

  Specific course prerequisites for regular admission into the program (with relevant Oakland University course numbers) include:

Multivariable Calculus	MTH 254
Linear Algebra	MTH 275
Advanced Calculus	MTH 452

In addition, there are specialization prerequisites (with relevant Oakland University course numbers):

a. Applied Continuous Mathematics

Differential Equations (required prerequisite)	APM 255
Complex Variables (recommended prerequisite)	MTH 352

b. Applied Discrete Mathematics

Abstract Algebra	MTH 475
Discrete Mathematics	APM 263

c. Applied Statistics

Twelve credits in statistics are required. Example:

STA 226	Applied Probability and Statistics	4
STA 402	Applied Linear Models I	4
STA 403	Applied Linear Models II	4

Students who lack the necessary background may need to complete a few prerequisite undergraduate courses prior to regular admission into the program.

Degree requirements

A minimum of 90 credits beyond the bachelor's degree is required for the Doctor of Philosophy in applied mathematical sciences degree consisting of 60 credits (15 courses) of coursework, 3 credits of APM 695 or STA 695 (Problem Solving Seminar) and 27 credits of APM 790 or STA 790 (Dissertation Research).

Students who have earned a master's degree may petition to have prior coursework applied toward the 60 credits. The Committee on Graduate Programs will evaluate the student's prior master's degree work and allow Ph.D. credits for courses judged to be relevant to the proposed Ph.D. course of study. A maximum of 32 credits may be applied; all candidates must complete at least 28 credits of additional coursework exclusively at Oakland University.

In the Ph.D. program, courses awarded a grade of less than 3.0 will not count toward the degree: however, all numerical grades earned are used in computing a student's GPA, and an overall 3.0 GPA must be maintained.

The course requirements and options for each specialization are as follows:

Applied Continuous Specialization

Specialization requirements

Nine courses are required in the Applied Continuous Mathematics specialization consisting of:

APM 533	Numerical Methods	4
APM 557	Advanced Partial Differential Equations	4
APM 658	Mathematical Modeling in Industry: Continuous Models	4
MTH 551	Real Analysis	4
MTH 651	Functional Analysis	4

and four courses selected from:

APM 534	Applied Numerical Methods: Matrix Methods	4
APM 553	Advanced Ordinary Differential Equations	4
APM 566	Computational Geometry	4
APM 634	Numerical Methods for Partial Differential Equations	4
MOR 554	Linear and Integer Optimization	4
APM 605	Applied Continuous Mathematics: Selected Topics	4
MOR 558	Mathematical Modeling in Industry: Operations Research Models	4
MTH 555	Complex Analysis	4

In addition, the requirements include completion of at least 3 credits (included in dissertation research credit requirements) of the following 1-credit seminar:

APM 695	Problem Solving Seminar	1

Distribution requirements

Two courses are required in the applied statistics area consisting of:

STA 613	Mathematical Statistics I	4
and one other course selected from the Applied Statistics specialization list.		4

Two courses are required in the applied discrete area consisting of:

APM 563	Applied Mathematics: Discrete Methods I	4
and one other course selected from the Applied Discrete specialization list.		4

In addition, there are two free elective courses for a total of fifteen courses to satisfy the 60-credit course requirement, exclusive of dissertation research credit.

Applied Discrete Specialization

Specialization requirements

Nine courses are required in the applied discrete specialization consisting of:

APM 568	Mathematical Modeling in Industry: Discrete Models	4
APM 569	Graph Theory and Applications	4
APM 664	Combinatorial Optimization	4
MTH 571	Algebra I	4
MTH 572	Algebra II	4
and four courses selected from the following list:		
APM 564	Applied Mathematics: Discrete Methods II	4
APM 567	Algorithms and Complexity	4
APM 577	Computer Algebra	4
APM 581	The Theory of Computation	4
APM 665	Approximation and Randomized Discrete Algorithms	4
APM 673	Coding Theory	4
MOR 554	Linear and Integer Optimization	4
MOR 555	Nonlinear Optimization	4
MTH 670	Algebraic Number Theory	4
MTH 671	Commutative Algebra	4
MTH 672	Algebraic Geometry	4

In addition, the requirements include completion of at least 3 credits (included in dissertation research credit requirements) of the following 1-credit seminar:

APM 695	Problem Solving Seminar	1

Distribution requirements

Two courses are required in the applied statistics area consisting of:

STA 613	Mathematical Statistics I	4
And one other course selected from the Applied Statistics specialization list.		4

Two courses are required in the Applied Continuous area consisting of:

MTH 551	Real Analysis	4
And one other course selected from the applied continuous specialization list.		4

In addition, there are two free elective courses for a total of fifteen courses to satisfy the 60-credit course requirement, exclusive of dissertation research credit.

Applied Statistics Specialization

Specialization requirements

Nine courses are required in the applied statistics specialization consisting of:

STA 613	Mathematical Statistics I	4
STA 614	Mathematical Statistics II	4
STA 527	Linear Statistical Models	4
and six courses selected from the following list; these six courses must include one of the following sets of courses: (STA 515, STA 615), (STA 521, STA 621), (STA 528, STA 628), (STA 530, STA 630)		
STA 503	Applied Linear Models II	4
STA 504	Discrete Data Analysis	4
STA 506	Statistical Computing	4
STA 515	Stochastic Processes I	4
STA 521	Multivariate Statistical Methods I	4
STA 522	Statistical Process Control	4
STA 526	Nonparametric Methods	4
STA 528	Reliability and Life Data Analysis I	4
STA 529	Statistical Methods in Sample Surveys	4
STA 530	Time Series I	4
STA 531	Bayesian Methods	4
STA 603	Advanced Design of Experiments	4
STA 610	Probability Theory	4
STA 615	Stochastic Processes II	4
STA 621	Multivariate Statistical Methods II	4
STA 628	Reliability and Life Data Analysis II	4
STA 630	Time Series II	4

In addition, the requirements include completion of at least 3 credits (included in dissertation research credit requirements) of the following 1-credit seminar:

APM 695	Problem Solving Seminar	1

Distribution requirements

Two courses are required in the applied continuous area consisting of:

MTH 551	Real Analysis	4
and one other course selected from the applied discrete specialization list.		4

Two courses are required in the applied discrete area consisting of:

APM 563	Applied Mathematics: Discrete Methods I	4
and one other course selected from the Applied Discrete specialization list.		4

In addition, there are two free elective courses for a total of fifteen courses to satisfy the 60-credit course requirement, exclusive of dissertation research credit.

Additional program information

General examination and dissertation

The General Examination is intended to assess the student's overall knowledge of mathematical sciences at the graduate level and the student's ability to pursue the doctoral degree in his or her selected specialization. The General Examination is administered by the Committee on Graduate Programs and consists of two parts:

1. Part I consists of three written section exams and is offered once near the beginning of the fall term (normally in August) and once near the beginning of the winter term (normally in January). Each section exam covers material in one of the areas of continuous mathematics, discrete mathematics and statistics.
2. Part II of the General Examination may only be attempted after passage of Part I. Part II consists of a single written exam and is offered within a month after the results of Part I are announced. The material covered in this single exam involves only the area of the student's prospective specialization.

Both parts of the General Examination must be passed within 13 months of the initial attempt at Part I, and a student may attempt each part of the General Examination no more than twice.

Detailed guidelines about the material to be covered on both parts of the General Examination are available from the Graduate Coordinator. Exception to the above must be approved by the Committee on Graduate Programs.

A student must have completed at least 12 credits of graduate coursework at Oakland with a GPA of 3.0 or better before taking the General Examination. No student with a GPA below 3.0 will be permitted to take the General Examination. Students in the Ph.D. program will not be allowed to accumulate more than 32 credits toward the Ph.D. degree without taking the General Examination. A student must have passed the General Examination to be eligible to register for Doctoral Dissertation Research.

Dissertation committee

Each student who has passed the General Examination will have a dissertation committee prior to registration for doctoral research credit.

The dissertation committee will be appointed by the Committee on Graduate Programs, with the approval of Graduate Study and Lifelong Learning. The dissertation committee will consist of five faculty members, at least three of whom will be in the specialization area of the student. Prior to the formation of the committee, the student will nominate one faculty member from the student's area of specialization with the concurrence of the faculty member. At least one member of the committee will be selected by the Committee on Graduate Programs from faculty in the department but outside the student's area of specialization. The chair of the dissertation committee will be the intended supervisor of the doctoral dissertation for the student and is normally the faculty member nominated by the student. The membership of the committee may be changed by action of the Committee on Graduate Programs, with the approval of Graduate Study and Lifelong Learning.

Final oral examination and dissertation defense

The chair of the dissertation committee is responsible for keeping the committee members informed about the progress of the dissertation research and making preliminary drafts of the dissertation available to all members of the dissertation committee in a manner which permits timely suggestions for improvements. When the chair of the committee determines that the dissertation is ready for oral presentation, the chair will request that a colloquium talk be scheduled where the student presents the dissertation. Immediately following the colloquium, the committee will continue an oral examination of the candidate. Others are welcome to attend this portion of the final examination, with the consent of the candidate and the committee. When this oral examination is concluded, the committee will meet privately and decide whether the candidate, with possible modifications in the dissertation, will be recommended by the committee to receive the Ph.D. Every member of the committee must be present at the oral examination and be willing to sign the dissertation (after suitable and specified modifications, if any) for the student to pass this final oral examination.

Time limits

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

Residency requirements

A minimum residency requirement is full-time residency (a minimum of 8 credits per semester) for at least three consecutive full semesters (fall-winter-fall, fall-winter-summer, winter-summer-fall, etc.) with at least two of these devoted to dissertation research. The demands of this research activity imply that the student may not be employed in work which is not directly related to dissertation research, for more than 20 hours a week while satisfying this residency requirement. Petitions for exceptions to this policy may be submitted to the Committee on Graduate Programs.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time to degree

The maximum time limit for completing a Ph.D. degree program is no more than ten years from the term of the first course enrollment in the doctoral program.

The time limit for completing a Ph.D. degree requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

■ Master of Arts in Mathematics

Coordinator:

Robert H. Kushler

Program description

The program leading to the degree of Master of Arts in mathematics provides students with a sound theoretical knowledge of modern mathematical sciences and ample opportunity to learn something of the applications of the mathematical sciences, the construction of mathematical models and the art of problem solving. The program is designed to serve those who wish to enter a Ph.D. program in mathematical sciences or to teach at the secondary or community college level. (This program does not provide secondary education certification: contact the School of Education and Human Services for information on certification.) Courses required for the program are offered in the late afternoon or evening to accommodate the part-time student. Teaching assistantships are available to full-time students on a competitive basis.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two recommendation letters
- Applicants who wish to be considered for a teaching assistantship should also submit a brief (up to 500 words) personal statement describing their goals and any prior teaching experience or other potentially relevant background. This statement should be sent to the Graduate Coordinator no later than the beginning of March in order to be considered for an appointment for the following academic year.

Admission requirements

Admission to the Master of Arts in mathematics degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- A baccalaureate degree from a regionally accredited institution with a 3.0 GPA
- Normally the mathematical preparation requires at least 30 semester credits in undergraduate mathematics including courses in multivariable calculus, linear algebra and differential equations. Students who have not had an undergraduate course in abstract algebra or advanced calculus may be required to complete one or both of these courses as a prerequisite to regular admission.

Degree requirements

To fulfill the requirements for the Master of Arts in mathematics a student must successfully complete, with at least a 2.5 in each course and an overall GPA of 3.0 or better, a 36-credit program as outlined below.

Course requirements

a. Core requirements (at least 28 credits in the mathematical sciences)

At least four courses from the following list must be included. At least one of MTH 551 or MTH 571 must be among the four courses selected.

MTH 551	Real Analysis	4
MTH 555	Complex Analysis	4
MTH 561	Topology I	4
MTH 571	Algebra I	4
MTH 590	Directed Reading and Research	4
MTH 651	Functional Analysis	4
APM 553	Advanced Ordinary Differential Equations	4
APM 557	Advanced Partial Differential Equations	4
APM 566	Computational Geometry	4
APM 569	Graph Theory and Applications	4
APM 577	Computer Algebra	4
APM 581	The Theory of Computation	4
APM 634	Numerical Methods for Partial Differential Equations	4
APM 664	Combinatorial Optimization	4
APM 673	Coding Theory	4

(This list may be expanded in the future. Check with the graduate coordinator for an up-to-date list.) All other course selections must be approved by the student's adviser.

b. Electives (at most 8 credits)

At most, 8 credits of elective courses outside of the mathematical sciences. Course selections must be approved by the student's adviser.

Non-course requirements

Each student must pass a comprehensive examination devised by a committee appointed by the Graduate Coordinator. Details on the format of this exam can be obtained from the Graduate Coordinator. A student who fails this exam on the first attempt may make, at most, one additional attempt.

■ Master of Science in Industrial Applied Mathematics

Coordinator:

Robert H. Kushler

Program description

The primary goal of this program is to provide the appropriate mathematical knowledge and experience for persons seeking positions in industry. The program focuses on those mathematical theories and techniques that are applicable in the industrial setting. Emphasis is on the construction of mathematical models of industrial problems and on the mathematical tools that can be applied to such models. The program has two tracks focusing on continuous mathematics or discrete mathematics.

Courses required for the program are offered in the late afternoon or evening to accommodate the part-time student.

Teaching assistantships are available to full-time students on a competitive basis.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two recommendation letters
- Applicants who wish to be considered for a teaching assistantship should also submit a brief (up to 500 words) personal statement describing their goals and any prior teaching experience or other potentially relevant background. This statement should be sent to the Graduate Coordinator no later than the beginning of March in order to be considered for an appointment for the following academic year.

Admission requirements

Admission to the Master of Science in industrial applied mathematics degree is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- All applicants who have received a baccalaureate from a regionally accredited institution with a cumulative GPA of 3.0 or more will be considered.
- The applicant's background should include courses in multivariable calculus and linear algebra and knowledge of at least one high-level scientific programming language. In addition, recommended background includes courses in differential equations and advanced calculus (for the continuous track) or discrete mathematics (for the discrete track). Applicants lacking some aspects of the necessary background may be required to take one or more prerequisite courses prior to being admitted to the program.

Degree requirements

To fulfill the requirements for a Master of Science degree in industrial applied mathematics, a student must successfully complete, with at least a 2.5 in each course and an overall GPA of 3.0 or better, a 36-credit program as outlined below:

Course requirements

a. Core requirement (4 credits)

One course from:

APM 568	Mathematical Modeling in Industry: Discrete Models	4
APM 658	Mathematical Modeling in Industry: Continuous Models	4
MOR 558	Mathematical Modeling in Industry: Operations Research Models	4

b. Track requirements (at least 16 credits)

Students must choose continuous or discrete track.

1. Continuous track

At least four courses from the following list. The courses selected must include at least one of APM 533 or APM 534.

APM 533	Numerical Methods	4
APM 534	Applied Numerical Methods: Matrix Methods	4
APM 553	Advanced Ordinary Differential Equations	4
APM 557	Advanced Partial Differential Equations	4
APM 565	Differential Geometry	4
APM 566	Computational Geometry	4
APM 605	Applied Continuous Mathematics: Selected Topics	4
APM 634	Numerical Methods for Partial Differential Equations	4
MOR 554	Linear and Integer Optimization	4

2. Discrete track

At least four courses from the following list. The courses selected must include at least one of APM 567, APM 577 or APM 581.

APM 563	Applied Mathematics: Discrete Methods I	4
APM 564	Applied Mathematics: Discrete Methods II	4
APM 566	Computational Geometry	4
APM 567	Algorithms and Complexity	4
APM 569	Graph Theory and Applications	4
APM 577	Computer Algebra	4
APM 581	The Theory of Computation	4

APM 664	Combinatorial Optimization	4
APM 665	Approximation and Randomized Discrete Algorithms	4
APM 673	Coding Theory	4
MTH 571	Algebra I	4
MOR 554	Linear and Integer Optimization	4

c. Electives (at most 12 credits)

Elective courses to complete the 36-credit requirement. The set of courses must be approved by the student's adviser. At most two courses in the MTS rubric can be used.

d. Exit (4 credits)

APM 595	Master of Science Research Project	4

The research must be carried out under the supervision of an approved adviser. The student must prepare a written report based on the research and make an oral presentation to a group of faculty members. The student must contact the graduate coordinator for permission to enroll in this course.

■ Master of Science in Applied Statistics

Coordinator:

Robert H. Kushler

Program description

By offering this program, the department seeks to increase the number of people with broad training in statistical methodology that is suitable for application in industrial, business and governmental settings. The program's primary goal is to provide the basis for the skilled and competent application of modern statistical methods. Areas of methodology in the program, in addition to a basic theoretical foundation, include design of experiments, regression analysis, discrete data, statistical computing, statistical process control, Bayesian, non-parametric, multivariate, reliability, sample survey and time series methodology. All applied courses make use of and stress the importance of modern statistical computing software. Courses required for the program are offered in the late afternoon or evening to accommodate the part-time student. Teaching assistantships are available to full-time students on a competitive basis.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two recommendation letters
- Applicants who wish to be considered for a teaching assistantship should also submit a brief (up to 500 words) personal statement describing their goals and any prior teaching experience or other potentially relevant background; this statement should be sent to the Graduate Coordinator no later than the beginning of March in order to be considered for an appointment for the following academic year.

Admission requirements

Admission to the Master of Science in applied statistics degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- All applicants who have received a baccalaureate from a regionally accredited institution with a cumulative GPA of 3.0 or more will be considered.
- Previous mathematical training should include the satisfactory completion of courses in multivariable calculus and linear algebra, as well as at least one introductory course in statistics. Applicants should also have some background in scientific computing.

Degree requirements

To fulfill the requirements for the Master of Science in applied statistics, a student must successfully complete, with at least a 2.5 in each course and an overall GPA of 3.0 or better, a 36-credit program as outlined below.

Course requirements

a. Core requirements (at least 24 credits)

At least 24 credits of courses in the STA rubric numbered 502 or above. All course selections must be approved by the student's adviser. STA 502, STA 513 and STA 514 are required unless the student has completed the equivalent course before admission. Students with the necessary mathematics background are encouraged to complete these courses in their first year in order to satisfy prerequisites for more advanced courses.

b. Electives (at most 12 credits):

At most, students may select 12 credits of elective courses outside of the STA rubric. The courses selected must be approved by the student's adviser.

Non-course requirements

All students must complete an applied statistics project, demonstrating competence in applying statistical methods and theory in the solution of a practical problem or problems. The work must be carried out under the supervision of a faculty member appointed by the Graduate Coordinator, and the student must prepare a written report and make an oral presentation to a committee of faculty members appointed by the Graduate Coordinator. The committee must certify that the student has met the requirement. Contact the Graduate Coordinator for more information about this requirement.

■ Graduate Certificate in Statistical Methods

Coordinator:
Robert H. Kushler

Program description
The program consists of 20 credits of statistical methods as set forth below. It is designed for completion in either one year or two years by students who are employed full time. The aim of the program is to provide knowledge in modern statistical methods for industrial managers. Graduates of the program will be capable of standard statistical treatment of industrial problems arising in research, development and production. They also will be able to recognize difficult problems and communicate well with fully trained statistical experts.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two recommendation letters.

Admission requirements
In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- All applicants will be considered who have received a baccalaureate from a regionally accredited institution.
- Previous training should include one introductory statistics course and some exposure to calculus.

Certificate requirements
To fulfill the certificate requirements, the student must have completed an approved program of at least 20 credits with at least a 2.0 in each course and an overall average of 3.0 in all courses. The courses normally included are STA 501, 502, 503 and 8 additional credits chosen from STA courses numbered 504 or higher. The course selections for a particular student will be chosen to complement previous statistics study and to enhance the competency of the individual in his/her chosen field of application.

Relationship to Master of Science in Applied Statistics
STA 501 does not count toward the Master of Science in applied statistics degree, but all other STA courses numbered 502 or higher count fully toward the degree. Thus, students who complete the Graduate Certificate program will have 16 credits that count toward the M.S. degree.

Certificate program students who wish to continue and pursue the M.S. degree should apply for admission to the M.S. program prior to completing the fifth course, and should make sure they have satisfied the prerequisites for admission to the M.S. program (which may require taking additional mathematics courses). For more information, speak to the coordinator.

■ DEPARTMENT OF MUSIC, THEATRE AND DANCE

207 Varner Hall • (248) 370-2030 • Fax (248) 370-2041
www.oakland.edu/mtd

Chair:
Jacqueline H. Wiggins

Program directors:
Michael Mitchell, Music
Kerro Knox 3, Theatre
Gregory Patterson, Dance

Artist-in-residence:
Regina Carter

Center for Applied Research in Musical Understanding:
Joseph Shively, Director
Deborah Blair
Jacqueline Wiggins

Professors emeriti:
David Daniels, Ph.D., University of Iowa
John Dovaras, M.M., Northwestern University
Robert Facko, Ed.D., Columbia University
Carol Halsted, Ed.D., Wayne State University
Adeline G. Hirschfeld-Medalia, Ph.D., Wayne State University
Marvin D. Holladay, M.A., Wesleyan University
Stanley Hollingsworth, Dipl., Curtis Institute of Music and Fellow of the American Academy of Rome (Italy)
Flavio Varani, M.M., Manhattan School of Music

Professors:
Laurie Eisenhower, M.F.A., Arizona State University
Karen F. Sheridan, M.F.A., Goodman School of Drama, DePaul University
John-Paul White, Dipl., Curtis Institute of Music
Jacqueline H. Wiggins, Ed.D., University of Illinois, Urbana-Champaign

Associate professors:
Lettie Beckon Alston, D.M.A., University of Michigan
Gregory M. Cunningham, Ed.D., University of Illinois, Urbana-Champaign
Michael E. Gillespie, Ph.D., Stanford University
David M. Kidger, Ph.D., Harvard University
Kerro Knox 3, M.F.A., Yale School of Drama
Kenneth R. Kroesche, D.M.A., University of Michigan
Michael A. Mitchell, D.M.A., University of Missouri, Kansas City
Gregory A. Patterson, M.F.A., University of Michigan
Joseph L. Shively, Ed.D., University of Illinois, Urbana-Champaign

Assistant professors:
Deborah V. Blair, Ph.D., Oakland University
Drake Dantzler, D.M.A., University of North Texas
Melissa Hoag, Ph.D., Indiana University
Thayer P. Jonutz, M.F.A., University of Michigan
Fred A. Love, Jr., M.M., University of Arizona
Jessica Payette, Ph.D., Stanford University
George Stoffan, D.M.A., University of Wisconsin-Madison
Yin Zheng, D.M.A., Eastman School of Music

Special instructors:
Mark A. Stone, M.M., University of Michigan
Thomas M. Suda, M.F.A., Wayne State University

Visiting assistant professor
Rodney Brown, M.F.A., University of Michigan

Full-time adjunct instructor:
Debra Bernstein-Siegel, M.A., Ohio State University

Adjunct assistant professor:
Edith Diggory, D.M.A., Indiana University

DSO affiliate applied faculty:
Douglas Cornelsen (clarinet)
Maxim Janowsky (double bass)
Marcus Schoon (bassoon)
Corbin Wagner (French horn)
Jeffrey Zook (flute)

Special lecturers:
Jennifer Kincer Catallo, Bret Hoag, Lois Kaarre, Marie Kujenga, Leslie Littell, Roberta Lucas, Thomas Mahard, Victoria Shively, Michele Soroka, Giner Thatcher, Phyllis White

Lecturers:
Sandra Birch, Mary Bischoff, Barbara Bland, Jacqueline Boucarad, Donna Buckley, Terry Carpenter, Ricky Carver, Rebecca Crimmins, Candace deLattre, Nadine DeLeury, Ronald DeRoo, Kitty Dubin, Michael Duncan, Nina Flanigan, Shannon Ford, Mindy McCabe Grissom, Mila Govich, John Hall, Rebecca Happel, Terry Herald, Alyssa Hetzner, Brandy Hudelson, Andrea Hughes, Laura Kroesche, Marie Kujenga, Kristen Larson, Ruth LeBay, Lynnae Lehfeldt, Marcia Mai, John Manfredi, Daniel Maslanka, Zelkjo Milicevic, Dennis North, Helen Yu Park, Stephanie Pizzo, Elizabeth Rowin, Marcus Schoon, Titos Sompa, Ivonne Tapia, Christina Tasco, Corbin Wagner, Brent Wrobel, Carol Yamasaki

Applied music instructors:
Kerstin Allvin (harp), Barbara Bland (voice), Frederic DeHaven (organ), Candice deLattre (voice), Nadine Delevry (cello), Edith Diggory (voice), Richard Fanning (jazz trumpet), Shannon Ford (saxophone), John Hall (guitar), Rebecca Hammond (oboe), Rebecca Happel (piano), Bret Hoag (guitar), Brandy Hudelson (flute), Mark Kieme (jazz saxophone), Kenneth Kroesche (trombone, euphonium, tuba), Daniel Maslanka (percussion, jazz percussion), Helen Yu Park (voice), Elizabeth Rowin (violin, viola), Mary Siciliano (piano), Gordon Simmons (trumpet), George Stoffan (clarinet), Mark Stone (world percussion),

Thomas Trenney (organ), Nadine Washington (voice), John-Paul White (voice), Yin Zheng (piano)

Accompanists:

Dimas Caraballo, Jerry Depuit, Rebecca Harding, Alyssa Hetzner, Vladimir Kalmsky, Lois Kaarre, Minjumg Kim, Angelina Pahsmakova, Amanda Sabelhaus, Eun Young Yoo, Tatyana Zut, Stanley Zydek

Degree programs:

Doctor of Philosophy in Music Education

Master of Music with majors in:
- Conducting
- Music Education
- Pedagogy (piano or vocal)
- Performance (instrumental, piano or voice)

Graduate Certificate or Post-master's Graduate Certificate in:
- Conducting
- Music Education (CARMU)
- Pedagogy (piano or vocal)
- Performance (instrumental, piano or voice)

Accreditation

The degree programs offered by the Department of Music, Theatre and Dance are fully accredited by the National Association of Schools of Music, the National Association of Schools of Theatre, and the National Association of Schools of Dance.

Ensemble auditions

Auditions for music and dance ensembles are held during the first few days of each semester. Auditions for other groups and theatrical productions are announced throughout the year.

Honors and awards

The Department of Music, Theatre and Dance offers honors and awards for students, alumni, and community supporters. Departmental honors are awarded for a combination of academic achievement (minimum 3.3 GPA), artistry in the major area of study, and contribution to the operations of the school. Alumni Arts Achievement Awards are presented in dance, music and theatre. The department also awards a Distinguished Community Service Award and an Outstanding Student Service Award.

The department confers a Distinguished Musicianship Award as its highest honor and Outstanding Student Awards to students who distinguish themselves in performance, music education, and chamber music. The Joyce Weintraub Adelson Memorial Award for Piano Ensemble honors the memory of an Oakland University piano instructor, and the Jennifer Scott Memorial Award honors the memory of an Oakland University piano student.

The department confers a variety of awards, including Outstanding Student Awards in musical theatre and theatre design and technology. The Gittlin Theatre and Gittlin Achievement Awards are scholarships offered to theatre students of promise and outstanding ability.

Professional offerings

Center for Applied Research in Musical Understanding (CARMU)

The mission of the Center for Applied Research in Musical Understanding (CARMU) is to:

- transform practice in music education
- build and advance a research-based pedagogy of teaching for musical understanding
- support pre-K-12 music educators in Michigan, the United States, and internationally
- demonstrate how research informs professional practice in music education
- seek national and international eminence in applied research in musical understanding at Oakland University
- support faculty, graduate and undergraduate research in musical understanding

The center hosts biannual international conferences on music learning and teaching. For information about the activities of the center, contact carmu@oakland.edu or visit www.oakland.edu/CARMU.

Music Preparatory Division

The department offers music programs to the community through the Music Preparatory Division, 331 Varner Hall, (248) 370-2034. The Prep Division offers private studio lessons in voice, piano, guitar, and all orchestral instruments for elementary and secondary school students and adults, as well as classes in music theory, early childhood music, creative music for children, and piano readiness. From time to time, workshops are offered on special topics. As part of their study, students have opportunities to perform in biannual recitals in Varner Recital Hall.

Professional development

The department offers a full complement of courses and workshops designed for performing arts professionals. The Department of Music, Theatre and Dance offers summer workshops in a variety of special topics in both theatre and dance. For information about current offerings, go to www.oakland.edu/mtd.

All graduate courses and workshops offered by the Department of Music, Theatre and Dance are open to qualified professional development students. These offerings are advertised in our annual graduate brochure (available at www.oakland.edu/mtd). For eligibility to enroll, go to www.oakland.edu/grad and complete a graduate application checking the Professional Development category.

Affiliated professional organizations

Eisenhower Dance Ensemble

The Eisenhower Dance Ensemble is a professional modern dance company in residence in the Department of Music, Theatre and Dance. Many part-time dance faculty are members of this ensemble. Dance majors also have performance and apprenticeship opportunities with the ensemble. The company performs at Oakland University and in venues across the state and nation. For information about the company, go to www.ede-dance.org.

Meadow Brook Theatre Ensemble

The Meadow Brook Theatre Ensemble is a professional theatre company in residence at Oakland University. Many part-time theatre faculty are members of this ensemble. Theatre majors also have some opportunities to intern in the ensemble. The company presents a full season of productions in Meadow Brook Theatre on Oakland's campus.

Pontiac Oakland Symphony

The Pontiac Oakland Symphony is a professional orchestra affiliated with and co-sponsored by Oakland University. Some music majors have opportunities to perform regularly with this ensemble. The orchestra holds an annual concerto competition for Oakland music majors; winners perform with the orchestra. Instrumental conducting majors may have an opportunity to conduct the orchestra. The orchestra presents a full season of concerts in Varner Recital Hall and other venues.

Partners in the Performing Arts

Detroit Symphony Orchestra (DSO)

Members of the DSO serve as applied music faculty in the Department of Music, Theatre and Dance. Oakland University music education faculty create lesson plans and materials and provide in-service workshops that support the orchestra's annual Educational Concert Series. The department hosts some DSO outreach events.

Michigan Opera Theatre (MOT)

Members of the MOT orchestra serve as applied music faculty in the Department of Music, Theatre and Dance. Oakland University performing arts faculty are instructors in the MOT Summer Opera Camp. Oakland voice majors have performed as part of the Michigan Opera Theatre chorus.

Oakland University Cooperative Orchestral Library (OUCOL)

The Department of Music, Theatre and Dance holds, maintains, and manages the Oakland University Cooperative Orchestral Library, a collection of orchestral music used by area community orchestras, including the Lake St. Clair Symphony, Livonia Symphony, Metropolitan Youth Symphony, Pontiac Oakland Symphony, Oakland Youth Orchestras, Rochester Symphony, Warren Symphony, and the Southfield Philharmonic.

Teaching for Musical Understanding (TMU)

TMU is an organization of nearly 100 K-12 music teachers in the region who hold professional development workshops to support their constructivist music teaching. The group has its own executive board and planning committee but is sponsored by CARMU and the Department of Music, Theatre and Dance.

Oakland Youth Orchestras (OYO)

The Department of Music, Theatre and Dance sponsors the Oakland Youth Orchestras which provide opportunities for elementary and secondary students from Oakland and surrounding counties to perform in full symphony orchestras. The orchestras rehearse weekly in departmental facilities.

Classical theatre study in Greece

The Oakland Theatre Program has partnered with the University of Detroit-Mercy to offer a month-long summer program in Greece. Students take classes, rehearse classic Greek plays, perform in outdoor amphitheatres and visit archeological sites and museums.

■ Michigan Teacher Certification Requirements

Professional teacher certification

To meet the professional (formerly continuing) certification requirements of the state of Michigan, candidates must already hold initial certification as a Michigan music teacher and must:

- complete three years of experience in their certificate area
- complete 18 credits of coursework in an approved, planned program
- show evidence of having completed at least 3 credits of coursework in methods of teaching reading. To meet the reading requirement, coursework taken as part of the undergraduate degree will apply. Students who have not taken a reading method course may take RDG 538, Guiding Reading-Learning in Content Subjects.

Candidates for professional certification are urged to complete their 18 credits as part of a master's degree. This choice offers maximum flexibility. As an alternative, students may choose non-degree planned programs. Oakland University will accept 6 to 9 credits from another institution toward certification requirements upon adviser approval.

Those teachers who wish to renew a lapsed provisional certificate may be recommended to the state of Michigan upon successful completion of 10 credits of coursework within their planned program.

Upon successful completion of coursework (3.0 for graduate courses; 2.0 for undergraduate), students must apply for certificate renewal or professional certification through the Teacher Education Advising Office, 363 Pawley Hall. The Michigan Department of Education charges for all certifications and renewals. A copy of the fee structure is available through the Teacher Education Advising Office, 364 Pawley Hall, (248) 370-4182.

Those teachers who wish to renew a lapsed continuing or permanent certificate and do not possess a master's degree must complete 6 credits at the graduate or undergraduate level. These credits do not have to be in a planned program. On completion, the student must apply for validation directly to the Michigan Department of Education, Teacher Certification, Box 30008, Lansing, MI, 48909.

Professional certificate renewal

Teachers who earn a professional certificate (through the process described above) are required to renew that certificate every five years on the basis of 6 credits of academic credit earned from an approved teacher preparation institution or the equivalent in State Board approved teacher development programs or activities that will award credits obtained as State Board Continuing Education Units (SB-CEUs). Continuing certificates issued before July 1, 1992 remain

valid as long as the holder serves in an educational capacity 100 days within a five-year period.

Initial certification as a music teacher

Students who hold a bachelor's degree and wish to obtain initial music teacher certification must enroll in a second undergraduate degree program in music education. Contact the College of Arts and Sciences Advising Office for information on qualifications and admission. Students wishing to enroll in a music teacher certification program must audition for the music program faculty. For details, see the Undergraduate Catalog or www.oakland.edu/mtd.

■ Doctor of Philosophy in Music Education

Coordinator:

Jacqueline H. Wiggins

Program description

The Doctor of Philosophy in music education degree program is designed to develop individuals who can provide leadership for music education practice as teacher educators, curriculum leaders, and researchers.

Core concepts in the program include constructivism, multiple perspective, and multiculturalism in music learning and teaching linking to and supporting social justice and democracy in music.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate and master's degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcript of all post-secondary educational institutions from which the applicant earned a degree (beginning with first baccalaureate) and all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Three (3) professional letters of recommendation
- Written statement of professional goals
- Additional information is required before international applicants can apply for and be granted a student visa.
- Teaching experience relevant to the applicant's intended area of study
- Applicants should also be prepared to provide evidence of their prior knowledge and understanding of music and music education. This could be in the form of papers written at the graduate level or in the form of a written examination designed by the admissions committee.
- Applicants who qualify as a result of this screening process will be interviewed by the music education faculty.

Admission requirements

Admission to the Doctor of Philosophy in music education degree program is selective. In making admission recommendations to the Ph.D. in music education degree program, the department evaluates admission candidates as musicians, scholars and practitioners through assessment of prior coursework at the undergraduate and graduate levels, professional experience, written statement of goals, professional letters of recommendations, interview and any other admission requirement established by the academic program.

Degree requirements

The Doctor of Philosophy in music education degree is awarded upon satisfactory completion of 76 credits in an approved program of study, successful admission to candidacy, successful defense of the dissertation and final approval and submission of the dissertation.

Course requirements

a. Core requirements (28 credits)

MUS 730	Doctoral Seminar	4
MUS 731	Historical and Philosophical Foundations of Music Education	4
MUS 732	Psychological Foundations of Music Education	4
MUS 789	Research in Music Education	4
ED 733	Analytical Methods	4
MUS 851	Research Mentorship I	2
MUS 852	Research Mentorship II	2
MUS 995	Dissertation Proposal Development Seminar	4

b. Approved cognate or electives (32 credits)

Chosen in consultation with the faculty adviser and/or chair of the dissertation committee.

c. Dissertation (16 credits)

MUS 999	Dissertation Research	16

Non-course requirements

Doctoral seminar

Students are encouraged to participate in Doctoral Seminar every semester of study (four times for credit, as indicated above).

Comprehensive and dissertation committees

The comprehensive and dissertation committees are made up of a minimum of three members. These faculty must be tenure-track faculty at Oakland University, and at least two members must be from the Department of Music, Theatre and Dance. In addition, the student may choose to add a fourth member to the dissertation committee. This additional member can be another faculty member

from the Department of Music, Theatre and Dance or other department in the College of Arts and Sciences; a faculty member from the School of Education and Human Services; or a faculty member from another institution, provided this person is approved by the Oakland University members of the dissertation committee.

The dissertation chair oversees the student's candidacy, assists the student in developing the dissertation proposal, guides the student's research, and certifies to Graduate Study and Lifelong Learning that all degree requirements have been fulfilled.

All coursework and admission to candidacy must be completed, with no outstanding (P) or (I) grades, before students may register for credit in Dissertation Research (MUS 999) using their dissertation chair as instructor of record. Students may register for dissertation credit repeatedly at any time up through the dissertation defense. To graduate, students must have completed a minimum of 16 credits of MUS 999 by the end of the semester in which his or her dissertation is defended and registered.

Comprehensive examination

Upon completion of all required coursework, the student must pass a comprehensive examination in the fields of music education philosophy, psychology, research and practice. Failure to pass the examination within two attempts shall constitute failure and dismissal from the Ph.D. program.

The comprehensive examination provides an opportunity for the student to demonstrate achievement of a level and quality of knowledge and skill sufficient to be considered a Doctor of Philosophy in music education. It also provides an opportunity for the student to demonstrate preparedness and readiness to engage in the dissertation study.

The examination will consist of three questions, generally one dealing with philosophical, psychological, and sociocultural foundations of music education; a second dealing with literature related to the candidate's interest area within the field; and a third with research methodology.

Students must complete all core courses before officially initiating the examination process. Once initiated, students have one calendar year to complete their responses. Non-core coursework may continue during the period of examination, but should be substantially completed. To initiate the process, the student invites faculty members to serve on his or her Comprehensive Committee. The committee then writes three questions.

Dissertation

An integral and major component of the program is the successful completion of original research to study a problem of current interest in the field. Each student shall, in consultation with his or her adviser, prepare a dissertation proposal consisting of a general introduction explaining relevance to the field, an extensive literature review, and an explanation of methodology of the study. Approval of the proposal by the dissertation committee is required.

The work shall be deemed ready for submission as a dissertation at such time as the committee agrees that the student has completed the work and has demonstrated a sufficiently high level of expertise in the area of focus to be called an expert in that area. At that time, the student shall submit the dissertation to the committee and shall defend the dissertation in an oral examination conducted by the committee. This defense shall be open to the public.

Acceptance of the dissertation by Graduate Study and Lifelong Learning requires favorable recommendations by the dissertation committee. All dissertations must conform to university standards (see "Thesis and Dissertation" in the "Graduation Information" section of this catalog).

Additional program information

Academic advising

Upon acceptance into the program, the coordinator of the Ph.D. in music education program advises all students. After the first year of study, each student seeks a dissertation chairperson who will then serve as adviser.

Residency requirement

Students must complete a residency for the purpose of concentrating study and fostering close and continuous contact with faculty and fellow graduate students. Residency is established by completing 16 credits in two consecutive semesters or 20 credits in one calendar year.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

■ Master of Music

Coordinator:

Joseph L. Shively

Program description

The Master of Music program is a professional degree program designed to enable students to further their understanding of and proficiency in music, and to provide opportunities for student growth as performers, conductors, studio instructors and school music

teachers. A student can earn a Master of Music degree in any of the following majors:

- Conducting
- Music Education
- Piano or Vocal Pedagogy
- Instrumental, Piano or Voice Performance

Application terms and deadlines

All application materials must be received by:

- August 1 for the Fall semester
- December 1 for the Winter semester
- April 1 for Summer I
- June 1 for Summer II.

General application requirements

To be considered for graduate admission, an applicant must submit all the general application requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two professional letters of recommendation
- Additional information is required before international applicants can apply for and be granted a student visa.

Program admission requirements

In addition to General Admission Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program including, but not limited to those listed below:

- Bachelor's degree in music from a regionally accredited institution that must include a minimum of two years of music theory, one year music history, and performance ability in some instrument or voice; or equivalent background to above requirements.
- For music education: K-12 teaching certificate in music and at least one year of elementary and/or secondary music teaching experience
- Candidate's goals which are compatible with the goals of the Master of Music program at Oakland University (via Supplemental Program Form available with graduate application at www.oakland.edu/grad)
- Two years of music theory; one year of music history and music performance ability OR background equivalent to these requirements.
- Audition or other personal evaluation by designated music faculty Performance, pedagogy, and conducting majors: audition Music education: sample of academic writing faxed to (248) 370-2041, Attn: Professor Joseph Shively.

Theory or history placement

Upon acceptance into the program, master's students participate in history and theory placement assessments to determine whether they have the necessary background to succeed in these courses. The department will provide a series of workshops for students whose performance on the assessments indicates that they may need additional preparation to be successful. For information about these offerings, contact Professor Joseph Shively, coordinator of the master's program at shively@oakland.edu.

General degree requirements

The Master of Music degree is awarded upon satisfactory completion of 36 credits in approved program of study, successful performance on an oral examination and successful completion of a culminating project or recital.

Upon acceptance into the program, master's students participate in history and theory placement assessments to determine whether they have the necessary background to succeed in these courses. The department will provide a series of workshops for students whose performance on the assessments indicates that they may need additional preparation to be successful. For information about these offerings, contact Professor Joseph Shively, coordinator of the master's program at shively@oakland.edu.

If the faculty deems areas of the candidate's undergraduate preparation deficient, undergraduate courses at the 400-level may be prescribed. Such work will not count as part of the 36 credits of the master's program.

Satisfactory progress toward degree

At the end of any semester, a graduate student who earns an individual course grade below a 3.0 will be reviewed by the graduate program and subject to academic warning, probation or dismissal, according to published program requirements. As work progresses, the following may be grounds for dismissal from the program:

- One grade below 2.5
- Two grades below 3.0

Culminating projects

The culminating project differs depending upon which major is chosen.

- For candidates for a Master of Music with majors in conducting or performance, the culminating project is a recital.
- For candidates for a Master of Music with a major in pedagogy, the culminating project consists of written work plus the teaching practicum.
- For candidates for a Master of Music with a major in music education, the culminating project consists of a thesis.

Students are urged to plan ahead for the culminating projects. Obtain information about the expectations for culminating projects from your adviser early in the degree program.

While working on a culminating project, students are expected to enroll every fall and winter for a minimum of 1 credit until the project, thesis, or recital is completed.

Oral examination

After completion of the culminating project, thesis or recital, the student will be asked to make a 10- to 15-minute presentation to his or her project committee. In the case of a recital, this might include discussion of interpretation, editions chosen, historical aspects, and so on. In the case of a thesis or project, this might take the form of a research presentation, including discussion of intentions, methodology, interpretation of data and findings

A satisfactory presentation of material reflective of a satisfactory thesis, project or recital constitutes passing the Oral Examination for the degree of Master of Music. Any student who does not pass this examination may be offered the examination again one semester later, upon the approval of the student's adviser.

DEGREE REQUIREMENTS FOR MAJORS

Master of Music in conducting

The Master of Music in conducting is a 36-credit program designed to meet the needs of music teachers and other music professionals who are interested in developing high-level skills and understanding in instrumental and/or choral conducting.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program
- A successful audition that shows an appropriate level of prior experience and potential for success in the program.

  For *choral* conducting, contact Professor Michael Mitchell (mmitchel@oakland.edu)

  For *instrumental* conducting, contact Professor Gregory Cunningham (cunningh@oakland.edu)
- Written statement of professional goals via the Supplemental Program Form available with graduate application at www.oakland.edu/grad
- Two years of music theory; one year of music history and music performance ability OR background equivalent to these requirements.
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Master of Music in conducting degree program is selective. In making admission recommendations to the Master of Music in conducting program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, goal statement, letters of recommendation, audition, prerequisite courses and any other admission requirement established by the academic program.

Degree requirements

The Master of Music in conducting is awarded upon satisfactory completion of 36 credits in an approved program of study, successful completion of a culminating project, and successful performance on an oral examination.

Course requirements

a. Core requirements (12 credits)

MUS 500	Introduction to Graduate Study in Music	2

Choose two Music History Seminars from:

MUS 521*	Seminar in Medieval and Renaissance Music	2
MUS 522*	Seminar in Baroque and Classical Music	2
MUS 523*	Seminar in Music from 1800 to Present	2

*MUS 521, 522, and 523 may be repeated for credit when the repeated seminar is on a different topic from the first taken.

Choose one Music Theory Seminar from:

MUT 535	Analytical Techniques in Tonal Music	2
MUT 536	Analysis of Post-1900 Music	2
MUT 537	Theories of Rhythm and Meter	2

Choose core electives from:

any 500-level music course, in consultation with adviser.

Students may not use courses required for their major to fulfill the music history core requirement.

b. Major requirements (22 credits)

MUS 580	Advanced Choral Interpretation and Conducting Techniques	2
MUS 581	Advanced Instrumental Interpretation and Conducting Techniques	2
MUS electives in related studies (orchestration, literature, analysis, voice, diction, score study)		4
Literature course (MUS 556, 576 or other as appropriate)		2
MUS 620	Conducting Apprenticeship (3 semesters)	6
Electives		6

c. Exit (2 credits)

Culminating project		
MUA 695	Master's Recital	2
(Must enroll for 1 credit every fall/winter until completed.)		
Oral examination		

Culminating project

For candidates for a Master of Music in conducting, the culminating project is a master's recital.

Students are urged to plan ahead for the recital. Obtain information about the expectations from your adviser early in the degree program.

While working on the recital, students are expected to enroll every fall and winter for a minimum of 1 credit until the recital is completed.

Oral examination

After completion of the recital, the student will be asked to make a 10- to 15-minute presentation to his or her recital committee. This might include discussion of interpretation, editions chosen, historical aspects of the works chosen, and so on.

A satisfactory presentation of material reflective of a satisfactory recital constitutes passing the Oral Examination for the degree of Master of Music. Any student who does not pass this examination may be offered the examination again one semester later, upon the approval of the student's adviser.

Master of Music in music education

The Master of Music in music education is a 36-credit program designed to meet the needs of music teachers, to help them expand and extend their professional skills and understandings with a long-range goal of enabling educators to study and improve their own practice.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program
- K-12 teaching certificate in music and at least one year of elementary and/or secondary music teaching experience
- Sample of academic writing faxed to (248) 370-2041, Attn: Professor Joseph Shively or sent as an e-mail attachment to shively@oakland.edu
- Written statement of professional goals via the Supplemental Program Form available with graduate application at www.oakland.edu/grad
- Two years of music theory; one year of music history and music performance ability OR background equivalent to these requirements.
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Master of Music in music education degree program is selective. In making admission recommendations to the Master of Music in music education program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, goal statement, letters of recommendation, audition, prerequisite courses and any other admission requirement established by the academic program.

Degree requirements

The Master of Music in music education degree is awarded upon satisfactory completion of 36 credits in an approved program of study, successful completion of a culminating project and successful performance on an oral examination.

Course requirements

a. Core requirements (12 credits)

MUS 500	Introduction to Graduate Study in Music	2

Choose two Music History seminars from:

MUS 521*	Seminar in Medieval and Renaissance Music	2
MUS 522*	Seminar in Baroque and Classical Music	2
MUS 523*	Seminar in Music from 1800 to Present	2

* MUS 521, 522, and 523 may be repeated for credit when the repeated seminar is on a different topic from the first taken.

Choose one Music Theory seminar from:		
MUT 535	Analytical Techniques in Tonal Music	2
MUT 536	Analysis of Post-1900 Music	2
MUT 537	Theories of Rhythm and Meter	2

Choose core electives from:
any 500-level music course, in consultation with adviser.

Students may not use courses required for their major to fulfill the music history core requirement.

b. Major requirements (20 credits)

MUS 531	Historical and Philosophical Foundations of Music Education	4
MUS 532	Psychological Foundations of Music Education	4
MUS 641, 642, 643 or 644	Music Education Methods	2
MUS 689	Research Methods in Music Education	2
Electives	(in music, education, or music education)	8

c. Exit (4 credits)

Culminating project		
MUS 699	Master's Thesis	4
(Must enroll for 1 credit every fall/winter until completed.)		
Oral examination		

Culminating project

For candidates for a Master of Music in music education, the culminating project is a master's thesis.

Students are urged to plan ahead for the thesis. Obtain information about the expectations from your adviser early in the degree program.

While working on the thesis, students are expected to enroll every fall and winter for a minimum of 1 credit until the thesis is completed.

Oral examination

After completion of the master's thesis, the student will be asked to make a 10- to 15-minute research presentation to his or her thesis committee that includes discussion of intentions, methodology, interpretation of data, and findings.

A satisfactory presentation of material reflective of a satisfactory thesis constitutes passing the Oral Examination for the degree of Master of Music. Any student who does not pass this examination may be offered the examination again one semester later, upon the approval of the student's adviser.

Master of Music in pedagogy (piano or vocal)

The Master of Music in piano or vocal pedagogy is a 36-credit program for experienced pianists or singers, designed to enable them to explore approaches to teaching piano or voice, to expand their knowledge of repertoire and technique, and to further their personal performance skills and musical understanding.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program
- A successful audition that shows an appropriate level of prior experience and potential for success in the program:

  For *piano* pedagogy, contact Professor Yin Zheng (zheng2@oakland.edu) .

  For *vocal* pedagogy, contact Professor John-Paul White (jpwhite@oakland.edu).
- Written statement of professional goals via the departmental questionnaire available with the graduate application at www.oakland.edu/grad
- Two years of music theory; one year of music history and music performance ability OR background equivalent to these requirements.
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Master of Music in piano or vocal pedagogy degree program is selective. In making admission recommendations to the Master of Music in piano or vocal pedagogy program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, goal statement, letters of recommendation, audition, prerequisite courses and any other admission requirement established by the academic program.

Degree requirements

The Master of Music in piano or vocal pedagogy degree is awarded upon satisfactory completion of 36 credits in an approved program of study, successful completion of a culminating project and successful performance on an oral examination.

Course requirements

a. Core requirements (12 credits)

MUS 500	Introduction to Graduate Study in Music	2

Choose two Music History Seminars from:

MUS 521*	Seminar in Medieval and Renaissance Music	2
MUS 522*	Seminar in Baroque and Classical Music	2
MUS 523*	Seminar in Music from 1800 to Present	2

* MUS 521, 522, and 523 may be repeated for credit when the repeated seminar is on a different topic from the first taken.

Choose one Music Theory seminar from:

MUT 535	Analytical Techniques in Tonal Music	2
MUT 536	Analysis of Post-1900 Music	2
MUT 537	Theories of Rhythm and Meter	2

Choose core electives from:

any 500-level music course, in consultation with adviser.

Students may not use courses required for their major to fulfill the music history core requirement.

b. Major requirements (22 credits)

500-level Applied Study (4 semesters)		8
MUS 533	Learning Theory for Studio Teachers	2
MUS 541, 542 or MUS 550, 552	Piano or Vocal Pedagogy	4
MUS 555, 557 or MUS 561, 562	Piano or Vocal Repertoire	4
500-level Ensembles (2 semesters)		2
Electives		2

c. Exit (2 credits)

Culminating project		
MUS 695	Master's Project (includes teaching practicum)	2
(Must enroll for 1 credit every fall/winter until completed.)		
Oral examination		

Culminating project

For candidates for a Master of Music in piano or vocal pedagogy, the culminating project is a written master's project which includes a teaching practicum.

While working on the written master's project, students are expected to enroll every fall and winter for a minimum of 1 credit until the master's project is completed.

Oral examination

After completion of the written master's project, the student will be asked to make a 10- to 15-minute presentation to his or her master's project committee. This might include discussion of interpretation, editions chosen, historical aspects of the works chosen, and so on.

A satisfactory presentation of material reflective of a satisfactory written master's project constitutes passing the Oral Examination for the degree of Master of Music. Any student who does not pass this examination may be offered the examination again one semester later, upon the approval of the student's adviser.

Master of Music in performance (instrumental, piano or voice)

The Master of Music in instrumental or piano or voice performance is a 36-credit program for highly experienced pianists, singers, or orchestral instrumentalists, designed to enable them to expand their knowledge of repertoire and technique, and to further their personal performance skills and musical understanding.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program

- A successful audition that shows an appropriate level of prior experience and potential for success in the program.

  For *brass or percussion* performance, contact Professor Kenneth Kroesche (kroesche@oakland.edu).

  For *wind or string* performance, contact Profesor George Stoffan (stoffan@oakland.edu).

  For *piano* performance, contact Professor Yin Zheng (zheng2@oakland.edu) .

  For *voice* performance, contact Professor John-Paul White (jpwhite@oakland.edu).
- Written statement of professional goals via the Supplemental Program Form available with the graduate application at www.oakland.edu/grad
- Two years of music theory; one year of music history and music performance ability OR background equivalent to these requirements.
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Master of Music in performance degree program is selective. In making admission recommendations to the Master of Music in performance program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, goal statement, letters of recommendation, audition, prerequisite courses and any other admission requirement established by the academic program.

Degree requirements

The Master of Music in instrumental or piano or voice performance degree is awarded upon satisfactory completion of 36 credits in an approved program of study, successful completion of a culminating project and successful performance on an oral examination.

Course requirements

a. Core requirements (12 credits)

MUS 500	Introduction to Graduate Study in Music	2

Choose two Music History Seminars from:

MUS 521*	Seminar in Medieval and Renaissance Music	2
MUS 522*	Seminar in Baroque and Classical Music	2
MUS 523*	Seminar in Music from 1800 to Present	2

* MUS 521, 522, and 523 may be repeated for credit when the repeated seminar is on a different topic from the first taken.

Choose one Music Theory Seminar from:

MUT 535	Analytical Techniques in Tonal Music	2
MUT 536	Analysis of Post-1900 Music	2
MUT 537	Theories of Rhythm and Meter	2

Choose core electives from:

any 500-level music course, in consultation with adviser.

Students may not use courses required for their major to fulfill the music history core requirement.

b. Major requirements (22 credits)

500-level Applied Study (4 semesters)	8
Pedagogy in major area (2 for instrumental, 4 for piano or voice)	2 or 4
Repertoire in major area*	4
500-level Ensembles* (2 semesters) *Instrumental performance majors must participate in a major ensemble every semester of major.	2
Electives (additional performance study recommended)	4 to 6

c. Exit (2 credits)

Culminating project		
MUA 695	Master's Recital	2
(Must enroll for 1 credit every fall/winter until completed.)		
Oral examination		

Culminating project

For candidates for a Master of Music in performance, the culminating project is a master's recital.

Students are urged to plan ahead for the recital. Obtain information about the expectations from your adviser early in the degree program.

While working on the recital, students are expected to enroll every fall and winter for a minimum of 1 credit until the recital is completed.

Oral examination

After completion of the recital, the student will be asked to make a 10- to 15-minute presentation to his or her recital committee. This might include discussion of interpretation, editions chosen, historical aspects of the works chosen, and so on.

A satisfactory presentation of material reflective of a satisfactory recital constitutes passing the Oral Examination for the degree of Master of Music. Any student who does not pass this examination may be offered the examination again one semester later, upon the approval of the student's adviser.

■ Performance Certificate in Piano

Program description

The Performance Certificate in Piano is a non-degree certificate program that consists of 32 credits to be earned over the course of two years. The program is designed for the most advanced and gifted performers who, by their performance and credentials, demonstrate that they have serious potential to become concert artists.

The program provides intensive study and performance opportunities in preparation for a concert career.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree in Music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program
- A successful audition that shows an appropriate level of prior experience and potential for success in the program:

  Contact Professor Yin Zheng (zheng2@oakland.edu)
- Goal statement showing that professional goals are compatible with the goals of the program.
- International students must submit official TOEFL scores and all additional documents required by Graduate Admissions.

  Paper-based TOEFL score of at least 550; computer-based TOEFL score of at least 213 or MELAB minimum score of 77

  Paper-based TOEFL score 520-549; computer-based TOEFL score of at least 192-212 or MELAB score of 73-76 (ESL coursework required)

Admission requirements

Admission to the Performance Certificate in Piano program is selective. In making admission recommendations to the Performance Certificate in Piano program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, goal statement, letters of recommendation, audition, prerequisite courses and any other admission requirements established by the academic program.

Performance certificate requirements

The Performance Certificate in Piano is awarded upon satisfactory completion of 32 credits in an approved program of study

Course requirements (32 credits)

MUA 540	Applied Piano (Diploma Level)	16
MUE 580	Chamber Music	8
MUA 575	Accompanying	4
MUS 541	Piano Pedagogy I	2
MUS 542	Piano Pedagogy II	2

Non-course requirements

Two successful graduate recitals (no credit).

■ Graduate Certificates and Post-Master's Graduate Certificates in Music

The Graduate Certificates and Post-Master's Graduate Certificates in music are awarded upon satisfactory completion of 16 credits in an approved program of study.

Academic performance

To earn a Graduate Certificate or Post-master's Graduate Certificate in music, a student must earn a grade of 3.0 or higher in all courses applied to the certificate.

Transfer to Master of Music

Graduate certificate students who wish to transfer to the Master of Music degree program must apply to the master's program prior to enrolling in the last certificate course.

General requirements

Application, admission and certificate requirements are listed in each area as follows.

Graduate Certificate or Post-master's Graduate Certificate in Music Education (CARMU)

Program description

The Graduate Certificate and Post-master's Graduate Certificate in Music Education (CARMU) is a professional program designed to meet the needs of music teachers, to help them expand and extend their professional skills and understanding, and to improve their own practice. The program consists of 16 credits of music education courses.

The graduate certificate program is an outgrowth of the work of the Center for Applied Research in Musical Understanding (CARMU).

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate or master's degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program
- Sample of academic writing faxed to (248) 370-2041, Attn: Professor Joseph Shively or sent as an e-mail attachment to shively@oakland.edu
- K-12 teaching certificate in music and at least one year of elementary and/or secondary music teaching experience
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Graduate or Post-master's Certificate in Music Education program is selective. In making admission recommendations to the Graduate or Post-master's Certificate in music education program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, writing sample, letters of recommendation, prerequisite courses and any other admission requirement established by the academic program.

Certificate requirements

The Graduate Certificate and Post-master's Graduate Certificate in Music Education is awarded upon satisfactory completion of 16 credits in an approved program of study.

Course requirements (16 credits)

MUS 531	Historical and Philosophical Foundations of Music Education	4
MUS 532	Psychological Foundations of Music Education	4
MUS 641, 642, 643, or 644	Music Education Methods	2
MUS 645	Music Curriculum Design and Assessment	2
Electives	Chosen in consultation with adviser	4

Graduate Certificate and Post-master's Graduate Certificate in Conducting

Program description

The Graduate Certificate and the Post-master's Graduate Certificate in Conducting is a professional program designed to meet the needs of music teachers and other music professionals who are interested in developing high-level skills and understanding in instrumental and/or choral conducting. The program consists of 16 credits of conducting and related courses.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate or master's degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcript of all post-secondary educational institutions from which the applicant earned a degree (beginning with first baccalaureate) and all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program
- A successful audition that shows an appropriate level of prior experience and potential for success in the program.

  For *choral* conducting, contact Professor Michael Mitchell (mmitchel@oakland.edu)

  For *instrumental* conducting, contact Professor Gregory Cunningham (cunningh@oakland.edu).
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Graduate or Post-master's Certificate in Conducting program is selective. In making admission recommendations to the Graduate or Post-master's Certificate in conducting program, the department assesses the potential of applicants for success in the program by examining their

undergraduate records, writing sample, letters of recommendation, prerequisite courses, audition and any other admission requirement established by the academic program.

Certificate requirements

The Graduate Certificate and Post-master's Graduate Certificate in Conducting is awarded upon satisfactory completion of 16 credits in an approved program of study.

Course requirements (16 credits)

MUS 580	Advanced Choral Interpretation and Conducting Techniques	2
MUS 581	Advanced Instrumental Interpretation and Conducting Techniques	2
MUS 620	Conducting Apprenticeship (2 semesters)	4
MUT 535, 536, or 538	Music Theory (choose 2)	4
Electives	Chosen in consultation with adviser	4

Graduate Certificate or Post-master's Graduate Certificate in Pedagogy (piano or vocal)

Program description

The Graduate Certificate or Post-master's Graduate Certificate in Piano or Vocal Pedagogy is a professional program for experienced pianists or singers, designed to enable them to explore approaches to teaching piano or voice, to expand their knowledge of repertoire and technique, and to further their personal performance skills and musical understanding. The program consists of 16 credits of conducting and related courses.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program.
- A successful audition that shows an appropriate level of prior experience and potential for success in the program.

  For *piano* pedagogy, contact Professor Yin Zheng (zheng2@oakland.edu).

  For *vocal* pedagogy, contact Professor John-Paul White (jpwhite@oakland.edu).
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Graduate or Post-master's Certificate in Piano or Vocal Pedagogy program is selective. In making admission recommendations to the Graduate or Post-master's Certificate in piano or vocal pedagogy program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, letters of recommendation, prerequisite courses, audition and any other admission requirement established by the academic program.

Certificate requirements

The Graduate Certificate or Post-master's Graduate Certificate in Piano or Vocal Pedagogy is awarded upon satisfactory completion of 16 credits in an approved program of study.

Course requirements (16 credits)

500-level	Applied Voice or Piano (3 semesters)	6
MUS 533	Learning Theory for Studio Teachers	2
MUS 541, 542	Piano Pedagogy I, II	4
MUA 555, 557	Repertoire I, II	4

Graduate Certificate or Post-master's Graduate Certificate in Performance (instrumental, piano or voice)

Program description

The Graduate Certificate or Post-master's Graduate Certificate in Instrumental, Piano or Voice Performance is a professional program for highly experienced pianists, singers, or orchestral instrumentalists, designed to enable them to expand their knowledge of repertoire and technique, and to further their personal performance skills and musical understanding. The program consists of 16 credits of conducting and related courses.

Application requirements

To be considered for graduate admission, an applicant must submit all the general and program application requirements including, but not limited to those listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree in music from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre-and post-bachelor's degree.
- Two letters of recommendations from those who can attest to the applicant's potential for successful graduate study
- Proof of prerequisite courses (undergraduate) required to be admitted into degree program
- A successful audition that shows an appropriate level of prior experience and potential for success in the program.

  For *brass or percussion* performance, contact Professor Kenneth Kroesche (kroesche@oakland.edu).

  For *piano* performance, contact Professor Yin Zheng (zheng2@oakland.edu).

  For *voice* performance, contact Professor John-Paul White (jpwhite@oakland.edu).

  For *wind or string* performance, contact Profesor George Stoffan (stoffan@oakland.edu).
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Graduate Certificate or Post-master's Graduate Certificate in Instrumental, Piano or Voice Performance program is selective. In making admission recommendations to the Graduate Certificate or Post-master's Graduate Certificate in Instrumental, Piano or Voice Performance program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, letters of recommendation, prerequisite courses, audition and any other admission requirement established by the academic program.

Certificate requirements

The Graduate Certificate and Post-master's Graduate Certificate in Instrumental, Piano or Voice Performance is awarded upon satisfactory completion of 16 credits in an approved program of study.

Course requirements (16 credits)

500-level Applied Voice or Piano (3 semesters)		6
MUS 541, 542	Piano Pedagogy I, II	4
MUA 555, 557	Repertoire I, II	4
MUA 595	Graduate Recital	2

■DEPARTMENT OF PHYSICS

190 Science and Engineering Building • (248) 370-3416
Fax (248) 370-3408 • www.oakland.edu/physics

Chair:
Andrei N. Slavin

Professors emeriti:
Abraham R. Liboff, Ph.D., New York University
John M. McKinley, Ph.D., University of Illinois
Ralph C. Mobley, Ph.D., University of Wisconsin
Norman Tepley, Ph.D., Massachusetts Institute of Technology
Paul A. Tipler, Ph.D., University of Illinois
William D. Wallace, Ph.D., Wayne State University
Robert M. Williamson, Ph.D., University of Wisconsin

Distinguished professor:
Michael J. Chopp, Ph.D., New York University

Professors:
Ken Elder, Ph.D., University of Toronto (Canada)
David Garfinkle, Ph.D., University of Chicago
Bradley J. Roth, Ph.D., Vanderbilt University
Andrei N. Slavin, Ph.D., Leningrad Technical University (Russia)
Gopalan Srinivasan, Ph.D., Indian Institute of Technology (India)
Uma Devi Venkateswaran, Ph.D., University of Missouri
Yang Xia, Ph.D., Massey University (New Zealand)

Associate professors:
George B. Martins, Ph.D., Campinas State University (Brazil)
Alberto G. Rojo, Ph.D., Instituto Balseiro Bariloche (Argentina)

Assistant professor:
Evgeniy Khain, Ph.D., Hebrew University of Jerusalem (Israel)

Visiting assistant professor:
Eugene Surdutovich, Ph.D., Wayne State University

Adjunct professors of physics:
Carl E. Bleil, Ph.D., University of Oklahoma
Joseph V. Mantese, Ph.D., Cornell University

Adjunct professors of medical physics:
Stephen L. Brown, Ph.D., University of Toronto (Canada)
Howard J. Dworkin, M.D., Albany Medical College
Jae Ho Kim, Ph.D., Kyungpook University (University of Iowa)
Harold D. Portnoy, M.D., Wayne State University
Hani Sabbah, Ph.D., Oakland University

Adjunct associate professor physics:
Kapila Clara Castoldi, Ph.D., University of Milan (Italy)

Adjunct associate professors of medical physics:
Constantine Demetropoulos, Ph.D., Wayne State University
James R. Ewing, Ph.D., Oakland University
Quan Jiang, Ph.D., Oakland University
Robert Knight, Ph.D., Oakland University
S. David Nathanson, M.D., University of Witwatersrand (South Africa)
Stephen E. Robinson, Ph.D., Hahnemann Medical College

Adjunct assistant professors of medical physics:
Susan Bowyer, Ph.D., Oakland University
Kenneth Jenrow, Ph.D., Oakland University
Zheng-Gang Zhang, Ph.D., Oakland University

Adjunct instructor of medical physics:
Ray A. Carlson, M.S., Wayne State University

Degree programs
Doctor of Philosophy in Biomedical Sciences: Medical Physics

Master of Science in Physics

Research fields and facilities

The Department of Physics faculty are currently involved in research in three broad areas: biophysics and medical physics, condensed matter physics theory and experiment, and gravitational physics theory. Specifically, the biophysics and medical physics group has been studying the mechanisms underlying bioelectromagnetic interactions, biomedical aspects of biomagnetism, NMR imaging, NMR microscopy, in vivo NMR spectroscopy, neuromagnetism, photodynamic therapy, and the biophysics and biomechanics of osteoarthritis, stroke, cerebrovascular disease, brain tumor, migraine headache, cardiac electrophysiology, hyperthermia and the invasion and clustering of cancer cells. The condensed matter physics group conducts theoretical studies of the linear and nonlinear dynamics of spin waves and phenomena associated with phase transitions and experiments on magnetic properties of technologically useful materials, optical properties of semiconductors and carbon nanotubes under high pressure, instabilities and pattern formation in granular matter, and crystal growth of diamond films and silicon ribbons. The gravitational theory group's research centers on critical phenomena, chaos, and the nature of generic singularities in Einstein's theory of general relativity.

Research facilities in the high pressure optics laboratory include Raman spectrometers with single or multi-channel detectors, facilities for photoluminescence studies in the visible and infrared regions, argon ion and Ti: sapphire lasers, high pressure cells capable of generating 10 GPa, and closed cycle helium refrigerators. Research facilities in the condensed matter physics laboratories include a Faraday Magnetometer, an AC susceptometer, a ferromagnetic resonance spectrometer at x-band, a Philips x-ray diffractometer, one and two kilowatt RF power supplies with 50W matching networks for silicon ribbon growth, and vacuum facilities for thin film evaporation and fullerene preparation. Research facilities in the biomagnetism laboratories include the non-magnetic environment of the Kettering Magnetics Laboratory and an underground shielded room for

research demanding ultra-low AC backgrounds. Research facilities in the NMR microscopy laboratory include a Bruker AMX 300 NMR spectrometer with a 7-Tesla/89-mm vertical bore superconducting magnet and micro-imaging accessories. The department also has microwave device facilities in the frequency range from 100 kHz to 70 GHz. Supporting facilities include electronics and mechanical workshops staffed by experienced technical personnel. Computer facilities include a 200-node supercomputer cluster for high performance computing, plus a number of workstations, and numerous Macintosh and PC computers. Most research laboratories are located in the modern Science and Engineering Building on campus.

Among research facilities in neighboring hospitals available to medical physics students are a 3.0-Tesla whole-body NMR system and a 7.0-Telsa/20-cm horizontal bore magnet NMR system for imaging and in vivo spectroscopy, a megawatt tuneable dye laser and argon ion laser for photodynamic therapy research, a 148-channel whole-head SQUID neuromagnetometer, a nuclear medicine laboratory, radiology and CT scanning facilities, advanced modalities cancer therapy laboratory, including radiotherapy and hyperthermia, diagnostic ultrasonic equipment, a laser surgery laboratory, and major hospital medical libraries.

■ Doctor of Philosophy in Biomedical Sciences: Medical Physics

Coordinator:
Bradley Roth

Program description

The College of Arts and Sciences offers a Doctor of Philosophy in biomedical sciences degree with a specialization in medical physics that is centered in the Department of Physics.

Medical physicists are providing primary contributions to advances in diagnostic and therapeutic medicine. Laser surgery, ultrasonics, nuclear medicine, radiotherapy and nuclear magnetic resonance imaging are examples of medical modalities developed and implemented by medical physicists. The medical physics specialization of the biomedical sciences doctoral program is designed for students who plan careers in medical research in industrial, hospital and academic settings. The curriculum is designed to prepare the student to engage in research in areas of physics applied to medicine. Ph.D. candidates may elect to do their dissertation research either with one of a number of Oakland University faculty currently involved in biomedical research or with one of the scientists in area hospitals that collaborate closely with the university. Among these are Henry Ford Hospital, Detroit; and William Beaumont Hospital, Royal Oak. In addition to available Oakland University graduate assistantships, hospitals participating in this program may provide support for qualified students. Interested students should consult the program coordinator for details.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- June 1 for the summer session

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Three letters of recommendation submitted directly by individuals who can evaluate the applicant's potential for graduate-level scientific research
- Official results of the Graduate Record Examination (GRE). The physics subject exam is also recommended
- International students will have additional application requirements; see the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Doctor of Philosophy in biomedical sciences: medical physics degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Students will be considered for admission if they hold a baccalaureate degree in physics, chemistry, mathematics, biology, engineering, or other disciplines related to medical physics.
- Each student entering the program must demonstrate proficiency in specific areas of coursework. Upon entering the program the student must consult with the specialization adviser who will plan a program of coursework to eliminate any deficiences in the student's preparation. Proficiency typically would consist of satisfactory knowledge of coursework equivalent to the following Oakland University courses: modern physics (PHY 371), physical chemistry (CHM 343), and at least three of the following: computer programming, differential equations (APM 257), electronics (PHY 341, 347), electricity and magnetism (PHY 381), physiology (BIO 207 or BIO 321), and statistics (STA 226).

Degree requirements

The Doctor of Philosophy in biomedical sciences: medical physics degree is awarded upon satisfactory completion of 90 credits in an approved program of study.

The basic requirements for the Doctor of Philosophy in biomedical sciences: medical physics degree are completion of a unified program of formal coursework and independent research approved by the candidate's dissertation committee and the medical physics specialization committee.

Course requirements

a. Foundation requirements

Areas of graduate-level proficiency required for the medical physics specialization are theoretical physics, mathematical methods in scientific research, and biophysical sciences and laboratories. Proficiency in theoretical physics would typically be established by taking several of the following courses:

PHY 472	Quantum Mechanics I	4
PHY 482	Electricity and Magnetism II	4
PHY 522	Statistical Thermodynamics	4
PHY 552	Theoretical Physics	4
PHY 562	Mechanics II	4

Courses used to satisfy the mathematical methods area might include:

STA 425	Elements of Stochastic Processes	4
STA 427	Introduction to Mathematical Statistics	4
STA 501	Statistical Methods in Research and Production	4
APM 533	Numerical Methods	4
APM 534	Applied Numerical Methods: Matrix Methods	4

The biophysical sciences area proficiencies could be met by taking:

BIO 321	Physiology	4
BIO 401	Advanced Human Physiology	4
CHM 342	Physical Chemistry I	4
CHM 453	Biochemistry I	3
PHY 525	Radiation Biophysics	4
PHY 545	Nuclear Magnetic Resonance	4

Laboratory proficiency may be satisfied by laboratory courses or by research.

b. General requirements

A minimum of 90 credits beyond the baccalaureate is required, including at least 30 credits of dissertation research. The Ph.D. in biomedical sciences: medical physics degree program is an approved interdisciplinary program, so graduate students, with the approval of the medical physics specialization committee, may use up to 12 credits of 300-499 courses taken at Oakland University toward a graduate degree.

Non-course requirements

Preliminary examination

Within two years after admission into the program the student must pass a comprehensive written and oral examination. The comprehensive examination consists of three written exams in theoretical physics, mathematical methods, and biophysical sciences, and an oral exam. The examination is intended to determine the extent of the student's knowledge and fitness for the doctoral degree and will be designed and evaluated by the medical physics specialization committee. If the student does not pass the examination, the specialization committee may allow the student to retake the examination within one year. Failure to pass the examination within two attempts shall constitute failure in the Ph.D. program.

Dissertation committee

A dissertation committee consisting of at least three members, one of whom serves as dissertation adviser, will be chosen by the specialization committee and the student in question. The student's dissertation adviser will be chairperson of the committee. The committee is charged with the guidance of the student in course selection, review of dissertation proposals before initiation of a project, and approval of the completed dissertation.

Research and dissertation

An integral and major component of the program is the successful completion of original research using state-of-the-art experimental or theoretical methods to study a problem of current interest. Each student shall, in consultation with their adviser, prepare a dissertation proposal outlining the problem to be studied, a survey of the appropriate literature, a description of the appropriate techniques, and an outline of the experiments to be performed. The student shall, at the request of the dissertation committee, orally defend the proposal or elaborate on the methods for data collection and analysis. Approval of the proposal by the committee is required prior to commencing research. The project shall be deemed ready for preparation of dissertation at such time as the student's committee agrees that the student has completed the project and that the student is an expert in the use of specific methods required by the project. At that time, the student shall prepare a doctoral dissertation for submission to the committee and shall defend the dissertation in a public oral examination conducted by the committee and attended by the medical physics specialization committee. Acceptance of the dissertation by Graduate Study and Lifelong Learning requires favorable recommendations by the dissertation and specialization committees. All dissertations must conform to university standards (see "Thesis and Dissertation" in the "Graduation Information" section of this catalog).

Residence

All students are required to fulfill a residency requirement for this program. Although students may complete some of the program on a part-time basis, continuous full-time enrollment is highly preferred. The minimal residency requirement shall be full-time residency (12 credits per semester) for at least three consecutive full semesters with at least two of these devoted primarily to the student's research project.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration

requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time to degree

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

■ Master of Science in Physics

Coordinator:

Gopalan Srinivasan

Program description

The program leading to the Master of Science in physics degree consists of courses, research, seminar participation, and a final research report. Students receiving the degree will be prepared to work toward the Doctor of Philosophy in physics, to teach at the junior college level, or to work in industry.

The average candidate entering in the fall semester will usually require two academic years to complete the degree. A very well-prepared candidate should complete the required courses and research credits in three semesters. Each student's program will be adjusted to his/her interests and background.

Admission terms and deadlines

All application materials must be received by:

- March 1 for the fall semester
- December 1 for the winter semester

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two letters of recommendation
- International students will have additional application requirements; see the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in physics degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Bachelor's degree from a regionally accredited university
- Strong background in physics and mathematics.

Degree requirements

The Master of Science in physics degree is awarded upon satisfactory completion of 36 credits in an approved program of study.

Course requirements

a. Core requirements

PHY 600	Seminar	1
PHY 673	Quantum Mechanics	4

b. Electives

Twenty-three credits of additional 400-, 500-, or 600-level courses approved by the department, which may include additional research credits.

c. Exit

PHY 690	Master of Science Research	8

Non-course requirements

Final written report or critical essay.

■DEPARTMENT OF POLITICAL SCIENCE

418 Varner Hall • (248) 370-2352 • Fax (248) 370-4299
www.oakland.edu/mpa

Chair:
Paul J. Kubicek

Director of Master of Public Administration program:
Diane M. Hartmus

Distinguished professor emeritus:
Sheldon Appleton, Ph.D., University of Minnesota

Professors emeriti:
Thomas W. Casstevens, Ph.D., Michigan State University
Robert J. Goldstein, Ph.D., University of Chicago
Edward J. Heubel, Ph.D., University of Minnesota
William A. Macauley, Ph.D., University of Houston
Roger H. Marz, Ph.D., Michigan State University
James R. Ozinga, Ph.D., Michigan State University

Professors:
*John S. Klemanski, Ph.D., Wayne State University
Paul J. Kubicek, Ph.D., University of Michigan

Associate professors:
David A. Dulio, Ph.D., American University
*Diane M. Hartmus, J.D., Boston College Law School
*Emmett N. Lombard, Ph.D., Colorado State University
*C. Michelle Piskulich, Ph.D., State University of New York at Binghamton
*J. Patrick Piskulich, Ph.D., State University of New York at Binghamton
Peter F. Trumbore, Ph.D., University of Connecticut
Martha T. Zingo, Ph.D., University of Maryland, College Park

Assistant professors:
*Douglas A. Carr, Ph.D., University of Kentucky
Laura K. Landolt, Ph.D., University of Arizona
Roger T. Larocca, Ph.D., University of Chicago
Terri L. Towner, Ph.D., Purdue University
*Julie K. Walters, Ph.D., George Mason University

Adjunct assistant professors:
* Fred M. Mester, J.D., Wayne State University
*Robert Mourning, J.D., University of Michigan
*Donna Petras, M.P.A., Oakland University

Special instructor
Alan D. Epstein, Ph.D., Cornell University

*Participants in the public administration program

Degree programs
Master of Public Administration (M.P.A.)

Certificate programs
Post-Master's Certificate in Local Government Management
Post-master's Certificate in Nonprofit Organization and Management

■ Master of Public Administration (M.P.A.)

Program director:
Diane M. Hartmus

Director of internships:
Douglas A. Carr

Program description
The master's degree program in public administration and public policy has been established to provide a challenging education for persons seeking professional careers in governmental and other public and not-for-profit agencies. The need for such programs is recognized, given the growth in the number and the complexity of agencies at the state and local levels and the concern for both responsive and effective public service at all levels. The Master of Public Administration (M.P.A.) degree program seeks a generalist focus through a set of core courses and provides an opportunity for specialization through the electives and the directed project/internship option. Persons with significant experience in public service will be advised to undertake a directed project; those seeking a transition to a public service career will be assisted in an assignment to a public administration internship in one of the area agencies.

Accreditation
The Oakland University M.P.A. program is accredited by the National Association of Schools of Public Affairs and Administration (NASPAA).

Application terms and deadlines
All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for the summer session

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational

institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two recommendation letters
- Two essays
  (Forms are downloadable from www.oakland.edu/mpa.)

Admission requirements

Admission to the Master of Public Administration degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Baccalaureate degree from a regionally accredited undergraduate institution
- Undergraduate grade record that indicates above-average work (generally a GPA of 3.0 or greater)
- The program welcomes students with a wide variety of undergraduate preparations, provided that certain courses have been taken and skills acquired as part of those programs. Applicants must meet the university's general requirements for admission to graduate studies. Conditional admission status may be granted to students who need minor improvements to their records, subject to approval by Graduate Study and Lifelong Learning. In addition to these requirements, the Director of the MPA program will interview the applicants and assess their writing abilities. Detailed application information can be found at www.oakland.edu/mpa.

Undergraduate preparation for the M.P.A.

Degrees in a wide variety of majors will prepare the student for admission, providing that the record includes:

- Basic courses in political science, government, or public administration
- Principles of macroeconomics (or an equivalent course approved by the director)
- Principles of accounting (or an equivalent course approved by the director)
- Basic statistics (or an equivalent course approved by the director).

Students otherwise qualified for admission to the program but lacking in these areas may be admitted with the requirement that the deficiency be corrected during the first year of the program by appropriate coursework. A departmental adviser will plan with the student an appropriate way of addressing these deficiences. Credits earned to meet these standards will not be counted toward the total credits needed for the degree.

Degree requirements

The Master of Public Administration degree is awarded upon satisfactory completion of 40 credits in an approved program of study.

Course requirements

a. Foundation requirements

The program director will review undergraduate transcripts to determine if these courses are needed. They are not required of all students entering the program and are not included in the 40-credit program total.

PA 522	Research Perspective and Techniques	2
PA 526	Government and the Economy	4
PA 524	Introduction to Government and Nonprofit Accounting	2

b. Core requirements (24 credits)

All M.P.A. students must take these six courses:

PA 601	Public Administration: Theory	4
PA 620	Quantitative Methods in Public Administration	4
PA 621	Government Information Systems	4
PA 653	Public Budgeting and Finance	4
PA 654	Human Resources Management in the Public Sector	4
PA 655	Program and Policy Evaluation	4

c. Concentration or electives (12 credits)

In addition to the 24 credits in the core curriculum, a student may take all 12 elective credits in one of 4 concentrations: health care administration, non-profit organization and management, local government management or criminal justice leadership. Each concentration has one course that is a "core course" meaning that the student must take that course. Students who pursue a concentration may need an additional semester to complete elective requirements. Students may also choose not to concentrate in one area, and may take 12 electives from among any the program offers.

1. Criminal Justice Leadership

Core for concentration (4 credits)

PA 560	Criminal Justice Leadership	4

Electives (additional 8 credits)

PA 541	Law and Public Policy	4
PA 548	Administrative Ethics	2
PA 561	Law Enforcement Leadership	4
PA 562	Security Leadership	4
PA 563	Corrections Leadership	4
PA 603	Contemporary Public Management Techniques	4
PA 610	Strategic Planning	4
PA 638	Public Sector Employee Relations	2 or 4

2. Health Care Administration

Core for concentration (4 credits)

PA 569	Organization and Administration of Health and Medical Care Programs	

Electives (additional 8 credits)

PA 548	Administrative Ethics	2
PA 559	Public Policy and Health Care	4
PA 568	Health Planning: Policies and Processes	4
PA 603	Contemporary Public Management Techniques	4
PA 610	Strategic Planning	4
PA 634	Risk Management	2
PA 638	Public Sector Employee Relations	2 or 4

3. Local Government Management

Core for concentration (4 credits)

PA 630	Local Government Management	4

Electives (additional 8 credits)

PA 503	Intergovernmental Relations	4
PA 541	Law and Public Policy	4
PA 542	Law and Administration: Local Perspectives	2
PA 543	Law and Administration: State Perspectives	2
PA 548	Administrative Ethics	2
PA 603	Contemporary Public Management Techniques	4
PA 610	Strategic Planning	4
PA 631	Grants: Politics and Administration	2 or 4
PA 634	Risk Management	2
PA 638	Public Sector Employee Relations	2 or 4
PA 669	Community Planning and Zoning	4

4. Nonprofit Organization and Management

Core for concentration (4 credits)

PA 510	Nonprofit Organization and Management	4

Electives (additional 8 credits)

PA 511	Fundraising and Philanthropy	4
PA 548	Administrative Ethics	2
PA 603	Contemporary Public Management Techniques	4
PA 610	Strategic Planning	4
PA 631	Grants: Politics and Administration	4
PA 634	Risk Management	2

5. Electives option

M.P.A. students do not need to choose a concentration. Any 12 credits from the list below will serve toward degree completion:

PA 503	Intergovernmental Relations	4
PA 510	Nonprofit Organization and Management	4
PA 511	Fundraising and Philanthropy	4
PA 541	Law and Public Policy	4
PA 542	Law and Administration: Local Perspectives	2
PA 543	Law and Administration: State Perspectives	2
PA 548	Administrative Ethics	2
PA 559	Public Policy and Health Care	4
PA 560	Criminal Justice Leadership	4
PA 561	Law Enforcement Leadership	4
PA 562	Security Leadership	4
PA 563	Corrections Leadership	4
PA 568	Health Planning: Policies and Processes	4
PA 569	Organization and Administration of Health Care Programs	4
PA 602	Public Administration: Issues and Problems	4
PA 603	Contemporary Public Management Techniques	4
PA 610	Strategic Planning	4
PA 630	Local Government Management	4
PA 631	Grants: Politics and Administration	2 or 4
PA 632	Public Sector Collective Bargaining	2
PA 633	Workshop in Fair Employment Practices	2
PA 634	Risk Management	2
PA 638	Public Sector Employee Relations	2 or 4
PA 644	Current Issues in Public Sector Human Resources Management	2 or 4
PA 657	Workshop in Capital Budgeting	2
PA 660	Public Administration Workshop	2 or 4
PA 669	Community Planning and Zoning	4
PA 691	Directed Readings	2 or 4
PA 692	Special Topics in Public Administration	2 or 4
PA 693	Special Topics in Public Policy	2 or 4

d. Exit (4 credits)

Students will do either an internship or a research project. A student who has not had significant public service experience may choose to do an internship; others will be expected to complete a research project.

PA 658	Internship	4
or		
PA 690	Research Project	4

Non-course requirements

Conditional and special graduate status

Students who are conditionally admitted to the program must have the condition removed before undertaking the second year of the program. Students who have special graduate status may take up to three courses in the program without formal admission to the program; to proceed further in the course sequence requires admission to the program. Upon attaining full graduate status, the student will receive credit toward the program for the work done as a special graduate student.

Academic progress

Although credit for completion of a course in the M.P.A. program will be given for grades of 2.0 or above, the minimum satisfactory grade for graduate work is 3.0. A student's academic progress is monitored by the director of the M.P.A. program. If a student receives a grade for any M.P.A. course below 3.0, an academic warning letter is sent to the student. With a second grade below a 3.0, the student receives written notification that he or she is on academic probation. A student placed on probation may be required to meet new standards to remain in the M.P.A. program. With a third grade below a 3.0, the student is notified in writing that he or she is subject to dismissal pending a review of the student's entire record by the M.P.A. director and the Executive Director of Graduate Study and Lifelong Learning. Regardless of their standing, all M.P.A. students are encouraged to consult with their individual instructors and the M.P.A. academic adviser concerning their academic progress.

For current program information, see www.oakland.edu/mpa or contact the department at: (248) 370-2352.

■ Post-Master's Graduate Certificate Programs

Program coordinator:

Diane M. Hartmus

Description

The post-master's graduate certificate programs, offered as part of the Master of Public Administration degree program are designed to provide students who have already earned an M.P.A. or a similar degree with additional education and training in specialized areas of public management and administration. Students will be required to take at least 16 credits of graduate work beyond the Master's degree in one of the two post-master's program areas of Local Government Management and Nonprofit Organization and Management. These specialty areas are based on elective coursework in two of the concentrations currently offered by the M.P.A. program. Students in the post-master's certificate program will be required to earn a grade of 3.0 or above in each course required for the certificate.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Two essays

  (Forms are downloadable from www.oakland.edu/mpa.)

Admission requirements

Admission to the Post-Master's Certificate programs is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Applicants to the Post-Master's Certificate program must hold an M.P.A. or equivalent degree to be considered for admission. If the degree is not from an NASPAA accredited program, the M.P.A. director, in consultation with the M.P.A. faculty group, will determine whether a specific degree program provides adequate background training.
- Applicants should have a cumulative G.P.A. of 3.0 or better in the Master of Public Administration degree or M.P.A.-type degree.

General program requirements

The post-master's certificate programs require the following of all students. Specific course requirements are listed under each of the graduate certificate programs listed below.

- Software skills: proficiency in the use of Microsoft Professional Suite (or comparable package) and use of the Internet; students deficient in these skills may take an approved PC skills course which will not apply toward the certificate program
- Academic probation: students admitted to a graduate certificate program will be subject to the same policies governing academic progress for regularly matriculated M.P.A. students
- GPA requirements: students must earn a grade of 3.0 or above in each course required for the graduate certificate in order to qualify for the graduate certificate; students may repeat any course once in order to achieve the minimum grade for that course
- Number of graduate certificates: students may earn more than one graduate certificate, but cannot use (double count) any specific course to meet the requirements of two graduate certificate programs.

- Transfer credit: up to 4 credits of graduate work taken at another institution may be transferred to Oakland to meet part of the 16-credit requirement; these credits may not be used toward another graduate certificate or degree program
- Course requirements: courses used toward the graduate certificate requirements must be beyond those earned for the master's degree.

Students who have completed any of the specific courses required for the graduate certificate as part of their master's program will be required to take additional courses to produce a total of 16 credits for the graduate certificate beyond the credits earned in their master's program.

1. Post-Master's Certificate in Local Government Management

To provide specialized work in local government management the student is required to complete a minimum of 16 credits in the courses listed below. Students who have completed any of these courses for their master's program or another graduate certificate program will be required to take additional courses to complete the 16 credits required for this graduate certificate.

Core (4 credits)

PA 630	Local Government Management	4

Elective courses (12 credits)

PA 503	Intergovernmental Relations	4
PA 541	Law and Public Policy	
PA 542	Law and Administration: Local Perspectives	2
PA 543	Law and Administration: State Perspectives	
PA 548	Administrative Ethics	2
PA 603	Contemporary Public Management Techniques	4
PA 610	Strategic Planning	4
PA 631	Grants: Politics and Administration	2
PA 634	Risk Management	2
PA 638	Public Sector Employee Relations	
PA 669	Community Planning and Zoning	4

2. Post-Master's Graduate Certificate in Nonprofit Organization and Management

To provide specialized work in nonprofit organization and management, the student is required to complete a minimum of 16 credits in the courses listed below. Students who have completed any of these courses for their master's program or another graduate certificate program will be required to take additional courses to complete the 16 credits required for this graduate certificate.

Core (8 credits)

PA 510	Nonprofit Organization and Management	4
PA 511	Fundraising and Philanthropy	4

Elective courses (8 credits)

PA 548	Administrative Ethics	2
PA 603	Contemporary Public Management Techniques	4
PA 610	Strategic Planning	4
PA 631	Grants: Politics and Administration	2
PA 634	Risk Management	2

■THE MASTER OF ARTS IN LIBERAL STUDIES

221 Varner Hall • (248) 370-2539 • Fax (248) 370-4280
www.oakland.edu/mals

Director:
Linda Benson, Professor of History

Executive Committee:
George Gamboa, Professor of Biological Sciences
Debra McGinnis, Associate Professor of Psychology
Aldona Pobutsky, Assistant Professor of Spanish
Phyllis Rooney, Associate Professor of Philosophy

Program description

The Master of Arts in Liberal Studies is an innovative and rigorous interdisciplinary approach to graduate education designed for adult post-baccalaureate students wishing to explore new subjects, develop their intellectual resources, and extend their range of knowledge. The objectives of this program are in harmony with the goals of a liberal education: that is, to cultivate the individual's ability to integrate diverse fields of human knowledge and activity.

The program is not specifically vocational or professional but is valued by employers in a wide range of professions because it fosters intellectual development, hones and expands critical thinking skills, encourages personal creativity and intellectual flexibility, and provides broad-based knowledge across traditional academic disciplines.

Admission terms and deadlines

All application materials must be received by:

- June 1 for the fall semester
- October 1 for the winter semester
- April 1 for the summer session

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Minimum of two letters of recommendation
- Personal goal statement summarizing academic and/or professional background as well as objectives for entering the program.

Admission requirements

Admission to the Master of Arts in Liberal Studies degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Bachelor's degree from a regionally accredited college or university
- A minimum of a 3.0 grade-point on a 4.0 scale in undergraduate study. Students who do not meet the grade-point minimum and/or other requirements may be admitted on a provisional basis with the approval of the director and the executive committee. All conditions placed on such an admission must be met before full admission to the program will be granted.
- Strong letters of recommendation that directly address the applicant's intellectual interests as well as academic background and potential for success in a graduate program. Students applying within two years of university graduation must have letters from two of their professors assessing the quality of their undergraduate record.

Transfer credit

Up to 8 graduate credits completed in residence at another institution may be applied toward the 36-credit minimum degree requirement. Transfer credits must be approved by the program's executive committee and are subject to the conditions indicated in Oakland University's "Transfer Credit Policy" in the graduate catalog. Up to 8 graduate credits may be applied from another Oakland University school, subject to the approval of the program's executive committee.

Degree requirements

Candidates for the degree of Master of Arts in Liberal Studies will complete 36 credits of coursework beyond the bachelor's degree. All students must complete a core of three courses which include an introductory colloquium and two core seminars. Students will then choose five liberal studies electives which are cross-listed with the College of Arts and Sciences' graduate course offerings (or, in the case of departments with no graduate program, 300-400 level courses in which additional graduate-level work will be required). The student must take a minimum of 4 credits in each of the four designated areas: languages and literatures, humanities, social sciences, and science. The final requirement is the 4-credit final project. No more than 8 credits may be taken as independent study (LBS 590).

Course requirements

a. Core requirements (12 credits)

LBS 500	Introductory Colloquium	4

Two core seminars chosen from:

LBS 501*	Seminar in Language and Literature	4
LBS 502*	Seminar in the Humanities	4

LBS 503*	Seminar in the Social Sciences	4
LBS 504*	Seminar in the Sciences	4

* Courses vary each semester. See MALS Web site for information on courses for the coming semester.

b. Electives (20 credits)

Five electives including 4 credits in each of the following categories:

LBS 511	Topics in Language and Literature	4
LBS 512	Topics in the Humanities	4
LBS 513	Topics in the Social Sciences	4
LBS 514	Topics in the Sciences	4

c. Exit (4 credits)

LBS 600	Master's Project	4

Non-course requirements

Final project

All students complete a final master's project (LBS 600), which will integrate theory and methods from two or more academic disciplines. The three core courses (the colloquium and two core seminars), plus four electives must be completed before beginning the final project. A thesis committee, consisting of a chair and two faculty members, will guide the student in preparing their final project proposal which must be approved by the program's executive committee prior to registering for LBS 600.

■SPECIAL COURSES

Occasionally, with the approval of Graduate Study and Lifelong Learning, departments which do not have graduate programs may offer certain courses which carry graduate credit. The following courses have been approved by the Graduate Council for these special offerings.

ART AND ART HISTORY

AH 505
African Art (4)

AH 555
Michigan Architecture (4)

MODERN LANGUAGES

ML 504
Foreign Language Seminar: Language and Culture (3)

ML 505
Foreign Language Seminar: Conversation and Culture (3)

ML 520
Grammar Review Through Translation: French, German or Spanish (4)

ML 521
Advanced Composition: French, German or Spanish (4)

ML 522
Advanced Oral Practice: French, German or Spanish (4)

PSYCHOLOGY

PSY 510
Developmental Psychology (4)

PSY 552
Sensation and Perception (4)

PSY 553
Cognitive Psychology (4)

PSY 590
Seminar: The Psychology of Reading (4)

PSY 591
Seminar: The Development of Reading Ability, Individual Differences, and Learning Disabilities (4)

WRITING AND RHETORIC

WRT 514
Writing Project Programs (2 or 4)

WRT 515
Meadow Brook Writing Project (2 or 4)

WRT 516
Advanced Workshop (1 to 4)

WRT 525
Teaching Writing with New Media (4)

WRT 614
Teaching Writing (4)

COMMUNICATION AND JOURNALISM

JRN 505
Supervising High School Publications (4)

JRN 506
Newspapers in Education (2)

SOCIOLOGY

SOC 500
Theories of Society and Culture (4)

SOC 502
Specialized Field Techniques of Social Research (4)

SOC 514
Social Context of Social Work (4)

SOC 527
Police and Society (4)

SOC 537
Sociology of the Courts (4)

■SCHOOL OF BUSINESS ADMINISTRATION

238 Elliott Hall • (248) 370-3287 • Fax (248) 370-4964
http://www.sba.oakland.edu

Dean:
Mohan Tanniru

Business Manager and Director of Corporate Relations:
Donna Kellstrom

Faculty director, graduate business programs:
Balaji Rajagopalan

MAcc faculty coordinator:
Donna K. Free

Coordinator, graduate business programs:
Paul Trumbull

Department chairpersons:
Ravi Parameswaran, Management and Marketing
Mohinder Parkash, Accounting and Finance
Thomas W. Lauer, Decision and Information Sciences
Anandi P. Sahu, Economics

Distinguished professor emeritus:
Karl D. Gregory, Ph.D., University of Michigan

Professors emeriti:
Eleftherios N. Botsas, Ph.D., Wayne State University
Daniel N. Braunstein, Ph.D., Purdue University
Ronald M. Horwitz, Ph.D., Michigan State University, CPA
Sid Mittra, Ph.D., University of Florida
John Tower, Ph.D., University of Michigan

Professors:
Lizabeth A. Barclay, Ph.D., Wayne State University, SPHR
Mohammad S. Bazaz, Ph.D., University of Oklahoma
Joseph H. Callaghan, Ph.D., University of Illinois, Urbana-Champaign
Addington M. Coppin, Ph.D., University of Illinois, Urbana-Champaign
Mohammad Dadashzaduh, Ph.D., University of Massachusetts, Amherst
Gadis J. Dillon, Ph.D., University of Michigan, CPA
David P. Doane, Ph.D., Purdue University
Sherman T. Folland, Ph.D., University of Iowa
Oded Izraeli, Ph.D., University of Chicago
Thomas W. Lauer, Ph.D., Indiana University
Paul S. Licker, Ph.D., University of Pennsylvania
J. Austin Murphy, Ph.D., University of Georgia
Kevin J. Murphy, Ph.D., Michigan State University
Ravi Parameswaran, Ph.D., Georgia State University
Anandi P. Sahu, Ph.D., Washington University
Howard S. Schwartz, Ph.D., Cornell University
Jonathan Silberman, Ph.D., Florida State University
Miron Stano, Ph.D., Cornell University
Vijayan Sugumaran, Ph.D., George Mason University
Mohan Tanniru, Ph.D., Northwestern University
Kenneth M. York, Ph.D., Bowling Green State University

Associate professors:
Henry Aigbedo, Ph.D., University of Tsukuba (Japan)
Mukesh Bhargava, Ph.D., University of Texas at Austin
Xiadong Deng, Ph.D., University of Toledo
Eugene B. Fliedner, D.B.A., Indiana University
John W. Henke, Jr., Ph.D., Michigan State University
Mark W. Isken, Ph.D., University of Michigan
John D. Kim, Ph.D., University of Cincinnati
Kieran D. Mathieson, Ph.D., Indiana University
Cynthia E. Miree-Coppin, Ph.D., University of Pittsburgh
Nivedita Mukherji, Ph.D., Virginia Polytechnic Institute and State University
Mohinder Parkash, Ph.D., University of Arizona
Sandra H. Pelfrey, M.B.A., Wright State University, CPA
R. Mohan Pisharodi, Ph.D., University of Tennessee
Balaji Rajagopalan, Ph.D., Memphis State University
Srinarayan Sharma, D.B.A., Southern Illinois University at Carbondale
Mark Simon, Ph.D., Georgia State University
Kasaundra M. Tomlin, Ph.D., University of Oregon
Ronald L. Tracy, Ph.D., Michigan State University
T. J. Wharton, Ph.D., University of Minnesota
Floyd G. Willoughby, Ph.D., Michigan State University

Assistant professors:
Yu Chen, Ph.D., Institute of Management, Paris (France)
Seong-Yeon Cho, Ph.D., University of Buffalo
Faud Hasanov, Ph.D., University of Texas, Austin
Joy Jiang, Ph.D., University of Western Ontario (Canada)
Karl Majeske, Ph.D., University of Michigan
Karen S. Markel, Ph.D., Michigan State University
Robert A. Nehmer, Ph.D., University of Illinois, Urbana-Champaign
Ram Orzach, Ph.D., Tel Aviv University
Hong Qian, Ph.D., Pennsylvania State University
Joseph Schiele, Ph.D., University of Ontario (Canada)
James S. Serocki, L.L.M., Wayne State University
Rajeev Singhal, Ph.D., University of Utah
Janell Townsend, M.B.A., Wayne State University
Xie Zhu, Ph.D., Tulane University
Ellen Zhu, Ph.D., Michigan State University

Special instructors:
Donna K. Free, CPA, M.Acc., University of Missouri, St. Louis
Frederick G. Hoffman, J.D., Marshall Law School

Board of Visitors

The Board of Visitors of the School of Business Administration provides a direct link between the industrial community and the school. The board is composed of outstanding corporate and professional leaders from the Detroit metropolitan area. Board members assist the faculty on several projects and provide consultation on goals and objectives, curricula designs and research programs.

Board members:

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John R. Crary, Vice President, Information Technology, Lear Corporation
Stuart Doyle, Senior Director, Advisory Services, Cisco Systems
Terry Fiscus, Chief Financial Officer, Royal Oak Industries
Kevin Gleeson, Attorney at Law, Sullivan, Ward, Asher and Patton, PC
Glenn C. Gouldey, Vice President, Strategic Technology & Planning, Eaton Corporation
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Raymond Gunn, Managing Director, Wingspan Partners LLC
Timothy Healy, Executive Vice President, Takat (TK Holdings, Incorporated)
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Mohan Tanniru (ex officio), Dean SBA, Oakland University
Joseph Tori, President and CEO, g2 Business Development Solutions
Bette Walker, Chief Information Officer, Delphi Automotive
Tommi White, Chief Executive Officer, ER-One Partners

Complementing the Board of Visitors of the School of Business Administration are the following department or program advisory boards:

The Accounting and Finance Advisory Board is a group of distinguished individuals in public accounting, industry and government. The board's objective is to enhance the ties between the School of Business Administration's accounting faculty and students and the business and professional accounting community.

The Marketing Advisory Board enhances the relationship between the marketing faculty and students and the business marketing community in southeastern Michigan. Students and faculty benefit by having access to a variety of business resources, which enhances the marketing program's educational, research and service activities. Members of the Marketing Advisory Board benefit by having the opportunity to provide advice, direction and support for Oakland University's educational and research activities.

The Human Resources Management Advisory Board enhances the relationship between the human resources faculty and students and the business human resources community. Students and faculty benefit by having access to a variety of resources that improve the HRM program's educational, research and service activities.

The Decision and Information Sciences Advisory Board enhances the education of MIS students at Oakland University and assists in providing well-educated MIS professionals to the business community.

The Executive MBA Advisory Board is made up of senior executives from major hospitals and corporations. They help the dean and director formulate strategic program policies and provide a focus on emerging health care and information systems issues which will be covered in special topic courses.

■ Graduate Business Degree Programs

Executive MBA with concentrations in:

- Health Care Management
- Information Systems Leadership

Master of Business Administration (MBA) with concentrations in:

- Accounting
- Business Economics
- Entrepreneurship
- Finance
- Human Resources Management
- International Business
- Management Information Systems
- Marketing
- Production/Operations Management
- Supply Chain Management

Master of Accounting (MAcc)

Master of Science in Information Technology Management (MSITM)

The School of Business Administration also participates in the Master of Science in engineering management offered by the School of Engineering and Computer Science and the Master of Science in Safety Management offered by the School of Health Sciences. Details of these programs are described in the engineering section and health sciences section of this catalog.

Post-Master's Graduate Certificate Programs

For students with an MBA, the School of Business Administration offers post-master's graduate certificate programs in:

- Accounting
- Business Economics
- Entrepreneurship
- Finance

Human Resources Management
International Business
Management Information Systems
Marketing
Production/Operations Management

For students with a master's degree in a non-business field, the School of Business Administration offers the Post-Master's Graduate Certificate in General Management.

■ General Information

Accreditation

Oakland University's School of Business Administration (SBA) programs are accredited by AACSB International—the Association to Advance Collegiate Schools of Business. AACSB International is the premier accreditation organization for business schools. In addition, the accounting program, including the MAcc, has achieved separate AACSB accounting accreditation.

Assessment

To assist in the continuous improvement of its programs, the SBA engages in a range of assessment efforts. Students are expected to actively participate in these assessment and improvement efforts.

Graduate assistantships

A limited number of graduate assistantships are awarded each academic semester, on a competitive basis, to full-time students in the MBA, MSITM and MAcc programs. Assistantships include a stipend and an award of 9 credits of tuition per fall and winter semesters. In return, graduate assistants work up to 20 hours per week assisting one or more faculty members in their research efforts. Additional information and applications may be obtained from the Office of Graduate Business Programs.

Transfer credit

In accordance with the regulations of the Graduate Council, up to 9 credits of relevant, equivalent graduate coursework may be transferred from an MBA, MSITM or MAcc program at a regionally accredited institution. Up to 3 credits of equivalent graduate coursework may be transferred for the post-master's graduate certificate programs. Course equivalencies are determined by the SBA department, and accreditation of the transferring institution is considered. The business programs of the SBA are accredited by AACSB-International. For credits of equivalent courses to transfer, the student must have earned a grade of 3.0 (B) or above in the course. The transfer credit will reduce the number of credits required in the graduate business program. The acceptance of transfer credits and the related course exemptions are determined after an evaluation of a student's transcript. The transfer credits must be approved by the SBA department, the Office of Graduate Business Programs, and Graduate Study and Lifelong Learning. The transfer credits cannot have been used to satisfy requirements for another degree and must meet all regulations set forth by Oakland University.

Student evaluation and grading

In accordance with the university requirements for graduate students, a grade-point average of 3.0 is required for graduation. Students, therefore, should maintain at least a 3.0 GPA. Students may be dismissed if they do not maintain a GPA of 3.0 or appropriate progress toward the degree as determined by the Office of Graduate Business Programs. Any course resulting in a grade below 2.0 must be repeated. Students who do not complete a graduate course for two years must formally apply for readmission to the MBA, MAcc, MSITM or post-master's graduate certificate program.

Graduate Management Admission Test (GMAT)

Admission to the MBA, MSITM and MAcc programs requires the submission of official scores for the GMAT. This test is administered throughout the world by the Education Testing Service. For more information, visit the Graduate Management Admissions Council Web site at www.mba.com or call (800) 717-4628. The GMAT is an important part of the admission process and either careful study of a GMAT review manual or the completion of a review class is strongly recommended.

■ Executive Master of Business Administration

Program coordinator:

Donna Free

Program Description:

The Executive Master of Business Administration (EMBA) degree is designed for professionals who are already engaged in successful careers (seven or more years of experience) and want to broaden their business knowledge and gain additional leadership, management and business operation skills. This program will offer the depth and rigor of a traditional MBA with the schedule flexibility required of executives who do not want to step out of their careers at this time. In response to market demand, two specialized industry concentrations are available: 1) EMBA in health care management or 2) EMBA in information systems leadership.

The program value is enhanced by the cohort class structure. Applicants are notified in August of each year regarding their admission to the fall cohort group. Each new cohort group moves through the 21-month program together. In doing so, the classroom dynamics, commitment to the program and resulting learning experience is greatly enhanced. This format also leverages the wealth of knowledge resident with each cohort group.

Likely candidates for the program concentrating in health care management include physicians; middle managers at hospitals, HMOs, and other health care facilities; registered nurses; insurance company administrators; and corporate benefits administrators.

Likely candidates for the program concentrating in information systems leadership include IT managers from any industry, computer science engineers, computer programmers and network managers.

Program delivery

The EMBA is designed to meet the needs of busy professionals by meeting on Friday afternoons and all day Saturday on alternate weekends. In order to assure effective instruction and interaction, classes will be strictly limited to a maximum of 30 students.

Program tuition

The tuition for the EMBA program is $35,000. This fee includes all course registrations, textbooks, and meals on Fridays and Saturdays when classes are scheduled to meet. The total tuition will be due in six installments, a $1,000 deposit due when accepting admission, and five payments due at the beginning of each term. Students may apply to receive Financial Aid by contacting the University Financial Aid Office.

Admission terms and deadlines

Students may be admitted only in the fall term. All application materials for the EMBA must be received by July 1.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Official GMAT scores (for those not holding a graduate degree)

Admission review and assessment

Admission to the Executive MBA program is selective and is limited to an entering class of 30 students per year. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- A minimum of seven years experience in a field related to one of the concentration areas
- An undergraduate degree in any discipline
- Scores from the Graduate Management Admission Test (GMAT) taken in the past five years for applicants not holding a graduate degree.

In general, applicants with a total score of 500 or above on the GMAT and an overall GPA of 3.0 or above will be considered for non-conditional admission. Applicants holding degrees beyond a bachelor's degree will be waived from the GMAT exam. Applicants with strong letters of recommendation from their employers or who have demonstrated the ability to handle such a rigorous program may be considered for admission even though their GMAT score is less than 500 or GPA is less than 3.0.

Program prerequisites

Students in the program without evidence of the required skills in quantitative methods and computer skills will be expected to complete the appropriate workshops in the summer before entering the EMBA program. The workshops in Quantitative Methods and Computer Skills will be offered on the same Friday and Saturday schedule as the EMBA program on a weekend during the summer before the EMBA program starts.

Degree requirements

The Executive Master of Business Administration degree consists of 39 credits taken over 21 months. Twenty-nine of the 39 credits consist of foundation courses completed by the entire cohort. Additionally, the cohort may split into two groups to complete 10 credits of electives related to their field of concentration. Courses are designed and taught by a combination of full-time faculty from Oakland University's School of Business Administration who are respected scholars within their field and experienced professionals and practitioners from the related areas of concentration.

Course requirements

a. Core requirements (29 credits)

Each student will be expected to complete the following 29 credits of foundation coursework:

EMBA 504	Statistical Methods	3
EMBA 512	Financial and Managerial Accounting	3
EMBA 521	Managerial Economics	3
EMBA 530	Teambuilding, Leadership and Communication	2
EMBA 531	Human Resources Management	2
EMBA 535	Strategic Management	2
EMBA 537	Integrative Capstone Project	3
EMBA 540	Operations Management	2
EMBA 545	Information Systems	2
EMBA 550	Legal and Ethical Issues	2
EMBA 560	Marketing Management	2
EMBA 570	Financial Management	3

b. Concentrations (10 credits)

Each student will be expected to complete 10 credits of elective coursework in either the health care management concentration or the information systems leadership concentration. The interest and experience of the cohort will be considered in selecting the electives.

1. Health Care Management electives

HCM 527	Health Economics	2
HCM 606	Quality Improvement in Health Care	2
HCM 624	Government Policy in Health Care	2
HCM 625	International Comparisons in Health Care	1
HCM 633	Managing Cultural Diversity	1
HCM 634	Hospital Administration	2
HCM 635	Transforming the Health Care Organization	2
HCM 636	Contract and Negotiation in Health Care	1
HCM 638	New Ventures in Health Care	1
HCM 642	Facilities Planning and Evaluation	1
HCM 643	Project Management in Health Care	1

HCM 645	Managing Technology in Health Care	2
HCM 646	Data Warehousing in Health Care	1
HCM 661	Health Care Marketing and Consumer Satisfaction	2
HCM 670	Hospital Finance and Managed Care	3
HCM 680	Special Topics in HCM	1
HCM 690	Independent Study	3

2. Information Systems Leadership electives

ISL 604	Strategic Positioning of IT and Visioning/Leadership	2
ISL 606	IS Strategy and Information Economics	2
ISL 618	IS Strategy and the Future of Work	1
ISL 620	IS Strategy and Enterprise Architecture	2
ISL 625	IT Governance	2
ISL 630	Global Sourcing Strategies for IT	2
ISL 638	IS Security Fundamentals	2
ISL 640	IS Security Management and Cases	2
ISL641	Privacy and IT	2
ISL 643	Intellectual Property and IT	2
ISL680	Special Topics in ISL	2
ISL690	Independent Study	3

■ Master of Business Administration

Program coordinator:

Paul Trumbull

Program description

A program leading to the Master of Business Administration (MBA) with special emphasis in information technology and international business is offered by the School of Business Administration. It is designed to educate students for managerial roles in private, public, or not-for-profit sectors of the economy.

The MBA program is designed for undergraduate majors from any discipline, including business or management. It is preferred that students with an undergraduate degree in business or one of the functional areas of management have two years of work experience before entering the MBA program. A typical entering class may consist of undergraduate majors from engineering, the natural sciences, the social sciences, computer science, mathematics, business, health care, education and the humanities.

The program is based on the belief that an education in management should:

- Prepare students for careers involving problem identification, problem solving, decision making and leadership in any type of organization
- Emphasize the determination of goals and the effective utilization of scarce resources
- Help students understand and effectively interact with the emerging workplace issues of globalization and diversity
- Assist students in understanding the effects of, and successfully deal with, the changing social, legal, ethical and technological environments of the organization
- Stress understanding of human behavior and the organizational setting, for much of management relates to people – understanding them, communicating with them, working with them, and leading them
- Stress the importance of the management of information technology resources in the successful operation of an organization.

Students in the MBA program may choose to focus their elective work in one of the ten areas of concentration offered at Oakland University or select to choose from a variety of elective courses for more general study. Currently, the MBA program at Oakland University has areas of concentration in accounting, business economics, entrepreneurship, finance, human resources management, international business, management information systems, marketing, and production/operations management and supply chain management.

Program delivery

Courses are offered Monday through Thursday evenings and Saturday mornings at the Rochester campus and Monday through Thursday evenings at Oakland University site locations.

Length of program

The length of the MBA program varies from 36 to 48 credits (not including prerequisites), depending on the student's prior preparation.

Full-time students normally take 12 credits (four courses) in the fall and winter semesters and three credits (one course) in each summer session. The full-time student can finish the complete 48-credit program in less than two years. Students with sufficient background in business courses may be able to complete the minimum 36-credit MBA program in 16 months of full-time study.

Part-time students taking six courses per year can finish the complete 48-credit program in two and two-thirds calendar years (32 months) in a year-round program.

Satisfactory progress

The MBA program must be completed within six years from the date of entry into the program. The scheduling of MBA classes is based on the assumption that students will be enrolled in a standard part-time program: six courses per year (two courses in each of the 15-week fall and winter semesters, and one course in each of the eight-week summer sessions).

In accordance with university regulations, all course credits used to meet requirements of the MBA program must be earned within six years of the date that the MBA is awarded.

Application terms and deadlines

Students may begin the MBA program in the fall, winter, or summer semesters, depending upon their background.

All application materials for the MBA must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Official Graduate Management Admission Test (GMAT) scores; the GMAT scores must be five years or less at the time of the applicant's intended enrollment at Oakland University.

  Applicants who have earned a master's degree (or higher) may request a waiver of the GMAT score. To request a waiver, an applicant must include a GMAT waiver form for consideration as part of their admission packet. The request for waiver is subject to the approval of the Graduate Admissions Committee.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission review and assessment

Admission to the Master of Business Administration degree program is selective and depends on several elements, including scholarship and an ability to communicate effectively.

Applications that meet the general and program admission requirements for graduate study at Oakland University are considered by the Graduate Admission Committee of the School of Business Administration. In making admission recommendations, the admission committee assesses the potential of applicants for success in the MBA program by examining their undergraduate records, their GMAT scores, their responses to questions on the supplemental application and their work experience. Letters of recommendation are not required.

MBA foundation requirements

Students admitted to the Master of Business Administration program must demonstrate proficiency or complete coursework in the following areas:

- A college course in the principles of microeconomics
- A college course in the principles of macroeconomics
- A college course in financial accounting
- A recent college algebra course or mathematics at a higher level
- A college course in calculus or a continuing education course in quantitative methods which included basic calculus
- A college course, workshop, continuing education course or self-study in computer applications; students must have experience with word processors, spreadsheets, graphics, database management systems, and the Internet.

These requirements must be completed prior to beginning MBA coursework.

Degree requirements

The Master of Business Administration degree is awarded upon satisfactory completion of 36-48 credits in an approved program of study.

The MBA program consists of four parts: the foundation requirements, the core program, the integrative business policy course (MGT 535) and a set of at least five electives. Each part of the program is detailed below.

Course requirements

a. Core requirements

ACC 512	Managerial Accounting Systems	3
QMM 510	Statistical Analysis for Managers	3
ECN 521	Economics for Managers	3
ORG 530	Organizational Behavior	3
MGT 550	Legal Environment of Business	3
MIS 524	Enterprise Information Systems	3
MKT 560	Marketing Management	3
POM 521	Operations Management	3
FIN 533	Financial Management	3
MGT 526	International Business	3

Core course exemptions

Students may be exempted from some of the core courses if the applicant passed an equivalent undergraduate course with a grade of 2.0 (C) or above within the previous seven years and the student is current in the subject matter. Exemption from a core course may reduce the total credit requirement for the MBA. Students exempted from some or all the core courses will be required to take a minimum program of 36 MBA credits. As part of his or her program, the MBA student must take at least one graduate level course in each of the functional areas (i.e., at least one graduate course in ACC, FIN, MKT, and POM/QMM) either as one of the five MBA electives or in addition to these electives. Exemptions from core courses are determined by the Office of Graduate Business Programs after an evaluation of the student's transcript. A student will be allowed to take a core course from which he/she had been exempted only with prior written approval from the Office of Graduate Business Programs. Repeating waived courses may increase a student's MBA program beyond the minimum of 36 credits.

b. Electives

MBA candidates complete their program by selecting a minimum of 15 credits of MBA electives. Of these, one course must be an information technology elective and one must be an international business elective (see Web site for current list of acceptable courses www.sba.oakland.edu/mba). The remaining 9 credits may be drawn from MBA elective courses offered by the School of Business Administration or from approved courses offered by other units of Oakland University. Six of the elective credits may be a master's project. MBA electives are numbered 500 and above for accounting and MIS electives and 600 and above for all other areas.

c. Concentrations

If MBA students want a more structured set of electives, they can take one of the MBA concentrations. A maximum of two concentrations can be noted on their transcripts. The MBA concentrations consist of the electives structured as noted under each MBA concentration listed below. A single class may not be counted toward more than one concentration. All courses are 3 credits, unless otherwise noted.

1. Accounting concentration

To provide more background in accounting, the student would be required to complete three electives from the following list for a concentration in accounting:

ACC 505	Business Law for Accountants	3
ACC 518	Introduction to Accounting Information Systems and Databases	3
ACC 521	Federal Income Tax II	3
ACC 526	Accounting Information Systems: Audit and Control	3
ACC 533	Accounting Information Systems: Analysis and Design	3
ACC 600	Financial Reporting and Analysis	3
ACC 617	International Accounting	3
ACC 620	Cost Management	3
ACC 625	Federal Income Taxation for Business	3
ACC 631	Fraud Examination	3
ACC 650	Professional Issues in Accounting	3
ACC 680	Special Topics in Accounting	3
ACC 690	Independent Study in Accounting	3

2. Business Economics concentration

To provide more background in the application of economics in business, the student would be required to complete three electives from the following program for a concentration in business economics:

ECN 605	Econometrics	3
ECN 618	Seminar in Economic Policy	3
ECN 620	Money, Financial Institutions and Markets	3
ECN 656	Public Finance	3
ECN 667	Economics of Health Care	3
ECN 673	International Trade and Finance	3
ECN 685	Economics of Industries	3
FIN 627	International Financial Management	3
FIN 633	Advanced Financial Management	3
QMM 652	Forecasting	3
ECN 680	Special Topics in Economics	3
ECN 690	Independent Study in Economics	3

3. Entrepreneurship concentration

To provide more background in the strategic aspects of entrepreneurship, startups and small businesses, the student would be required to complete the following program for a concentration in entrepreneurship:

MGT 656	Entrepreneurship	3

Plus two electives from the following list:

ACC 625	Federal Income Taxation for Business	3
FIN 633	Advanced Financial Management	3
FIN 650	Real Estate Investment Analysis	3
MGT 660	Launching and Managing Small Businesses	3
MGT 670	Business Ethics	3
MGT 682	Special Topics in Entrepreneurship	3
MGT 692	Independent Study in Management	3
MKT 608	Strategic Marketing	3
ORG 635	Decision Making in Organizations	3
ORG 636	Leadership and Group Performance	3
ORG 640	Quality and Operational Excellence	3
POM 640	Process Management	3
POM 648	Project Management Techniques	3

4. Finance concentration

To provide more background in finance, the student would be required to complete three electives from the following list for a concentration in finance:

FIN 618	Investment Analysis	3
FIN 627	International Financial Management	3
FIN 633	Advanced Financial Management	3
FIN 650	Real Estate Investment Analysis	3
ACC 600	Financial Reporting and Analysis	3
FIN 680	Special Topics in Finance	3
FIN 690	Independent Study in Finance	3

5. Human Resources Management concentration

To provide more background in human resources management and personnel, the student would be required to complete the following for a concentration in human resources management:

ORG 631	Human Resources Management	3

Plus two electives from the following list:

MGT 638	Labor-Management Relations	3
MGT 670	Business Ethics	3
ORG 635	Decision Making in Organizations	3
ORG 636	Leadership and Group Performance	3
ORG 637	Motivation and Work Behavior	3
ORG 640	Quality and Operational Excellence	3
ORG 670	International Organizational Behavior and Human Resources	3
ORG 680	Special Topics in Organizational Behavior	3
ORG 690	Independent Study in Organizational Behavior	3

6. International Business concentration

To provide more background in international business, the student would be required to complete three electives from the following list for a concentration in international business:

ACC 617	International Accounting	3
ECN 673	International Trade and Finance	3
FIN 627	International Financial Management	3
MIS 630	Managing Global Outsourcing of IT and IT Enabled Services	3
MIS 648	Issues in International Information Technology	3
MKT 650	International Marketing	3
MKT 675	Customer and Supplier Relationships in the Global Enterprise	3
ORG 670	International Organizational Behavior and Human Resources	3
MGT 681	Special Topics in International Business	3
MGT 691	Independent Study in International Business	3

7. Management Information Systems concentration

To provide more background in MIS, the student would be required to complete three MIS electives for a concentration in management information systems.

MIS 604	Database Management	3
MIS 606	Advanced Database Management Systems	3
MIS 618	Network Management	3
MIS 620	Electronic Commerce	3
MIS 622	Business Object Development	3
MIS 624	Business Application Architecture	3
MIS 625	IT Planning and Strategy	3
MIS 630	Managing Global Outsourcing of IT and IT Enabled Services	3
MIS 636	Decision Support Systems	3
MIS 638	Knowledge Management	3
MIS 640	IS Security	3
MIS 641	Privacy and Intellectual Property	3
MIS 642	IS Issues in Supply Chain Management	3
MIS 646	Business Analysis and Modeling	3
MIS 648	Issues in International Information Technology	3

8. Marketing concentration

To provide more background in marketing, the student would be required to complete three electives from the following list for a concentration in marketing:

MKT 604	Consumer Behavior	3
MKT 605	Marketing Research	3
MKT 608	Strategic Marketing	3
MKT 620	Distribution Channels Management and Logistics	3
MKT 625	Supply Chain Logistics	3
MKT 650	International Marketing	3
MKT 670	Business to Business Marketing	3
MKT 675	Customer and Supplier Relationships in the Global Enterprise	3
MKT 680	Special Topics in Marketing	3
MKT 690	Independent Study in Marketing	3

9. Production/Operations Management concentration

To provide more background in production and operations management, the student would be required to complete the following for a concentration in production/operations management:

POM 643	Operations Planning and Control	3

Plus two electives from the following list:

ACC 620	Cost Management	3
POM 635	The Management of Service Operations	3
POM 640	Process Management	3
POM 642	Supply Chain Management	3
POM 645	Cases in Operations Management	3
POM 648	Project Management Techniques	3
POM 680	Special Topics in Production and Operations Management	3 or 4
QMM 652	Forecasting	3
POM 690	Independent Study in Production and Operations Management	3

10. Supply Chain Management concentration

To provide more background in supply chain management, the student would be required to complete three electives from the following list for a concentration in supply chain management. POM 642 will be required for all students who do not have previous coursework in supply chain management.

POM 642	Supply Chain Management	3
MGT 642	Supply Chain Purchasing	3
MIS 642	IS Issues in Supply Chain Management	3
MKT 625	Supply Chain Logistics	3
MKT 675	Customer and Supplier Relationships in the Global Enterprise	3
POM 640	Process Management	3

d. Exit (integrative business policy course)

The integrative business policy course, MGT 535, draws on all the coursework in the core of the MBA program in the analysis of real world cases in a team setting. MGT 535 is required of all MBA candidates.

MGT 535	Policy, Strategy and Goals	3

Master's project (optional)

The optional master's project (equal to 6 elective credits) requires the application of classroom training and extra-classroom study to a practical management problem. It must involve collection and analysis of data in an actual organizational setting, as well as cogent recommendations to management for resolving the problem. It should be organized around a management problem that requires input from several functional areas of management.

The master's project is not designed to be a theoretical master's ''thesis.'' Therefore, it does not need to comply with the guidelines on the preparation of a master's thesis or be submitted to Graduate Study and Lifelong Learning.

■ Master of Accounting

Program coordinator:

Donna Free

Program description

The Master of Accounting (MAcc) is offered in the Department of Accounting and Finance within the School of Business Administration. The MAcc is designed for students who are interested in careers in public, corporate, and non-business accounting.

The degree will assist accounting professionals in the dynamic corporate environment. Professionals in the field are required to be effective communicators, maintain a high level of expertise, and uphold ethical responsibilities, while providing financial information, analysis of the economic environment and input in decision-making activities.

Keeping these qualities in view, the MAcc is designed to achieve the following goals:

- Offer a graduate-level program developing superior technical knowledge and application skills beyond the baccalaureate accounting program
- Enhance students' analytical, communication and decision-making skills
- Provide a sound base in ethics and professional behavior
- Prepare students for careers in public, corporate, and non-business accounting positions
- Provide students with the educational requirements necessary to be eligible to take professional exams.

Admission terms and deadlines

Students may begin the MAcc program in the fall, winter, or summer semesters, depending upon their background.

All application materials for the MAcc must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Official Graduate Management Admission Test (GMAT) scores; the GMAT scores must be five years or less at the time of the applicant's intended enrollment at Oakland University.

  Applicants who have earned a master's degree (or higher) may request a waiver of the GMAT score. To request a waiver, an applicant must include a GMAT waiver form for consideration as part of their admission packet. The request for waiver is subject to the approval of the Graduate Admissions Committee.
- Additional information is required before international applicants can apply for and be granted a student visa; information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Master of Accounting degree program is selective and depends on several elements, including scholarship and ability to communicate effectively.

Applicants that meet the general and program admission requirements for graduate study at Oakland University are considered by the Accounting and Finance Department of the School of Business Administration. In making admission recommendations, the department assesses the potential of applicants for success in the MAcc program by examining their undergraduate records, their GMAT scores, their responses to questions on the Supplemental Program Form and their experience. Letters of recommendation are not required.

MAcc program prerequisites

Students admitted to the MAcc program must demonstrate proficiency or complete coursework in the following areas.

ACC 200	Introductory Financial Accounting
ACC 210	Managerial and Cost Accounting I
ACC 310	Intermediate Financial Accounting I
ACC 311	Intermediate Financial Accounting II
ACC 320	Managerial and Cost Accounting II
A college course in Micro or Macro Economics	

These program prerequisites must be completed prior to beginning MAcc coursework.

Degree requirements

The Master of Accounting degree is awarded upon satisfactory completion of a minimum of 30 credits in an approved program of study. It consists of two or three parts depending on a student's undergraduate education.

Course requirements

a. Foundation courses (24 credits)

The following courses are required of all MAcc students:

ACC 401	Advanced Financial Accounting	3
ACC 411	Auditing	3
ACC 415	Federal Income Taxation	3
ACC 518	Introduction to Accounting Information Systems and Databases	3
ACC 601	Financial Analysis and Valuation	3
ACC 660	Professional Accounting Research	3
FIN 533	Financial Management	3
QMM 510	Statistical Analysis for Managers	3

The foundation courses may be waived if an equivalent course was previously completed with a grade of "C" or above.

The MAcc student who is waived from foundation requirements will choose graduate business electives to complete their 30-credit program. The student's adviser must approve these electives.

b. Core requirements (minimum of 12 credits)

Each MAcc student will be required to take a minimum of 12 credits of accounting electives from the following list. All courses are 3 credits unless otherwise noted.

ACC 412	Government and Not-for-Profit Accounting	3
ACC 505	Business Law for Accountants	3
ACC 521	Federal Income Tax II	3
ACC 526	Accounting Information Systems: Audit and Control	3
ACC 533	Accounting Information Systems: Analysis and Design	3
ACC 617	International Accounting	3
ACC 620	Cost Management	3
ACC 625	Federal Income Taxation for Business	3
ACC 626	Systems of Governance, Development and Assurance	
ACC 630	Accounting and Communications	3
ACC 631	Fraud Examination	3
ACC 650	Professional Issues in Accounting	3
ACC 680	Special Topics in Accounting	3
ACC 690	Independent Study in Accounting	3
FIN 633	Advanced Financial Management	3
FIN 680	Special Topics in Finance	3

a. Electives (0-12 credits)

The MAcc student who is waived from foundation requirements will choose graduate business electives to complete their 30-credit program. The student's adviser must approve these electives.

Additional program information

- No more than 12 credits of Oakland University courses may be obtained from courses numbered 400-499. No course numbered below 400 will apply toward the graduate degree.
- In compliance with university policy, no undergraduate courses will be transferred from another college or university and applied toward graduate degree requirements.
- Students must meet the prerequisites for all MAcc courses.

■ Master of Science in Information Technology Management

Program coordinator:

Paul Trumbull

Program description

The Master of Science in Information Technology Management (MSITM) is offered by the Department of Decision and Information Sciences within the School of Business Administration. The goal of the program is to provide a strong technical and managerial background to those who are interested in using information technology for competitive advantage. It is intended to provide business professionals with the knowledge they need to effectively manage information technology in support of their decision making. It is also intended to provide information systems professionals with knowledge on the latest technologies and their use in application development.

Admission terms and deadlines

Students may begin the MSITM program in the fall, winter, or summer semesters, depending upon their background.

All application materials for the MSITM must be received by:

- August 1 for the fall semester
- December 1 for the winter semester

- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Official Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE) scores; the GMAT and GRE scores must be five years or less at the time of the applicant's intended enrollment at Oakland University.

  Applicants who have earned a master's degree (or higher) may request a waiver of the GMAT or GRE score. To request a waiver, an applicant must include a GMAT or a GRE waiver form for consideration as part of their admission packet. The request for waiver is subject to the approval of the Graduate Admissions Committee.
- Additional information is required before international applicants can apply for and be granted a student visa; information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Master of Science in Information Technology Management degree program is selective and depends on several elements, including scholarship and ability to communicate effectively.

Applicants that meet the general and program admission requirements for graduate study at Oakland University are considered by the Decision and Information Sciences Department of the School of Business Administration. In making admission recommendations, the department assesses the potential of applicants for success in the MSITM program by examining their undergraduate records, their GMAT or GRE scores, their responses to questions on the Supplemental Program Form and their experience. Letters of recommendation are not required.

Degree requirements

The Master of Science in Information Technology Management degree requires a minimum of 33 credits. It consists of five parts: a required prerequisite course, foundation requirements, core requirements, electives, and exit. Students may be admitted while they complete the prerequisite course during their first year of study in the MSITM program.

Required course

ACC 511	Financial Accounting Systems	3

Foundation requirements

MIS 504	Introduction to IS Management	3
MIS 505	Technology of Information Systems	3
ACC 512	Managerial Accounting Systems	3
MKT 560	Marketing Management	3
ORG 530	Organizational Behavior	3

and one of the following:

POM 521	Operations Management	3
FIN 533	Financial Management	3

Foundation courses may be waived based on evidence of an equivalent course taken within 7 years. Each of these courses or an equivalent course is offered regularly as part of the MBA program at Oakland University.

Core requirements

MIS 514	Systems Analysis	3
MIS 515	Systems Design	3
MIS 516	Software Project Management	3

These three courses provide a common foundation for all MSITM students. The courses consider the way business processes are analyzed, designed and implemented for IT support. Database and network management will be integrated throughout.

These courses may be waived, given evidence of an equivalent course taken within five years. If waived, a core course must be replaced by an elective course.

Electives

After the students have built a solid foundation, they will be able to choose seven courses from a host of electives on emerging information technologies and topics of contemporary interest. Students seeking a more technical focus will be able to select from courses on advanced database management systems, decision support systems, and electronic commerce, among others. Students seeking to work more closely with business process issues may tailor their program using courses on IS planning and strategy, supply chain management, IS privacy and security, business analysis and modeling, etc.

1. Electives related to IS Development

MIS 618	Network Management	3
MIS 620	Electronic Commerce	3
MIS 622	Business Object Development	3
MIS 624	Business Application Architecture	3

2. Electives related to IT Strategy and Management

MIS 625	IT Planning and Strategy	3
MIS 630	Managing Global Outsourcing of IT and IT Enabled Services	3
MIS 640	IS Security	3

MIS 641	Privacy and Intellectual Property	3
MIS 642	IS Issues in Supply Chain Management	3
MIS 648	Issues in International Information Technology	3

3. Electives related to Data Management and Decision Making

MIS 604	Database Management	3
MIS 606	Advanced Database Management	3
MIS 636	Decision Support Systems	3
MIS 638	Knowledge Management	3
MIS 646	Business Analysis and Modeling	3

The seven electives include, but are not limited to the courses listed above. Other selected courses offered by the School of Business Administration in accounting and finance (e.g., Accounting Information Systems), marketing, economics and selected courses offered by the School of Engineering and Computer Science may also be accepted for the program

Exit

MIS 650	Project Seminar	3

All students are required to take the Project Seminar course that ties IT strategy to business strategy. As part of this capstone course each student will complete a project that integrates strategic and technical IT issues

■ Post-Master's Graduate Certificate in General Management

Post-master's graduate certificate for students with a graduate degree in a non-business field

Program description

The Post-Master's Graduate Certificate in General Management program is a 15-credit course of study designed for individuals with a graduate degree in a non-business field who seek core business knowledge. The program emphasizes coursework that covers the major disciplines within the field of business. Upon completion, students will have general knowledge of common business practices and corporate procedures.

Completing the prescribed course of study leads to a graduate certificate granted by the university. Coursework completed within this program can be transferred to a graduate business degree program if the student wishes to continue. This transfer must be completed before the graduate certificate is issued.

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, or summer semesters, depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for the Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- College course in calculus and statistics
- Cumulative GPA of 3.0 or above in graduate degree
- Additional information is required before international applicants can apply for and be granted a student visa; information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in General Management program is selective.

In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form and their experience. Letters of recommendation are not required.

Certificate prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student will be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Certificate requirements

Course requirements (15 credits)

Five courses (15 credits) are required from the following list of courses. (All course prerequisites will apply.)

ACC 511	Financial Accounting	3
ACC 512	Managerial Accounting Systems	3
ECN 521	Economics for Managers	3
FIN 533	Financial Management	3
MGT 526	International Business	3
MGT 550	Legal Environment of Business	3
MIS 524	Enterprise Information Systems	3
MKT 560	Marketing Management	3
ORG 530	Organizational Behavior	3
POM 521	Operations Management	3

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

■ Post-Master's Graduate Certificates

Graduate certificates for students with an MBA degree or equivalent to an MBA degree

The School of Business Administration offers post-master's graduate certificates in each of the major areas of business. These programs are designed to provide students who have an MBA degree, or the equivalent of an MBA degree, with additional coursework in a specialized area of business.

Number of graduate certificates

A student may earn more than one graduate certificate, but may not apply any specific course toward the requirement of more than one program. Graduate certificates are available in accounting, business economics, entrepreneurship, finance, human resources management, international business, management information systems, marketing, and production/operations management. Each graduate certificate requires a minimum of 15 credits.

Post-Master's Graduate Certificate in Accounting

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree; applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree
- Additional information is required before international applicants can apply for and be granted a student visa; information in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Accounting program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Certificate prerequisites

Personal Computer (PC) skills are required for all students admitted to the post-master's graduate certificate programs. Students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be

required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Certificate requirements

Required courses

ACC 512	Managerial Accounting Systems	3

Four additional courses (12 credits) from the following:

ACC 505	Business Law for Accountants	3
ACC 518	Introduction to Accounting Information Systems and Databases	3
ACC 521	Federal Income Tax II	3
ACC 526	Accounting Information Systems: Audit and Control	3
ACC 533	Accounting Information Systems: Analysis and Design	3
ACC 601	Financial Analysis and Valuation	3
ACC 617	International Accounting	3
ACC 620	Cost Management	3
ACC 625	Federal Income Taxation for Business	3
ACC 631	Fraud Examination	3
ACC 650	Professional Issues in Accounting	3
ACC 660	Professional Accounting Research	3
ACC 680	Special Topics in Accounting	3
ACC 690	Independent Study in Accounting	3

Students who have completed ACC 512 or its equivalent will be required to take an additional course from the accounting elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in Business Economics

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree; applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree
- Additional information is required before international applicants can apply for and be granted a student visa; information in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Business Economics program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Certificate prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is

deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

ECN 521	Economics for Managers	3
Four additional courses (12 credits) from the following:		
ECN 605	Econometrics	3
ECN 618	Seminar in Economic Policy	3
ECN 620	Money, Financial Institutions and Markets	3
ECN 656	Public Finance	3
ECN 667	Economics of Health Care	3
ECN 673	International Trade and Finance	3
ECN 685	Economics of Industries	3
FIN 627	International Financial Management	3
FIN 633	Advanced Financial Management	3
QMM 652	Forecasting	3
ECN 680	Special Topics in Economics	3
ECN 690	Independent Study in Economics	3

Students who have completed ECN 521 or its equivalent will be required to take an additional course from the business economics elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in Entrepreneurship

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree; applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Entrepreneurship program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Certificate prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

MGT 656	Entrepreneurship	3

Four additional courses (12 Credits) from the following:

ACC 625	Federal Income Taxation for Business	3
FIN 633	Advanced Financial Management	3
FIN 650	Real Estate Investment Analysis	3
MGT 526	International Business	3

MGT 660	Launching and Managing Small Businesses	3
MGT 670	Business Ethics	3
MGT 682	Special Topics in Entrepreneurship	3
MGT 692	Independent Study in Entrepreneurship	3
MKT 608	Strategic Marketing	3
ORG 635	Decision Making in Organizations	3
ORG 636	Leadership and Group Performance	3
ORG 640	Quality and Operational Excellence	3
POM 640	Process Management	3
POM 648	Project Management Techniques	3

Students who have completed MGT 656 or its equivalent will be required to take an additional course from the entrepreneurship elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in Finance

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree; applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree
- Additional information is required before international applicants can apply for and be granted a student visa; information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Finance program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Certificate prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

FIN 533	Financial Management	3
Four additional courses (12 credits) from the following:		
FIN 618	Investment Analysis	3
FIN 627	International Financial Management	3
FIN 633	Advanced Financial Management	3
FIN 650	Real Estate Investment Analysis	3
ACC 601	Financial Analysis and Valuation	3
ECN 620	Money, Financial Institutions and Markets	3
FIN 680	Special Topics in Finance	3
FIN 690	Independent Study in Finance	3

Students who have completed FIN 533 or its equivalents will be required to take an additional course from the finance elective list above to produce a total of 15 credits beyond the credits earned in

their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: To qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in Human Resources Management

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree; applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree
- Additional information is required before international applicants can apply for and be granted a student visa. Information in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Human Resources Management program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Certificate prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

ORG 530	Organizational Behavior	3
ORG 631	Human Resources Management	3

Three additional courses (9 credits) from the following:

MGT 638	Labor-Management Relations	3
MGT 670	Business Ethics	3
ORG 635	Decision Making in Organizations	3
ORG 636	Leadership and Group Performance	3
ORG 637	Motivation and Work Behavior	3
ORG 640	Quality and Operational Excellence	3
ORG 670	International Organizational Behavior and Human Resources	3
ORG 680	Special Topics in Organizational Behavior	3
ORG 690	Independent Study in Organizational Behavior	3

Students who have completed ORG 530, ORG 631 or their equivalents will be required to take additional courses from the human resources management elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in International Business

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree; applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree
- Additional information is required before international applicants can apply for and be granted a student visa; information in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in International Business program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Certificate prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

MGT 526	International Business	3

Four additional courses (12 credits) from the following:

ACC 617	International Accounting	3
ECN 673	International Trade and Finance	3
FIN 627	International Financial Management	3
MIS 630	Managing Global Outsourcing of IT and IT Enabled Services	3
MIS 648	Issues in International Information Technology	3
MKT 650	International Marketing	3
MKT 675	Customer and Supplier Relationships in the Global Enterprise	3
ORG 670	International Organizational Behavior and Human Resources	3
MGT 681	Special Topics in International Business	3
MGT 691	Independent Study in International Business	3

Students who have completed MGT 526 or its equivalent will be required to take an additional course from the international business elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in Management Information Systems

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester

- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree. Applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree.
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Management Information Systems program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Graduate program prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

MIS 524	Enterprise Information Systems	3

Four additional courses (12 credits) from the following:

MIS 604	Database Management	3
MIS 606	Advanced Database Management Systems	3
MIS 618	Network Management	3
MIS 620	Electronic Commerce	3
MIS 622	Business Object Development	3
MIS 624	Business Application Architecture	3
MIS 625	IT Planning and Strategy	3
MIS 630	Managing Global Outsourcing of IT and IT Enabled Services	3
MIS 636	Decision Support Systems	3
MIS 638	Knowledge Management	3
MIS 640	IS Security	3
MIS 641	Privacy and Intellectual Property	3
MIS 642	IS Issues in Supply Chain Management	3
MIS 646	Business Analysis and Modeling	3
MIS 648	Issues in International Information Technology	3
MIS 680	Special Topics in Management Information Systems	3
MIS 690	Independent Study in Management Information Systems	3

Students who have completed MIS 524 or its equivalent will be required to take an additional course from the management information systems elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in Marketing

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree. Applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree.
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Marketing program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Graduate program prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

MKT 560	Marketing Management	3
MKT 608	Strategic Marketing	3

Three additional courses (9 credits) from the following:

MKT 604	Consumer Behavior	3
MKT 605	Marketing Research	3
MKT 620	Distribution Channels Management and Logistics	3
MKT 625	Supply Chain Logistics	3
MKT 650	International Marketing	3
MKT 670	Business to Business Marketing	3
MKT 675	Customer and Supplier Relationships in the Global Enterprise	3
MKT 680	Special Topics in Marketing	3
MKT 690	Independent Study in Marketing	3

Students who have completed MKT 560, MKT 608 or their equivalents will be required to take additional courses from the marketing elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

Post-Master's Graduate Certificate in Production and Operations Management

Admission terms and deadlines

Students may begin the post-master's graduate certificate program in the fall, winter, and summer semesters depending upon their background.

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission and program admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing.

- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree; international university transcripts must be evaluated by a professional credential evaluation service.
- Supplemental Program Form
- Earned MBA degree or equivalent to an MBA degree. Applicants who do not hold an MBA degree may have their degree evaluated by the Office of Graduate Business Programs to determine eligibility for the program. Graduates of the Oakland University Master of Science in Engineering Management program are eligible for admission.
- Cumulative GPA of 3.0 or above in graduate degree.
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission review and assessment

Admission to the Post-Master's Graduate Certificate in Production and Operations Management program is selective. In making admission recommendations to the post-master's graduate certificate program, the department assesses the potential of applicants for success in the program by examining their graduate records, their responses to questions on the Supplemental Program Form, and their experience. Letters of recommendation are not required.

Certificate prerequisites

The post-master's graduate certificate program requires the following of all admitted students:

- Personal Computer (PC) skills: students will be required to have proficiency in the use of word processors, spreadsheets, graphics, database management systems, and the Internet. If a student is deficient in these skills, the student would be required to take a college course, workshop, or continuing education course in PC skills as a prerequisite to the program.

Required courses

POM 521	Operations Management	3

Four additional courses (12 credits) from the following:

ACC 620	Cost Management	3
POM 635	The Management of Service Operations	3
POM 640	Process Management	3
POM 643	Operations Planning and Control	3
POM 642	Supply Chain Management	3
POM 645	Cases in Operations Management	3
POM 648	Project Management Techniques	3
QMM 652	Forecasting	3
POM 680	Special Topics in Production and Operations Management	3 or 4
POM 690	Independent Study in Production and Operations Management	3

Students who have completed POM 521 or its equivalent will be required to take an additional course from the production and operations management elective list above to produce a total of 15 credits beyond the credits earned in their master's degree program or another graduate certificate program.

Non-course requirements

Academic progress

Minimum grade requirement: to qualify for the graduate certificate, the student must complete the designated set of courses with a grade of 3.0 or above in each course.

Application for Graduation

Upon completion of a post-master's graduate certificate, the student must file an Application for Graduation online to receive an Oakland University graduate certificate and have it appear on his or her Oakland University transcript.

■ Master of Science in Engineering Management

The Master of Science program in engineering management is offered by the School of Engineering and Computer Science in cooperation with the School of Business Administration. Intended for students with a bachelor's degree in engineering or computer science, the program has as its goal the provision of the tools and skills necessary for making sound management decisions in industry and business while retaining a commitment to a specialized field of endeavor. For additional details on this program, consult the engineering section of this catalog for information on the Master of Science in engineering management.

■ Master of Science in Safety Management

The Master of Science in Safety Management (MSSM) program is offered by the School of Health Sciences and was developed through a cooperative effort between the School of Health Sciences and the School of Business Administration. This master's degree program focuses on the business aspects of safety management in the workplace. It combines an effective balance of core MBA coursework and application of these business skills to safety-related case studies in risk assessment, loss control, risk management, and safety program planning, administration, and management. The goal of the MSSM degree program is to provide the business analytical tools and skills necessary for making sound management decisions in business and industry as they relate to occupational safety, health, and environmental issues in the workplace. For additional details on this program, consult the Health Sciences section of the catalog.

For more information on Graduate Business Programs

For more information on Oakland University's graduate business programs, including an application for graduate study, a GMAT booklet, and answers to common questions, please either:

Write to:

Office of Graduate Business Programs
School of Business Administration
Oakland University
Rochester, MI 48309-4493.

Fax a request to:

Graduate Business Programs at (248) 370-4964.

E-mail a request to the following Internet address:

gbp@lists.oakland.edu

Call the staff of the Office of Graduate Business Programs at:

(248) 370-3287.

Or visit our Web site: www.sba.oakland.edu/.

■SCHOOL OF EDUCATION AND HUMAN SERVICES

415 Pawley Hall • (248) 370-3050 • Fax (248) 370-4202
www.oakland.edu/sehs

Interim dean:
William G. Keane

Associate deans:
Dawn M. Pickard
Robert A. Wiggins

Distinguished professor emeritus:
Laszlo J. Hetenyi, Ed.D., Michigan State University

Professors emeriti:
Richard F. Barron, Ph.D., Syracuse University
Jane M. Bingham, Ph.D., Michigan State University
Gloria T. Blatt, Ph.D., Michigan State University
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M. Sharon P. Muir, Ph.D., University of Nebraska
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Howard Splete, Ph.D., Michigan State University

Distinguished professor:
Ronald L. Cramer, Ph.D., University of Delaware

Professors:
Susan M. Awbrey, Ph.D., Michigan State University
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Ronald M. Swartz, Ph.D., New York University
Dyanne M. Tracy, Ph.D., Indiana University
Toni S. Walters, Ph.D., Oakland University

Associate professors:
Sandra M. Alber, Ed.D., Wayne State University
Ambika P. Bhargava, Ph.D., University of Texas, Austin
Thomas W. Blume, Ph.D., Texas Technological University
Karen Bolak, Ed.D., Wayne State University
James F. Cipielewski, Ph.D., Oakland University
Elyce A. Cron, Ph.D., University of Toledo
Robert S. Fink, Ph.D., State University of New York, Buffalo
Tomas R. Giberson, Ph.D., Wayne State University
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M. Shannan McNair, Ed.D., University of Michigan
Billy Joe Minor, Ph.D., Indiana University
Jana Nidiffer, Ed.D., Harvard University
Sherri L. Oden, Ph.D., University of Illinois
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Julia B. Smith, Ed.D., University of Michigan
Carol A. Swift, Ph.D., University of Arizona
Robert A. Wiggins, Ph.D., University of Illinois, Urbana-Champaign

Assistant professors:
Michael P. Chaney, Ph.D., Georgia State University
Tanya Christ, Ph.D., State University of New York, Buffalo
Mary Rose Day, Ph.D., Wayne State University
Susan T. Fascio-Vareen, Ph.D., Mississippi State University
Shannon R. Flumerfelt, Ph.D., Oakland University
Darlene Groomes, Ph.D., Michigan State University
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Todd W. Leibert, Ph.D., University of Florida
C. Robert Maxfield, Jr., Ed.D., Wayne State University
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Mark R. Olson, Ph.D., Michigan State University
Julie A. Ricks-Doneen, Ph.D., Michigan State University
Sunwoo Shin, Ed.D., University of Memphis
Brian J. Taber, Ph.D., Kent State University
Michel Weiss, Ph.D., University of Michigan
Caryn M. Wells, Ph.D., Michigan State University

Visiting assistant professors:
Linda Ayers, Ph.D., Oakland University
Judy L. Jacobs, Ph.D., Union Institute & University
Patrick Karbon, Ph.D., University of North Texas
Kristen Smiley, Ph.D., Oakland University
Thomas J. Tattan, Ed.D., Wayne State University
Luke Tsai, M.D., Taipei Medical University

Special instructors:

Brian O. Clark, Ed.D., Wayne State University
Mark S. Doman, J.D., University of Minnesota
Annette M. Osborne, Ph.D., Oakland University
Linda K. Tyson, Ed.S., University of Michigan
Mary F. Zepplin, Ed.S., Oakland University

Special lecturer:

Christine Abbott, Ph.D., Oakland University

The School of Education and Human Services offers programs leading to:

Doctor of Philosophy in Reading Education

Doctor of Philosophy in Education with majors in:
- counseling
- early childhood education
- educational leadership with cognates in educational leadership and higher education

Education Specialist in leadership

Master of Arts in Teaching in reading and language arts

Master of Arts in Teaching (elementary and secondary education)

Master of Education in five areas:
- early childhood
- educational leadership
- educational studies
- special education with concentrations in specific learning disabilities (SLD), emotional impairment (EI) or autism spectrum disorder (ASD)
- teacher leadership

Master of Arts in counseling

Master of Training and Development

Post-Master's Graduate Certificate in Higher Education

Graduate Certificate in International Education

Graduate Certificate in Microcomputer Applications

Professional Certification

Endorsements

■ General Academic Requirements

Advising

All students must schedule a program planning appointment with an adviser, after being notified of acceptance to a program, as follows:

- Students accepted into a doctoral or master's program should call the faculty advisers identified in their letters of acceptance.
- All other students must contact the Teacher Education Advising Office at (248) 370-4182 or the Human Resource Development Advising Office at (248) 370-3061 for an appointment to complete a required plan of work.

Academic progress

In order to remain in good standing, graduate students must earn a grade-point average of 3.0. No grade below 2.0 (2.8 for EL and MTD and 3.0 for TDES) can be applied toward a graduate degree. Two course grades below 3.0 or one below 2.0 automatically lead to an evaluation of progress and possible dismissal.

Special Graduate or Professional Development

Students will be allowed to take no more than 12 credits in Special Graduate or Professional Development status before admission to a program.

■ Admission

Initial certification

Apply for admission through the Office of Undergraduate Admissions, 101 North Foundation Hall.

Major/minor subject area endorsement

Apply through the Office of Undergraduate Admissions for post-baccalaureate status (PB).

Departmental planned program

Students who wish to complete requirements for professional certification in a non-degree departmental planned program apply through Graduate Admissions, 160 North Foundation Hall.

Doctoral and Master's programs

Students who wish to obtain a doctoral or master's degree apply through Graduate Admissions, 160 North Foundation Hall.

■ Michigan Initial Teacher Certification Requirements

Initial certification in elementary education

For students who hold a bachelor's degree and may wish to obtain initial teaching certification by completing a second undergraduate degree in elementary education or the MATEE with initial certification, contact the Teacher Education Advising Office, (248) 370-4182 for an advising appointment.

Initial certification in secondary education

Initial certification in secondary education is available for students who already hold a bachelor's degree. Please contact the Teacher Education Advising Office, 363 Pawley Hall, (248) 370-4182 for more information. Please note that secondary certificates are given in the following subjects only: mathematics, biology, chemistry, physics, French, German, Spanish, English, music and history.

Endorsements

Endorsements refer to any subject areas, specializations or changes of grade level which are added to a certificate. No undergraduate grade below 2.0 or graduate grade below 3.0 can be applied to an endorsement program.

1. Endorsements that require the completion of a master's degree at Oakland University:
   Counseling
   Reading
   Special Education: Specific Learning Disability, Emotional Impairment, and Autism Spectrum Disorder. Contact department for requirements.

   Students who wish to pursue these programs should apply to the master's program in the appropriate department.

2 . Endorsements that do not require completion of a master's degree:

   Major/minor subject area endorsements

Endorsements may be added in any of the areas approved by the state of Michigan for Oakland University. They are as follows:

K-12 Education

Music, art, modern languages (French, German, Spanish)

Secondary Education

Biology, chemistry, dance, economics, English, history, integrated science, mathematics, modern languages (French, German, Spanish), physics, political science, social studies, sociology, and English as a Second Language.

Elementary Education

Language arts, mathematics, modern languages (French, German, and Spanish), integrated science, social studies, dance.

Early Childhood Education

Coursework follows the planned program listed under the Department of Human Development and Child Studies (Early Childhood Education).

Special Education

Endorsements are available for Specific Learning Disability, Emotional Impairment and Autism Spectrum Disorder. Contact the Department of Human Development and Child Studies at (248) 370-3077 for requirements.

■ Michigan Professional Certification Requirements

General information

To meet the professional (formerly continuing) certification requirements of the state of Michigan, candidates must complete the following: 1) three years of experience within their certificate level; 2) 18 credits of coursework in an approved planned program or master's degree; and 3) both elementary and secondary candidates must show evidence of completing coursework in methods of teaching reading. (Coursework taken in the undergraduate degree will apply.) Six credits of reading are required for elementary candidates and three credits are required for secondary candidates.

If additional courses in reading need to be taken, the approved coursework for Oakland University is as follows:

For elementary teachers

RDG 500	Foundations of Reading Instruction	4
RDG 534	Reading-Language Arts Instruction in the Elementary School	4

For secondary teachers

RDG 538	Guiding Reading-Learning in Content Subjects	4

For those students enrolled in the MAT in reading and language arts only, RDG 632 and RDG 633 may be used. **New reading requirement implementing Senate Bill #327**

Effective July 1, 2009, satisfactory completion of a 3-credit course of study with appropriate field experience in the diagnosis and remediation of reading disabilities and differentiated instruction is required for all teachers applying for a professional certificate. At Oakland University, this requirement can be met through RDG 510, Inquiry-based Literacy Instruction.

Candidates for professional certification are urged to complete their 18 credits as part of a master's degree. This choice offers maximum flexibility. As an alternative, students may choose non-degree planned programs. Oakland University will accept

6 to 9 credits from another institution toward certification requirements, upon adviser approval.

Those teachers who wish to renew a lapsed provisional certificate may be recommended to the state of Michigan upon successful completion of 9 credits of coursework within their planned program. For more information about planned programs, consult the following department sections in this catalog:

Counseling

Educational Leadership

Educational Studies

Early Childhood

Microcomputer Applications in Education

Reading and Language Arts

Special Education

Teacher Development and Educational Studies.

Upon successful completion of coursework (3.0 for graduate courses, 2.0 for undergraduate), students must apply for certificate renewal or professional certification through the Teacher Education Advising Office, 363 Pawley Hall. The Michigan Department of Education charges for all certifications and renewals. A copy of the fee structure is available through the Teacher Education Advising Office, 363 Pawley Hall, (248) 370-4182.

Those teachers who wish to renew a lapsed continuing or permanent certificate and do not possess a master's degree must complete 6 credits at the graduate or undergraduate level. These credits do not have to be in a planned program. On completion, the student must apply for validation directly to the Michigan Department of Education, Teacher Certification, Box 30008, Lansing, MI, 48909.

Professional teacher certification renewal

As of July 1, 1992, persons receiving a professional (formerly continuing) certificate are required to renew that certificate every five years on the basis of six credits of academic credit earned from an approved teacher preparation institution or the equivalent in State Board approved teacher development programs or activities that will award credits obtained as State Board Continuing Education Units (SB-CEUs). Continuing certificates issued before the above date remain valid as long as the holder serves in an educational capacity 100 days within a five-year period.

■DEPARTMENT OF COUNSELING

491B Pawley Hall • (248) 370-4179 • Fax (248) 370-4141
www.oakland.edu/sehs

Chair:
Lisa D. Hawley

Professors emeriti:
Jane Goodman, Ph.D., Wayne State University
Howard Splete, Ph.D., Michigan State University

Professors:
Mary L. Otto, Ed.D., Indiana University
James T. Hansen, Ph.D., University of Detroit

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Todd W. Leibert, Ph.D., University of Florida
Brian J. Taber, Ph.D., Kent State University

Visiting assistant professor:
Kristin Smiley, Ph.D., Oakland University

Degree programs
Doctor of Philosophy in Education with a major in counseling

Master of Arts in counseling, emphasis in community/agency settings or emphasis in school counseling

Advanced specializations are available in addictions counseling, advanced career counseling, child and adolescent counseling, couple and family counseling, mental health counseling, and wellness counseling.

A post-master's school counseling specialization for students without teacher certification is available through Professional Development.

Ethical Standards and Counselor Fitness

Oakland University's CACREP accreditation obligates the program to comply with–and to ensure that its students comply with–the American Counseling Association's 2005 *Code of Ethics*. The Code holds counselors and counseling students accountable for their competence and acknowledges times when "physical, mental, or emotional problems are likely to harm a client or others . . ." (Section F.8.b). It requires that "Counselor educators, throughout ongoing evaluation and appraisal, are aware of and address the inability of some students to achieve counseling competencies" and requires faculty to "assist students and supervisees in securing remedial assistance when needed, seek professional consultation and document their decision to dismiss or refer students for assistance . . ." (Section F.9.b).

Applicants to Oakland's counseling program are assessed for interpersonal competence in the admission process, and those rated unacceptable on academic or personal fitness for counseling will not be admitted. Students are assessed for fitness throughout their coursework, including practical experience courses in which performance is an essential part of the grade. A student whose ethical behavior or psychological health is questionable will be reviewed according to published departmental policies and may be referred for external evaluation. Such evaluation may lead to a remediation plan or dismissal from the program.

■ Doctor of Philosophy in Education with a Major in Counseling

Coordinator:
Robert S. Fink

Program description

The Doctor of Philosophy in Education with a major in counseling degree prepares students for leadership roles within the field in the areas of advanced clinical practice, advanced school counseling practice, administration, research and supervision. The doctoral program is fully accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

The program allows students to pursue one of seven cognate areas: addictions counseling, career counseling, child and adolescent counseling, couple and family counseling, wellness counseling, school counseling, and mental health counseling. Additionally, in compliance with the CACREP guidelines, the program provides for advanced preparation in the following content areas: theories pertaining to the principles and practice of counseling, career development, group work, systems, and consultation; theories and practices of counselor supervision; instructional theory and methods relevant to counselor education; pedagogy relevant to current social and cultural issues, including social change theory and advocacy action planning; design and implementation of quantitative research and methodology, including univariate, multivariate, and single-subject design; design and implementation of qualitative research, including grounded theory, ethnographic, and phenomenological methodologies; models and methods of assessment and use of data;

ethical and legal considerations in counselor education and supervision (e.g., the ACA Code of Ethics); and the role of racial, ethnic, and cultural heritage, nationality, socioeconomic status, family structure, age, gender, sexual orientation, religious and spiritual beliefs, occupation, physical and mental status, local, regional, national, international perspective, and equity issues in counselor education programs.

Accreditation

The Doctor of Philosophy in Education with a major in counseling degree program is fully accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP).

Application deadlines

Applications will be accepted until March 1 of each year.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- A master's degree in counseling and/or related field
- Goal statement
- Two letters of recommendation
- Official GRE test scores
- Curriculum Vitae
- Writing sample.

Admission requirements

Admission to the Doctor of Philosophy in Education with a major in counseling degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below. Admission to the degree program is a multi-step process:

1. First, the admissions committee evaluates candidates in the following areas:
   Prior coursework and GPA at the graduate level
   Professional experience
   Written statement of purpose
   Professional letters of recommendation
   Official standardized test scores (GRE)
2. Applicants selected for further consideration are required to pass a departmental written examination and/or submit a video sample of their counseling.
3. The final step is an interview by the faculty.

Final admission recommendations are forwarded to Graduate Admissions by the counseling department faculty. The program is cohort based and allows for the admission of no more than eight doctoral students every year. Prerequisites will be required, if the earned master's is a non-counseling degree.

Degree requirements

The Doctor of Philosophy in Education with a major in counseling degree is awarded upon satisfactory completion of a minimum of 84 credits beyond the master's degree in an approved program of study: 12 credits in the foundation core, 32 credits in the department core, 20 credits in the cognate, 4 credits in the internship, and a minimum of 16 credits for work toward the completion of a dissertation.

Course requirements

a. Foundation core (12 credits)

CNS 730	Doctoral Professional Seminar I	2
CNS 731	Doctoral Professional Seminar II	2
CNS 732	Research Methodology	4
CNS 733	Analytical Methods	4

b. Department core (32 credits)

CNS 667	Advanced Theories of Counseling	4
CNS 669	Legal and Ethical Issues in Counseling	2
CNS 670	Sociocultural Issues in Counseling	2
CNS 671	Instructional Theory and Methods in Counseling	4
CNS 672	Seminar in Counselor Supervision	4
CNS 673	Advanced Group Counseling	4
CNS 674	Advanced Consultation Techniques	2
CNS 683	Advanced Appraisal: Models and Methods	4
CNS 691	Program Evaluation	2
CNS 780	Advanced Practicum	4

c. Cognate (20 credits minimum)

Each student's cognate includes one of the areas of advanced specializations. The student in conjunction with the advisory committee selects courses from other cognate areas to complete the 20-credit requirement.

d. Internship (4 credits)

CNS 790	Doctoral Internship	4

e. Dissertation (16 credits minimum)

The dissertation is an original scholarly contribution that is designed and conducted under the supervision of an advisory committee of four members. The committee is formed under the guidance of a chairperson nominated by the candidate, who must be a tenured faculty member within the department.

With advice from the chairperson, the candidate identifies two additional members who are full-time faculty within the department,

and a fourth doctoral-level committee member who does not hold a full-time appointment within the department. Selection of the doctoral committee is not official until the department doctoral committee approves it. The candidate is required to remain continuously enrolled during the dissertation process.

The candidate is required to submit a formal proposal to the committee before beginning the dissertation project and to schedule and pass a defense of the proposal before the committee. If the proposal is not accepted, the candidate is required to coordinate with the chair to receive specific feedback and to reschedule. The committee is charged with ensuring that the dissertation meets acceptable standards of scholarly originality and rigor in its conceptualization and implementation. To this end, the committee may strongly encourage a doctoral candidate to participate in seminars, study groups, or research teams to refine specialized knowledge and skills.

Upon completion of the approved dissertation project, the candidate is required to secure approval from all committee members and schedule a public dissertation defense. At the defense, attended by the committee and members of the academic community, the candidate must successfully present the project and address questions. At the end of the defense, the committee can set conditions for satisfactory completion, and the candidate must demonstrate that these conditions have been met before the candidate is recommended for graduation.

The following course sequence is an essential part of the dissertation process; if a student's dissertation is completed ahead of a scheduled seminar the student will be expected to sign up for an equivalent number of credits of CNS 799.

CNS 794	Counseling Inquiry: Proposal Planning and Development	4
CNS 795	Dissertation Research I: Data Analysis Lab	4
CNS 796	Dissertation Research II: Group Seminar	4
CNS 799	Dissertation Research III: Implementation and Writing	minimum of 4

Non-course requirements

Academic advising

Upon admission to the program each student is assigned an interim faculty adviser. Within the first year of study, the student is required to select an advisory committee consisting of a tenured chair and a second tenure-track faculty member. The committee assists the student in developing and implementing a plan of study, meeting at least annually to evaluate the student's progress. In order to remain in good standing, a student must maintain an overall GPA of at least 3.0 and make satisfactory progress toward the degree.

Qualifying examinations and candidacy

Comprehensive examinations must be passed after the completion of all coursework except the dissertation sequence. The examinations, consisting of written responses to a series of questions written and graded by department faculty, are administered annually. Content includes required program elements and specialized information unique to the student's cognate. A student may be required to orally defend a response, and the student's advisory committee may recommend additional learning experiences before the student is encouraged to retake portions not passed. All portions must be satisfactory before the student is advanced to doctoral candidacy and permitted to assemble a dissertation committee.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time to degree

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

■ Master of Arts in Counseling

Coordinator:

Lisa D. Hawley

Program description

The Department of Counseling offers a Master of Arts degree in counseling for individuals who wish to work in professional counseling roles with children, youth, adults and families in school or community settings. The program can accommodate both full-time and part-time students.

Accreditation

The Master of Arts in counseling degree program is fully accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP) in two areas: Community Counseling and School Counseling. Graduates are prepared for state counseling licensure.

Application deadlines

The application deadlines are as follows:

- Full-time or part-time fall admission on Oakland University campus: April 15

- Full-time Macomb University program: April 15
- Winter admission: October 1.

Deadlines for international students are May 1 for the fall semester and September 1 for the winter semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental program form
- All applicants must submit a written statement of purpose that explains reasons for entering the counseling program and employment goals. Applicants should describe experiences and accomplishments in working with children, youth and adults.
- Two letters of recommendation. Recommendations are important to the application procedure. The two required references must be from professionals, professors, or employers who can attest to the applicant's academic ability and effective interaction with youth and adults.
- All applicants must successfully complete a group interpersonal skills interview with the Department of Counseling.

Admission requirements

Admission to the Master of Arts in counseling degree program is selective; meeting minimum criteria does not guarantee acceptance into the program. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Bachelor's degree from a regionally accredited institution.
- Credentials, including transcripts and letters of recommendation, providing clear evidence of academic distinction.
- Grade-point average of 3.0 in all undergraduate coursework is ordinarily considered the minimum standard for admission.
- Applicants must have completed a minimum of 24 credits of undergraduate or graduate credits in the behavioral sciences such as psychology and sociology before admission to the program (this requirement is evaluated by the admissions committee).

Transcripts of previous work can be evaluated by the faculty of the counseling department before formal application is made.

Degree requirements

The Master of Arts in counseling degree is awarded upon satisfactory completion of 48 graduate-level credits in an approved program of study.

Students who complete the degree and who have a valid teaching certificate may be recommended for counselor endorsement at the K-9, 7-12 or K-12 level, depending on completion of the specific course requirements for each endorsement level. Students must consult with the internship instructor or internship coordinator regarding endorsement.

All graduates of the program are eligible to apply for a professional counselor license issued by the state of Michigan. Graduates may also qualify for other credentials. Students should consult their advisers for further information.

Course requirements

a. Core requirements

All candidates for the Master of Arts in counseling must take five core courses:

CNS 500	Introduction to the Counseling Profession	2
CNS 510	Counseling in a Diverse Society	2
CNS 520	Theories of Counseling	4
CNS 530	Developmental Counseling	4
CNS 540	Testing and Assessment in Counseling	4

Note: CNS 500 and CNS 510 are prerequisite or corequisite to all other counseling courses.

b. Concentrations

Students must select an emphasis either in school or community counseling as the setting for their coursework, research and internship. A plan of work must be on file by the completion of the first course. The courses required for each emphasis and setting are listed below.

Both concentrations permit students to gain expertise and experience in areas of interest and required disciplines by taking four credits of electives, as well as the following six courses:

CNS 640	Career Development Theory and Practice	4
CNS 660	Research in Counseling	4
CNS 661	Techniques of Counseling	4
CNS 663	Group Counseling	4
CNS 664	Counseling Practicum	4
CNS 666	Internship in Counseling	4

Note: Since clinical courses must be taken in sequence, students are urged to take CNS 661 immediately after their core courses.

Counseling emphasis in community/agency settings

Students who are preparing for counseling positions in community, business and agency settings take:

CNS 564	Introduction to Community/Agency Counseling	2
CNS 574	Case Conceptualization and Treatment Planning in Counseling	2

Internship work is then done at an appropriate community/agency site.

Counseling emphasis in school settings

Students who are seeking endorsement as a school counselor or who are preparing for the School Counselor License must take:

CNS 561	Introduction to School Counseling	2
CNS 571	Consultation Theory and Practice	2

Students in this emphasis must take sections of all of the following courses, which are designated as school counseling emphasis:

CNS 540	Testing and Assessment in Counseling	4
CNS 640	Career Development Theory and Practice	4
CNS 663	Group Counseling	4

Internship work is then done at an appropriate school site. Michigan now has provisions for Preliminary Authorizations for Employment as a School Counselor, which allows students to become employed after all coursework is completed except the internship and the elective. Preliminary Authorization for Employment expires after three years, at which time the master's must have been completed.

With the above coursework, students with valid Michigan teaching certificates can be endorsed in Guidance and Counseling on their teaching certificate. A state exam is required.

Those who choose not to be teacher certified will need to take the additional 12 credits in the post-master's school counseling specialization which leads to an Oakland University recommendation for the new School Counselor License.

c. Electives (4 credits required)

CNS 573	Introduction to Family and Couple Counseling	4
CNS 577	Reaction to Significant Loss	4
CNS 578	Introduction to Chemical Dependency	4
CNS 697	Seminar in Couple and Family Counseling	2
CNS 697	Seminar in Couple and Family Counseling: Human Sexuality	2

Note: A proposal for independent research in an area of special interest may also be submitted for approval as an elective under CNS 560. The student must first obtain a commitment from an interested faculty member to sponsor this work.

Non-course requirements

Student advising

Upon admission to the counseling program, students are assigned faculty advisers. All students are required to complete a degree program plan, which must be approved by their assigned adviser before the completion of CNS 500. It is expected that students will maintain contact with their adviser throughout their program. Open advising is also available. Contact the Counseling Department for open advising hours.

Academic standing

In order to remain in good standing a student must maintain an overall GPA of at least 3.0 and make satisfactory progress toward the degree. With one grade under 3.0, a student is on academic probation, and their status will be reviewed by the faculty. No grade below 2.0 can be applied toward a degree and two grades below 3.0 or one below 2.0 will automatically lead to an evaluation of progress and possible dismissal.

Code of ethics

Along with scholarship preparation, high levels of ethical conduct are considered essential for those who are involved in counseling adults and children. Students are expected to comply with the current Code of Ethics of the American Counseling Association. Violations will be brought before the faculty and could result in dismissal from the program.

Petition of Exception

Students may request waivers or modifications of specific program requirements by filing a Petition of Exception form with the Chair of the department. The Chair will make recommendations to Graduate Study and Lifelong Learning, who will review the petition and notify students of any action taken. Petition of Exception forms may be obtained from the department's administrative assistant or from the Graduate Study and Lifelong Learning Web site.

Program Options

Main Campus

Students are admitted for fall or winter semesters and may plan an intensive two-year concentrated program or a part-time flexible program.

An intensive two-year concentrated program is most appropriate for students with strong undergraduate preparation in areas such as psychology, sociology, social work, or other related helping fields. Students who enroll for 12 credits are usually not employed full-time during the program.

Sample two-year program plan

	Year 1	Year 2
Fall	CNS 500 CNS 510 CNS 520 CNS 530	CNS 664 CNS 660
Winter	CNS 661 CAN 540 CNS 640	CNS 666 Elective
Summer I	CNS 564/574	
Summer I	CNS 564/574 (Community/Agency emphasis) CNS 663	
Summer II	CNS 561/571 (School setting emphasis) CNS 663	

Sample part-time program plan

	Year 1	Year 2	Year 3	Year 4
Fall	CNS 500 CNS 510	CNS 540	CNS 660	CNS 664
Winter	CNS 520	Elective	CNS 661	CNS 666
Summer I	CNS 564/574	CNS 640	CNS 663	
Summer II	CNS 530	CNS 561/571		

Macomb University Center

The Macomb University Center Program is an off-campus master's program in counseling for students residing or working in the Macomb County area. The program is cohort based and allows completion of the degree in two full years and one semester. Students are admitted to the program as a cohort in fall only and must take all courses (except laboratory classes and electives) at the Macomb Center and in the prescribed sequence. Admission to the program is selective and applicants must meet all regular admission requirements. A completed application for fall admission must be received by April 15.

Typical Macomb University Center cohort program plan

	Year 1	Year 2	Year 3
Fall	CNS 500 CNS 510 CNS 520	CNS 640 CNS 660	CNS 666
Winter	CNS 530 CNS 540	CNS 663 Elective	
Summer I	CNS 661 CNS 564/574	CNS 664	
Summer II	CNS 561/571 CNS 661	CNS 664	

■ Advanced specializations

The department offers advanced specializations for current students who desire to specialize at the master's level and for post-master students who wish to add advanced skills. (Specializations may be taken concurrently with the master's program.) Admission to specializations is limited and competitive. Prospective students can obtain admission information from the specialization coordinator. Students who are admitted are expected to complete the specializations in sequence and within one calendar year. Each specialization consists of advanced theoretical coursework, advanced techniques and an advanced clinical internship.

1. Specialization in Addictions Counseling (12 credits) (Begins each Fall)

Coordinator:
Michael P. Chaney

Prerequisite:

CNS 578	Introduction to Chemical Dependency	4

Specialization course requirements (12 credits)

CNS 668	Conceptual Models of Addiction	4
CNS 678	Counseling the Chemically Dependent	4
CNS 679	Fieldwork in Addiction Counseling	4

2. Specialization in Advanced Career Counseling (12 credits) (Begins each Fall)

Coordinator:
Brian J. Taber

Prerequisite:

CNS 640 and coordinator permission

Specialization course requirements (12 credits)

CNS 675	Advanced Career Counseling	4
CNS 676	Leadership in Career Counseling	4
CNS 677	Fieldwork in Career Counseling	4

3. Specialization in Child and Adolescent Counseling (12 credits) (Begins each Fall)

Coordinator:
Robert S. Fink

Prerequisite:

CNS 661 and coordinator permission

Specialization course requirements (12 credits)

CNS 680	Counseling in Infancy and Early Childhood	4
CNS 681	Counseling the Older Child and Adolescent	4
CNS 682	Fieldwork in Child and Adolescent Counseling	4

4. Specialization in Couple and Family Counseling (12 or 20 credits*) (Begins each Fall)

Coordinator:
Elyce A. Cron

Prerequisite:

CNS 573 and coordinator permission

Specialization course requirements (12 credits)

CNS 693	Advanced Couple and Family Theory	2
CNS 694	Couple and Family Methods and Techniques	2
CNS 695	Advanced Couple and Family Development	2
CNS 696	Couple and Family Assessment	2
CNS 697	Seminar in Couple and Family Counseling	2 + 2
CNS 698	Advanced Methods of Couple and Family Counseling	4
CNS 699	Fieldwork in Couple and Family Counseling	4

* 12 credits for certificate; 20 credits for LLMFT license eligibility

5. Specialization in Mental Health Counseling (12 credits) (Begins each Summer)

Coordinator:
James T. Hansen

Prerequisites:

CNS 540, CNS 661 and coordinator permission

Specialization course requirements (12 credits)

CNS 684	Intelligence and Personality Assessment	4
CNS 685	Psychopathology	4
CNS 686	Fieldwork in Mental Health Counseling	4

6. Specialization in Wellness Counseling (12 credits) (Begins each Fall)

Coordinator:
Luellen Ramey

Specialization course requirements (12 credits)

CNS 641	Integrative Holistic Medicine Principles for Practice	4
CNS 653	Counseling for Wellness	4
EXS 535	Health Promoting Lifestyle Choices and Interventions	4
or		
HS 630	Complementary Medicine and Wellness Seminar	2
and		
CNS 560	Approved Independent Study	2
Total Credits		12

7. Specialization in School Counseling (12 credits) (Begins each Fall)

Must apply through Professional Development: (248) 370-3033

Specialization (12 credits)

TD 500	Introduction to the School and Society	2
TD 511	Learning Theory	2
TD 554	Advanced Interaction Laboratory for Teacher Development	4
SE 500	The Exceptional Student	2
CNS 688	Issues in School Counseling	2

■ DEPARTMENT OF EDUCATIONAL LEADERSHIP

480D Pawley Hall • (248) 370-3070 • Fax (248) 370-4605
www.oakland.edu/edleadership

Chair:
Jana Nidiffer

Professors emeriti:
James W. Hughes, Ed.D., University of New Mexico
Patrick J. Johnson, Ed.D., Wayne State University
M. Sharon P. Muir, Ph.D., University of Nebraska

Professor:
Sandra P. Packard, Ed.D., Indiana University

Associate professors:
Sarah L. Gibson, Ph.D., Wayne State University
Ilene L. Ingram, Ed.D., Wayne State University
Jana Nidiffer, Ed.D., Harvard University
Dawn M. Pickard, Ph.D., Purdue University
Julia B. Smith, Ed.D., University of Michigan
Robert A. Wiggins, Ph.D., University of Illinois, Urbana-Champaign

Assistant professors:
Shannon R. Flumerfelt, Ph.D., Oakland University
Eileen S. Johnson, Ph.D., University of Houston
C. Robert Maxfield, Jr., Ed.D., Wayne State University
Caryn M. Wells, Ph.D., Michigan State University

Special instructor:
Brian O. Clark, Ed.D., Wayne State University

Visiting assistant professor:
Thomas J. Tattan, Ed.D., Wayne State University

Degree programs
Doctor of Philosophy in Education with a major in educational leadership

Education Specialist in leadership

Master of Education in educational leadership

Master of Education in teacher leadership

Certificate program
Post-Master's Graduate Certificate in higher education

■ Doctor of Philosophy in Education with a Major in Educational Leadership

Coordinator:
Julia B. Smith

Program description
The Doctor of Philosophy in education with a major in educational leadership is designed to develop individuals who can provide leadership to educational practice in the 21st century, whether through roles in public and private schools, colleges and universities, or by contributing to research and teaching about educational policy and practice. Core concepts in the program include systems thinking, learning theory and research methodology.

Application terms and deadlines
Applications will be accepted until March 1 of each year.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Three letters of recommendation
- Goal statement
- Curriculum Vitae
- Official GRE scores
- Writing sample.

Admission requirements
Admission to the Doctor of Philosophy in education with a major in educational leadership degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below. Candidates for the Ph.D. in education with a major in educational leadership will be selected based on experience, especially leadership experience, as reflected in an analysis of several criteria:

- The vitae
- The content of three references to be solicited by the applicant
- The candidate's graduate grade-point average as reported on official transcripts
- The score on the Graduate Record Examination (GRE)

- A goal statement
- The score on a targeted writing sample
- An interview with the department may be requested.

Degree requirements

The Doctor of Philosophy in education with a major in educational leadership degree requires a minimum of 76 credits beyond the master's degree: 12 credits in the foundation core, 20 credits in the department core, 28 credits in the cognate, and a minimum of 16 credits for the dissertation.

Course requirements

a. Foundation core (12 credits)

ED 730	Professional Seminar I	2
ED 731	Professional Seminar II	2
ED 732	Research Methodology	4
ED 733	Analytical Methods	4

b. Department core (20 credits)

ED 801	Philosophical and Ethical Issues in Educational Leadership	4
ED 802	Advanced Education Politics and Policy	4
ED 804	Learning Theories and Psychological Issues in Education	4
ED 901	Field-Based Mentorship Issues I	2
ED 902	Field-Based Mentorship Issues II	2
ED 903	Leadership Research Issues and Proposal Development	4

c. Cognate requirement (28 credits)

Students may complete their cognate requirement in an allied field of study or through a personalized cognate plan developed in conjunction with the program adviser.

Students who have completed an Education Specialist degree from Oakland University or another accredited university may receive cognate credit up to 28 credits for their work on this degree.

Cognate in Higher Education Administration (28 credits)

A cognate in higher education is available for students interested in higher education leadership in a college or university, or in higher education planning and policy formation in a governmental, accreditation, or other related agency or organization. Prior admission into the Ph.D. in education program is not required for enrollment in Higher Education cognate courses.

Higher Education Administration cognate required courses (20 credits)

ED 911	Contemporary American Higher Education	4
ED 912	Administering the College or University	4
ED 913	Executive Processes of Leadership and Management	4
ED 921	Resource Management in Higher Education	4
ED 925	Current Topics in Higher Education	4

Higher Education Administration cognate internship courses (4-8)

ED 914	Internship in Higher Education	4-8

Higher Education Administration Electives (4 credits)

ED 919	Student Services Administration in Higher Education	4

d. Dissertation (minimum of 16 credits)

ED 999	Dissertation Research	minimum of 16

Non-course requirements

Academic advising

Upon acceptance into the program, the Ph.D. program coordinator advises students initially. Students who must complete a cognate will be assigned to a program adviser to assist in planning a cognate course of study. Each student will seek a dissertation chairperson after completion of all coursework.

Residency

Students must complete a residency for the purpose of concentrating study and fostering close and continuous contact with faculty, fellow graduate students and other professionals. The residency is met by completing 16 credits, excluding dissertation, in two consecutive semesters or 20 credits, excluding dissertation, in one calendar year.

Additional program information

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive examination is taken, as well as each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time to degree

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to

candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

■ Education Specialist in Leadership

Coordinator:
Brian O. Clark

Program description

The nationally recognized and state approved Education Specialist program is based on the belief that leadership must be distributed throughout schools and school districts. Thus, this program prepares teacher leaders as well as administrators to provide the leadership needed by effective school organizations. The Ed.S. program emphasizes a cohort structure with the belief that learning is increased by the ongoing interaction of all members of learning communities. A mentorship is required with the belief that theory must be linked to practice. A program portfolio is required with the belief that reflection on practice is key to building leadership capacity. Cohort members will develop the skills, knowledge, and dispositions needed to play many different leadership roles within the education profession.

Program delivery

The Education Specialist in leadership degree program requires 36 credits, all of which must be taken within the 22-month, cohort-structured program. Prescribed courses are generally taken one week night for fall and winter terms with some courses scheduled on periodic Saturdays. Summer sessions I and II, which are held back-to-back and are shorter in length, require two evenings per week. The action research project begins during the first semester and is presented during the final semester of the program.

Cohorts are formed at the main campus, online, and at various off-campus locations. Cohorts are limited to 20 students each.

Application terms and deadlines

Admission to the program will be made only for the fall semester for all on-ground cohorts. The distance learning education specialist cohorts begin in both the fall and winter semesters. Application deadlines are located on the Graduate Admissions Web site.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Evidence of a master's degree from a regionally accredited institution
- Two letters of recommendation from supervisors familiar with the candidate's current position
- A statement indicating willingness to make a two-year commitment to the program and a statement of personal goals after completing the educational leadership program
- Candidates may be interviewed by the program coordinator, who will make admission recommendations to Graduate Admissions
- Curriculum Vitae
- Site Preference Form

Admission requirements

Admission to the Education Specialist in leadership degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program.

The Faculty Council for the Education Specialist program will screen candidates after all application materials have been received by Graduate Admissions.

Degree requirements

The Education Specialist in leadership degree is awarded upon satisfactory completion of 36 credits in an approved program of study as follows.

Course requirements

EA 701	Internship Experience I	1
EA 702	Internship Experience II	1
EA 740	School as a Formal Organization	4
EA 741	School Business Management	4
EA 742	Educational Law	4
EA 743	Professional Seminar	2
EA 744	Long-Range Planning	2
EA 746	Curriculum and Staff Development	4
EA 747	Program Assessment	2
EA 748	Seminar on School/Community Development	2
EA 749	Testing Measurement and Data Analysis Techniques	2
EA 750	Action Research I	2
EA 751	Action Research II	2
EA 754	Human Resource Management and Supervision	4

Non-course requirements

Internship and field experiences

All program participants are paired with a mentor, who is a practicing administrator. The internship begins during the initial course and continues throughout the entire program. Goals and activities are mutually agreed upon by the intern, mentor and cohort coordinator. Mentors will also provide support and assistance to

Ed.S. students as they complete the field experience requirement of various courses during the program.

Academic portfolio

All program participants create an Ed.S. academic portfolio during the initial course. Using this framework, students will organize artifacts collected throughout their courses, field work and internship. Portfolios will be presented during the final seminar of the program.

Additional program information

Ph.D. cognate option

Upon completion of the Education Specialist in leadership degree program, students who choose to apply and are accepted into the Ph.D. in Education with a major in educational leadership program can use 28 of the 36 credits from the Ed.S. and apply it to the cognate area of the Ph.D. program.

■ Master of Education in Educational Leadership

Coordinator:

Thomas J. Tattan

Program description

The Master of Education in educational leadership degree program prepares students for elementary and secondary principalships. Students will expand their expertise and competence as teachers or professional staff members through exploring the research and theory of teaching, learning and administration. The program includes an internship, which helps students put theory into practice.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Two letters of recommendation from individuals in a supervisory relationship to the applicant
- Goal statement
- Copy of teaching certificate
- Compliance with regulations established by the Michigan Department of Education regarding criminal convictions.

Admission requirements

Admission to the Master of Education in educational leadership degree program is selective; meeting minimum criteria does not guarantee acceptance into the program. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- An undergraduate GPA of at least 3.0
- A teaching certificate
- Applicants must have taught for two years.

Students who are conditionally admitted to the program because of a lower GPA must complete a minimum of 8 credits (EL 500 and one other core class) with a grade of at least 3.2 in each course.

Degree requirements

The Master of Education in educational leadership degree is awarded upon satisfactory completion of 36 credits in an approved program of study.

a. Course requirements (36 credits)

EL 500	Introduction to Educational Leadership	4
EL 520	Schools, Students and Educational Equity	4
EL 530	Theories and Techniques of Leadership	4
EL 540	Educational Administration	4
EL 550	School Finance and Business Administration	4
EL 560	Staff and Curriculum Development for School Improvement	4
EL 620	Law for Teachers and Administrators	4
EL 630	Internship for School Leaders I	2
EL 640	Internship for School Leaders II	2
EL 690	Culminating Master's Practicum in Educational Leadership	4

Non-course requirements

Plan of study

Upon admission, a plan of study is prepared jointly by the student and the faculty adviser.

Academic progress

No grade below 2.8 may be applied to the degree, and an overall GPA of 3.0 must be maintained.

■ Post-Master's Graduate Certificate in Higher Education

Coordinators:
Sandra P. Packard and Jana Nidiffer

Program description

The Post-Master's Graduate Certificate in Higher Education is designed for individuals who would like to begin a career in higher education or for practicing university or college administrators who may already possess a doctoral degree, or who do not wish to pursue a doctoral degree at the present time, but wish to update and advance their professional knowledge and skills. It also serves mid-career professionals in other related work who wish to explore a career change. Through relevant coursework and administrative projects, students will gain a broad understanding of higher education practices, systems, policies and issues. They will also advance their skills and dispositions for successful leadership and management in higher education settings. Students accepted into the Ph.D. in educational leadership degree program may use certificate coursework towards the required cognate.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.

Admission requirements

Admission to the Post-Master's Graduate Certificate in Higher Education program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Students must have successfully completed a master's degree at an accredited college or university and meet Oakland University requirements for post-graduate enrollment.

Certificate requirements

The Post-Master's Graduate Certificate in Higher Education is awarded upon satisfactory completion of 16 credits in an approved program of study. Twelve of the credits are required courses and 4 of the credits are related graduate electives.

Course requirements

a. Core requirements (12 credits)

EL 611	Contemporary American Higher Education	4
EL 612	Administering the College or University	4
EL 613	Executive Process of Leadership and Management	4

b. Electives (4 credits)

Any related master's or doctoral course as approved by the program coordinator.

■ Master of Education in Teacher Leadership

Coordinators:
C. Robert Maxfield and Dyanne Tracy

This degree program is a joint offering between the Department of Teacher Development and Educational Studies and the Department of Educational Leadership. Applicants to the Master of Education in teacher leadership degree program apply through Graduate Admissions.

Application requirements

Applicants for admission must submit the following:

- An Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- A Supplemental Program Form
- A goal statement
- Two letters of recommendation
- A copy of the teaching certificate

Admission requirements

In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

Applicants for the Master of Education in teacher leadership will be selected based on experience, especially leadership experience, as reflected in an analysis of several criteria:

- An undergraduate GPA of at least 3.0
- A teaching certificate
- Ready access to K-12 classrooms

- At least one year K-12 teaching experience
- Two letters of recommendation from individuals in a supervisory relationship to the applicant
- A statement of professional goals
- Communication skills commensurate with graduate-level scholarship.

Program delivery

Students will become part of a cohort for the two years of the program. Courses will be delivered through Saturday classroom sessions as well as podcasts, on-site visitation and online instruction.

Degree requirements

The Master of Education in teacher leadership degree is awarded upon successful completion of 35 credits.

The program consists of 32 specific credits and one elective, as shown below.

Required courses (32 credits)

EST 662	Reflective Practitioner	4
EST 663	Collaborative Inquiry I	2
EST 664	Collaborative Practitioner	4
EST 665	Collaborative Inquiry II	2
EST 666	Inquiry to Practice I	2
EST 667	Applied Theory of Teacher Leadership I	2
EL 505	Organizational Change Agent	4
EL 506	Collaborative Inquiry III	2
EL 515	Teacher Leaders in the Education Profession	4
EL 516	Collaborative Inquiry IV	2
EL 525	Inquiry to Practice II	2
EL 535	Applied Theory of Teacher Leadership II	2

Elective course (3 credits)

One elective from SEHS may be applied	3

Non-course requirements

Plan of Study

Upon admission, a plan of study is prepared jointly by the student and the faculty adviser.

Academic progress

No grade below 3.0 may be applied to the degree.

Course sequence

YEAR 1

Fall	EST 662, Reflective Practitioner
	EST 663, Collaborative Inquiry I
Winter	EST 664, Collaborative Practitioner
	EST 665, Collaborative Inquiry II
Summer I	EST 666, Inquiry to Practice I
Summer II	EST 667, Applied Theory of Teacher Leadership I

YEAR 2

Fall	EL 505, Organizational Change Agent
	EL 506, Collaborative Inquiry III
Winter	EL 515, Teacher Leaders in the Education Profession
	EL 516, Collaborative Inquiry IV
Summer I	EL 525, Inquiry to Practice II
Summer II	EL 535, Applied Theory of Teacher Leadership II

■ DEPARTMENT OF HUMAN DEVELOPMENT AND CHILD STUDIES

405B Pawley Hall • (248) 370-3077 • Fax (248) 370-4242
www.oakland.edu/sehs

Chair:
Carol A. Swift

Professor:
Ronald M. Swartz, Ph.D., New York University

Associate professors:
Sandra M. Alber, Ed.D., Wayne State University
Ambika P. Bhargava, Ph.D., University of Texas, Austin
Janet E. Graetz, Ph.D., George Mason University
Darlene A. G. Groomes, Ph.D., Michigan State University
Andrew S. Gunsberg, Ph.D., University of Illinois
James M. Javorsky, Ph.D., Purdue University
M. Shannan McNair, Ed.D., University of Michigan
Sherri L. Oden, Ph.D., University of Illinois
Richard C. Pipan, Ed.D., University of North Carolina
Erica A. Ruegg, Ed.D., Texas Technological University
Carol A. Swift, Ph.D., University of Arizona

Assistant professors:
Julie A. Ricks-Doneen, Ph.D., Michigan State University
Sunwoo Shin, Ed.D., University of Memphis

Degree programs
Doctor of Philosophy in Education with a major in early childhood education

Master of Education in early childhood education

Master of Education in special education with concentrations in autism spectrum disorder, specific learning disability, emotional impairment or a dual concentration in specific learning disability and emotional impairment

Endorsement programs
Early Childhood Education

Special Education

Autism Spectrum Disorder

Specific Learning Disability

Emotional Impairment

The Department of Human Development and Child Studies offers programs leading to a Doctor of Philosophy in education with a major in early childhood education, degrees of Master of Education (M.Ed.) in early childhood education and in special education, teaching endorsements, and professional certification. The M.Ed. in early childhood education includes the early childhood endorsement for those who are certified teachers. A Master of Education in special education includes a concentration in specific learning disabilities (SLD), emotional impairment (EI) or autism spectrum disorder (ASD) that meets the requirements for the state approved teaching endorsement in the selected area(s). Certificate programs that also meet state requirements for the ASD endorsement are available.

■ Doctor of Philosophy in Education with a Major in Early Childhood Education

Coordinator:
Sherri L. Oden

Program description
The Ph.D. in education with a major in early childhood education is designed to prepare leaders for the field. The goals of the program are to develop and support leadership, research, and policy that will inform, support, and promote education for young children. Major areas of focus include early childhood development and educational theories, research, and policies, curricular and program approaches, literacy, cultural diversity, and transition to preschool and primary school classrooms.

The program provides preparation in quantitative and qualitative research methods. Students also select a cognate in complementary areas including special education, reading, educational leadership and administration, counseling, curriculum, professional development or other academic areas.

Graduates of the program are prepared to assume leadership, teaching, or research and policy positions in early childhood care and education settings, school systems, colleges and universities, early childhood organizations and government.

Admission terms and deadlines
Students are admitted in the fall semester only. Applications will be accepted until June 1 for the following fall semester.

Application requirements
The application materials and steps to be completed are:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational

institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Three letters of recommendation, at least one from a graduate academic source and one from a professional in the field
- Official scores for the Graduate Record Examination (GRE)
- Official scores for the Test of English as a Foreign Language (TOEFL) from applicants who are graduates of programs taught in a language other than English
- Professional curriculum vitae
- Personal essay statement, describing professional goals, experiences and philosophy
- Two writing samples related to early childhood education, which may include professional reports, academic course papers, publications or presentations
- An interview (to be scheduled by the program coordinator) with the program coordinator and other faculty members, and written assignment to be completed as part of the interview.

Admission requirements

Admission to the Doctor of Philosophy in education: early childhood education degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

Finalists will be selected based upon a review of the criteria below, as well as the personal statement, samples of writing, letters of recommendation, and the interview and written assignment:
- Completion of a master's degree or equivalent in early childhood education or an allied field
- Minimum graduate grade-point average of 3.6
- Three years of professional experience in early childhood education or an allied field.

Degree requirements

The Doctor of Philosophy in education: early childhood education degree program is awarded upon satisfactory completion of a minimum of 80 credits beyond the master's degree in an approved program of study: 12 credits in the foundation core, 32 credits in the department core, 20 credits in the cognate, and a minimum of 16 credits for the dissertation.

Previously earned graduate credits may apply if they did not count toward the qualifying master's degree and if they are equivalent to a required course for the program or are part of an approved cognate.

Course requirements

a. Foundation core (12 credits)

EC 730	Doctoral Professional Seminar I	2
EC 731	Doctoral Professional Seminar II	2
EC 732	Research Methodology	4
EC 733	Analytical Methods	4

b. Department core (32 credits)

EC 809	Development and Early Learning: Theories and Research Studies	4
EC 844	Paradigms of Early Education and Curriculum Design	4
EC 851	Field-Based Project I	4
EC 852	Field-Based Project II	4
EC 862	Curriculum Investigation: Practice and Theory	4
FE 802	Ecology of Early Learning: Health Care and Education	4
FE 873	Policy Studies in Early Education: Culture, Economics and Politics	4
SE 861	Special Education: Early Childhood Seminar	4

c. Cognate (20 minimum credits)

The cognate courses should complement the core foundation and department courses. The cognate area of study may include courses within or outside the department upon advisement by the adviser and the program coordinator.

d. Dissertation (16 minimum credits)

FE 994	Dissertation Proposal Planning	4
EC 995	Dissertation Development Seminar	2 to 8
EC 999	Dissertation Implementation and Writing	1 to 8
FE 996	Dissertation Data Analysis Lab	2 to 8

Non-course requirements

Academic advising

Upon acceptance into the program, students are advised initially by the early childhood Ph.D. program coordinator. Toward the end of the first year of study, each student, in consultation with the program coordinator and faculty members, selects a faculty adviser who guides the student in planning a program of study, including establishment of a portfolio, design of a cognate, and preparation for completion of qualifying comprehensive exams and the dissertation. The adviser and program coordinator advise the student to form a committee of faculty members who will provide further guidance and evaluation for the exams and the dissertation.

Residency requirement

Students must complete at least 16 credits (excluding dissertation credits) during one of the academic (or calendar) years of the student's program of doctoral study. Further, students are required to register for one credit every fall and winter after their admission to the program. Exceptions to this policy must be approved by the program coordinator.

Qualifying comprehensive examinations

To prepare for exams, the student's adviser and a minimum of two additional faculty members comprise the Doctoral Advisory Exam Committee and meet with the student to review the student's portfolio — a major source for determining the student's interests, strengths, and areas for further development. When the student elects to take the exams, the committee either grants approval to proceed or proposes a plan for further study, coursework, or other appropriate preparation necessary for taking the exams. Exam questions assess the student's knowledge with respect to challenging issues in the field, e.g., comparing and contrasting major theories, approaches, and policies in early childhood education and care; implications of the knowledge base for child care and education, preschool, and primary school early childhood curricula/programs; and for designing early childhood curricula and program approaches, evaluations, research studies, and policy initiatives.

To pass qualifying exams, the student must demonstrate competence in the following four segments:

1. Comprehensive knowledge of the foundational core and early childhood education. This exam segment assesses the student's knowledge of the foundational and early childhood core coursework areas, including the major theories, research methods and findings, educational practices and public policies. This segment of the exam is conducted on a "take-home" basis, with a limited time frame.
2. In-depth knowledge of a specific area in early childhood education. This segment of the exam is a qualifying paper that demonstrates an in-depth knowledge of a particular area of focus. The topic must be approved by the chair of the Doctoral Advisory Committee, who also sets a minimum page requirement and a style format. The paper must be completed by a date set by the committee as a part of the exam process.
3. Comprehensive knowledge of a cognate area. This exam segment assesses the student's knowledge in a cognate area (a complementary area of study). This segment of the exam is conducted on a "take-home" basis, with a limited time frame.
4. The oral examination. Upon successful completion of the written segments of the qualifying comprehensive exam (parts 1, 2, and 3) explained above, the student proceeds to take the oral segment of the exams. This exam segment provides an opportunity for the student to make a presentation in an area of special interest (usually the area of the in-depth paper) and to demonstrate the ability to respond to questions from the faculty about the presentation and related issues.

The Doctoral Advisory Committee assesses the student's performance on the written and oral parts of the exam to determine if the student is adequately prepared to proceed as a candidate for dissertation preparation. If the student's qualifying exam performance is determined to be inadequate, the Doctoral Advisory Committee may recommend further preparation, e.g., coursework, writing, or study.

Dissertation

The dissertation is an original contribution to the field of study through disciplined inquiry. Conducting the dissertation study, writing, and defending a dissertation should be accomplished in accordance with the highest professional standards. The student's dissertation adviser and a minimum of three additional faculty members (one external to the department) comprise the Dissertation Committee and advise the student on the formation of a dissertation proposal. The written format for the proposal is specified by the committee, and the student orally presents and defends the dissertation proposal. The committee assesses the student's written and oral presentation of the proposal and determines if modifications in the proposal are needed prior to the student conducting the research. The committee members, led by the dissertation adviser, continue to advise the student throughout the research and the preparation of the dissertation manuscript. Students must obtain a copy of the dissertation format requirements from Graduate Study and Lifelong Learning so that the dissertation manuscript conforms to university standards.

Final oral examination and dissertation defense

The oral defense of the dissertation is held after the dissertation is completed and approved by the committee. The purpose of the oral defense is to enable the dissertation committee to judge the quality of the investigation and the student's ability to defend and communicate the work. A copy of the dissertation is made available for review in the Office of The Dean of the School of Education and Human Services, and the announcement of the date, time, and location of the defense is distributed to the faculty. The oral defense is to be attended by the Dissertation Committee members and is open to all School of Education and Human Services faculty and the university community. Final approval and acceptance of the doctoral dissertation requires a favorable vote of the Dissertation Committee with no more than one dissenting vote. The Dissertation Committee determines the adequacy of the student's oral defense and if there are to be modifications for the dissertation manuscript, which is then subject to final approval by the committee. The committee may permit reexamination, if the initial dissertation defense is deemed inadequate.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive qualifying examination is taken, the preliminary dissertation proposal oral defense, and for each subsequent term (fall and winter) until all the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to

candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

Graduation

Three copies of the approved dissertation manuscript must be submitted to Graduate Study and Lifelong Learning by the date published in the *Schedule of Classes* for the term in which the student expects to graduate. (See "Thesis and Dissertation" in the Graduation Information section of this catalog).

■ Master of Education in Early Childhood Education

Coordinator:

Ambika Bhargava

Program description

The program prepares professionals to work with children from birth through age eight in public and private schools and agency settings. It also provides training for the direction and evaluation of early childhood programs and the coordination of community resources for young children and families. The program combines theory with observation and participation in clinical, community and school practicum settings.

The program emphasizes a broad interdisciplinary view of early childhood education and child development. Also emphasized are multicultural issues concerning young children and their families, and the need for educational programs to respect and respond to children's developmental variabilities and exceptionalities.

Admission terms and deadlines

June 1 for fall admission, October 1 for winter admission, April 1 for summer admission.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Two letters of recommendation from individuals who are in a supervisory relationship to the applicant
- Goal statement which includes the reasons for application, the intended focus of graduate study, professional and career goals, and a description of experiences and accomplishments in working with children and their families.

Admission requirements

Admission to the Master of Education in early childhood education degree program is selective; meeting minimum criteria does not guarantee acceptance. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the minimum admission requirements established by the academic program as listed below:

- To be admitted to the M.Ed in early childhood education degree program in full standing, the applicant must have an undergraduate cumulative grade point average (GPA) of 3.0 or above. Applicants with an undergraduate GPA less than 3.0, but with an appropriate academic background and strong letters of recommendation, may be considered for admission in limited standing. Students who qualify for this admission classification must complete a maximum of 12 credits of graduate coursework with a grade of 3.0 or above in each course within the first three academic terms from the time of initial enrollment.
- Completion of a minimum of 24 credits at the undergraduate or graduate level in education, humanities, social sciences, health or an appropriate related field (this requirement is carefully weighed by the department's faculty admissions committee).

Degree requirements

The Master of Education in early childhood education degree is awarded upon satisfactory completion of a minimum of 36 credits beyond the master's degree in an approved program of study.

To fulfill the degree requirements, the student must complete the planned program of 36 credits, with a GPA of 3.0 or above within the six-year period allowed for the degree.

Course requirements

Level I (20 to 22 credits):

EC 540	Theories of Child Development and Education	4
EC 542	Applied Developmental Principles	4
EC 543	Teacher as Child Advocate and Adult Educator	4
EC 544	Adult-Child Interaction: Play and Mediation of Learning	4
EC 645	Observation and Assessment of the Young Child	4
EC 546	Practicum in Early Childhood	2

Level II (12 credits):

Prerequisite is completion of all courses in Level I.

FE 509	Family, Child and Learning in Cultural Context	4
Elective	See possible course options below	4
FE 593	Research Project in Early Childhood Education: Phase I	4

Possible course options for elective:

EC 545	Administration and Direction of Early Childhood Programs	4
EC 547	Infants: Normal and Exceptional Development and Programming	4
EC 548	Toddlers: Normal and Exceptional Development and Programming	4
EC 550	Special Problems in Education — Early Childhood	2, 4 or 8
EC 549	Development of the Young Exceptional Child	4
EC 644	Play and Development of the Hospitalized Child	4
EC 651	Gifted and Talented Young Children	4

* A Petition of Exception is required for approval of an equivalent course not listed here.

Level III (4 credits)

Prerequisite is completion of all courses in Level II.

EC 650	Research Project in Early Childhood Education: Phase II	4

This is the final requirement of the program and consists of class meetings, seminars and the completion of an action project and a project report.

Application for Degree

Students must apply to graduate by the deadlines imposed by the university in order to be eligible for graduation.

Early Childhood Education Endorsement

Endorsements generally refer to any content areas or specializations that are added to a teaching certificate and can be used as planned programs for professional certification. Only those individuals who hold a teaching certificate are eligible for an endorsement. Both coursework and a practicum experience are required. The endorsement program in Early Childhood Education requires 22-24 credits.

Program description

This program consists of the five courses in Level 1 of the M.Ed. plus a 2-credit state-mandated practicum (EC 546) and may be applied for as an endorsement only program. Credits vary from 22-24, depending upon the student's background and the need to fulfill practicum requirements. The students in the M.Ed. program may apply for the endorsement upon completion of Level 1 requirements, plus the practicum, and successful completion of the state competency exam.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Two recommendations from those who can attest to the applicant's potential for successful graduate study
- Copy of current (or most recent) teaching certificate
- Goal statement, which includes the reason for application, the intended focus of graduate study, a description of professional experiences and accomplishments, and professional and career goals
- Additional information is required before international applicants can apply for and be granted a student visa. Further information is in the General Admission Requirements section of the graduate catalog.

Relationship to the Master of Education in Early Childhood Education

The endorsement is attained through completion of Level 1 courses, for those students who are eligible (hold a teaching certificate). Courses taken prior to admission to the degree may count toward the degree if completed within the six-year time frame allowed for the degree.

■ Master of Education in Special Education

Coordinator:

Carol A. Swift

Program description

The Master of Education in special education is a degree focusing on 1) the broader concepts of exceptionality – learning, instruction and development and 2) an in-depth preparation for one or two areas of exceptionality. Exploration of theory and research and advanced application in instruction and assessment with selected populations are integrated throughout the program.

The Master of Education in special education degree is designed to provide students advanced training and expertise in a chosen area of concentration. The areas of concentration offered within the M.Ed. in special education degree program at Oakland University are:

- M.Ed. with a concentration in specific learning disability
- M.Ed. with a concentration in emotional impairment
- M.Ed. with a concentration in autism spectrum disorder.

Admission terms and deadlines

July 1 for fall admission, November 1 for winter admission, March 1 summer admission.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Two recommendations from those who can attest to the applicant's potential for successful graduate study
- Copy of current (or most recent) teaching certificate
- Goal statement, which includes the reason for application, the intended focus of graduate study, a description of professional experiences and accomplishments, and professional and career goals
- Additional information is required before international applicants can apply for and be granted a student visa. Further information is in the General Admission Requirements section of the graduate catalog.

Admission requirements

Admission to the Master of Education in special education degree program is selective. In making admission recommendations to the M.Ed. in special education program, the department assesses the potential of applicants for success in the program by examining their undergraduate records, goal statement, supplemental program form, letters of recommendation, prerequisite courses and any other admission requirement established by the academic program.

To be admitted to the M.Ed. in special education degree program in full standing, the applicant must have an undergraduate cumulative grade point average (GPA) of 3.0 or above. Applicants with an undergraduate GPA less than 3.0, but with an appropriate academic background and strong letters of recommendation, may be considered for admission in limited standing. Students who qualify for this admission classification must complete a maximum of 12 credits of graduate coursework with a grade of 3.0 or above in each course within the first three academic terms from the time of initial enrollment.

Degree requirements

Students must complete the 44-56 credits of graduate coursework, including foundation core, degree core, concentration and exit courses. The foundation courses will be considered for waiver with previous equivalent or similar undergraduate or graduate coursework as reflected on an official transcript. Waivers reduce the number of credits required to complete the degree by 4-8 credits.

Students must complete the credits required for the degree with a GPA of 3.0 or higher within the six-year period required by the university. Students must apply to graduate by the deadlines set by the university in order to be eligible for graduation.

M.Ed. in Special Education with a concentration in specific learning disability

Course requirements

a. Foundation requirements* (8 credits):

SE 501	Introduction to the Student with Special Needs (or equivalent)	4
FE 506	Child Development, Variability and Learning (or equivalent)	4

* Foundation courses may be waived with documentation of equivalents thus reducing the overall credit requirement.

b. Core requirements (24 credits)

SE 502	Legal Issues in Special Education	4
SE 518	Organization and Management of Instructional Behaviors and Environments	4
SE 517	Language and Exceptional Children and Youth	4
SE 524 or SE 624	Assessment in Special Education Advanced Diagnostics (Prerequisite: SE 524 or approved equivalent)	4 4
SE 601	Issues and Trends in Special Education	4
SE 619	Theory, Research and Practice in Special Education	4

c. SLD concentration (12 credits)

RDG 510	Inquiry-Based Literacy Instruction	4
EST 532	Diagnosis and Remediation in Mathematics	4
SE 523	Educational Procedures for Students with Specific Learning Disability	4

d. Exit option A (8 credits)

SE 592	Practicum: Specific Learning Disability K-12	4
SE 699	Final Project in Special Education	4

Exit option B (12 credits)

SE 592	Practicum: Specific Learning Disability K-12	4
Electives	Must be approved	8

M.Ed. in Special Education with a concentration in autism spectrum disorder

Course requirements

a. Foundation requirements* (8 credits):

SE 501	Introduction to the Student with Special Needs (or equivalent)	4
FE 506	Child Development, Variability and Learning (or equivalent)	4

* Foundation courses may be waived with documentation of equivalents, thus reducing the overall credit requirement.

b. Core requirements (16 credits)

SE 502	Legal Issues in Special Education	4
SE 524 or SE 624	Assessment in Special Education Advanced Diagnostics (Prerequisite: SE 524 or approved equivalent)	4 4
SE 601	Issues and Trends in Special Education	4
SE 619	Theory, Research and Practice in Special Education	4

c. ASD concentration (20 credits)

SE 559	Overview of Autism Spectrum Disorder	4
SE 527	Educational Procedures for Students with Autism Spectrum Disorder	4
SE 578	Communication and Language Issues in Autism Spectrum Disorder	4
SE 579	Behavioral and Social Issues in Students with Autism Spectrum Disorder	4
SE 596	Collaboration and Consultation Skills: Autism Spectrum Disorder	4

d. Exit option A (8 credits)

SE 591	Practicum: Autism Spectrum Disorder K-12	4
SE 699	Final Project in Special Education	4

Exit option B (12 credits)

SE 591	Practicum: Autism Spectrum Disorder K-12	4
Electives	Must be approved	8

M.Ed. in Special Education with a concentration in emotional impairment

Course requirements

a. Foundation requirements* (8 credits):

SE 501	Introduction to the Student with Special Needs (or equivalent)	4
FE 506	Child Development, Variability and Learning (or equivalent)	4

* Foundation courses may be waived with documentation of equivalents, thus reducing the overall credit requirement.

b. Core requirements (24 credits)

SE 502	Legal Issues in Special Education	4
SE 518	Organization and Management of Instructional Behaviors and Environments	4
SE 517	Language and Exceptional Children and Youth	4
SE 524 or SE 624	Assessment in Special Education Advanced Diagnostics (Prerequisite: SE 524 or approved equivalent)	4 4
SE 601	Issues and Trends in Special Education	4
SE 619	Theory, Research and Practice in Special Education	4

c. EI concentration (12 credits)

SE 510	Students with Behavioral and/or Emotional Impairment	4
SE 520	Educational Procedures for Students with Emotional Impairment	4
SE 620	Advanced Interventions and Resources for Students with Emotional Impairment	4

d. Exit option A (8 credits)

SE 594	Practicum: Emotional Impairment K-12	4
SE 699	Final Project in Special Education	4

Exit option B (12 credits)

SE 594	Practicum: Emotional Impairment K-12	4
Electives	Must be approved	8

Dual concentration

Oakland University also offers students the Master of Education in special education degree with a dual concentration in specific learning disability and emotional impairment.

This degree program consists of 56-64 credits of graduate coursework, including foundation core, degree core, SLD concentration, EI concentration and exit courses. The foundation courses will be considered for waiver with previous equivalent or similar undergraduate or graduate coursework as reflected on official transcript. Waivers reduce the number of credits required to complete the degree by 4-8 credits.

M.Ed. in Special Education with a dual concentration in specific learning disability and emotional impairment

Course requirements

a. Foundation requirements* (8 credits):

SE 501	Introduction to the Student with Special Needs (or equivalent)	4
FE 506	Child Development, Variability and Learning (or equivalent)	4

* Foundation courses may be waived with documentation of equivalents, thus reducing the overall credit requirement.

b. Core requirements (24 credits)

SE 502	Legal Issues in Special Education	4
SE 518	Organization and Management of Instructional Behaviors and Environments	4
SE 517	Language and Exceptional Children and Youth	4
SE 524	Assessment in Special Education	4
or		
SE 624	Advanced Diagnostics (Prerequisite: SE 524 or approved equivalent)	4
SE 601	Issues and Trends in Special Education	4
SE 619	Theory, Research and Practice in Special Education	4

c. SLD concentration (12 credits)

RDG 510	Inquiry-Based Literacy Instruction	4
EST 532	Diagnosis and Remediation in Mathematics	4
SE 523	Educational Procedures for Students with Specific Learning Disability	4

EI concentration (12 credits)

SE 510	Students with Behavioral and/or Emotional Impairment	4
SE 520	Educational Procedures for Students with Emotional Impairment	4
SE 620	Advanced Interventions and Resources for Students with Emotional Impairment	4

d. Exit (8 credits)

SE 592	Practicum: Specific Learning Disability K-12	4
SE 594	Practicum: Emotional Impairment K-12	4

■ Endorsement and Certificate Programs in Special Education

Graduate Certificate in Autism Spectrum Disorder

(Pending final approval Fall 2009)

Program description

The courses for the graduate certificate program and the area of concentration within the degree program meet the state requirements for an endorsement in Autism Spectrum Disorder (ASD). The credits for the graduate certificate program in Autism Spectrum Disorder (ASD) varies from 24 to 42. Completion of a practicum is required for those seeking an endorsement from the state. Students should contact the program coordinator to confirm application procedures for the practicum and submission deadlines.

Application requirements

To be considered for graduate admission, an applicant must submit all the general admission requirements listed below:

- Application for Admission to Graduate Study
- An earned baccalaureate degree from an accredited U.S. institution, OR a degree equivalent to a four-year U.S. baccalaureate degree from a college or university of government recognized standing
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Two recommendations from those who can attest to the applicant's potential for successful graduate study
- Copy of current (or most recent) teaching certificate
- Goal statement, which includes the reason for application, the intended focus of graduate study, a description of professional experiences and accomplishments, and professional and career goals
- Additional information is required before international applicants can apply for and be granted a student visa. Information is in the General Admission Requirements section of the graduate catalog.

Admission requirements

Admission to the Graduate Certificate in Autism Spectrum Disorder program is selective. In making admission recommendations to the graduate certificate program the department assesses the potential of applicants for success in the program by examining their undergraduate records, goal statement, supplemental program form, letters of recommendation, audition, prerequisite courses and any other admission requirement established by the academic program.

To be admitted to the graduate certificate program in full standing, the applicant must have an undergraduate cumulative grade point average (GPA) of 3.0 or above. Applicants with an undergraduate GPA less than 3.0, but with an appropriate academic background and strong letters of recommendation, may be considered for admission in limited standing. Students who qualify for this admission classification must complete a maximum of 12 credits of graduate coursework with a grade of 3.0 or above in each course within the first three academic terms from the time of initial enrollment.

Option A (24 credits)

Requires an applicant to hold a prior special education endorsement in Michigan. Meets state requirements for the teaching endorsement.

Certificate core

SE 559	Overview of Autism Spectrum Disorder	4
SE 527	Educational Procedures for Students with Autism Spectrum Disorder	4
SE 578	Communication and Language Issues in Autism Spectrum Disorder	4
SE 579	Behavioral and Social Issues in Students with Autism Spectrum Disorder	4
SE 596	Collaboration and Consultation Skills: Autism Spectrum Disorder	4
SE 591	Practicum: Autism Spectrum Disorder K-12	4

Option B (32-40 credits)

Requires an applicant to have a valid teaching certificate in the state of Michigan and be eligible for a state approved teaching endorsement. Meets state requirements for the teaching endorsement.

Foundation core*

SE 501	Introduction to the Student with Special Needs (or equivalent)	4
FE 506	Child Development, Variability and Learning (or equivalent)	4

*Foundation courses may be waived with documentation of equivalents, thus reducing overall credit requirement by 4-8 credits.

Certificate core

SE 502	Legal Issues in Special Education	4
SE 559	Overview of Autism Spectrum Disorder	4
SE 527	Educational Procedures for Students with Autism Spectrum Disorder	4
SE 578	Communication and Language Issues in Autism Spectrum Disorder	4
SE 579	Behavioral and Social Issues in Students with Autism Spectrum Disorder	4
SE 596	Collaboration and Consultation Skills: Autism Spectrum Disorder	4
SE 524	Assessment in Special Education	
SE 591	Practicum: Autism Spectrum Disorder K-12	4

Option C (24-32 credits)

For individuals who wish to increase their expertise in Autism Spectrum Disorder but are not seeking the state-approved teaching endorsement.

Foundation core*

SE 501	Introduction to the Student with Special Needs (or equivalent)	4
FE 506	Child Development, Variability and Learning (or equivalent)	4

* Foundation courses may be waived with documentation of equivalents, thus reducing overall credit requirement by 4-8 credits.

Certificate core

SE 559	Overview of Autism Spectrum Disorder	4
SE 527	Educational Procedures for Students with Autism Spectrum Disorder	4
SE 578	Communication and Language Issues in Autism Spectrum Disorder	4
SE 579	Behavioral and Social Issues in Students with Autism Spectrum Disorder	4
SE 596	Collaboration and Consultation Skills: Autism Spectrum Disorder	4
or		
SE 590	Special Topics: Counseling Issues for Special Needs	4
SE 628	Advanced Practicum in Special Education	4

Relationship to the Master of Education in Special Education

Requirements for the certificate and endorsement programs are contained within the degree programs. Courses taken in an endorsement or certificate program may apply to the M.Ed. if taken within the six-year time frame allowed for the degree.

■DEPARTMENT OF HUMAN RESOURCE DEVELOPMENT

435A Pawley Hall • (248) 370-4109 • Fax (248) 370-4095
www.oakland.edu/sehs/hrd

Chair:
Michael P. Long

Professors emeriti:
F. James Clatworthy, Ph.D., University of Michigan
William C. Fish, Ed.D., Columbia University
William F. Moorhouse, Ed.D., University of Wyoming
Robert G. Payne, Ph.D., University of Michigan

Professor:
Susan M. Awbrey, Ph.D., Michigan State University

Associate professors:
Michael P. Long, J.D., Detroit College of Law
Billy Joe Minor, Ph.D., Indiana University
James Quinn, Ph.D., University of Iowa
Chaunda L. Scott, Ed.D., Columbia University

Assistant professors:
Tomas R. Giberson, Ph.D., Wayne State University

Visiting assistant professor:
Judy L. Jacobs, Ph.D., Union Institute & University

Special instructor:
Mark S. Doman, J.D., University of Minnesota

Technology consultant:
George Preisinger

■ Master of Training and Development

Program description

The program is designed to develop practitioners with the knowledge and skills required to enhance individual and organization development and performance. Graduates of the program will be able to lead and support interventions and processes associated with diagnosing individual and organization performance problems and opportunities, designing and implementing solutions, and evaluating results.

Graduates of the program will be qualified to work as human resource development professionals, including directors of training centers, organization development consultants, instructional designers and performance technologists.

The MTD program is offered as an off-campus program delivered at the Seaholm High School facility in Birmingham, Michigan, and the Macomb University Center in Clinton Township, Michigan. Students are admitted on a full-time and part-time basis and must complete the program in six years. Full-time students can complete the program in two and a half years.

Admission terms

Students are admitted for the fall and winter semesters. Application to the MTD program is initiated through Oakland University Graduate Admissions. Graduate Admissions must receive all application materials at least five weeks prior to the beginning of the semester in which the applicant wishes to enroll. Completed applications are reviewed by the Graduate Admissions Committee in the Department of Human Resource Development, four weeks prior to the beginning of each semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level course work beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in course work both pre- and post-bachelor's degree.
- A formal statement detailing work and life experiences of preferably one year or longer that have led to the desire to pursue the Master of Training and Development degree program. The statement must be between 1,000 and 1,500 words.
- Three recommendations that attest to the quality and scope of the applicant's academic and professional ability.

Admission requirements

Admission to the Master of Training and Development program is competitive and meeting the minimum requirements does not guarantee admission into the program. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Official transcripts for undergraduate and graduate coursework, showing a bachelor's degree from a regionally accredited institution with a cumulative grade-point average of 3.0 or better. Applicants who do not meet this standard may be conditionally admitted and must complete the first 12 credits of the graduate program with a grade of 3.2 or above before conditional status is removed.
- The formal statement is evaluated on the basis of quality of writing, organization of ideas, clarity of expression and compatibility with program goals.
- An interview will be required of all students.

Degree requirements

The Master of Training and Development degree is awarded upon satisfactory completion of 36 credits in an approved program of study.

Course requirements

a. Core requirements (20 credits)

Completion of five core courses:

HRD 503	Instructional Design	4
HRD 506	Theoretical Foundations in Training and Development	4
HRD 507	Needs Assessment	4
HRD 605	Program Evaluation	4
HRD 611	Program Administration	4

b. Electives (16 credits)

Students will select the remaining four courses, with the approval of the academic adviser, within one of the two following paths:

1. Instructional Design and Technology

HRD 550	Trends and Issues in Technology-based Training	4
HRD 603	Advanced Instructional Design	4
HRD 625	Instructional Design Theory to Practice	4
500 or 600-level HRD course	With approval of MTD adviser	4

2. Organization Development and Leadership

HRD 504	Organization Development	4
HRD 530	Team Development	4
HRD 635	Leadership Theory and Development	4
500 or 600-level HRD course	With approval of MTD adviser	4

Non-course requirements

Academic advising

Upon admission, each student is assigned an academic adviser who is a faculty member in the Department of Human Resource Development. Together the student and the academic adviser establish a program plan, and meet each term prior to course enrollment to facilitate successful completion of the degree program.

Academic progress

Completion of 36 approved credits with an overall grade-point average of 3.0 or better. Credit toward the degree will not be given for courses with grades under 2.8.

■DEPARTMENT OF READING AND LANGUAGE ARTS

485K Pawley Hall • (248) 370-3065 • Fax (248) 370-4367
www.reading.oakland.edu

Chair:
James F.Cipielewski

Professors emeriti:
Richard F. Barron, Ph.D., Syracuse University
Jane M. Bingham, Ph.D., Michigan State University
Gloria T. Blatt, Ph.D., Michigan State University
Robert J. Christina, Ph.D., Syracuse University
George E. Coon, Ed.D., Wayne State University

Distinguished professor:
Ronald L. Cramer, Ph.D., University of Delaware

Professors:
John E. McEneaney, Ph.D., University of Georgia
Robert M. Schwartz, Ph.D., University of Illinois
Toni S. Walters, Ph.D., Oakland University

Associate professors:
James F. Cipielewski, Ph.D., Oakland University
LeDong Li, Ph.D., Oakland University
Mary K. Lose, Ed.D., Drake University
Linda M. Pavonetti, Ed.D., University of Houston
Anne E. Porter, Ph.D., Wayne State University
Gwendolyn M. McMillon, Ph.D., Michigan State University

Assistant professors:
Tanya Christ, Ph.D., University of Buffalo, SUNY
S. Rebecca Leigh, Ph.D., University of South Carolina

Visiting assistant professor:
Linda J. Ayres, Ph.D., Oakland University

Special Instructor:
Annette M. Osborne, Ph.D., Oakland University

The Department of Reading and Language Arts offers:
Doctor of Philosophy in reading education

Master of Arts in Teaching in reading and language arts

Master of Arts in Teaching in reading and language arts with endorsement in early childhood (ZA)

Microcomputer Applications Graduate Certificate

Advanced Microcomputer Applications Graduate Certificate

Michigan Certificate Endorsement in Reading

Post-Master's Graduate Certificate in Reading, Language Arts and Literature

Post-Master's Advanced Graduate Certificate in Reading, Language Arts and Literature

■ Doctor of Philosophy in Reading Education

Coordinator:
Robert M. Schwartz

Program description

Reading and language arts education is predicated upon an understanding of such diverse domains of knowledge as linguistics, psychology, psychometrics and educational psychology, to mention just a few. A well-prepared reading and language arts professional must have a solid foundation in: learning theory, language development, literature, composition, comprehension, word recognition, diagnosis and correction of reading performance, theoretical models of reading, as well as a historical perspective on reading and language arts as it has developed over the past century. Well-versed reading and language arts experts must possess a solid theoretical background, as well as the practical knowledge required to teach reading and the related language arts in classrooms, clinical settings, or in university programs.

The Reading and Language Arts Department is committed to offering a program of study that prepares students to conduct and evaluate research, to master the art of teaching children and adults to read and write, and to understand and appreciate the wealth of knowledge that related disciplines can contribute to literacy instruction.

Application terms and deadlines

All application materials must be received by Graduate Admissions by March 1.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Personal statement
- Three letters of recommendation
- Curriculum Vitae
- Miller Analogy Test (MAT) score.

Admission requirements

Admission to the Doctor of Philosophy in reading education degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Letters of recommendation
- Prior coursework at the undergraduate and graduate levels
- Writing ability as revealed through a personal essay
- Professional background as indicated in a curriclum vita
- Scores on the Miller Analogies Test (MAT).

Final admission recommendations are then made by the Reading and Language Arts faculty working as a committee of the whole. Applications for fall admission are reviewed during the previous winter semester.

Program prerequisite requirements

Depending on previous professional experiences and training, doctoral students may be asked to take a limited number of courses prior to the 700-level courses of the core program.

Degree requirements

The Doctor of Philosophy in reading education degree is awarded upon satisfactory completion of the approved program of study.

When appropriate, up to 36 graduate credits earned in a master's degree at Oakland University or other accredited universities may be applied toward the Ph.D. degree, upon approval of the Reading and Language Arts faculty and Graduate Study and Lifelong Learning.

The Ph.D. program consists of four parts: the reading and language arts core component, the research core component, the planned sequence component and the dissertation component.

The reading and language arts core and research components consist of 13 or 14 advanced courses taught in seminar fashion. The reading and language arts seminars cover topics such as theoretical models of reading, comprehension, cognitive psychology, children's literature, advanced diagnosis and correction, composing processes and instructional technology. The research seminars cover topics such as systematic inquiry, research design, qualitative and quantitative approaches to research, methods and tools of research, applied research, and actively engage students in conducting research.

Course requirements

a. Reading and Language Arts core requirements (28 credits)

RDG 703	Advanced Diagnostic and Corrective Reading	4
RDG 704	Perspectives in Literature	4
RDG 705	Perspectives in Writing	4
IST 706	Perspectives in Instructional Systems Technology	4
RDG 707	Theoretical Models and Historical Perspectives	4
RDG 708	The Psychology of Reading	4
RDG 709	Doctoral Seminar in Reading	4

b. Research core requirements (24 or 28 credits)

RDG 706	Critical Inquiry in Reading and Language Arts	4
RDG 710	Educational Research in Reading and Language Arts	4
RDG 720	Qualitative Research Design and Methods in Reading and Language Arts	4
RDG 725	Quantitative Research Design and Methods in Reading and Language Arts	4
RDG 730*	Advanced Qualitative Research Design and Methods in Reading and Language Arts	4
RDG 735*	Advanced Quantitative Research Design and Methods in Reading and Language Arts	4
RDG 750	Research Practicum in Reading and Language Arts	4

* Students must select one Advanced Design and Methods course, as part of their research program of study. When students opt to take both Advanced Design and Methods courses, then their planned sequence coursework will be a minimum of 16 credits, and their research core component will be 28 credits.

c. Planned sequence requirements (16 or 20 credits)

The planned sequence component consists of 16 or 20 semester hours of study selected by the student, with the advice of an adviser, to serve that student's needs and interests. The planned sequence must be approved and signed by the student's adviser. The planned sequence may include study in related disciplines such as (but not limited to) linguistics, psychology, English, instructional systems technology, school administration, children's literature, composition, or guidance and counseling.

d. Dissertation (20 credits)

The dissertation component consists of coursework guided by the student's dissertation chair and committee members and is designed to assist the student in the research and writing process involved in successful completion of the dissertation. A dissertation proposal (written paper) and oral proposal defense are required, as well as a dissertation and oral defense of the dissertation. Dissertations may investigate any faculty-approved theoretical or

practical issue in reading and language arts and literacy related issues in instructional technology.

Non-course requirements

Academic advising

Upon acceptance into the program, students are advised by the Ph.D. program coordinator. During the first semester of study, students are assigned an initial academic adviser.

The initial academic adviser provides academic counseling early in the course of study and assists the student in developing a preliminary plan of study. Students may later choose a full-time faculty member as their adviser.

Residence

Students must complete at least one semester of full-time study during which they earn at least 8 credits. During residency, students may be assigned experiences not ordinarily available through coursework. Examples of such experiences may include tutoring children and adults in the reading clinic, assisting faculty in the conduct of research, and teaching undergraduate or graduate courses under departmental supervision. Graduate assistantships, which include a stipend and tuition and fees, are available on a competitive basis to students pursuing full-time study. Assistantships cannot be granted to students who are employed full time.

Qualifying examination

Before admission to candidacy, each student must pass a written and oral qualifying examination. The examination is taken after the bulk of coursework is completed. Portions of the examination that all doctoral students must complete are prepared by the Departmental Qualifying Examination (DQE) Committee. Portions of the examination specifically addressing the interests, needs, and objectives of individual students are prepared by a Student Qualifying Examination (SQE) Committee selected especially for the student. If a student is completing a planned sequence of courses within the department, the SQE committee will consist of three Reading and Language Arts faculty members. If the student is completing a planned sequence of courses in another department, then a fourth member representing that discipline is required.

The qualifying examination is administered twice each academic year, in the fall and winter semesters. Normally, students will have passed their qualifying examination before final approval of the dissertation proposal is given. However, the dissertation adviser can make an exception to this norm when appropriate.

The qualifying examination consists of a written examination designed to assess an individual student's knowledge about theory, research, and practice in reading and language arts and in the planned sequence area. Qualifying examinations are administered over three days. The members of the Student Qualifying Examination Committee read the student's written responses and, if a student has successfully completed the written portion of the examination, the student is invited to orally defend their responses for this committee.

The Student Qualifying Examination Committee may permit a student to repeat the qualifying examination. An unacceptable performance on the qualifying examination may result in educational requirements and experiences in addition to those specified in the regular course of study. Passing evaluations on either the written or oral portions of the examination do not preclude the faculty from requiring additional courses or learning experiences if the Student Qualifying Examination Committee deems such actions warranted.

Dissertation

Each candidate must complete a dissertation that makes a contribution to the major field of study. When a student is ready to initiate a dissertation proposal, he or she should nominate a dissertation committee chairperson. The dissertation committee is then formed in consultation with the student's dissertation chairperson. The dissertation committee consists of four Oakland University faculty members, including at least three members from the Department of Reading and Language Arts, at least one member from outside the Department of Reading and Language Arts, and at least one member from the student's area of minor concentration. An Oakland faculty member at large or a faculty member from another university may be asked to serve on the committee, if approved by the committee chair and the Ph.D. coordinator. The student's nominees are subject to availability and other constraints. The coordinator of the doctoral program must approve the selection of the dissertation committee.

The dissertation committee chairperson advises the candidate through the stages of dissertation preparation. When the dissertation committee chairperson and the student have agreed on a dissertation topic, the student must prepare a written dissertation proposal. Requirements of the dissertation proposal shall be specified by the dissertation chairperson in consultation with the dissertation committee. The penultimate dissertation proposal must be made available, and the proposal defense must be announced two weeks prior to the defense. The student shall present and orally defend the proposal before the dissertation committee and other members of the Reading and Language Arts faculty, insuring that all relevant issues pertaining to the dissertation are considered. Once the dissertation committee approves the proposal, the student may initiate the study.

A penultimate draft of the dissertation must be submitted to the committee for modification and approval before the final copy is prepared and approved by the dissertation committee. Eleven bound copies of the dissertation are required and are distributed as follows: three to Graduate Study and Lifelong Learning, three to the Ph.D. coordinator of the Department of Reading and Language Arts, and one for each member of the dissertation committee.

One copy of the completed dissertation must be published by University Microfilms International (see University Microfilms International (UMI) publishing requirement in the Ph.D. Degree Information section of this catalog).

Twenty credits in RDG 799 are required of all doctoral students. Merely amassing dissertation credits does not indicate satisfactory progress toward, or completion of, the dissertation. The dissertation is deemed completed only after a successful oral defense and after final approval of the completed dissertation by the dissertation committee.

Oral final examination

Each candidate must orally defend the dissertation before the dissertation committee. The examination is scheduled after the dissertation committee has had at least two weeks to review the penultimate dissertation. The oral defense must be announced to the university at least two weeks prior to the defense. While interested faculty and outside observers may make comments and

ask questions, only the dissertation committee certifies approval of the dissertation. The dissertation committee may permit re-examination if the initial dissertation defense is deemed inadequate.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Oakland University recognizes a variety of circumstances may require a doctoral student to interrupt progress toward a graduate degree. Doctoral students, temporarily unable to continue their programs, may request a "Leave of Absence" for up to two (2) consecutive semesters (Fall/Winter or Winter/Fall). Students should consult the Leave of Absence policy in the Office of Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

All requirements, including the dissertation, must be completed within ten years after admission to the program. The student must achieve candidacy within six years. An extension may be granted with the approval of the Ph.D. coordinator and Graduate Study and Lifelong Learning

If six consecutive semesters elapse where no credits are accumulated toward the degree, the student will be considered inactive and may be dropped from the program. Students who are deemed inactive or dropped from the program may be reinstated upon approval of the Ph.D. coordinator and Graduate Study and Lifelong Learning.

Graduation

Students expecting to graduate in a given semester must be registered and file an Application for Degree by the deadline published in the *Schedule of Classes*. Failure to do so on time will preclude graduation in that semester.

■ Master of Arts in Teaching in Reading and Language Arts

Coordinator:

James F. Cipielewski

Program description

Most Master of Arts in Teaching in reading and language arts students are classroom teachers whose daily work requires them to deal with the literacy needs of young children, adolescents or adults. Instruction in the MAT program prepares classroom teachers to work effectively and efficiently in settings where class sizes may range from 5 to 40 or more learners. The MAT program allows certified teachers to add a Michigan endorsement as a Classroom Reading Teacher (BT), a Language Arts Teacher (BX) or a building level Reading Specialist (BR). The core program is the same for each endorsement but Oakland can only recommend students for one endorsement program based on those courses. Requirements and elective options vary according to the intended endorsement program. Endorsement candidates must complete the coursework and pass the appropriate state of Michigan certification endorsement test before the endorsement can be issued by the State.

Application terms and deadlines

Applications are accepted at any time. Applicants are notified of their status after submitting all required documents.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Two letters of recommendation

Admission requirements

Admission to the Master of Arts in Teaching in reading and language arts degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program.

The department considers only those applicants who hold baccalaureate degrees from regionally accredited institutions. While an undergraduate grade-point average of at least 3.0 is the minimum standard for admission, other factors bearing on potential academic success are given due consideration.

Degree requirements

The Master of Arts in Teaching in reading and language arts degree is awarded upon satisfactory completion of 36 credits in an approved program of study. If the two-course option, in lieu of RDG 699 (Master's Practicum), is selected, the program requires 40 credits.

Course requirements

a. Core courses

RDG 500	Foundations of Reading Instruction	4
RDG 571	Foundations of Literature for Children and Young Adults	4
RDG 575	Teaching Writing in the Elementary and Secondary Schools	4
RDG 632	Diagnosis of Reading Disabilities	4
RDG 633	Correction of Reading Disabilities	4
RDG 699*	Master's Practicum (previously Master's Project)	4

* Students may substitute two elective courses in lieu of RDG 699. This option necessitates 40 credits for graduation.

Endorsement requirements and elective courses

MAT plus Classroom Teacher (BT) endorsement

The MAT plus Classroom Reading Teacher (BT) endorsement provides the most flexibility in choice of electives. The program consists of the core courses plus 12 credits of electives in Reading (RDG) or Instructional Systems Technology (IST). Any 500- or 600-level course with a RDG or IST designation preceding the course number constitutes an acceptable elective. In addition, RDG or IST 700-level courses may serve as electives, but only with adviser and course instructor permission. If you choose to substitute two additional electives for RDG 699, Master's Practicum (previously Master's Project), this would allow five electives.

Teachers can design a focus area for their program through the selection of electives.

An Elementary focus would include electives like:

RDG 532	Teaching Reading in the Primary Grades	2 to 6
RDG 534	Reading-Language Arts Instruction in the Elementary School	4
RDG 537	Content Reading in the Elementary School	4
RDG 539	Clinical Issues in Early Literacy Instruction: Reading Recovery ™ Teacher Training	10
RDG 560	Emerging Literacy: Early Reading and Writing	2 or 4
RDG 561	Phonics in Proper Perspective	2 or 4
RDG 570	The Author's and Illustrator's Art and Craft	4
and/or		
RDG 574	Literature for the Young Child	4
RDG 577	Narrative: Reading and Writing	2 or 4
and/or		
RDG 578	Non-Fiction: Reading and Writing	2 or 4

A Middle School and Secondary focus would include electives like:

RDG 538	Guiding Reading-Learning in Content Subjects	4
RDG 565	Teaching Apprenticeship: Reading and Language Arts	4
RDG 570	The Author's and Illustrator's Art and Craft	4
RDG 573	Adolescent Literature in Middle Schools, Junior and Senior High Schools	4
RDG 577	Narrative: Reading and Writing	2 or 4
and/or		
RDG 578	Non-Fiction: Reading and Writing	2 or 4

A Research focus would include electives like:

RDG 564	Teacher as Researcher: Classroom Inquiry	4
RDG 590	Independent Study: Reading and Language Arts	2 to 8
RDG 706	Critical Inquiry in Reading and Language Arts	4
and/or		
RDG 710	Educational Research in Reading and Language Arts	4

MAT plus Reading Specialist (BR) endorsement

The MAT plus Reading Specialist (BR) endorsement consists of the core requirements plus RDG 538 and RDG 540 plus one elective. If a student chooses to substitute two additional electives for RDG 699, Master's Practicum (previously Master's Project), this would allow three electives. The credits needed to graduate remain the same in either program.

MAT plus Language Arts (BX) endorsement

The MAT plus Language Arts (BX) endorsement consists of the core requirements plus RDG 534 and two electives. These electives must fulfill the English and Linguistics requirements for this endorsement. If these requirements have been met with undergraduate courses not used for a previous endorsement, then RDG or IST electives can be substituted to fulfill the needed electives. If a student chooses to substitute two additional electives for RDG 699, Master's Practicum (previously Master's Project), this would allow four electives.

■ MAT in Reading and Language Arts with Endorsement in Early Childhood Education (ZA)

Coordinator:
Linda M. Pavonetti

A limited number of reading and language arts students will be admitted to the early childhood endorsement sequence. Candidates for admission to the certificate endorsement sequence in early childhood must first be admitted to the MAT in reading and language arts program and then apply to the early childhood program by the June 1 deadline for fall admission (see early childhood education section in the catalog). Students admitted to this sequence must schedule an advising appointment with the program coordinator before taking courses.

This program can lead to two combinations of endorsement: the Early Childhood (ZA) endorsement and either the Classroom Reading Teacher (BT) or Reading Specialist (BR) endorsement.

The BT plus ZA program consists of the MAT core courses, RDG 560 and the 22-credit Early Childhood (EC) sequence shown below. This is a total of 50 credits; if you choose to substitute two electives for RDG 699 this increases the total to 54 credits.

The BR plus ZA program consists of the MAT core courses (not including RDG 699), RDG 538, 540 and 560 and the 22-credit EC sequence. This is a total of 54 credits (RDG 538 and RDG 540 substitute for RDG 699).

Early Childhood endorsement sequence

EC 540	Theories of Child Development and Education	4
EC 544	Adult-Child Interaction: Play and Mediation of Learning	4
EC 542	Applied Developmental Principles	4
EC 543	Teacher as Child Advocate and Adult Educator	4
EC 546	Workshop in Early Childhood Curriculum	2
EC 645	Observation and Assessment of the Young Child	4

■ Microcomputer Applications Graduate Certificate

Coordinator:
Anne E. Porter

The Reading and Language Arts Department offers a 16-credit graduate certificate indicating focused training in educational applications of microcomputers and related technologies. This program is intended for teachers, administrators and professional staff representing a variety of educational and training levels. The graduate certificate program meets the needs of educators in the challenging and rapidly changing field of technology in education as it relates to literacy, learning and the school curriculum.

Admission to this program requires basic computer literacy skills. Prior to entering the program students should be comfortable using computer applications such as word processing and curriculum related software to meet their general personal and professional needs.

Students enrolled in the MAT program in reading and language arts may earn the graduate certificate as part of the master's degree program. Under this option, students will complete the elective portion of the MAT by enrolling in IST 594, 595 and 679. IST 699 will be substituted for RDG 699. Note: 4 credits of IST 630 may be substituted for IST 595 only.

■ Advanced Microcomputer Applications Graduate Certificate

Coordinator:
Anne E. Porter

For holders of the Certificate of Microcomputer Applications in Education (or the equivalent), the Department of Reading and Language Arts offers a 16-credit graduate certificate of advanced study in the theory and application of instructional systems technology in the enhancement of learning environments. This program provides an opportunity for focused inquiry in specific areas of interest relating to the impact of advanced technologies on teaching, learning and literacy in a variety of settings.

Doctoral students may pursue this graduate certificate as part of their minor concentration. Students enrolled in the MAT in reading and language arts program may use these courses as part of their elective sequence with permission from their adviser. Students may also enroll in the graduate certificate program without pursuing a graduate degree. Students will receive the graduate certificate upon the successful completion of IST 630, 703, 706 and 780.

■ Michigan Certificate Endorsement in Reading

Coordinator:
Jim Cipielewski

For teachers that have successfully completed a master's degree in an allied or related field of study, the Department of Reading and Language Arts offers programs leading to a Michigan Certificate Endorsement in Reading. The Classroom Reading Teacher endorsement (BT) courses are RDG 500, 571, 575, 632, 633 and one elective. The Reading Specialist endorsement (BR) courses are RDG 500, 571, 575, 632, 633, 538 and 540. Endorsement seekers must also pass the appropriate state of Michigan reading endorsement certification examination. Students considering pursuing this endorsement must schedule an advising appointment prior to beginning the program.

■ Post-Master's Graduate Certificates in Reading, Language Arts and Literature: 16 Credits and 32 Credits

Coordinator:
Annette Osborne

The 16- and 32-credit post-master's graduate certificates in reading, language arts and literature are intended for two different groups of students:

1. Students with little background in reading and,
2. Students who have completed a MAT in reading and language arts.

If you have little or no reading, language arts or children's literature background, the options available will enable you to gain a basic understanding of literacy instruction and provide invaluable information on current trends and issues in the field.

Since some school districts now require planned 15- and 30-hour programs, the post-master's graduate certificate programs in reading, language arts and literature will meet the need for a planned program. Students wishing to pursue this program option must schedule an advising appointment with the program coordinator. A plan must be in place before beginning the certificate program.

Michigan Professional Certificate

Candidates for the Michigan Elementary Professional Certificate (formerly Continuing Certificate) must elect RDG 534 if they have not previously met the 6-credit requirement for reading methods courses in their undergraduate program.

Candidates for the Michigan Secondary Professional Certificate must elect RDG 538 if they have not previously completed an equivalent 3-credit reading course in their undergraduate program.

It is the student's responsibility to confirm with the School of Education and Human Services' advising office whether or not prior coursework fulfills state requirements for the Professional Certificate.

Public Act 32

Effective July 1, 2009 satisfactory completion of a course of study with appropriate field experiences in the diagnosis and remediation of reading disabilities and differentiated instruction is required for all teachers applying for their professional certificate. You can meet this requirement by taking RDG 510 Inquiry-Based Literacy Instruction at Oakland University.

■DEPARTMENT OF TEACHER DEVELOPMENT AND EDUCATIONAL STUDIES

485B Pawley Hall • (248) 370-2613 • Fax (248) 370-2639
www.oakland.edu/sehs

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Dyanne M. Tracy

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Patrick J. Johnson, Ed.D., Wayne State University
M. Sharon P. Muir, Ph.D., University of Nebraska

Professors:
Mary T. Stein, Ph.D., State University of New York, Buffalo
Dyanne M. Tracy, Ph.D., Indiana University

Associate professors:
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Michael G. MacDonald, Ph.D., University of Calgary (Canada)
Carolyn J. O'Mahony, Ph.D., Michigan State University
Dawn M. Pickard, Ph.D., Purdue University
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Assistant professors:
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Timothy G. Larrabee, Ph.D., University of California, Davis
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Thomas Pedroni, Ph.D., University of Wisconsin

Special instructors:
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Mary F. Zeppelin, Ed.S., Oakland University

Degree programs
Master of Education in educational studies

Master of Education in teacher leadership (in collaboration with the Department of Educational Leadership)

Master of Arts in Teaching in elementary education

Master of Arts in Teaching in secondary education

Graduate certificate programs
Graduate Certificate in international education

■ Master of Education in Educational Studies

Coordinator:
Michael G. MacDonald

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level course work beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in course work both pre- and post-bachelor's degree.
- Supplemental Program Form
- Goal statement
- Two letters of recommendation from individuals in a supervisory relationship to the applicant
- Copy of teaching certificate.

Admission requirements
Admission to the Master of Education in educational studies degree program is selective. Meeting minimum criteria does not guarantee acceptance into the program. Students are notified of their admission status by Graduate Admissions.

In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- An undergraduate GPA of at least 3.0
- A teaching certificate
- Ready access to K-12 classrooms
- K-12 teaching experience
- Two letters of recommendation from individuals in a supervisory relationship to the applicant
- A statement of professional goals
- Communication skills commensurate with graduate-level scholarship. Students who are conditionally admitted to the program because of a lower GPA or lack of recommendations must complete a minimum of 7 credit hours (EST 601 and one other core course) with a grade of at least 3.0 in each course.

Degree requirements
The Master of Education in educational studies degree is awarded upon satisfactory completion of a minimum of 32 credits in an approved program of study. The program consists of a minimum 9-credit core, a minimum of 18 elective credits approved by the student's faculty adviser, and a minimum 3-credit exit plan of EST 609 (or

IB 678/9 for students enrolled in the International Baccalaureate program).

Elective courses must be taken for at least 3 credits to be counted toward the Master of Education in educational studies program, unless enrolled in the International Baccalaureate program.

Four Oakland University credits may be applied from outside the listed electives; exceptions to this policy require approval of a Petition of Exception by department faculty and Graduate Study and Lifelong Learning.

Course requirements

a. Core requirements (9 credits):

1. Introduction to Research in Educational Studies (3 credits)

EST 601	Introduction to Educational Studies (must be taken as first course in M.Ed. program for a minimum of 3 credits)	3

2. Sociocultural Diversity in the Context of Education (3 or 4 credits)

EST 602	Diverse Learners and the Curriculum	4
EST 521	Cross National Investigations into Educational Systems and Practices	4
EST 581	Gender Socialization in Schools	3 or 4
EST 582	Sexual Orientation, Gender Identity and Education	3 or 4
EST 620	Social Theories of Education in Cross-National Context	4
IB 672*	International Baccalaureate: International and Global Education I (2 credits)	
and		4
IB 673*	International Baccalaureate: International and Global Education II (2 Credits)	

* Only students enrolled in the International Baccalaureate program may register.

3. Teachers and Curriculum (3 or 4 credits)

EST 603	Teachers and the Curriculum	4
IB 674*	International Baccalaureate: Teaching, Learning, and the Curriculum (2 Credits)	2
and		
IB 675*	International Baccalaureate: Curriculum and Instruction in the Classroom (2 Credits)	2

* Only students enrolled in the International Baccalaureate program may register.

b. Electives (18 credits)

Choose 18 credits from the following as outlined in one of ten focus areas. Students must meet with their faculty adviser for an approved Plan of Study.

Elective courses must be taken for at least 3 credits to be counted toward the Master of Education in educational studies program, unless enrolled in the International Baccalaureate program.

EST 500	Art for the Classroom Teacher	4
EST 501	Visual Culture: Theories in Art Education	2
EST 502	Teaching Art in the Elementary School	4
EST 503	Teaching Art in the Middle School	2
EST 504	Teaching Art at the Secondary Level	4
EST 510	Foreign Language Teaching Methods in Elementary and Middle School	3
EST 511	Foreign Language Teaching Methods in the Jr. High and the High School	3
EST 520	Social Theories of Education in Cross-National Contexts	4
EST 521	Cross-National Investigations into Educational Systems and Practices	4
EST 530	Teaching Mathematics in the Middle School	1 to 4
EST 531	Focused Technologies in K-8 Mathematics Curriculum	1 to 4
EST 532	Diagnosis and Remediation in Mathematics	1 to 4
EST 533	Number and Operations for Middle School Mathematics Teachers	3
EST 566	Understanding Our Geosphere Through Real-World Connections	3
EST 567	Understanding Our Solar System and the Universe Through Real World Connections	3
EST 568	Understanding the Hydrosphere, Weather, and Atmosphere	3
EST 569	Understanding Science Through Field Experiences	1
EST 570	The International Experience	2 to 4
EST 571	Social Studies in the Schools	4
EST 572	Global Education in the Schools	4
EST 573	Multicultural Education in the Schools	1 to 4
EST 581	Gender Socialization in Schools	1 to 4
EST 582	Sexual Orientation, Gender Identity and Education	2 to 4
EST 590	Trends and Practices in Middle Level Education	4
EST 591	Middle Level Schools	2 or 4
EST 604	Advanced Instructional Design	4
EST 620	Social Theories of Education in Cross-National Context	4
EST 640	Integrating Disciplines in the Curriculum	4
EST 641	Applied Curriculum Studies	4
EST 642	Practicum: School-wide Community-Building	4

EST 643	Integrating Beekeeping Across the Curriculum	3 or 4
EST 650	Special Studies in Teacher Development and Educational Studies	1 to 4
EST 651	Issues in Education	1 to 6
EST 660	Teacher Leadership in Mathematics and Science	1 to 4
EST 661	Supervisory Skills for Teachers and Administrators	2 or 4
EST 662	Reflective Practitioner	4
EST 663	Collaborative Inquiry I	2
EST 664	Collaborative Practitioner	4
EST 665	Collaborative Inquiry II	2
EST 666	Inquiry to Practice I	2
EST 667	Applied Theory of Teacher Leadership I	2
IB 670*	International Baccalaureate: Philosophy and Practices I	2
IB 671*	International Baccalaureate: Philosophy and Practice II	2
IB 672*	International Baccalaureate: International and Global Education I	2
IB 673*	International Baccalaureate: International and Global Education II	2
IB 674*	International Baccalaureate: Teaching, Learning, and the Curriculum	2
IB 675*	International Baccalaureate: Curriculum and Instruction in the Classroom	2
IB 676*	International Baccalaureate: Assessment to Support Learning	2
IB 677*	International Baccalaureate: Assessment in the Classroom	2
IB 678*	International Baccalaureate: Professional Learning through Reflective Practice and Research	2
IB 679*	International Baccalaureate: Professional Learning through Collaborative Action Research	2
CNS 561	Introduction to School Counseling	2
CNS 571	Consultation Theory and Practice	2
EC 540	Theories of Child Development and Education	4
EL 560	Staff and Curriculum Development for School Improvement	4
EL 620	Law for Teachers and Administrators	4
HRD 625	Instructional Design Theory to Practice	4
IST 594	Introduction to Technology Applications in the Classroom	4
RDG 500	Foundations of Reading Instruction	4
or		
RDG 510	Inquiry-Based Literacy Instruction	3 or 4
SE 510	Students with Behavioral and/or Emotional Impairment	4

* Only students enrolled in the International Baccalaureate program may register.

c. Exit (3 credits)

The exit plan is to be completed within the last calendar year of the program with the M.Ed. adviser's and supervising instructor's approval.

EST 609	Collaborative Action Research	2 to 6
or		
IB 678*	International Baccalaureate: Professional Learning through Reflective Practice and Research	2
or		
IB 679	International Baccalaureate: Professional Learning through Collaborative Action Research	2

* Only students enrolled in the International Baccalaureate program may register.

Non-course requirements

Plan of study

Upon admission, a Plan of Study is prepared jointly by the student and the faculty adviser.

Academic progress

No grade below 3.0 may be applied to the degree.

Additional program information

Transfer credits

Up to 6 graduate credits from other accredited colleges or universities may be applied to the Master of Education degree with faculty adviser approval.

Michigan professional certification

Teachers may be recommended for professional certification upon completion of 18 credits in a planned program in Teacher Development and Educational Studies consisting of EST 601; EST 602 or EST 521 or EST 581 or EST 582 or EST 620; EST 603; and EST elective credits bringing the total credits to 18.

■ Master of Education in Teacher Leadership

Coordinators:

C. Robert Maxfield and Dyanne Tracy

This degree program is a joint offering between the Department of Teacher Development and Educational Studies and the Department of Educational Leadership. Applicants to the Master of Education in teacher leadership degree program apply through Graduate Admissions.

Application requirements

Applicants for admission must submit the following:

- An Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- A Supplemental Program Form
- A goal statement
- Two letters of recommendation
- A copy of the teaching certificate

Admission requirements

In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

Applicants for the Master of Education in teacher leadership will be selected based on experience, especially leadership experience, as reflected in an analysis of several criteria:

- An undergraduate GPA of at least 3.0
- A teaching certificate
- Ready access to K-12 classrooms
- At least one year K-12 teaching experience
- Two letters of recommendation from individuals in a supervisory relationship to the applicant
- A statement of professional goals
- Communication skills commensurate with graduate-level scholarship.

Program delivery

Students will become part of a cohort for the two years of the program. Courses will be delivered through Saturday classroom sessions as well as podcasts, on-site visitation and online instruction.

Degree requirements

The Master of Education in teacher leadership degree is awarded upon successful completion of 35 credits.

The program consists of 32 specific credits and one elective, as shown below:

Required courses (32 credits)

EST 662	Reflective Practitioner	4
EST 663	Collaborative Inquiry I	2
EST 664	Collaborative Practitioner	4
EST 665	Collaborative Inquiry II	2
EST 666	Inquiry to Practice I	2
EST 667	Applied Theory of Teacher Leadership I	2
EL 505	Organizational Change Agent	4
EL 506	Collaborative Inquiry III	2
EL 515	Teacher Leaders in the Education Profession	4
EL 516	Collaborative Inquiry IV	2
EL 525	Inquiry to Practice II	2
EL 535	Applied Theory of Teacher Leadership II	2

Elective course (3 credits)

One elective from SEHS may be applied	3

Non-course requirements

Plan of Study

Upon admission, a Plan of Study is prepared jointly by the student and the faculty adviser.

Academic progress

No grade below 3.0 may be applied to the degree.

Course sequence

YEAR 1	
Fall	EST 662, Reflective Practitioner
	EST 663, Collaborative Inquiry I
Winter	EST 664, Collaborative Practitioner
	EST 665, Collaborative Inquiry II
Summer I	EST 666, Inquiry to Practice I
Summer II	EST 667, Applied Theory of Teacher Leadership I

YEAR 2

Fall	EL 505, Organizational Change Agent
	EL 506, Collaborative Inquiry III
Winter	EL 515, Teacher Leaders in the Education Profession
	EL 516, Collaborative Inquiry IV
Summer I	EL 525, Inquiry to Practice II
Summer II	EL 535, Applied Theory of Teacher Leadership II

■ Master of Arts in Teaching in Elementary Education with Elementary Certification

Coordinator

Michael G. MacDonald

Program description

The Master's of Arts in Teaching in elementary education (MATEE) with elementary certification is designed for career changers and individuals who already hold a bachelor's degree in a field other than education. Designed for individuals who are considering a career in teaching elementary or middle school, it is a quality, two-year program with Oakland University's excellent reputation for preparing teachers to enhance employability.

Program delivery

Classes are held in the evening and on scheduled Saturdays, except for the final semester of student teaching. Courses are taken as a cohort group with coursework beginning in the fall semester.

Application deadline

The application deadline is April 1.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level course work beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in course work both pre- and post-bachelor's degree.
- Two letters of recommendation from individuals in a supervisory relationship to the applicant
- Goal statement
- Evidence of completion of one teaching major or two teaching minors with a minimum grade of 2.5 in each course
- Résumé
- Experience Working with Children Form(s)
- Passing scores on the Michigan Test for Teacher Certification (MTTC) Basic Skills test.

Admission requirements

Admission to the Master of Arts in Teaching in elementary education degree program is selective. Meeting minimum criteria does not guarantee acceptance into the program. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Bachelor's degree from a regionally accredited institution.
- Cumulative grade-point average of 3.0 or better (improved grades in recent coursework will be considered).
- Passing scores on the Michigan Basic Skills Test for Teachers (MTTC).
- A 2.5 minimum grade in each course applying to major or minor teaching endorsements. Major or minor courses taken after beginning the MAT Elementary program, as well as professional courses, will require a minimum grade of 3.0. Additional major and minor courses may be necessary for individuals whose prior coursework does not include sufficient credits for the core competencies set by the Michigan Department of Education for teaching a major and minor content area.

Individual interviews may be conducted in addition to these requirements.

Degree requirements

The Master of Arts in Teaching in elementary education degree is awarded upon satisfactory completion of a minimum of 49 credits in an approved program of study.

Course requirements

TD 506	Health Curriculum at the Elementary and Middle Level	1
FE 680	Learning Models	2
TD 530	Managing the Classroom Environment of and for Diverse Learners	4
IST 535	Instructional Systems Technology Applications in Education	2
RDG 502	Reading and Language Arts in the Elementary and Middle School I	4
TD 514	Teaching Elementary/Middle Level Social Studies	4
RDG 503	Reading and Language Arts in the Elementary and Middle School II	4
SE 500	The Exceptional Student	2
TD 515	Integrating the Arts in the Elementary Classroom	2

TD 513	Teaching Elementary/Middle Level Science	4
TD 516	Mathematics Pedagogy and Curriculum in Elementary and Middle Grades	4
TD 555	Internship in Elementary Education	8
EST 601	Introduction to Educational Studies	4
EST 609	Collaborative Action Research	4

* Course sequence subject to minor changes depending on instructor availability. Student teaching must be done during the school year.

Additional program information

For program information and degree requirements, contact Professional Development and Education Outreach in the School of Education and Human Services at (248) 370-3033.

■ Master of Arts in Teaching in Secondary Education with Secondary Certification

Coordinator

Karen Bolak

Program description

The Master of Arts in Teaching in secondary education (MAT-Secondary) with Secondary certification is designed for individuals who already have a bachelor's degree and wish to become certified to teach middle school or high school.

High-quality learning experiences ensure that participants are well-prepared to teach. The program is aligned with the state of Michigan certification and endorsement requirements. Additional major and minor courses may be necessary for individuals whose prior coursework does not include sufficient credits for the core competencies set by the Michigan Department of Education for teaching a major and minor content area.

Program delivery

Courses meet on two weekday evenings and scheduled Saturdays, with the exception of one semester of daytime student teaching.

Application deadline

The application deadline is May 1.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level course work beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in course work both pre- and post-bachelor's degree.

- Two letters of recommendation from individuals in a supervisory relationship to the applicant
- Goal statement
- Evidence of completion of one teaching major or two teaching minors with a minimum grade of 3.0 in each course
- Résumé
- Experience Working with Children Form(s)
- Passing scores on the Michigan Test for Teacher Certification (MTTC) Basic Skills test and your chosen major and minor.

Admission requirements

Admission to the Master of Arts in Teaching in secondary education degree program is selective. Meeting minimum criteria does not guarantee acceptance into the program. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Bachelor's degree from a regionally accredited institution
- Cumulative grade-point average of 3.0 or better (improved grades in recent coursework will be considered)
- Passing scores on the Michigan Basic Skills Test for Teachers (MTTC)
- Major or minor courses taken after beginning the MAT Secondary program, as well as professional courses, will require a minimum grade of 3.0.

Individual interviews may be conducted in addition to these requirements.

Degree requirements

The Master of Arts in Teaching in secondary education degree is awarded upon satisfactory completion of a minimum of 46 credits in an approved program of study

Course requirements

TD 500	Introduction to the School and Society	2
TD 501	Learning Theory: Cognitive and Affective Development of Adolescents	3
TD 520	Instructional Interaction and Classroom Management	3
IST 630	Workshop in Educational Software and Related Technologies	2
TD 519	Issues of Equity in the Schools	3
RDG 538	Guiding Reading-Learning in Content Subjects	4
SE 521	Serving Students with Special Needs in General Education Classroom	3
TD 521	Instructional Design and Assessment	3
TD 528	Secondary Teaching of the Major and Minor Fields	3

TD 559	Internship in Secondary Education	10
TD 556	Internship Seminar	2
EST 601	Introduction to Educational Studies	4
EST 609	Collaborative Action Research	4

* Course sequence subject to minor changes depending on instructor availability. Student teaching must be done during the school year.

Additional program information

For program information and degree requirements, contact Professional Development and Education Outreach in the School of Education and Human Services at (248) 370-3033.

■ Graduate Certificate in International Education

Coordinator

Mary Stein

Program description

This program provides knowledge and experiences related to understanding teaching, learning, assessment, and international-mindedness within International Baccalaureate (IB) schools. It is appropriate for teachers who are currently teaching within IB schools, as well as those who are not teaching in IB schools but who seek professional preparation for doing so. Graduates of the program will understand the foundations of IB programs of study and will be prepared to engage in curriculum development and implementation that reflects international perspectives in K-12 schools.

Students in the program take 20 credits of educational studies coursework within a cohort and should complete certificate program requirements within two years.

Relationship to the Master of Education in educational studies

Certificate program applicants are encouraged to apply simultaneously to the Master of Education in educational studies degree program. All courses in the certificate can be applied to this M.Ed. program, which is a 32-credit program.

After completing certificate requirements, students pursuing this M.Ed. degree will work individually with a faculty adviser to determine which elective courses are needed to complete their M.Ed. degree requirements. For more information, contact the Department of Teacher Development and Educational Studies.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level course work beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in course work both pre- and post-bachelor's degree.
- OU-IB Teacher Development Certificate Program Form
- Goal statement
- Two letters of recommendation
- Copy of teaching certificate

Admission requirements

In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Undergraduate GPA of 3.0 or above
- A teaching certificate
- K-12 teaching experience
- Communication skills commensurate with graduate-level scholarship.

Certificate requirements

The Graduate Certificate in International Education program is awarded upon satisfactory completion of a minimum of 20 credits in an approved program of study.

Course requirements

IB 670*	International Baccalaureate: Philosophy and Practice I	2
IB 671	International Baccalaureate: Philosophy and Practice II	2
IB 672*	International Baccalaureate: International and Global Education I	2
IB 673	International Baccalaureate: International and Global Education II	2
IB 674*	International Baccalaureate: Teaching, Learning, and the Curriculum	2
IB 675	International Baccalaureate: Curriculum and Instruction in the Classroom	2
IB 676*	International Baccalaureate: Assessment to Support Learning	2
IB 677	International Baccalaureate: Assessment in the Classroom	2
IB 678*	International Baccalaureate: Professional Learning through Reflective Practice and Research	2
IB 679*	International Baccalaureate: Professional Learning through Collaborative Action Research	2

* The even-numbered courses involve primarily face-to-face delivery, while the odd-numbered courses are delivered online.

Non-course requirements

Students must earn a 3.0 in each course.

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

248 Dodge Hall • (248) 370-2212 • Fax (248) 370-4261
www.secs.oakland.edu

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Bhushan L. Bhatt

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Keith Harvey

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Michael P. Polis, Ph.D., Purdue University
Andrew Rusek, Ph.D., Technical University of Warsaw (Poland)
Ishwar Sethi, Ph.D., Indian Institute of Technology (Kharagpur)
Robert P. Van Til, Ph.D., Northwestern University
Lianxiang Yang, Ph.D., University of Kassel (Germany)
Mohamed A. Zohdy, Ph.D., University of Waterloo (Canada)

Associate professors:
Daniel Aloi, Ph.D., Ohio University
Yin-Ping Chang, Ph.D., Pennsylvania State University
Debatosh Debnath, Ph.D., Kyushu Institute of Technology (Japan)
Patrick Dessert, Ph.D., Oakland University
Huirong Fu, Ph.D., Nanyang Technological University (Singapore)
Laila Guessous, Ph.D., University of Michigan
Darrin M. Hanna, Ph.D., Oakland University
Jia Li, Ph.D., University of Michigan
Ching Long Ko, Ph.D., University of Oklahoma
Christopher Kobus, Ph.D., Oakland University
Michael A. Latcha, Ph.D., Wayne State University
Lunjin Lu, Ph.D., University of Birmingham (England)
Barbara Oakley, Ph.D., Oakland University
Brian P. Sangeorzan, Ph.D., University of Wisconsin, Madison
Sankar Sengupta, Ph.D., Clemson University
Gautam B. Singh, Ph.D., Wayne State University
Lorenzo M. Smith, Ph.D., Michigan State University
Christian C. Wagner, Ph.D., Michigan State University
Qian Zou, Ph.D., Tsinghua University (China)

Assistant professors:
Dae-Kyoo Kim, Ph.D., Colorado State University
Supratik Mukhopadhyay, Ph.D., Max Planck Institute (Germany)
Nilesh Patel, Ph.D., Wayne State University
Gaungzhi Qu, Ph.D., University of Arizona
Hongwei Qu, Ph.D., University of Florida
James David Schall, Ph.D., North Carolina State University
Mohamed Sharaf, Ph.D., University of Pittsburgh
Mohamad Siadat, Ph.D., Wayne State University
Xia Wang, Ph.D., Rensselaer Polytechnic Institute

Special instructor:
Jerry E. Marsh, M.S., Oakland University

Special lecturer:
Laura Dinsmoor, M.S., Oakland University

Adjunct professors:
Ismat Abu-Isa, Ph.D., Northwestern University
Alex Alkidas, Ph.D., Georgia Institute of Technology
Robert F. Bordley, Ph.D., University of California, Berkeley
Francis H. K. Chen, Ph.D., University of Illinois, Urbana-Champaign
Yung-Li Lee, Ph.D., University of Wisconsin-Madison
Mutasim Salman, Ph.D., University of Illinois, Champaign

Adjunct associate professors:
Preston L. Brooks, M.S.E.E., Stanford University, M.B.A., University of San Diego
Fang Chen, Ph.D., Oakland University
Francis B. Hoogterp, Ph.D., Oakland University
Gerard R. Jozwiak, Ph.D., Wayne State University
Anson Lee, Ph.D., Oakland University
Phil Szuba, Ph.D., Oakland University
Simon Chin-Yu Tung, Ph.D., Rensselaer Polytechnic Institute

Adjunct assistant professors:

Randy Graca, Ph.D., Oakland University
Patrick Hillberg, Ph.D., Oakland University
Suresh Ramalingham, Ph.D., Texas A&M University

Advisory Board

The Advisory Board for the School of Engineering and Computer Science is composed of leaders in industry. They assist the school in developing educational and research programs to meet the rapidly expanding requirements in the technical world. The board is available as a body or individually for consultation on such matters as curriculum, research, facilities, equipment requirements, special subjects and long-range planning.

Board Members:

Ron A. May, Chair, Advisory Board; Senior Vice President of Energy Distribution, DTE Energy
Hadi A. Akeel, Ph.D., Consultant-Robotics & Automation
Thomas E. Anderson, Ph.D., Director, Automation Alley Technology Center
Michael Bolon, Senior Vice President, General Dynamics, Land Systems
Herb H. Dobbs, Ph.D., Consultant, Rochester, Michigan
John Felice, (Retired), Chrysler LLC
Grant R. Gerhart, Ph.D., Senior Research Scientist, U.S. Army Tank-Automotive, RDE Center (TARDEC)
Philip M. Headley, Chief Engineer, Brake Systems, Continental Teves
Sidney D. Jeffe, Vice President (Retired), Chrysler Corporation
Fred Killeen, Interim Chief Technology Officer, General Motors Corporation
Robert T. Lentz, Ph.D., Director, (Retired) General Dynamics Land Systems
Joseph D. Long, Chief Engineer, Door Systems, Delphi Interior Systems
William Mattingly, Vice President, Global Engineering, Lear Corporation
William T. Mihalic, Executive Coordinator, Denso International America, Inc.
Yogen N. Rahangdale, President and Chief Operating Officer, American Axle and Manufacturing
Gary W. Rogers, President and CEO, FEV Engine Technology, Inc.
Gerhard Schmidt, Ph.D., Vice President, Research, Ford Motor Company
Stephan Sharf, President, SICA
Jeffery Van Dorn, Partner, Android Industries, LLC

Centers and Institutes

Center for Robotics and Advanced Automation (CRAA)

The School of Engineering and Computer Science has a Center for Robotics and Advanced Automation. The main goals of the center are to contribute to the demand for high technology and industrial productivity in the United States.

Fastening and Joining Research Institute (FAJRI)

Fastening and joining significantly affects the safety, quality and reliability of many mechanical and structural systems, machinery and equipment. The FAJRI is the only known academic facility of its kind in the world dedicated solely to the research and development of fastening and joining of materials in industries such as automotive, aerospace and nuclear. The research programs at FAJRI benefit both the commercial and defense sectors of the economy, while improving the safety of the public.

Product Development and Manufacturing Center (PDMC)

Global competition in manufacturing mandates continual improvement in technology, business processes and employee capabilities. The manufacturing enterprise must also consider interdependencies between these three factors when affecting change. In recognition of this dynamic, the Product Development and Manufacturing Center at Oakland University focuses on improving the competitiveness of the automotive industry and its suppliers through application of new and existing technology, modified business practices, and new educational and training paradigms.

■ General information

The School of Engineering and Computer Science offers programs leading to the Doctor of Philosophy degree in computer science and informatics, electrical and computer engineering, mechanical engineering and systems engineering. It also offers the Master of Science degree in computer science, electrical and computer engineering, embedded systems, industrial and systems engineering, mechanical engineering, software engineering and information technology, and systems engineering. Additionally, a Master of Science degree program in engineering management is offered in cooperation with the School of Business Administration.

The School of Engineering and Computer Science is housed in Dodge Hall of Engineering, Hannah Hall and the Science and Engineering building, which is a modern facility with extensive laboratories for research and design studies. Laboratories cover automotive mechatronic systems, robotics, machine vision, experimental stress analysis, heat transfer, fluid flow, system simulation, circuits and communications, control, mechanical and electrical properties of materials, solid-state devices and microelectronics, microprocessors, computer integrated manufacturing, computer graphics and computer-aided design. Students have access to the various computing facilities of the school and the university's computer services. Fully equipped and staffed electronics, computer and machine shops complement these facilities.

Graduate assistantships and fellowships

A number of graduate assistantships and a limited number of fellowships are awarded each year on a competitive basis. They carry both stipend and tuition remuneration. Graduate assistants render 20 hours per week of teaching and/or research service to the university. No such service is required of graduate fellows. Graduate assistants or fellows at the master's level who plan to enter either the area of research and development in industry or a doctoral program

are strongly encouraged to include a master's project or thesis as part of their program.

■ Doctor of Philosophy in Computer Science and Informatics

Coordinator

Gautam B. Singh

Program description

The Doctor of Philosophy in computer science and informatics is for students who plan to pursue research and development related careers in industrial, governmental or academic settings. Each student admitted to the doctoral program must select a specialization stream as either 1) computer science or 2) software and information technology.

The computer science stream trains doctoral students to become researchers in traditional disciplines within the computer sciences and generally requires that the incoming student hold an undergraduate or graduate degree in computer science or equivalent.

The software and information technology stream aims to train doctoral students to become researchers in applied computing and computational sciences and possibly conduct research in multidisciplinary areas.

Program delivery

As a significant number of graduate courses are offered in the afternoon and late evenings, students can begin the doctoral program on a part-time basis while holding full-time employment. However, later phases of the program may require students to commit a larger fraction of their time for dissertation research.

The program admits students for both part-time and full-time study. The entire program must be completed in seven calendar years, regardless of whether the student is full-time, part-time or full-time for only a portion of their program.

Admission terms and deadlines

Students are admitted to start the program in the fall and winter semesters only. Applications will be accepted until May 1 and October 1 for the following fall or winter semester, respectively.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendations from three faculty members of their most recent study program who can evaluate their scholarly achievement and potential
- Statement of research objectives and goals
- Scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA
- Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Doctor of Philosophy in computer science and informatics degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as follows.

Normally a master's degree from an accredited institution is required for admission; however, students with outstanding undergraduate records may apply directly for admission to the doctoral programs.

The Ph.D. in computer science and informatics degree program is designed for students with academic backgrounds in engineering and computing. Students with backgrounds in mathematics or the physical sciences may also be admitted to the program, but they will be required to build up basic engineering/computing knowledge through relevant coursework.

Degree requirements

The Doctor of Philosophy in computer science and informatics degree is awarded upon satisfactory completion of 80 credits in an approved program of study.

At least 56 credits must be earned for coursework beyond the bachelor's degree (exclusive of dissertation). The normal full-time load is 8 to 12 credits per semester.

Students who have previously earned a master's degree from Oakland University or another regionally-accredited institution may reduce the 56 credits of coursework required for the doctoral degree by up to 32 credits. To be considered for a reduction in required doctoral credits, students must submit a Petition of Credit from Earned Master's Degree. The advisory committee will evaluate the student's prior master's degree work and may reduce the required Ph.D. credits based on the master's coursework. The decision of the advisory committee is final, but the approved petition and approved Plan of Study must be on file in Graduate Study and Lifelong Learning by the end of the first year of doctoral study. All candidates must complete at least 24 credits of additional coursework exclusively at Oakland University.

Course requirements (56 credits)

The total credits required to obtain a Ph.D. in computer science and informatics degree is 80. Students are required to complete a minimum of 56 credits of graduate coursework and a minimum of 24 credits of dissertation research. Approved courses taken as a part of a master's degree may be used towards satisfying this requirement.

Students may also take graduate courses from other departments with the approval of their advisory committee.

a. Research Foundation (4 credits)

All students regardless of the chosen stream of specialization must complete the following two courses:

CSE 791	Research Initiation	2
CSE 792	Research Seminar	2

b. Math Course (4 credits)

All students regardless of the chosen stream of specialization must complete one of the following courses:

APM 533	Numerical Methods	4
APM 569	Graph Theory and Applications	4
STA 521	Multivariate Statistical Methods I	4
STA 527	Linear Statistical Methods	4
STA 530	Time Series	4
MTH 651	Functional Analysis	4

The remaining coursework related to a student's research area or other areas of interest should be completed according to the Plan of Study approved by the student's advisory committee.

c. Electives (16 credits)

Electives	16

d. Previous master's coursework (up to 32 credits)

Previous master's coursework (up to 32 credits)	32

e. Dissertation (24 credits)

All students regardless of the chosen stream of specialization must complete 24 credits of dissertation.

CSE 799	Doctoral Dissertation Research	24

Non-course requirements

Academic progress

In the Doctor of Philosophy in computer science and informatics degree program, credit will not be awarded for courses in which a grade less than 3.0 is earned. All numerical grades earned are used in computing a student's grade-point average.

Initial advising

After admission to the Ph.D. program, a student should consult with the Program Coordinator for any advice until formulation of an Advisory Committee.

Advisory committee

As soon as possible after admission, but prior to earning 16 credits of coursework, students must form an advisory committee, which will direct and guide the progress of their program. Such a committee is composed of four faculty members, specified as follows:

- Three faculty members nominated by the student (one designated as chair and one selected from a department outside the School of Engineering and Computer Science).
- One member appointed by the Dean of the School of Engineering and Computer Science.
- Upon recommendation of the advisory committee, following successful completion of the Ph.D. comprehensive examination, one member from within or outside the university community may either be added to the committee or replace a member for the dissertation proposal and review.

The composition of the entire advisory committee must be approved by the Dean of the School of Engineering and Computer Science and Graduate Study and Lifelong Learning.

Residency

At least 24 credits of graduate coursework, excluding the dissertation credits, must be completed at Oakland University. Further, all students are required to register for at least two credits every fall and winter after their admission to the program.

Qualifying comprehensive examinations

The qualifying examinations consist of the core, option and an oral examination. The applicant must pass the core qualifying examination in computer sciences and informatics. In addition to passing the common core examination, the applicant must pass any two option qualifying examinations pertinent to their stream. The student's Advisory Committee must be established before he or she is allowed to appear for the option examinations. The selection of the subject areas of the option examinations requires the approval of the Advisory Committee.

The core examination must be completed within two calendar years of joining the program. The option and the oral examinations must be completed within three calendar years of joining the program.

Students will be given two attempts for passing the qualifying examinations.

Core examination

The core examination must be completed by all Ph.D. applicants irrespective of the chosen stream of specialization. This examination may be completed before the applicant has formed a doctoral advisory committee. The core examination will be conducted by the department once during every fall and winter term each year. The syllabus for the core qualifying examination consists of:
Analysis of Algorithms
Discrete Mathematics
Data Structures
Programming Languages
Computer Architecture
Operating Systems.

Option examinations

Based on the stream selected by the Ph.D. applicant, two examinations from the appropriate set must be chosen in consultation with the applicant's advisory committee.

1. Computer Science

Students in this stream must select any two examininations from the following list:

Formal Methods and Theoretical Computer Science

Software Engineering
Database Management Systems
Computer Networking and Communications
Knowledge Engineering

2. Software and Information Technology

Students in this stream must select any two examininations from the following list:

Object Oriented Analysis and Design
Information Storage and Retrieval
Bioinformatics
Software Engineering
Multimedia and Wireless Systems

Qualifying examination (oral)

Within one semester of successfully completing the written qualifying examination, the Ph.D. applicant must present a brief summary of their proposed research to the oral qualifying examination committee appointed by the department. The purpose of the oral qualifying examination is to evaluate a) the applicant's knowledge of research techniques, b) their understanding of skills necessary to become a productive researcher, and c) their awareness of research ethics. The focus of the oral examination is less on the subject matter but more on the techniques, procedure and protocols of conducting research and background knowledge of their chosen field.

Teaching experience requirement

The department considers that some relevant teaching experience in computer science and engineering is an integral part of the preparation for undertaking a career in research. A successful researcher in computer science or information technology, even in non-academic careers, is often called upon to make presentations and train their protégés to enable appropriate advancements in research. Further, they are also called upon to disseminate information on mature technologies and to facilitate technology transfers. Accordingly, unless waived because of the candidate's prior teaching experience, the Ph.D. program requires students to provide evidence of experience in teaching. This requirement may be satisfied through the student's active involvement in the research seminar course that is required of all students.

Dissertation proposal

Doctoral dissertation must constitute an original contribution to the field of study. The student's Advisory Committee must approve his or her doctoral proposal. The student usually conducts preliminary research and presents the dissertation proposal to the committee. In presenting the dissertation proposal, the student provides an overview of the existing state of the art of the chosen field and describes how the proposed research will lead to its advancement. The committee evaluates the significance and the originality of the proposed research and makes the necessary determination.

The committee members, led by the dissertation adviser, continue to advise the student throughout the research and the preparation of the dissertation manuscript.

The completed dissertation must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog).

Research credits

Students who have advisory committee approval of their dissertation proposals and are conducting research should register for EGR 790 or ME 790 or CSE 799. At least 24 research credits are required of all doctoral candidates. However, merely amassing credits does not indicate satisfactory progress toward or completion of the dissertation. These judgments are made by the advisory committee. The dissertation is judged completed upon successful completion of the final examination and acceptance of the dissertation by Graduate Study and Lifelong Learning.

Residence

Writing a doctoral dissertation requires a full commitment to research. Such research cannot be effectively pursued in an environment which places research in a secondary role. Doctoral students are required to be full-time students for at least one year of their active dissertation research. The doctoral student should arrange such a period of residency by 1) registering for at least 8 credits of doctoral dissertation research for two consecutive semesters and 2) making a commitment, in a statement addressed to his/her advisory committee, to a program of full-time research (at least 20 hours per week).

The above represents the normal residency requirement. However, if the present occupation of the candidate (e.g., industrial research or teaching) is conducive to the intended research, there is an alternative method to fulfill the residency requirement. To arrange for the alternative residency, the candidate must apply in writing to his/her advisory committee at the time of the dissertation proposal review. The committee must be furnished with a written statement by the candidate's employer confirming that the dissertation research constitutes a major portion of the job assignment. If the advisory committee grants permission to pursue this option, the student must enroll in doctoral dissertation research (8 credits maximum) for at least two consecutive semesters.

Final dissertation defense

The oral defense of the dissertation may be held after the dissertation is completed and approved by the advisory committee. The purpose of the oral defense is to enable the dissertation committee to judge the quality of the investigation and the student's ability to defend and communicate the work. The originality of the dissertation representing advancement in the field of study is typically evidenced through the student's participation in technical conferences in related research areas, as well as by publication of their research findings in peer-reviewed, refereed journals. An announcement of the date, time and location of the defense, along with a one-page abstract, is distributed to the faculty and to Graduate Study and Lifelong Learning. The oral defense must be attended by members of the advisory committee and is open to the university community and public at large. Final approval and acceptance of the doctoral dissertation requires a favorable vote of the advisory committee with no more than one dissenting vote. The committee may permit a re-examination, if the initial dissertation defense is deemed inadequate.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive,

preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

If a student is deemed inactive, he or she may be dropped out of the program despite the petition for extension.

Graduation

Students expecting to graduate in a given semester must file an application for degree by the deadline published by the university. Failure to do so on time will preclude graduation in that semester.

■ Doctor of Philosophy in Electrical and Computer Engineering

Coordinator

Manohar Das

Program description

The Doctor of Philosophy in electrical and computer engineering degree is for students who plan careers in industrial or governmental research and development laboratories or problem-oriented agencies, as well as in the academic fields related to electrical and computer engineering.

The field of Electrical and Computer Engineering (ECE) is very broad, including areas as diverse as applied electromagnetics, autonomous navigation, bioengineering, communications, computer architecture and hardware design, control systems, digital signal processing, digital image processing, electronic materials and devices, micro- and nano-electronics, pattern recognition, power systems and robotics. The Department of Electrical and Computer Engineering is concentrating its efforts in these and other related areas at the Ph.D. level.

Program delivery

Students can begin doctoral study on a part-time basis, availing themselves of late afternoon or evening courses while working full time in local industry. However, later phases of study and research will require full-time devotion to the program. Students must also fulfill a residency requirement.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendations from three faculty members of their most recent study program who can evaluate their scholarly achievement and potential
- Statement of research objectives and goals
- Scores from the Graduate Record Examination (GRE) if the student graduated from an institution not accredited by a regional accrediting agency of the USA
- Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Doctor of Philosophy in electrical and computer engineering degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as follows.

Normally a master's degree from an accredited institution is required for admission; however, students with outstanding undergraduate records may apply directly for admission to the doctoral program.

The Ph.D. in electrical and computer engineering degree program is primarily designed for students with academic backgrounds in either electrical engineering or computer engineering. Students with backgrounds in other engineering disciplines, computer science, mathematics or the physical sciences may also be admitted to the

program, but they will be required to augment their basic electrical and computer engineering knowledge through relevant coursework.

Degree requirements

The Doctor of Philosophy in electrical and computer engineering degree is awarded upon satisfactory completion of 80 credits in an approved program of study. In addition to 56 credits of coursework beyond the bachelor's degree, students must also complete a minimum of 24 credits of dissertation research.

At least 56 credits must be earned for coursework beyond the bachelor's degree (exclusive of dissertation). The normal full-time load is 8 to 12 credits per semester.

Students who have previously earned a master's degree from Oakland University or another regionally-accredited institution may reduce the 56 credits of coursework required for the doctoral degree by up to 32 credits. To be considered for a reduction in required doctoral credits, students must submit a Petition of Credit from Earned Master's Degree. The advisory committee will evaluate the student's prior master's degree work and may reduce the required Ph.D. credits based on the master's coursework. The decision of the advisory committee is final, but the approved petition and approved Plan of Study must be on file in Graduate Study and Lifelong Learning by the end of the first year of doctoral study. All candidates must complete at least 24 credits of additional coursework exclusively at Oakland University.

Course requirements (56 credits)

a. Mathematics courses (minimum of 8 credits)

At least 8 credits must be earned in mathematics courses. Of these 8 credits, at least 4 must be taken from the following course group. With approval of the student's advisory committee, the other 4 credits can also be taken from graduate level mathematics courses not listed in the following group:

APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4
APM 563	Applied Mathematics: Discrete Methods I	4
APM 564	Applied Mathematics: Discrete Methods II	4
APM 565	Differential Geometry	4
APM 567	Algorithms and Complexity	4
APM 569	Graph Theory and Applications	4
APM 577	Computer Algebra	4
APM 658	Mathematical Modeling in Industry	4
MTH 551	Real Analysis	4
MTH 651	Functional Analysis	4
STA 521	Multivariate Statistical Methods I	4
STA 621	Multivariate Statistical Methods II	4

b. Electives (16 credits)

Electives	16

The remaining coursework related to a student's research area or other areas of interest should be completed according to the Plan of Study, approved by the student's Advisory Committee.

c. Previous master's coursework (up to 32 credits)

Previous master's coursework (up to 32 credits)	32

d. Dissertation (minimum of 24 credits)

ECE 790	Doctoral Dissertation Research	minimum of 24

Non-course requirements

Academic progress

In the Ph.D. program, credit will not be awarded for courses in which a grade less than 3.0 is earned. All numerical grades earned are used in computing a student's grade-point average.

Initial advising

After admission to the Ph.D. program, a student should consult with the Program Coordinator for any advice until formulation of an Advisory Committee.

Advisory committee

As soon as possible after admission, but prior to earning 16 credits of coursework, students must form an advisory committee, which will direct and guide the progress of their program. Such a committee is composed of four faculty members, specified as follows:

- Three faculty members nominated by the student (one designated as chair and one selected from a department outside the School of Engineering and Computer Science).
- One member appointed by the Dean of the School of Engineering and Computer Science.
- Upon recommendation of the advisory committee, following successful completion of the Ph.D. comprehensive examination, one member from within or outside the university community may either be added to the committee or replace a member for the dissertation proposal and review.

The composition of the entire advisory committee must be approved by the Dean of the School of Engineering and Computer Science and Graduate Study and Lifelong Learning.

Comprehensive examination

Each student is required to take a comprehensive examination after the student has completed all of his/her coursework, but before completing no more than 8 credits of dissertation research. The examination is designed to assess the student's analytical reasoning, theoretical understanding and preparedness to do independent research. The examination is composed of a written component and an oral component. The written examination includes at least two discipline-specific areas relevant to the student's coursework and research interest. The student's advisory committee, based on the student's preparation, selects the areas for the examination. The oral examination follows within a month of the written examination. The written examination is commonly split into no more than three parts to be taken over a reasonable period of time (usually not to exceed one month). A student may repeat the comprehensive examination once.

Dissertation proposal

As soon as a candidate and the advisory committee chair agree on a specific research topic, the candidate must write a dissertation proposal. This document contains a formulation of the problem, the

background work leading to the formulation and a plan for the subsequent research. Candidates must orally present the proposal to their advisory committees and any other interested faculty, at which time the committee may question the preparedness of the student to carry out the research.

Research credits

Students who have advisory committee approval of their dissertation proposals and are conducting research should register for ECE 790. At least 24 research credits are required of all doctoral candidates. However, merely amassing credits does not indicate satisfactory progress toward or completion of the dissertation. These judgments are made by the advisory committee. The dissertation is judged completed upon successful completion of the final examination and acceptance of the dissertation by Graduate Study and Lifelong Learning.

Dissertation

Each candidate will submit a dissertation to the advisory committee. The dissertation must be the candidate's own work and must constitute a contribution to knowledge in his/her field of endeavor. The completed dissertation must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog).

Residence

Writing a doctoral dissertation requires a full commitment to research. Such research cannot be effectively pursued in an environment which places research in a secondary role. Doctoral students are required to be full-time students for at least one year of their active dissertation research. The doctoral student should arrange such a period of residency by 1) registering for at least 8 credits of doctoral dissertation research for two consecutive semesters and 2) making a commitment, in a statement addressed to his/her advisory committee, to a program of full-time research (at least 20 hours per week).

The above represents the normal residency requirement. However, if the present occupation of the candidate (e.g., industrial research or teaching) is conducive to the intended research, there is an alternative method to fulfill the residency requirement. To arrange for the alternative residency, the candidate must apply in writing to his/her advisory committee at the time of the dissertation proposal review. The committee must be furnished with a written statement by the candidate's employer confirming that the dissertation research constitutes a major portion of the job assignment. If the advisory committee grants permission to pursue this option, the student must enroll in doctoral dissertation research (8 credits maximum) for at least two consecutive semesters.

Final examination

Each Ph.D. candidate must satisfactorily defend the dissertation in a final oral examination administered by the advisory committee. The examination is taken after the advisory committee certifies that the dissertation is ready for final review. At the committee's option, one reexamination may be permitted if a candidate fails to pass the final examination.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

If a student is deemed inactive, he or she may be dropped out of the program despite the petition for extension.

Graduation

Students expecting to graduate in a given semester must file an application for degree by the deadline published by the university. Failure to do so on time will preclude graduation in that semester.

■ Doctor of Philosophy in Mechanical Engineering

Coordinator

Gary C. Barber

Program description

The Doctor of Philosophy in mechanical engineering degree is designed for students who plan careers in industrial or governmental research and development laboratories or problem-oriented agencies, as well as in the academic field.

The field of mechanical engineering includes areas such as dynamics, vibrations and noise, energy systems, automotive engineering design, thermal energy transport, fluid transport, experimental stress analysis, solid mechanics, manufacturing processes and materials, tribology, numerical techniques, optical inspection, mechanics of metal forming, fasteners and bolted joints, and fuel cells. The Department of Mechanical Engineering is concentrating its efforts in these areas at the Ph.D. level.

Program delivery

Students can begin doctoral study on a part-time basis, availing themselves of late afternoon or evening courses while working full time in local industry. However, later phases of study and research will require full-time devotion to the program. Students must also fulfill a residency requirement.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendations from three faculty members of their most recent study program who can evaluate their scholarly achievement and potential
- Statement of research objectives and goals
- Scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA
- Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Doctor of Philosophy in mechanical engineering degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as follows.

Normally a master's degree from an accredited institution is required for admission; however, students with outstanding undergraduate records may apply directly for admission to the doctoral programs.

The Ph.D. in mechanical engineering degree program is designed for students with an academic background in mechanical engineering. Students with backgrounds in other areas of engineering, mathematics or the physical sciences may also be admitted to the program, but they will be required to build up basic mechanical engineering/computing knowledge through relevant coursework.

Degree requirements

The Doctor of Philosophy in mechanical engineering degree program is awarded upon satisfactory completion of 80 credits in an approved program of study. In addition to 56 credits of coursework beyond the bachelor's degree, students must also complete a minimum of 24 credits of dissertation research.

At least 56 credits must be earned for coursework beyond the bachelor's degree (exclusive of dissertation). The normal full-time load is 8 to 12 credits per semester.

Students who have previously earned a master's degree from Oakland University or another regionally-accredited institution may reduce the 56 credits of coursework required for the doctoral degree by up to 32 credits. To be considered for a reduction in required doctoral credits, students must submit a Petition of Credit from Earned Master's Degree. The advisory committee will evaluate the student's prior master's degree work and may reduce the required Ph.D. credits based on the master's coursework. The decision of the advisory committee is final, but the approved petition and approved Plan of Study must be on file in Graduate Study and Lifelong Learning by the end of the first year of doctoral study. All candidates must complete at least 24 credits of additional coursework exclusively at Oakland University.

Course requirements (56 credits)

a. Mathematics courses (minimum of 8 credits)

APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4

b. Depth areas (16 credits)

Select at least two depth areas from the following:

Manufacturing Processes and Materials
Experimental Stress Analysis
Dynamics, Vibrations and Noise
Automotive Engineering Design
Energy Systems
Thermal Energy Transport
Fluid Transport
Solid Mechanics
Tribology
Numerical Techniques
Optical Inspection
Mechanics of Metal Forming
Fasteners and Bolted Joints
Fuel Cells
Reliability Methods

The depth areas should be selected in consultation with the Advisory Committee and related to the student's research interests. Students can also select graduate electives from computer science and engineering, electrical engineering, systems engineering, mathematics, chemistry and physics after consultation with the Advisory Committee.

c. Previous master's coursework (up to 32 credits)

Previous master's coursework (up to 32 credits)	32

d. Dissertation (minimum of 24 credits)

ME 790	Doctoral Dissertation Research	minimum of 24

Non-course requirements

Academic progress

In the Ph.D. program, credit will not be awarded for courses in which a grade less than 3.0 is earned. All numerical grades earned are used in computing a student's grade-point average.

Initial advising

After admission to the Ph.D. program, a student should consult with the Program Coordinator for any advice until formulation of an Advisory Committee.

Advisory committee

As soon as possible after admission, but prior to earning 16 credits of coursework, students must form an advisory committee, which will direct and guide the progress of their program. Such a committee is composed of four faculty members, specified as follows:

- Three faculty members nominated by the student (one designated as chair and one selected from a department outside the School of Engineering and Computer Science).
- One member appointed by the Dean of the School of Engineering and Computer Science.
- Upon recommendation of the advisory committee, following successful completion of the Ph.D. comprehensive examination, one member from within or outside the university community may either be added to the committee or replace a member for the dissertation proposal and review.

The composition of the entire advisory committee must be approved by the Dean of the School of Engineering and Computer Science and Graduate Study and Lifelong Learning.

Comprehensive examination

Doctoral students in mechanical engineering are required to take a comprehensive examination after the student has completed all of the relevant coursework, but before completing no more than 8 credits of dissertation research. The examination is designed to assess the student's analytical reasoning, theoretical understanding and preparedness to do independent research. The examination is composed of a written component and an oral component. The written examination includes at least two discipline-specific areas relevant to the student's coursework and research interest. The student's advisory committee, based on the student's preparation, selects the areas for the examination. The oral examination follows within a month of the written examination. The written examination is split into three parts to be taken over a reasonable period of time (usually not to exceed one month). A student may repeat the comprehensive examination once.

Dissertation proposal

As soon as a candidate and the advisory committee chair agree on a specific research topic, the candidate must write a dissertation proposal. This document contains a formulation of the problem, the background work leading to the formulation and a plan for the subsequent research. Candidates must orally present the proposal to their advisory committees and any other interested faculty, at which time the committee may question the preparedness of the student to carry out the research.

Research credits

Students who have advisory committee approval of their dissertation proposals and are conducting research should register for ME 790. At least 24 research credits are required of all doctoral candidates. However, merely amassing credits does not indicate satisfactory progress toward or completion of the dissertation. These judgments are made by the advisory committee. The dissertation is judged completed upon successful completion of the final examination and acceptance of the dissertation by Graduate Study and Lifelong Learning.

Dissertation

Each candidate will submit a dissertation to the advisory committee. The dissertation must be the candidate's own work and must constitute a contribution to knowledge in his/her field of endeavor. The completed dissertation must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog).

Residence

Writing a doctoral dissertation requires a full commitment to research. Such research cannot be effectively pursued in an environment which places research in a secondary role. Doctoral students are required to be full-time students for at least one year of their active dissertation research. The doctoral student should arrange such a period of residency by 1) registering for at least 8 credits of doctoral dissertation research for two consecutive semesters and 2) making a commitment, in a statement addressed to his/her advisory committee, to a program of full-time (at least 20 hours per week) research.

The above represents the normal residency requirement. However, if the present occupation of the candidate (e.g., industrial research or teaching) is conducive to the intended research, there is an alternative method to fulfill the residency requirement. To arrange for the alternative residency, the candidate must apply in writing to his/her advisory committee at the time of the dissertation proposal review. The committee must be furnished with a written statement by the candidate's employer confirming that the dissertation research constitutes a major portion of the job assignment. If the advisory committee grants permission to pursue this option, the student must enroll in doctoral dissertation research (8 credits maximum) for at least two consecutive semesters.

Final examination

Each Ph.D. candidate must satisfactorily defend the dissertation in a final oral examination administered by the advisory committee. The examination is taken after the advisory committee certifies that the dissertation is ready for final review. At the committee's option, one re-examination may be permitted if a candidate fails to pass the final examination. The completed dissertation must conform to university standards (see Master's thesis/ doctoral dissertation in the Policies and Procedures section of this catalog).

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student

status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limit

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

If a student is deemed inactive, he or she may be dropped out of the program despite the petition for extension.

Graduation

Students expecting to graduate in a given semester must file an application for degree by the deadline published by the university. Failure to do so on time will preclude graduation in that semester.

■ Doctor of Philosophy in Systems Engineering

Coordinator

Michael P. Polis

Program description

The Doctor of Philosophy in systems engineering degree program is designed for students who plan careers in industrial or governmental research and development laboratories or problem-oriented agencies, as well as in the academic field.

The field of engineering has evolved into a blending of disciplines that is well suited for dealing with such concerns as robotics and machine vision, electronic and communication systems, mechanics, material and manufacturing systems, fluid and thermal systems, dynamic systems and control, computer and microprocessor systems, industrial and production systems, and artificial intelligence and expert systems. The School of Engineering and Computer Science is concentrating its efforts in these areas at the Ph.D. level.

Systems approach

The field of systems engineering recognizes the inter-disciplinary nature of engineering, particularly in the areas of robotics, electronics, communications, mechanics, manufacturing systems, production systems, fluid and thermal systems, dynamic systems and control, computer hardware and software systems, software engineering, artificial intelligence and expert systems. The successful analysis and design of complex engineering systems in each of these areas involve two major perspectives. The first perspective, characterized by viewing individual elements of any phenomenon, process or system as being interrelated, with the form of the relationship influencing the behavior of the whole, requires that a systems approach be taken in the analysis, modeling or synthesis of the phenomenon, process or system under consideration. The second perspective is discipline-specific and requires a detailed understanding of the fundamental physical principles or concepts associated with the particular system under study.

A direct benefit of the above approach to problem solving is that it ties the contributions made to the fundamental knowledge in the field with the nuances and constraints imposed by the environment on the specific problem under investigation.

In other words, it makes the engineering research sensitive and relevant to practical applications. For example, consider the problem of computer vision. Research in this area will involve the fundamental principles of pattern recognition, digital signal processing, image enhancement, data communication, etc. However, a computer vision system that is associated with robotics in a classical or flexible assembly line manufacturing environment would be subjected to very different environmental conditions and constraints than would a computer vision system on an all-terrain, ground-based vehicle. Integration of such fundamental research, while recognizing the interaction with the environment, lends itself to a systems approach to problem solving.

It is this broad definition of engineering systems that forms the cornerstone of the Ph.D. in systems engineering program at Oakland University. The program is multi-disciplinary, drawing its strength and resources from the entire faculty of the School of Engineering and Computer Science.

Ph.D. discipline specializations

In keeping with the programs of study that are currently available through the Computer Science and Engineering Department, Electrical and Systems Engineering Department, Industrial and Systems Engineering Department and Mechanical Engineering Department, the student can follow any one of the following discipline specializations, depending upon his or her previous background and training.

Computer Systems

The work in this discipline may be focused on hardware and software system design, artificial intelligence and expert systems, computer communication systems including parallel and distributed computing, computer graphic systems, computer vision and multimedia systems, pattern recognition and data mining, and software engineering systems.

Control Engineering and Dynamic Systems

The work in this discipline may be focused on adaptive, intelligent, digital and optimal control systems, modeling and estimation of dynamic systems, robotic systems, fuzzy logic and neural network-based control systems.

Electrical Engineering Systems

The work in this discipline may be focused on digital image and signal processing, microelectronic circuits and systems including

VLSI, instrumentation and measurement systems, electromagnetic systems, and analog and digital communication systems.

Industrial Engineering Systems

The work in this discipline may be focused on production systems, quality control, manufacturing systems, computer integrated manufacturing, flexible manufacturing systems, graphics and CAD/CAM, artificial intelligence in manufacturing systems, scheduling and systems integration.

Manufacturing Processes and Systems

The work in this discipline may be focused on manufacturing processes including machining, metal forming, materials, automated inspection and evaluation systems.

Mechanical Engineering Systems

The work in this discipline may be focused on engineering mechanics systems involving acoustics, vibrations, classical/experimental mechanics and non-destructive testing; fluid and thermal energy systems involving phase change, combustion, and energy transfer and conversion; tribology systems involving friction, lubrication and wear; and general manufacturing processes systems.

Program delivery

Students can begin doctoral study on a part-time basis, availing themselves of late afternoon or evening courses while working full time in local industry. However, later phases of study and research will require full-time devotion to the program. Students must also fulfill a residency requirement.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 Summer II

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendations from three faculty members of their most recent study program who can evaluate their scholarly achievement and potential
- Statement of research objectives and goals
- Scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA
- Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Doctor of Philosophy in systems engineering degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as follows.

Normally a master's degree from an accredited institution is required for admission; however, students with outstanding undergraduate records may apply directly for admission to the doctoral programs.

The Ph.D. program is designed for students with academic backgrounds in engineering and computing. Students with backgrounds in mathematics or the physical sciences may also be admitted to the program, but they will be required to build up basic engineering/computing knowledge through relevant coursework.

Degree requirements

The Doctor of Philosophy in systems engineering degree program is awarded upon satisfactory completion of 80 credits in an approved program of study. In addition to 56 credits of coursework beyond the bachelor's degree, students must also complete a minimum of 24 credits of dissertation research.

Course requirements (56 credits)

Because of the importance of the two perspectives outlined above, the Ph.D. in systems engineering degree program has two major components: systems concepts and discipline-specific options. The courses in the first component provide the necessary knowledge to apply a systems approach to problem solving.

The systems concepts required for the analysis and design of continuous systems are different from those required of discrete systems. Therefore, two tracks of courses have been identified to address the systems approach to these two different classes of systems.

a. Track requirements

1. Continuous Systems foundation courses (12 credits)

SYS 520	Signal and Linear Systems Analysis	4
or		
ME 610	Continuum Mechanics	4
APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4

2. Discrete Systems foundation courses (12 credits)

Four credits from the following:

SYS 569	Computer Simulation in Engineering	4
ISE 569	Computer Simulation of Discrete Event Systems	4

Eight credits from the following:

APM 541	Math Analysis for Engineers I	4
APM 563	Discrete Mathematics I	4
APM 564	Discrete Mathematics II	4
APM 568	Math Modeling in Industry: Discrete Models	4
APM 569	Graph Theory and Applications	4
APM 581	Theory of Computation	4
APM 664	Combinatorial Optimization	4
MOR 554	Linear and Integer Optimization	4
MOR 555	Nonlinear Optimization	4
MOR 556	Stochastic Models in Operations Research	4
MOR 558	Math Modeling in Industry: Operations Research Models	4
MOR 800	Stochastic Models in Operations Research	4
STA 504	Discrete Data Analysis	4
STA 513	Introduction to Mathematical Statistics I	4
STA 514	Introduction to Mathematical Statistics II	4
STA 515	Stochastic Processes I	4
STA 521	Multivariate Statistical Methods I	4
STA 527	Linear Statistical Models	4
STA 528	Reliability and Life Data Analysis I	4
STA 603	Advanced Design of Experiments	4

a. Depth areas (12 credits)

Every student in the Ph.D. in systems engineering degree program is required to elect one of the above two tracks.

Once the systems approach to problem solving has been established, a student will study several specific depth areas which relate to his/her research interest. These courses provide the discipline-specific component of the Ph.D. program. The student will concentrate on at least two of these areas, the selection of which will be the concerted effort of the student and the advisory committee. Although a student is expected to specialize in either continuous systems or discrete systems, he/she may select courses from other areas as deemed appropriate.

The current discipline-specific options offered by the School of Engineering and Computer Science include:

Continuous Systems

Optimal Control
Numerical Techniques
Manufacturing Processes
Dynamic Systems
Robotics
Quality and Reliability
Advanced Systems Theory
Tribology
Optimization and Decision Theory
Microelectronics, VLSI
Analog and Digital Communications
Energy Systems
Thermal Energy Transport
Signal and Image Processing
Fluid Transport
Instrumentation and Measurement
Experimental Stress Analysis
Electromagnetics
Solid Mechanics and Materials
Intelligent and Adaptive Control
Dynamics, Vibrations and Noise
Digital Control
Automotive Mechatronics

Discrete Systems

Manufacturing Systems
Industrial Systems
Product Systems
Quality Control
Computer Communications
Computer Integrated Manufacturing
Artificial Intelligence
Flexible Manufacturing Systems
Software Engineering
Graphics and CAD/CAM
Theory of Computing Systems
Computer Hardware Design
Microprocessor Systems
Software Systems
Parallel Processing
Pattern Recognition
Data Mining
Computer Vision
Multimedia Systems

For example, a student interested in robotics would be required to take the continuous systems track and may elect the following three discipline-specific options: robotics, dynamic systems and microprocessors. Such options not only cross the boundaries of the two classes of systems but also include courses from various departments within the School of Engineering and Computer Science. This multidisciplinary approach is one of the unique features of the systems engineering Ph.D. program at Oakland University.

c. Previous master's coursework (up to 32 credits)

Previous master's coursework (up to 32 credits)	32

d. Dissertation (minimum of 24 credits)

ME 790	Doctoral Dissertation Research	minimum of 24

The requirement for the Ph.D. is completion of a unified program of formal coursework, as specified above, and independent research directed and approved by the advisory committee. While the courses and examinations for a particular student are specified by the advisory committee, all programs are subject to the following general regulations.

Non-course requirements

Academic progress

In the Ph.D. program, credit will not be awarded for courses in which a grade less than 3.0 is earned. All numerical grades earned are used in computing a student's grade-point average.

Initial advising

After admission to the Ph.D. program, a student should consult with the Program Coordinator for any advice until formulation of an Advisory Committee.

Advisory committee

As soon as possible after admission, but prior to earning 16 credits of coursework, students must form an advisory committee, which will direct and guide the progress of their program. Such a committee is composed of four faculty members, specified as follows:

- Three faculty members nominated by the student (one designated as chair and one selected from a department outside the School of Engineering and Computer Science).
- One member appointed by the Dean of the School of Engineering and Computer Science.
- Upon recommendation of the advisory committee, following successful completion of the Ph.D. comprehensive examination, one member from within or outside the university community may either be added to the committee or replace a member for the dissertation proposal and review.

The composition of the entire advisory committee must be approved by the Dean of the School of Engineering and Computer Science and Graduate Study and Lifelong Learning.

Comprehensive examination

Doctoral students in systems engineering are required to take a comprehensive examination after the student has completed all of his/her coursework, but before completing no more than 8 credits of dissertation research. The examination is designed to assess the student's analytical reasoning, theoretical understanding and preparedness to do independent research. The examination is composed of a written component and an oral component. The written examination includes at least two discipline-specific areas relevant to the student's coursework and research interest. The student's advisory committee, based on the student's preparation, selects the areas for the examination. The oral examination follows within a month of the written examination. The written examination is commonly split into no more than three parts to be taken over a reasonable period of time (usually not to exceed one month). A student may repeat the comprehensive examination once.

Dissertation proposal

As soon as a candidate and the advisory committee chair agree on a specific research topic, the candidate must write a dissertation proposal. This document contains a formulation of the problem, the background work leading to the formulation and a plan for the subsequent research. Candidates must orally present the proposal to their advisory committees and any other interested faculty, at which time the committee may question the preparedness of the student to carry out the research.

Research credits

Students who have advisory committee approval of their dissertation proposals and are conducting research should register for EGR 790. At least 24 research credits are required of all doctoral candidates. However, merely amassing credits does not indicate satisfactory progress toward or completion of the dissertation. These judgments are made by the advisory committee. The dissertation is judged completed upon successful completion of the final examination and acceptance of the dissertation by Graduate Study and Lifelong Learning.

Dissertation

Each candidate will submit a dissertation to the advisory committee. The dissertation must be the candidate's own work and must constitute a contribution to knowledge in his/her field of endeavor. The completed dissertation must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog).

Residence

Writing a doctoral dissertation requires a full commitment to research. Such research cannot be effectively pursued in an environment which places research in a secondary role. Doctoral students are required to be full-time students for at least one year of their active dissertation research. The doctoral student should arrange such a period of residency by 1) registering for at least 8 credits of doctoral dissertation research for two consecutive semesters and 2) making a commitment, in a statement addressed to his/her advisory committee, to a program of full-time (at least 20 hours per week) research.

The above represents the normal residency requirement. However, if the present occupation of the candidate (e.g., industrial research or teaching) is conducive to the intended research, there is an alternative method to fulfill the residency requirement. To arrange for the alternative residency, the candidate must apply in writing to his/her advisory committee at the time of the dissertation proposal review. The committee must be furnished with a written statement by the candidate's employer confirming that the dissertation research constitutes a major portion of the job assignment. If the advisory committee grants permission to pursue this option, the student must enroll in doctoral dissertation research (8 credits maximum) for at least two consecutive semesters.

Final examination

Each Ph.D. candidate must satisfactorily defend the dissertation in a final oral examination administered by the advisory committee. The examination is taken after the advisory committee certifies that the dissertation is ready for final review. At the committee's option, one re-examination may be permitted if a candidate fails to pass the final examination.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limit

The maximum time limit for completing a Ph.D. degree is no more than ten years from the term of the first course enrollment in the doctoral program.

The Time Limit for Completing a Ph.D. Degree policy requires a student to achieve candidacy within six years from the first course enrollment in the doctoral program. After being advanced to candidacy, a student is expected to complete the remaining degree requirements within four years (including the dissertation defense).

If a student is deemed inactive, he or she may be dropped out of the program despite the petition for extension.

Graduation

Students expecting to graduate in a given semester must file an application for degree by the deadline published by the university. Failure to do so on time will preclude graduation in that semester.

■ Master of Science Degree Programs

The School of Engineering and Computer Science master's programs are described in the following order:

Computer Science and Engineering Department

M.S. in computer science
M.S. in software engineering and information technology

Electrical and Computer Engineering Department

M.S. in electrical and computer engineering
M.S. in embedded systems
M.S. in systems engineering

Industrial and Systems Engineering Department

M.S. in industrial and systems
M.S. in engineering management

Mechanical Engineering Department

M.S. in mechanical engineering

■ Master of Science in Computer Science

Administered by:

Department of Computer Science and Engineering

Program description

The Master of Science in computer science degree program is designed to prepare students for significant computer-related careers in business and industry and simultaneously for further graduate study. A natural continuation of studies is offered for students who have received a baccalaureate in computer science and are interested in furthering their technical knowledge.

The program offers two tracks: a professional track and a research track.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise.
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in computer science degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants

must also satisfy the admission requirements established by the academic program as listed below.

- Bachelor of Science in computer science (CS) or information technology (IT) or software engineering or computer engineering (CE) or equivalent. Applicants from other disciplines would be considered after successfully completing appropriate prerequisite courses.
- Grade-point average of 3.0 or better

Degree requirements

The Master of Science in computer science degree is awarded upon satisfactory completion of 32 or 36 credits in an approved program of study.

Advanced level prerequisite courses

The advanced level prerequisite courses CSE 505, 506, 507 and 508 afford an opportunity for students with strong academic or professional records in related fields to prepare for graduate studies in the above graduate program in minimal time.

Course requirements

1. Professional track (36 credits)

The professional track requires 36 credits of graduate coursework including 4 credits of an internship/industry project work. Those already working as professionals will have the option of replacing the internship/industry project with a regular course.

a. Core requirement (16 credits)

Must complete four core courses consisting of

CSE 535	Programming Languages and Compilers	4
CSE 545	Database Systems I	4
CSE 550	Operating Systems	4
CSE 561	Advanced Data Structures and Algorithms	4
or		
APM 563	Applied Mathematics: Discrete Methods I	4
or		
APM 577	Computer Algebra	4
or		
APM 581	The Theory of Computation	4

Note: A core course may be substituted by another CSE course with prior approval provided the student has already taken an equivalent course.

b. Depth requirement (8 credits)*

Students on a professional track must complete two courses (8 credits) from one specialty group.

c. Electives (8 credits)*

Eight credits of electives should be completed from at least two different specialty groups other than the specialty group selected as depth.

d. Internship or industry project (4 credits)

Students must complete 4 credits of internship or industry project.

CSE 596	Professional Practice	4

2. Research track (32 credits)

The research track requires 32 credits including 8 credits of thesis to graduate. The structure of credits is as follows:

a. Core requirement (16 credits)

Must complete four core courses consisting of

CSE 535	Programming Languages and Compilers	4
CSE 545	Database Systems I	4
CSE 550	Operating Systems	4
CSE 561	Advanced Data Structures and Algorithms	4
or		
APM 563	Applied Mathematics: Discrete Methods I	4
or		
APM 577	Computer Algebra	4
or		
APM 581	The Theory of Computation	4

Note: A core course may be substituted by another CSE course with prior approval provided the student has already taken an equivalent course.

b. Depth requirement (8 credits)

Students on a research track must complete a thesis for 8 credits.

CSE 691	Master's Thesis Research	8

c. Electives (8 credits)*

Eight credits of electives should be completed from at least two different specialty groups other than the specialty group selected as depth.

* A listing of CSE 500- to 700-level courses is given at the end of the program listing for the Master of Science in Software Engineering and Information Technology degree program.

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in the Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, a master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study, advising the thesis or project or teaching the special topics course must be obtained before registering for these credits.

No more than 8 thesis or project credits may be used toward the degree requirements.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required credits for the degree. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

Master's project or thesis

Although the master's degree requirements may be satisfied by taking only coursework, either a graduate engineering project (690) or a directed master's thesis research (691) may be included as part of the program in place of elective courses.

Students electing a thesis option must accumulate a minimum of 8 credits of (691). Successful completion and defense of a thesis is a prerequisite for earning thesis credits. Students choosing the thesis option must select an advisory committee, which is composed of at least three faculty members from the School of Engineering and Computer Science. The selection of the committee and the Plan of Study must be approved by the department chair. The chair (major professor) of the advisory committee will direct and guide the research. The student must propose a research topic to the committee for approval at least one semester before graduation. The completed thesis must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog).

At the completion of the research and its documentation, the content of the thesis must be publicly presented and defended. Successful defense of the thesis is a prerequisite for earning the research credits.

■ Master of Science in Software Engineering and Information Technology

Administered by:

Department of Computer Science and Engineering

Program description

The Master of Science in software engineering and information technology degree program is designed to prepare students for significant computer-related careers in business and industry and, simultaneously, for further graduate study. The program offers a natural continuation of studies for students who have received a baccalaureate in information technology or in software engineering or in computer science and are interested in furthering their technical knowledge. The program offers two tracks: a professional track and a research track. The professional track requires 36 credits of graduate coursework including 4 credits of internship/industry project work. The research track requires 32 credits including 8 credits of thesis to graduate.

The advanced level prerequisite courses CSE 505-508 afford an opportunity for students with strong academic or professional records in related fields to prepare for graduate studies in the above graduate programs in minimal time.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational

institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.

- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in software engineering and information technology degree program is selective. In addition to Graduate Admissions General Requirements specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Bachelor of Science in computer science (CS) or information technology (IT) or software engineering or computer engineering (CE) or equivalent. Applicants from other disciplines would be considered after successfully completing appropriate prerequisite courses.
- Grade-point average of 3.0 or better.

Degree requirements

The Master of Science in software engineering and information technology degree offers two tracks: professional track and research track. The professional track requires 36 credits of graduate coursework including 4 credits of internship/industry project work. Those already working as professionals will have the option of replacing the internship/industry project with a regular course. The research track requires 32 credits including 8 credits of thesis to graduate. The structure of credits is as follows:

Course requirements

1. Professional track (36 credits)

a. General core course requirements (16 credits*)

Must complete four core courses consisting of:

CSE 520	Fundamentals of Software Modeling	4
CSE 522	Object Oriented Analysis and Design	4
CSE 539	Software Engineering	4
CSE 545	Database Systems I	4

* A core course may be substituted by another CSE course with prior approval provided the student has already taken an equivalent course.

b. Depth requirement (8 credits*)

Students on research track must complete a thesis for 8 credits Students on professional track must complete two courses (8 credits) from SE or IT specialty group.

c. Electives (8 credits*)

Eight credits of electives should be completed. Four credits must be from non-SE and IT specialty groups.

d. Internship or industry project (4 credits)

CSE 596	Professional Practice	4

*See listing of CSE 500-to-700-level courses below.

2. Research track (32 credits)

a. General core course requirements (16 credits*)

Must complete four core courses consisting of:

CSE 520	Fundamentals of Software Modeling	4
CSE 522	Object Oriented Analysis and Design	4
CSE 539	Software Engineering	4
CSE 545	Database Systems I	4

* A core course may be substituted by another CSE course with prior approval provided the student has already taken an equivalent course.

b. Depth requirement (8 credits*)

Students on a research track must complete a thesis for 8 credits.

CSE 691	Master's Thesis Research	8

c. Electives (8 credits*)

Eight credits of electives should be completed. Four credits must be from non-SE and IT specialty groups.

*See listing of CSE 500-to-700-level courses below.

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in the Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having

attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, a master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study, advising the thesis or project or teaching the special topics course must be obtained before registering for these credits.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required 32 credits. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

No more than 8 thesis or project credits may be used toward the degree requirements.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

Master's project or thesis

Although the master's degree requirements may be satisfied by taking only coursework, either a graduate engineering project (690) or a directed master's thesis research (691) may be included as part of the program in place of elective courses.

Students electing a thesis option must accumulate a minimum of 8 credits of (691). Successful completion and defense of a thesis is a prerequisite for earning thesis credits. Students choosing the thesis option must select an advisory committee, which is composed of at least three faculty members from the School of Engineering and Computer Science. The selection of the committee and the Plan of Study must be approved by the department chair. The chair (major professor) of the advisory committee will direct and guide the research. The student must propose a research topic to the committee for approval at least one semester before graduation. The completed thesis must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog). At the completion of the research and its documentation, the content of the thesis must be publicly presented and defended. Successful defense of the thesis is a prerequisite for earning the research credits.

CSE 500- to 700-level courses

The following is the complete list of 500- to 700-level courses offered by the department. The prerequisite courses do not give any graduate credit. These are meant for students lacking sufficient background in computer science and engineering. Please consult the degree requirements to see how best to choose courses for your program of study.

Note: Courses listed under miscellaneous do not form a specialty group.

Prerequisite courses

CSE 505	Object Oriented Computing I	4
CSE 506	Object Oriented Computing II	4
CSE 507	Design and Analysis of Algorithms	4
CSE 508	Computer Hardware Design	4

Core courses

CSE 520	Fundamentals of Software Modeling	4
CSE 522	Object Oriented Analysis and Design	4
CSE 535	Programming Languages and Compilers	4
CSE 539	Software Engineering	4
CSE 545	Database Systems I	4
CSE 550*	Operating Systems	4
CSE 561	Advanced Data Structures and Algorithms	4
CSE 564	Computer Architecture	4
CSE 570	Real Time Microprocessor Software and Systems	4
CSE 576	Embedded Systems Design Using FPGAs	4
CSE 671	DSP in Embedded Systems	4

Specialty Group Courses

Networking and Systems Group

CSE 549	Wireless and Industrial Networks	4
CSE 647	Advanced Computer Networks	4
CSE 650	Advanced Operating Systems	4
CSE 664	Parallel Computer Architecture	4
CSE 681	Information Security	4

Embedded Systems Group		
CSE 566	Micro- and Nano-Embedded Systems	4
CSE 570	Real Time Microprocessor Software and Systems	4
CSE 576	Embedded Systems Design Using FPGAs	4
CSE 661	Design Automation of Embedded Systems	4
CSE 671	DSP in Embedded Systems	4
CSE 678	Advanced Embedded Systems	4

Information Technology Group		
CSE 551	Advanced Web Design and Application	4
CSE 581	Information Retrieval and Knowledge Discovery	4
CSE 591	Bioinformatics	4
CSE 583	E-Commerce and ERP	4
CSE 645	Database Systems II	4
CSE 681	Information Security	4

Software Engineering Group		
CSE 530	Software Prototyping and Validation	4
CSE 538	Software Verification and Testing	4
CSE 539	Software Engineering	4
CSE 541	Software Project Planning, Management and Maintenance	4
CSE 542	Software Architecture and Components	4

Intelligent Computing Group		
CSE 513	Computational Intelligence	4
CSE 555	Visual Computing	4
CSE 581	Information Retrieval and Knowledge Discovery	4
CSE 616	Pattern Recognition and Machine Learning	4
CSE 655	Advanced Visual Computing	4

Miscellaneous		
CSE 594	Independent Study	2 to 4
CSE 595	Special Topics	2 to 4
CSE 596	Professional Practice	2 to 4
CSE 691	Master's Thesis Research	2 to 8
CSE 794	Independent Study	2 to 4
CSE 795	Special Topics	2 to 4

*These courses are cross-listed as advanced undergraduate and graduate courses. If completed as a 400-level course or equivalent as part of baccalaureate degree, the course may be used to offset graduate program requirements. However, credit will not then be awarded and must be earned by completion of an approved substitute course.

■ Master of Science in Electrical and Computer Engineering

Administered by:

Department of Electrical and Computer Engineering

Program Description

The Master of Science in electrical and computer engineering degree program (ECE) is designed for students who are interested in acquiring advanced knowledge and skills in the traditional and emerging areas of ECE. The graduate curricula include strong offerings in advanced control engineering, automotive mechatronic systems, computer engineering, digital and wireless communication, digital signal and image processing, electromagnetics and antenna theory, electronics and microelectronics system design, microprocessor-based system design and robotic systems.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in electrical and computer engineering degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Bachelor of Science in electrical engineering (EE) or computer engineering (CE). Applicants from other disciplines will be considered after successfully completing appropriate prerequisite courses.
- Grade-point average of 3.0 or better.

Degree requirements

To fulfill the requirements for a Master of Science in electrical and computer engineering degree, a student must:

- Complete at least 32 credits of graduate-level work, of which at least 24 credits must be in approved courses offered by the School of Engineering and Computer Science.
- Earn a cumulative GPA of at least 3.0 in courses applied toward the degree.
- Complete the requirements specified for the program in electrical and computer engineering.
- Satisfy all requirements concerning academic progress.

The degree requirements may be satisfied by taking only coursework. However, a graduate engineering project (ECE 690) or master's thesis research (ECE 691) provides a unique and valuable learning experience in which an individual student works with a faculty member in an area of mutual interest. Therefore, students are encouraged to include such an experience as their program permits.

A student must fulfill the following program requirements to be awarded the Master of Science in electrical and computer engineering:

Course requirements

a. Core and Theory course requirements (8 credits)

Choose 8 credits from the following:

APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4
APM 563	Applied Mathematics: Discrete Methods I	4
MTH 555	Complex Analysis	4
SYS 510	Systems Optimization and Design	4
SYS 520	Signal and Linear Systems Analysis	4
ECE 533	Random Signals and Processes	4

b. Depth and Breadth area options (16 credits)

- Depth requirement: To satisfy the depth requirement, students must either complete a master's thesis or choose one of the options below as the depth area and take at least two courses from it. (8 credits)
- Breadth requirement: To satisfy the breadth requirement, students must choose two other options as the breadth areas and take at least one course from each. (8 credits)

1. Communications Option

ECE 527	High-Frequency Electronics	4
ECE 533	Random Signals and Processes	4
ECE 534	Principles of Digital Communications	4
ECE 550	Satellite-based Positioning Systems	4
ECE 567	Computer Networks	4
ECE 632	Wireless Communications	4
ECE 633	Signal Detection and Estimation Theory	4
ECE 635	Modulation and Coding	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

2. Computer Engineering Option

ECE 570*	Microprocessor-based Systems Design	4
ECE 585	VLSIC Design of Digital Chips	4
ECE 571	Mixed-Signal Embedded Systems	4
ECE 576	Embedded System Design with FPGAs	4
ECE 664	Parallel Embedded Computer Architecture	4
ECE 666	Real-time Computing Systems	4
ECE 671	DSP in Embedded Systems	4
ECE 672	Fault Tolerant Systems	4
ECE 676	Advanced Embedded System Design	4
CSE 564*	Computer Architecture	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

3. Controls Option

ECE 525	Instrumentation and Measurements	4
ECE 572*	Microcomputer-based Control Systems	4
ECE 575*	Automotive Mechatronics I	4
ECE 675	Automotive Mechatronics II	4
SYS 520	Signal and Linear Systems Analysis	4
SYS 630	Optimal Control Theory	4
SYS 631	Estimation and Control Theory	4
SYS 632	Analysis of Nonlinear Control Systems	4
SYS 635	Adaptive Control Systems	4
SYS 645	Intelligent Control Systems	4
SYS 674	Digital Control Systems	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

4. Electromagnetics Option

ECE 527	High-Frequency Electronics	4
ECE 545*	Electromagnetic Engineering	4
ECE 546	Electromagnetic Compatibility	4

ECE 547	Antennas	4
ECE 550	Satellite-Based Positioning Systems	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

5. Electronics Option

ECE 525	Instrumentation and Measurements	4
ECE 527	High-Frequency Electronics	4
ECE 581	Integrated Circuits and Devices	4
ECE 583	Fundamentals of MEMS	4
ECE 585*	VLSIC Design of Digital Chips	4
ECE 587*	Integrated Electronics	4
ECE 625	Applications of Analog Integrated Circuits	4
ECE 682	Field-Effect Devices	4
ECE 683	Advanced VLSIC Analog/Digital Systems Design	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

6. Energy Option

ECE 525	Instrumentation and Measurements	4
SYS 520	Signal and Linear Systems Analysis	4
ECE 557	Energy Conservation Systems	4
SYS 558*	Electrical Energy Systems	4
SYS 721	Large-Scale Dynamic Systems	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

7. Mechatronics and Robotics Option

SYS 510	Systems Optimization and Design	4
ECE 523	Robotic Systems and Control	4
ECE 525	Instrumentation and Measurements	4
ECE 572*	Microcomputer-based Control Systems	4
ECE 575*	Automotive Mechatronics I	4
ECE 675	Automotive Mechatronics II	4
ECE 678	Introduction to Autonomous Vehicle Systems	4
SYS 623	Dynamics and Control of Robotic Manipulators	4
SYS 632	Analysis of Nonlinear Control Systems	4
SYS 674	Digital Control Systems	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

8. Signal Processing Option

ECE 533	Random Signals and Processes	4
ECE 537	Digital Signal Processing	4
ECE 633	Signal Detection and Estimation Theory	4
ECE 638	Digital Image Processing	4
ECE 639	Advanced Digital Signal Processing	4
With approval:		
ECE	594**, 595, 690**, 691***, 795	

c. Electives (8 credits)

An additional 8 credits of electives can be chosen from any of the ECE or SYS courses listed above under various options. (8 credits)

Additional electives (with adviser consultation)

With adviser's approval, students may also choose their electives from the following group of courses:

CSE	513
PHY	562, 574, 583, 632, 673

*These courses are cross-listed as advanced undergraduate and graduate courses. If completed as a 400-level course or equivalent as part of baccalaureate degree, the course may be used to offset graduate program requirements. However, credit will not then be awarded and must be earned by completion of an approved substitute course.

**At most 4 credits of ECE 594 and ECE 690 can be used toward the degree.

***A minimum of 8 credits are required for master's thesis (ECE 691).

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in the Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, a master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study,

advising the thesis or project or teaching the special topics course must be obtained before registering for these credits.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required 32 credits. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

No more than 8 thesis or project credits may be used toward the degree requirements.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

Master's project or thesis

Although the master's degree requirements may be satisfied by taking only coursework, either a graduate engineering project (ECE 690) or a directed master's thesis research (ECE 691) may be included as part of the program in place of elective courses.

Students electing a thesis option must accumulate a minimum of 8 credits of (ECE 691). Successful completion and defense of a thesis is a prerequisite for earning thesis credits. Students choosing the thesis option must select an advisory committee, which is composed of at least three faculty members from the School of Engineering and Computer Science. The selection of the committee and the Plan of Study must be approved by the department chair. The chair (major professor) of the advisory committee will direct and guide the research. The student must propose a research topic to the committee for approval at least one semester before graduation. The completed thesis must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog). At the completion of the research and its documentation, the content of the thesis must be publicly presented and defended. Successful defense of the thesis is a prerequisite for earning the research credits.

■ Master of Science in Embedded Systems

Administered by:

Department of Electrical and Computer Engineering

Program Description

The Master of Science in embedded systems (ES) degree program is designed to prepare students for significant embedded computer-related careers in industry, automotive, various appliances and others. It is designed for students with a baccalaureate degree in computer engineering, computer science, electrical, electronic or communication engineering who want to strive for a balance of theory, hardware and software in computer system design. A degree in another field may be acceptable but remedial coursework may be required to overcome deficiencies.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in embedded systems degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- B.S. or equivalent degree in computer engineering, computer science, or electrical, electronic or communication engineering. Applicants without a background in digital logic and microprocessor-based systems will be asked to take ECE 508 and/or ECE 570 before taking any other courses.
- Grade-point average of 3.0 or better.

Degree requirements

To fulfill the requirements for a Master of Science degree in embedded systems, a student must:

- Complete at least 32 credits of graduate-level work, of which at least 24 credits must be in approved courses offered by the School of Engineering and Computer Science
- Earn a cumulative GPA of at least 3.0 in courses applied toward the degree
- Complete the requirements specified for the program in embedded systems
- Satisfy all requirements concerning academic progress.

The degree requirements may be satisfied by taking only coursework. However, a graduate engineering project (ECE 690) or master's thesis research (ECE 691) provides a unique and valuable learning experience in which an individual student works with a faculty member in an area of mutual interest. Therefore, students are encouraged to include such an experience as their program permits.

Students must fulfill the following program requirements to be awarded the Master of Science in embedded systems:

Course requirements

a. Core course requirements (16 credits)

Select four courses from the following:

ECE 566	Micro and Nano Embedded Systems	4
ECE 570*	Microprocessor-based Systems Design	4
ECE 571	Mixed-signal Embedded Systems	4
ECE 572*	Microcomputer-based Control Systems	4
ECE 573	Embedded System Validation and Verification	4
ECE 576	Embedded System Design with FPGAs	4
CSE 564	Computer Architecture	4

b. Depth area courses (12 credits)

Select 12 credits from the following:

ECE 585*	VLSI Design of Digital Chips	4
ECE 664	Parallel Embedded Computer Architecture	4
ECE 666	Real-time Computing Systems	4
ECE 671	DSP in Embedded Systems	4
ECE 672	Fault Tolerant Systems	4
ECE 676	Advanced Embedded System Design	4
ECE 690	Graduate Engineering Project**	2-4
ECE 691	Master's Thesis Research***	4-8

c. Electives (4 credits)

Four credits of electives can be chosen from any 500- or 600-level ECE or CSE courses.

*These courses are cross-listed as advanced undergraduate and graduate courses. If completed as a 400-level course or equivalent as part of baccalaureate degree, the course may be used to offset graduate program requirements. However, credit will not then be awarded and must be earned by completion of an approved substitute course.

**At most 4 credits of ECE 594 and ECE 690 can be used toward the degree.

***A minimum of 8 credits are required for master's thesis (ECE 691).

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in the Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study, advising the thesis or project or teaching the special topics course must be obtained before registering for these credits.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required 32 credits. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

No more than 8 thesis or project credits may be used toward the degree requirements.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

Master's project or thesis

Although the master's degree requirements may be satisfied by taking only coursework, either a graduate engineering project (ECE 690) or a directed master's thesis research (ECE 691) may be included as part of the program in place of elective courses.

Students electing a thesis option must accumulate a minimum of 8 credits of (ECE 691). Successful completion and defense of a thesis is a prerequisite for earning thesis credits. Students choosing the thesis option must select an advisory committee, which is composed of at least three faculty members from the School of Engineering and Computer Science. The selection of the committee and the Plan of Study must be approved by the department chair. The chair (major professor) of the advisory committee will direct and guide the research. The student must propose a research topic to the committee for approval; however, a formal presentation of the proposal is not necessary. The completed thesis must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog). At the completion of the research and its documentation, the content of the thesis must be publicly presented and defended. Successful defense of the thesis is a prerequisite for earning the research credits.

■ Master of Science in Systems Engineering

Administered by:

Department of Electrical and Computer Engineering

Program Description

The Master of Science in systems engineering degree program is designed to prepare students for significant engineering-related careers in industry as well as simultaneously for further graduate study. Admission is open to students with a bachelor's degree in any engineering discipline. The program offers three distinct options:

1. Dynamic systems and control engineering option
2. Robotic systems engineering option
3. System modeling and computer simulation option.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in systems engineering degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- Bachelor of Science in any engineering discipline
- Grade-point average of 3.0 or better.

Degree requirements

To fulfill the requirements for a Master of Science degree in systems engineering, a student must:

- Complete at least 32 credits of graduate-level work, of which at least 24 credits must be in approved courses offered by the School of Engineering and Computer Science.
- Earn a cumulative GPA of at least 3.0 in courses applied toward the degree.
- Complete the requirements specified for the program in systems engineering.
- Satisfy all requirements concerning academic progress.

The degree requirements may be satisfied by taking only coursework. However, a graduate engineering project (SYS 690) or master's thesis research (SYS 691) provides a unique and valuable learning experience in which an individual student works with a faculty member in an area of mutual interest. Therefore, students are encouraged to include such an experience as their program permits.

A student must fulfill the program requirements for one of the options listed below to be awarded the Master of Science in systems engineering.

1. Dynamic Systems and Control Engineering Option (32 credits)

Theory courses (4 to 8 credits)

APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4
APM 553	Advanced Ordinary Differential Equations	4
MTH 555	Complex Analysis	4
SYS 520	Signal and Linear Systems Analysis	4
ECE 533	Random Signals and Processes	4

Required courses (12 to 16 credits)

Students are required to select at least three courses from:

SYS 520	Signal and Linear Systems Analysis	4
SYS 630	Optimal Control Theory	4
SYS 631	Estimation and Control Theory	4
SYS 674	Digital Control Systems	4

Depth areas (8 to 16 credits)

A student is required to take at least two courses from one of the following depth areas. Students may take more than one depth area.

(Depth area courses are listed at the end of this section.)

Advanced Control Systems
Robotic Systems
Intelligent Systems
Dynamic Systems
Nonlinear Systems
Microprocessor Control Systems
Optimization of Systems

Electives** (0 to 8 credits)

Additional credits may be taken from the following electives:

SYS	Any course with level 500 and above
CSE	512, 513, 545, 550*, 576
ECE	525, 533, 567, 570*, 572*, 585*, 625, 537, 638, 683
ME	521, 569, 572*, 574*
PHY	562
With approval:	
SYS	594**, 595, 690**, 691***, 795

Thesis option (8 credits)

SYS 691	Master's Thesis Research	2-8

2. Robotics Systems Engineering Option (32 credits)

Theory courses: (4 to 8 credits)

APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4
APM 553	Advanced Ordinary Differential Equations	4
APM 565	Differential Geometry	4
SYS 510	Systems Optimization and Design	4
SYS 520	Signal and Linear Systems Analysis	4

Required courses (12 to 16 credits)

Students are required to select at least three courses from:

SYS 520	Signal and Linear System Analysis	4
SYS 575*	Automotive Mechatronics I	4
SYS 623	Dynamics and Control of Robot Manipulators	4
SYS 632	Analysis of Nonlinear Control Systems	4
ECE 523	Robotic Systems and Control	4

Depth areas (8 to 16 credits)

A student is required to take at least two courses from one of the following depth areas:

(Depth area courses are listed at the end of this section.)

Computer Systems
Dynamic Systems
Intelligent Systems
Linear Control Systems
Microprocessor Control Systems
Nonlinear Systems
Optimization of Systems

Electives* (0 to 8 credits)

Additional credits may be taken from the following electives:

SYS	Any course with level 500 and above
CSE	512, 513, 545, 550*
ECE	527, 533, 567, 570*, 572*, 585*, 625, 537, 638, 683
ME	521, 569, 572*, 574*
PHY	562
With approval:	
SYS	594**, 595, 690**, 691***, 795

Thesis option (8 credits)

SYS 691	Master's Thesis Research	2-8

3. Systems Modeling and Computer Simulation Option (32 credits)

Theory courses (4 to 8 credits)

APM 541 APM 542	Mathematical Analysis for Engineers I and II	4 (each)
APM 553	Advanced Ordinary Differential Equations	4
APM 565	Differential Geometry	4
SYS 510	Systems Optimization and Design	4
SYS 517 or ISE 517	Probability and Its Engineering Applications Probability and Its Engineering Applications	4 4
SYS 520	Signal and Linear Systems Analysis	4

Required courses (12 to 16 credits)

Students are required to select at least three courses from the following. Other electives that are appropriate to the student's Plan of Study require prior approval of the faculty adviser and department chair.

SYS 520	Signal and Linear Systems Analysis	4
SYS 563*	Foundation of Computer-aided Design	4
SYS 569* or ISE 569*	Computer Simulation in Engineering Computer Simulation of Discrete Event System	4 4
ISE 587*	Foundations of Systems Engineering I	4

Depth areas (8 to 16 credits)

A student is required to take at least two courses from one of the following depth areas.

(Depth area courses are listed at the end of this section.)

Dynamic Systems
Mechanical Systems
Microprocessor Control Systems
Nonlinear Systems
Optimization of Systems

Electives* (0 to 8 credits)

Additional credits may be taken from the following electives.

ISE	Any course with level 500 and above
SYS	Any course with level 500 and above
CSE	513, 545, 550*
ECE	527, 533, 567, 570*, 572*, 585*, 625, 537, 638, 683
ME	521, 569, 572*, 574*
PHY	562
With approval:	
SYS	594**, 595, 690**, 691***, 795

Thesis option (8 credits)

SYS 691	Master's Thesis Research	2-8

Systems Engineering Depth Areas

The student must select at least two courses from one of the following depth areas associated with their option above:

Advanced Control Systems:	SYS 632, SYS 635, ECE 645
Computer Systems:	SYS 563*, ECE 567, ECE 570*, ECE 571, ECE 576, ECE 585*, ECE 666, ECE 671, ECE 672
Dynamic Systems:	SYS 520, SYS 575*, SYS 675, ECE 525, ME 521
Electrical Systems:	ECE 525, ECE 570*, ECE 572*, ECE 583, ECE 585*, ECE 537, ECE 638, ECE 683
Intelligent Systems:	SYS 635, SYS 645, ISE 512*
Linear Control Systems:	ECE 433, SYS 520, SYS 575*, SYS 630, SYS 675
Mechanical Systems:	ECE 523*, SYS 575*, SYS 623, SYS 675, ME 521
Microprocessor Control Systems:	SYS 674, ECE 525, ECE 570*, ECE 572*
Nonlinear Systems:	SYS 510, SYS 623, SYS 632, SYS 635
Optimization of Systems:	SYS 510, SYS 630, SYS 631, CSE 513
Robotic Systems:	ECE 523*, ECE 678, SYS 575*, SYS 623, SYS 675
Stochastic Systems:	SYS 517 or ISE 517, SYS 585*, SYS 631, ECE 533

*These courses are cross-listed as advanced undergraduate and graduate courses. If completed as a 400-level course or equivalent as part of a baccalaureate degree, the course may be used to offset graduate program requirements. However, credit will not then be awarded and must be earned by completion of an approved substitute course.

**At most 4 credits of ECE 594 and ECE 690 can be used toward the degree.

***A minimum of 8 credits are required for master's thesis (SYS 691).

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in the Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study, advising the thesis or project or teaching the special topics course must be obtained before registering for these credits.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required 32 credits. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

No more than 8 thesis or project credits may be used toward the degree requirements.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

Master's project or thesis

Although the master's degree requirements may be satisfied by taking only coursework, either a graduate engineering project (SYS 690) or a directed master's thesis research (SYS 691) may be included as part of the program in place of elective courses.

Students electing a thesis option must accumulate a minimum of 8 credits of (SYS 691). Successful completion and defense of a thesis is a prerequisite for earning thesis credits. Students choosing the thesis option must select an advisory committee, which is composed of at least three faculty members from the School of Engineering and Computer Science. The selection of the committee and the Plan of Study must be approved by the department chair. The chair (major professor) of the advisory committee will direct and guide the research. The student must propose a research topic to the committee for approval, at least one semester before graduation. The completed thesis must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog). At the completion of the research and its documentation, the content of the thesis must be publicly presented and defended. Successful defense of the thesis is a prerequisite for earning the research credits.

■ Master of Science in Industrial and Systems Engineering

Administered by:

Department of Industrial and Systems Engineering

Program Description:

The Master of Science program in industrial and systems engineering is designed to prepare students for significant, engineering-related careers in industry as well as simultaneously for further graduate study. Admission is open to students with a bachelor's degree in any engineering discipline.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- B.S. in any engineering discipline
- Grade point average of 3.0 or better.

Degree requirements:

To fulfill the requirements for a Master of Science degree in industrial and systems engineering, a student must:

- Complete at least 32 credits of graduate-level work, of which at least 24 credits must be in approved courses offered by the School of Engineering and Computer Science
- Earn a cumulative GPA of at least 3.0 in courses applied toward the degree
- Complete the requirements specified for the program in industrial and systems engineering (see Industrial Option and General Systems Option)
- Satisfy all requirements concerning academic progress (see Academic progress next page).

The degree requirements may be satisfied by taking only coursework. However, a graduate engineering project (ISE 690) or master's thesis research (ISE 691) provides a unique and valuable learning experience in which an individual student works with a faculty member in an area of mutual interest. Therefore, students are encouraged to include such an experience.

A student in the Master of Science in industrial and systems engineering program is required to select one of the following two options:

1. Industrial
2. General Systems.

Course requirements

1. Industrial Option (32 credits)

a. Theory courses (4 to 8 credits)

Students are required to select one or two courses from:

ISE 517	Statistical Methods in Engineering	4
MOR 554	Linear and Integer Optimization	4
STA 501	Statistical Methods in Research and Production	4
SYS 510	Systems Optimization and Design	4

b. Required courses (12 credits)

Students are required to select at least three courses from:

ISE 530*	Engineering Operations Research-Stochastic Models	4
ISE 583*	Production Systems and Workflow Analysis	4
ISE 585*	Statistical Quality Analysis	4
ISE 587*	Foundations of Systems Engineering I	4
ISE 684	Computer-Integrated Manufacturing Systems	4

c. Depth area courses (8 credits)

Students are required to take at least two depth area courses from:

An additional 1 or 2 courses from the list of required courses given above.		4-8
ISE 512	Artificial Intelligence in Manufacturing	4
ISE 522*	Robotic Systems	4
ISE 541*	Human Factors	4
ISE 569*	Computer Simulation of Discrete Event Systems	4
ISE 580*	E-Commerce and ERP	4
ISE 581	Lean Principles and Application	4
ISE 588*	Foundations of Systems Engineering II	4
ISE 664	Advanced Computer-Aided Design	4
ISE 680	Engineering Decision Analysis	4
ME 572*	Material Properties and Processes	4
ME 574*	Manufacturing Processes	4

d. Elective courses** (0 to 8 credits)

Additional credits may be taken from the following electives.

ISE 484	Flexible and Lean Manufacturing Systems	4
ISE	Any course level 500 or above	

CSE, ECE, ME, SYS	Any course level 500 or above (Satisfaction of the prerequisites for any course in this list will depend upon the engineering discipline of the student's B.S. degree.)
With approval:	
ISE	594, 595, 690, 691, 795

2. General Systems Option (32 credits)

a. Theory courses (4 to 8 credits)

Students are required to select one or two courses from:

ISE 517	Statistical Methods in Engineering	4
ISE 530*	Engineering Operations Research-Stochastic Methods	4
APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4
APM 563	Applied Mathematics: Discrete Methods I	4
MOR 554	Linear and Integer Optimization	4
STA 501	Statistical Methods in Research and Production	4
SYS 510	Systems Optimization and Design	4

b. Required courses (12 credits)

Students are required to select at least three courses from:

ISE 569*	Computer Simulation of Discrete Event Systems	4
ISE 580*	E-Commerce and ERP	4
ISE 587*	Foundations of Systems Engineering I	4
ISE 588*	Foundations of Systems Engineering II	4
ISE 680	Engineering Decision Analysis	4

c. Elective courses** (12 to 16 credits)

Additional credits may be taken from the following electives or the student may select the M.S. thesis option.

ISE	Any course with level 500 and above
CSE, ECE, ME, SYS	Any course level 500 or above (Satisfaction of the prerequisites for any course in this list will depend upon the engineering discipline of the student's B.S. degree.)
With approval:	
ISE	594, 595, 690, 691, 795

*These courses are cross-listed as advanced undergraduate and graduate courses. If completed as a 400-level course or equivalent as part of a baccalaureate degree, the course may be used to offset graduate program requirements. However, credit will not then be awarded and must be earned by completion of an approved substitute course.

**Other electives that are appropriate to the student's Plan of Study require prior approval of the faculty adviser and department chair.

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in the Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study, advising the thesis or project or teaching the special topics course must be obtained before registering for these credits.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required 32 credits. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

No more than 8 thesis or project credits may be used toward the degree requirements.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate

studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

Master's project or thesis

Although the master's degree requirements may be satisfied by taking only coursework, either a graduate engineering project (ISE 690) or a directed master's thesis research (ISE 691) may be included as part of the program in place of elective courses.

Students electing a thesis option must accumulate a minimum of 8 credits of (ISE 691). Successful completion and defense of a thesis is a prerequisite for earning thesis credits. Students choosing the thesis option must select an advisory committee, which is composed of at least three faculty members from the School of Engineering and Computer Science. The selection of the committee and the Plan of Study must be approved by the department chair. The chair (major professor) of the advisory committee will direct and guide the research. The student must propose a research topic to the committee for approval at least one semester before graduation. The completed thesis must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog). At the completion of the research and its documentation, the content of the thesis must be publicly presented and defended. Successful defense of the thesis is a prerequisite for earning the research credits.

■ Master of Science in Engineering Management

Administered by:

Department of Industrial and Systems Engineering

Program description

The Master of Science in engineering management degree is offered by the School of Engineering and Computer Science in cooperation with the School of Business Administration. Intended for students with a bachelor's degree in engineering or computer science, the program has as its goal the provision of the tools and skills necessary for making sound management decisions in industry and business while retaining one's commitment to a specialized field of endeavor. Applicants with a computer science background may be required to take remedial courses in engineering.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise. These recommendations form an important part of the admission credentials.
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores.
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

International students will have additional application requirements. See the Graduate Admissions Web site for these additional requirements.

Admission requirements

Admission to the Master of Science in engineering management is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

- B.S. in computer science (CS) or information technology (IT) or software engineering or computer engineering (CE) or equivalent. Applicants from other disciplines would be considered after successfully completing appropriate prerequisite courses.
- Grade-point average of 3.0 or better
- Official GRE scores are required of applicants having the qualifying degree from an institution not regionally accredited
- Official TOEFL scores are required of graduates of programs taught in a language other than English.

Degree requirements

To be awarded the Master of Science in engineering management degree the student must:

- Successfully complete a minimum of 42-43 credits of graduate level work as specified below.
- Earn a grade-point average of at least 3.0 in courses applied toward the degree.
- Satisfy all requirements concerning Academic Progress.

A student must fulfill the following program requirements to be awarded the Master of Science in engineering management degree:

Theory courses (select 4 credits)

MOR 554	Linear and Integer Optimization	4
STA 501	Statistical Methods in Research and Production	4
STA 503	Applied Linear Models II	4
ISE 517	Probability and Its Engineering Applications	4

Required core courses (select 12 credits)

SYS 510	Systems Optimization and Design	4
ISE 569*	Computer Simulation of Discrete Event System	4
ISE 585*	Statistical Quality Analysis	4
ISE 680	Engineering Decision Analysis	4
ISE 684	Computer-Integrated Manufacturing Systems	4

Program courses

Group A (select 8 credits)

Choose two 500- and/or 600-level courses, in one discipline only, from ISE, SYS, ECE, ME or CSE (excluding CSE 505, 506, 507, and 508)

Group B courses (select 15 credits)

ACC 511	Financial Accounting	3
ECN 521	Economics for Managers	3
FIN 533	Financial Management	3
MIS 524	Enterprise Information Systems	3
MKT 560	Marketing Management	3
ORG 530	Organizational Behavior	3
POM 521	Operations Management	3

Group C courses (select 3 to 4 credits**)

ACC 512	Managerial Accounting Systems	3
MGT 550	Legal Environment of Business	3
MIS 525	Business Process Innovation and Management	3
ORG 631	Human Resources Management	3
CSE 545*	Database Systems I	4
ISE 581	Lean Principles and Applications	4
ISE 583*	Production Systems and Workflow Analysis	4
ISE 587*	Foundations of Systems Engineering I	4

*These courses are cross-listed as advanced undergraduate and graduate courses. If completed as a 400-level course or equivalent as part of baccalaureate degree, the course may be used to offset graduate program requirements. However, credit will not then be awarded and must be earned by completion of an approved substitute course.

** Some of the courses in this group may serve as prerequisites for above courses.

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in a Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study, advising the thesis or project or teaching the special topics course must be obtained before registering for these credits.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required 32 credits. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

No more than 8 thesis or project credits may be used toward the degree requirements.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate

studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

■ Master of Science in Mechanical Engineering

Administered by:

Department of Mechanical Engineering

Program Description

The Master of Science in mechanical engineering degree program is designed to prepare students for significant, engineering-related careers in industry as well as for further graduate study.

Admission is open to students with a bachelor's degree in mechanical engineering. A degree in other fields of engineering, science and mathematics may be acceptable but remedial coursework may be required to overcome deficiencies.

The program offers the following five options:

1. Solid and structual mechanics
2. Energy, fluid and thermal systems
3. Manufacturing processes
4. Automotive engineering
5. General mechanical engineering.

Admission terms and deadlines

All application materials must be received by:

- August 1 for the fall semester
- December 1 for the winter semester
- April 1 for Summer I
- June 1 for Summer II

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Recommendation letters from two members of the undergraduate major department or practicing engineers who are familiar with their accomplishments and promise. These recommendations form an important part of the admission credentials
- Applicants must submit scores from the Graduate Record Examination (GRE) if they graduated from an institution not accredited by a regional accrediting agency of the USA. Other applicants whose credentials do not meet regular admission criteria are also encouraged to submit their GRE scores
- The Test of English as a Foreign Language (TOEFL) must be submitted by applicants who are graduates of programs taught in a language other than English.

Admission requirements

The engineering programs leading to a Master of Science degree in mechanical engineering build upon the preparation acquired in a baccalaureate engineering curriculum. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below.

A bachelor's degree in physics, mathematics or other field of science may be acceptable, but a student presenting such a degree should plan to spend additional time in residence to gain proficiency in the fundamentals of engineering.

Admission to master's study is selective; applicants should have an undergraduate GPA of 3.0 or better in their major area of study and in their mathematics and science courses.

Degree requirements

To fulfill the requirements for a Master of Science degree in mechanical engineering, a student must:

- Complete at least 32 credits of graduate-level work, of which at least 24 credits must be in approved courses offered by the School of Engineering and Computer Science.
- Earn a cumulative GPA of at least 3.0 in courses applied toward the degree.
- Complete the requirements specified for the program in mechanical engineering.
- Satisfy all requirements concerning academic progress.

The degree requirements may be satisfied by taking only coursework. However, a graduate engineering project (ME 690) or master's thesis research (ME 691) provides a unique and valuable learning experience in which an individual student works with a faculty member in an area of mutual interest. Therefore, students are encouraged to include such an experience as their program permits.

In addition to the general degree requirements, a student must fulfill the following program requirements to be awarded the Master of Science in mechanical engineering:

Course requirements

a. Theory courses (4-8 credits)

Select one of the following:

APM 541	Mathematical Analysis for Engineers I	4
APM 542	Mathematical Analysis for Engineers II	4
ME 549	Numerical Methods in Mechanical Engineering	4

Students must take at least one theory course before completing 12 credits of their MS coursework.

b. Option (Depth) courses (16 credits)

Select one of the five options described below:

1. Solid and Structural Mechanics Option

Select four courses from the following:

ME 521	Dynamics	4
ME 522	Mechanical Vibrations	4
ME 523*	Acoustics and Noise Control	4
ME 525	Noise, Vibration and Harshness	4
ME 526	Vibration and Sound Measurement	4
ME 530	Kinematics and Mechanisms	4
ME 561*	Analysis and Design of Mechanical Structures	4
ME 562	Fatigue Analysis and Design	4
ME 563	Applied Elasticity	4
ME 564	Mechanics of Composite Materials	4
ME 565	Experimental Stress Analysis	4
ME 567*	Optical Measurement and Quality Inspection	4
ME 569	Finite Elements	4
ME 571	Theory of Plasticity	4
ME 578	Mechanics of Metal Forming	4
ME 587	Mechanical Computer Aided Engineering	4
ME 624	Vibration Analysis	4
ME 669	Advanced Finite Elements	4
ME 665	Optical Methods in Experimental Mechanics	4

2. Energy, Fluid and Thermal Systems Option

Select four courses from the following:

ME 537	Fuel Cell Science and Technology	4
ME 538*	Fluid Transport	4
ME 539	Computational Fluid Dynamics	4
ME 548*	Thermal Energy Transport	4
ME 554*	Alternative Energy Systems	4
ME 555	Combustion Processes	4
ME 557*	Internal Combustion Engines	4
ME 582*	Fluid and Thermal Systems Design	4
ME 638	Convective Transport Phenomena	4
ME 639	Gas Dynamics	4
ME 648	Thermal Transport Phenomena	4

3. Manufacturing Processes Option

Select four courses from the following:

ME 543*	Polymeric Materials	4
ME 544	Plastics Processing Engineering	4
ME 545*	Plastics Product Design	4
ME 564	Mechanics of Composite Materials	4
ME 567*	Optical Measurement and Quality Inspection	4
ME 572*	Material Properties and Processes	4
ME 574*	Manufacturing Processes	4
ME 575*	Lubrication, Friction and Wear	4
ME 578	Mechanics of Metal Forming	4
ME 586	Reliability Methods in Engineering Design	4
ME 589*	Fasteners and Bolted Joints	4
ME 674	Machining Processes	4
ME 675	Advanced Tribology	4
ME 678	Advanced Metal Forming	4
ME 689	Advanced Fasteners and Bolted Joints	4

4. Automotive Engineering Option

Select four courses from the following:

ME 521	Dynamics	4
ME 522	Mechanical Vibrations	4
ME 523*	Acoustics and Noise Control	4
ME 525	Noise, Vibration and Harshness	4
ME 526	Vibration and Sound Measurement	4
ME 530	Kinematics and Mechanisms	4
ME 537	Fuel Cell Science and Technology	4
ME 538*	Fluid Transport	4
ME 539	Computational Fluid Dynamics	4
ME 548*	Thermal Energy Transport	4
ME 555	Combustion Processes	4
ME 557*	Internal Combustion Engines	4
ME 559	Advanced Automotive Propulsion Systems	4
ME 561*	Analysis and Design of Mechanical Structures	4
ME 562	Fatigue Analysis and Design	4
ME 565	Experimental Stress Analysis	4
ME 572*	Material Properties and Processes	4
ME 575*	Lubrication, Friction and Wear	4
ME 584	Automotive Chassis Systems	4
ME 587*	Mechanical Computer Aided Engineering	4
ME 589*	Fasteners and Bolted Joints	4
ME 624	Vibration Analysis	4

ME 657	Internal Combustion Engines II	4
ME 665	Optical Method in Experimental Mechanics	4
ME 684	Automotive Engineering Design II	4
ME 689	Advanced Fasteners and Bolted Joints	4

5. General Mechanical Engineering Option

Select at least one course from each of options 1-4.

c. Electives** (8-12 credits)

Select 8-12 credits from:

Any ME courses with level 500 and above	
ME 691 Master's Thesis Research (with approval)	8
With approval: ME 690, APM or MTH courses, ME 594, 595, 795	
Up to 4 credits may be selected from courses with level 500 and above from other engineering and science departments (with approval)	

* These courses are cross-listed as advanced undergraduate and graduate courses. If completed as a 400-level course or equivalent as part of baccalaureate degree, the course may be used to offset graduate program requirements. However, credit will not then be awarded and must be earned by completion of an approved substitute course.

** Other electives in engineering, mathematics, physics or chemistry that are appropriate to the student's Plan of Study require prior approval of the faculty adviser and the department chair.

Non-course requirements

Academic progress

The minimum satisfactory grade for graduate work is 3.0. Credit for completion of a course in a Master of Science program will be given for grades of 2.5 or above but not more than two grades may be in the range of 2.5 to 2.9. Graduate credit will not be awarded for grades below 2.5. To repeat a course, a student must have the permission of the graduate committee of the school.

All grades received as a graduate student are used in computing the GPA except that, if a course has been repeated, the most recent grade is used in the calculation of the GPA. A graduate student is placed on academic probation if the student's overall GPA drops below 3.0 or if the student receives more than one grade below 3.0, including the original grade(s) of any repeated course(s). A graduate student receiving a grade less than 3.0 while on probation is subject to dismissal. A graduate student receiving more than two grades below 3.0 is subject to dismissal whether or not the student was put on probation previously.

In all programs the minimum grade point requirement is an average of at least 3.0. If a student's GPA is less than 3.0 after having attempted 16 credits, the student will be recommended for dismissal from the program.

Course approval

Approval by the master's degree adviser and the department chair is required for independent study, engineering projects, master's thesis or special topics courses that are used toward the degree. In addition, approval of the faculty administering the independent study, advising the thesis or project, or teaching the special topics course must be obtained before registering for these credits.

Course credit

Normally, graduate credit is awarded only for courses numbered 500 or higher. However, up to 4 credits of Oakland University senior-level (400-499) courses in the major can be approved for graduate credit by the student's adviser. With the added approval of the graduate committee of the school, an additional 4 credits of senior-level courses can also be counted toward the required 32 credits. Course credit will not be awarded for work applied toward another degree. Students who have received credit for the 400-level version of a cross-listed senior/graduate course cannot receive credit toward a graduate degree for the 500-level version of that course.

No more than 8 thesis or project credits may be used toward the degree requirements.

Transfer credit

Students transferring from other institutions are allowed to transfer a maximum of 9 credits of graduate coursework with the approval of the department.

Workload and scheduling

Full-time students must register for 8 to 12 credits per semester. Graduate assistants must be full-time students and commit 20 hours per week toward their research or teaching assistantship assignment. Graduate assistants normally register for only 8 credits per semester; however, a 12-credit load can be taken with the approval of the chair of their department.

For the convenience of part-time students employed in industry, courses are arranged in late afternoon and early evening. However, these students should be aware of the very real demands of graduate studies and should keep outside work commitments and their academic load in balance.

Master's adviser

The progress of each regular student toward the Master of Science degree is directed by the student's adviser, a faculty member of the School of Engineering and Computer Science who is assigned at the time of admission. Incoming students seeking the degree are urged to discuss their proposed concentration area with their adviser or other faculty members in that area. Students who wish to change their adviser can do so with the approval of the chair of their department.

Master's project or thesis

Although the master's degree requirements may be satisfied by taking only coursework, either a graduate engineering project (ME 690) or a directed master's thesis research (ME 691) may be included as part of the program in place of elective courses.

Thesis research provides a unique and valuable learning experience in which an individual student works with a faculty adviser in an area of mutual interest. Students are strongly encouraged to include such an experience in their graduate studies.

Students electing a thesis option must accumulate a minimum of 8 credits of (ME 691). Successful completion and defense of a thesis is a prerequisite for earning thesis credits. Students choosing the thesis option must select an advisory committee, which is composed of at least three faculty members from the School of Engineering and

Computer Science. The selection of the committee and the Plan of Study must be approved by the department chair. The chair (major professor) of the advisory committee will direct and guide the research. The student must propose a research topic to the committee for approval at least one semester before graduation. The completed thesis must conform to university standards (see Thesis and Dissertation in the Graduation Information section of this catalog). At the completion of the research and its documentation, the content of the thesis must be publicly presented and defended. Successful defense of the thesis is a prerequisite for earning the research credits.

■SCHOOL OF HEALTH SCIENCES

363 Hannah Hall • (248) 370-3562 • Fax (248) 370-4227
www.oakland.edu/shs

Dean:
Kenneth R. Hightower

Associate dean:
Richard J. Rozek

Assistant dean:
Tamra E. Bays

General information

The School of Health Sciences offers graduate degrees and graduate certificate programs in health and medically related fields. An entry-level Doctor of Physical Therapy degree (DPT) and a post-professional Doctor of Science in Physical Therapy degree (DScPT) are offered for those who are already licensed physical therapists. Master of Science degrees in exercise science, physical therapy, and safety management are also offered. Four graduate certificate programs are offered through the exercise science program, including clinical exercise science, complementary medicine and wellness, corporate and worksite wellness and exercise science. Graduate certificates in orthopedic manual physical therapy, pediatric rehabilitation, orthopedics, teaching and learning for rehabilitation professionals and neurological rehabilitation are offered through the physical therapy program to physical therapists, occupational therapists and other rehabilitation professionals who have acquired clinical experience following their entry-level professional preparation. Additionally, a number of graduate-level courses are offered through the school's program in occupational safety and health for students who wish to enroll on a non-degree basis or who may be able to apply these courses as electives to a graduate degree in a related field.

Continuing professional education is offered by the School of Health Sciences in order to meet the educational needs of health science professionals. Specialized contract programs are also provided to meet the unique professional staff development needs of employers in the health care setting, business and industry, government and other settings. Programs are individually tailored to meet the specific workplace needs of professionals and employers. Programs and courses are offered either for university credit or non-credit. When noncredit programs and courses are offered they carry the nationally recognized Continuing Education Unit (CEU).

Admission to any program offered by the School of Health Sciences may be considered on a competitive basis, if the balance between applicants and available instructional resources requires such action to maintain the academic integrity of the program.

■ Exercise Science Program

363 Hannah Hall • (248) 370-4038 • Fax (248) 370-4227
www.oakland.edu/shs/es/

Program director:
Brian R. Goslin

Professor emeritus:
Alfred W. Stransky, Ph.D., Florida State University

Professor:
Robert W. Jarski, Ph.D., University of Iowa

Associate professors:
Brian R. Goslin, Ph.D., Rhodes University (South Africa)
Charles R.C. Marks, Ph.D., University of Michigan

Clinical professors:
Barry A. Franklin, Ph.D., Pennsylvania State University
Steven J. Keteyian, Ph.D., Wayne State University
Robert Levine, Ph.D., George Washington University
Augustine L. Perrotta, D.O., Chicago College of Osteopathic Medicine

Clinical associate professors:
John F. Kazmierski, D.O., College of Osteopathic Medicine and Surgery, Des Moines, Iowa
Creagh E. Milford, D.O., Chicago College of Osteopathic Medicine
Rajendra Prasad, M.D., Prince of Wales Medical College (India)

Adjunct associate professor:
Victoria Kimler, Ph.D., Wayne State University

Clinical assistant professors:
Patricia Brooks, M.D., Michigan State University
Jeffrey H. Declaire, M.D., University of Michigan
Mario J. C. DeMeireles, M.D., Goa Medical College (India)
Albert A. DePolo, Jr., D.O., Philadelphia College of Osteopathic Medicine
Scott W. Eathorn, M.D., Wayne State University
Johnathon Ehrman, Ph.D., Ohio State University
William E. Hill, M.D., Howard University
Andrew J. Madak, D.O., Michigan State University
Chandra S. Reddy, M.D., Osmania Medical College (India)

Adjunct assistant professor:
Jack T. Wilson, Ph.D., University of Northern Colorado

Clinical instructors:
Mary Ann Cukr, M.S., Oakland University
Nancy S. Kennedy, M.S., Oakland University
Sheldon D. Levine, M.S.A., Central Michigan University

Adjunct instructor:
Terry Dibble, M.S., Oakland University

Degree programs

Master of Science in exercise science

Graduate certificate programs

Graduate Certificate in Clinical Exercise Science

Graduate Certificate in Complementary Medicine and Wellness

Graduate Certificate in Corporate and Worksite Wellness

Graduate Certificate in Exercise Science

■ Master of Science in Exercise Science

Director:

Brian R. Goslin

Program description

This interdisciplinary program emphasizes the role of exercise in health improvement and in the primary and secondary prevention of chronic degenerative disease. The curriculum addresses the inter-relationships among lifestyle, health and physical activity and optimization of human performance. Clinical experience is gained through cooperating internship sites. Graduates of the program are prepared for professional positions such as cardiac stress testing specialists; exercise specialists in medical settings; sport scientists; and directors of adult fitness programs, cardiac rehabilitation programs and health maintenance/health improvement programs in corporate, industrial and educational settings.

Full-time students complete the degree in 18 to 24 months. Part-time students usually require three to four years, depending on the number of credits taken per year. All courses are available in the evening, and several are offered in a concentrated weekend "executive
style" format.

Program prerequisites

Completion of the following prerequisite courses is required. Students should have completed the required prerequisite coursework at the appropriate undergraduate or graduate level, prior to beginning coursework for the master's degree.

- Human anatomy
- Human physiology
- Exercise physiology
- Kinesiology (human motion analysis)
- Statistics
- First aid and cardiopulmonary resuscitation
- Four credits of health enhancement (or physical education activity/theory).

While not required, additional coursework in biochemistry, organic chemistry, and mathematics through precalculus is highly recommended.

Oakland University equivalents for prerequisite coursework

BIO 205	Human Anatomy	4
BIO 207	Human Physiology	4
BIO 325*	Biochemistry I	4
or		
CHM 201*	Introduction to Organic and Biological Chemistry	4
EXS 103	Exercise (Strength Training) and Health Enhancement	2
EXS 105	Cardiovascular Fitness Training	2
EXS 207	Safety and First Aid in Exercise Settings	2
EXS 304	Exercise Physiology	3
EXS 306	Exercise Physiology Laboratory	1
EXS 350	Human Motion Analysis	4
MTH 141*	Precalculus	4
STA 225	Introduction to Statistical Concepts and Reasoning	4
or		
PSY 251	Statistics and Research Design	4

* Not a prerequisite; however, it is strongly recommended that applicants have some background in these areas.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Exercise Science Supplemental Program Form which includes a goal statement
- Two letters of recommendation from academics familiar with the student's abilities (preferred) or from employment supervisors
- Any other supplementary material that supports the admission application (e.g., resume, evidence of certifications or continuing education in the exercise science field)
- International applicants (only) must submit official GRE and TOEFL scores.

Admission requirements

Admission to the Master of Science in exercise science degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog,

applicants must also satisfy the admission requirements established by the academic program as listed below:

- A bachelor's degree from a regionally accredited school with an undergraduate cumulative grade-point average of 3.0 or above. Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this status must complete a minimum of 16 credits of graduate-level work with a GPA of 3.0 or above before conditional status is removed.
- A strong background in basic and applied health sciences.

Degree requirements

The Master of Science in exercise science degree is awarded upon satisfactory completion of 36 credits in an approved program of study.

Course requirements

The average candidate entering the fall or winter semester will spend two full-time academic years to successfully complete this graduate program, which requires:

a. Core requirements (24 credits)

EXS 500	Introduction to Research	4
EXS 520	Advanced Exercise Physiology	4
EXS 525	Biomechanics	3
EXS 530	Diagnostic Testing and Exercise Prescription	3
EXS 540	Nutrition, Weight Management and Exercise	2
EXS 601	Exercise Science Internship I	4
EXS 602	Exercise Science Internship II	4

b. Electives (6 credits)

Students will select a minimum of 6 credits of elective coursework, approved by their advisers.

EXS 503	Human Performance Enhancement	2
EXS 505	Health and Disease	2
EXS 510	Stress Management	2
EXS 521	Basic Athletic Training	2
EXS 535	Health Promoting Lifestyle Choices and Interventions	4
EXS 545	Physical Activity and Aging	2
EXS 560	Healthy Lifestyle Choices	2
EXS 565	Corporate and Worksite Wellness Programs	2
EXS 580	Preventive Nutrition Through the Life Span	2
EXS 605	Administration of a Cardiac Rehabilitation or Community Exercise Program	2
EXS 610	Clinical Biomechanics	2
EXS 615	Laboratory Instrumentation	2
EXS 620	Muscle Physiology	2
EXS 625	Exercise Electrocardiography	2
EXS 630	Seminar in Exercise Science	2
EXS 635	Environment and Human Performance	2
EXS 693	Directed Study and Research	2

In addition to the courses listed here, students may select other adviser-approved university courses, either from department offerings (400-level or above) or from advanced coursework (300-level or above) in such areas as biology, chemistry, computer science, engineering, health science, or psychology. Examples include:

PSY 333	Motivation	4
PSY 338	Health Psychology	4
PSY 344	Behavior Analysis	4
BIO 409	Endocrinology	4

c. Research requirement (6 credits)

EXS 670	Research in Exercise Science	6

Completion of a research requirement involving a master's thesis or comprehensive examinations must be achieved. The research requirement involves the completion of a minimum of 6 credits in EXS 670.

Non-course requirements

A GPA of 3.0 or better must be obtained. Credit toward the degree will not be given for courses with grades under 2.5.

Credit granted for successful completion of a course toward an undergraduate degree program may not be repeated for a graduate degree. If a substitution is approved, the minimum number of program-approved graduate credits will be required. A Petition of Exception requesting the substitution must be approved.

Additional program information

Thesis research or comprehensive examination option

Candidates for the Master of Science degree must choose either to carry out an independent research project culminating with the completion of a master's thesis or to conduct in-depth study in a number of approved areas, followed by a comprehensive examination covering these areas.

Students who choose the thesis option select an adviser who serves as the thesis committee chair, and two committee members agreed upon by the student and chair. A thesis proposal is presented orally and in writing to the committee for approval. Research topics usually consist of experimental studies in the areas of biomechanics, cardiac rehabilitation, exercise physiology, measurement and evaluation, performance assessment, physical rehabilitation and studies of lifestyle behavior. The thesis is presented and defended by the candidate at a meeting open to all interested faculty members. All thesis requirements must adhere to university format standards and deadlines (see Thesis and Dissertation in the Graduation Information section of this catalog).

The comprehensive examination option is designed to provide those students who do not wish to conduct thesis research an opportunity for in-depth study in several areas. Under this option, students select a minimum of three topics, with their adviser's approval. Extensive reading lists for each topic are compiled from recommendations submitted by three or more faculty members who have expertise in the area. A comprehensive examination consisting of selected questions for each topic area is given in order to determine if the candidate has the in-depth knowledge expected of a master's degree candidate. The comprehensive examination can be arranged to be given in three parts, covering each of the topics studied.

Exercise Science internship

The internship component of this program provides an opportunity for students to gain first-hand experience in the practice of exercise science. Internship placements will be the responsibility of the program and will include public and private health care settings and corporate and community wellness settings.

At least one internship shall be taken at a health promotion/ disease prevention facility. All students are required to demonstrate specific clinical and non-clinical competencies spelled out in the Master of Science in Exercise Science Student Handbook. Students entering the program with significant previous clinical experience, comparable to the internship experiences offered through this program, may be exempted from one or both internship courses (EXS 601 and 602) by following the Graduate Petition of Exception procedure.

Code of Ethics

Along with scholarly preparation in the appropriate academic disciplines, high levels of ethical conduct are considered essential for those who are involved in health care. Students are expected to comply with the principles of the Code of Ethics and Professional Conduct of the American College of Sports Medicine. Violations will be brought before the faculty and could result in dismissal from the program.

■ Graduate Certificate in Clinical Exercise Science

Program description

The Graduate Certificate in Clinical Exercise Science is designed to offer advanced, graduate-level courses in exercise science to individuals wishing to prepare for the rigors of clinical exercise science practice.

Certificate prerequisites

Completion of the following prerequisite courses. Students must have completed the required prerequisite coursework at the appropriate undergraduate or graduate level, prior to beginning coursework for the graduate certificate.

- Human anatomy
- Human physiology
- Exercise physiology
- Kinesiology (human motion analysis)
- Statistics
- First aid and cardiopulmonary resuscitation
- Four credits of health enhancement (or physical education activity/theory).

While not required, additional coursework in biochemistry, organic chemistry and mathematics through precalculus is highly recommended.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Exercise Science Supplemental Program Form which includes a goal statement
- Two letters of recommendation from academics familiar with the student's abilities (preferred) or from employment supervisors
- Any other supplementary material that supports the admission application (e.g., resume, evidence of certifications or continuing education in the exercise science field)

Admission requirements

Admission to the Graduate Certificate in Clinical Exercise Science program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- A bachelor's degree from a regionally accredited school with an undergraduate cumulative grade-point average of 3.0 or above. Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this status must complete a minimum of 16 credits of graduate-level work with a GPA of 3.0 or above before conditional status is removed.
- A strong background in basic and applied health sciences
- It is strongly recommended that applicants have suitable work experience in the field of exercise science

Graduate certificate requirements

The Graduate Certificate in Clinical Exercise Science is awarded upon satisfactory completion of 18 credits in an approved program of study.

Course requirements

A candidate entering the fall or winter semester will spend one full-time academic year to successfully complete the graduate certificate program, which requires completion of the following core courses.

a. Core requirements

HS 501	Human Pathology	4
EXS 520	Advanced Exercise Physiology	4
EXS 525	Biomechanics	3
EXS 530	Diagnostic Testing and Exercise Prescription	3
EXS 540	Nutrition, Weight Management and Exercise	2
EXS 625	Exercise Electrocardiography	2

Non-course requirements

Credit toward the graduate certificate will not be given for courses with grades under 2.5. A GPA of 3.0 or better must be obtained.

Credit granted for successful completion of a course toward an undergraduate degree program may not be repeated for a graduate certificate. If a substitution is approved, the minimum number of program-approved graduate credits will be required. A Petition of Exception requesting the substitution must be approved.

■ Graduate Certificate in Complementary Medicine and Wellness

Program description

The Graduate Certificate in Complementary Medicine and Wellness is a course of study emphasizing patient/client counseling, and education about health promotion, disease prevention, wellness and complementary therapies. Goals include helping patients/clients achieve a level of well-being that reaches beyond merely the absence of disease. Participants will learn to optimize the patient/client-practitioner relationship while promoting health across the identified wellness dimensions: physical, psychological, environmental, spiritual and social. Recent trends in health care delivery have challenged practitioners and educators to integrate alternative approaches that are complementary into traditional practice and to teach methods for evaluating their safety and effectiveness.

It is intended that candidates will use the graduate certificate to enhance or further their own professional practice, current licensure or formal education. The program augments the background of professionals in disciplines such as exercise science, counseling, physical therapy, medicine, physician assistant, nursing, dietetics, social work, psychology, education and theology. The program is offered as a full-time or part-time course of study accommodating the needs of working professionals. The graduate certificate is awarded following completion of the specified 16 credits of study.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Complementary Medicine and Wellness Supplemental Program Form
- A one-page prospectus describing how the applicant intends to integrate or use the certificate program in practice or for furthering education
- Two letters of recommendation from professionals qualified to comment on the applicant
- An elective or directed study plan for HS 693
- Any other supplementary material that supports the admission application (e.g., resume, evidence of certifications or continuing education in the professional field).

Admission requirements

Admission to the Graduate Certificate in Complementary Medicine and Wellness program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- A bachelor's degree from a regionally accredited school with an undergraduate cumulative grade-point average of 3.0 or above. Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this status must complete a minimum of 16 credits of graduate-level work with a GPA of 3.0 or above before conditional status is removed.

Graduate certificate requirements

The Graduate Certificate in Complementary Medicine and Wellness is awarded upon satisfactory completion of 16 credits in an approved program of study.

Course requirements

A candidate entering the fall or winter semester will spend one full-time academic year to successfully complete the graduate certificate program, which requires completion of the following core courses and electives.

a. Core requirements

HS/CNS 641	Integrative Holistic Medicine Principles for Practice	4
or		
HS 441	Integrative Holistic Medicine Principles for Practice	4
HS 630	Complementary Medicine and Wellness Seminar	2
CNS 653	Counseling for Wellness	4

b. Electives

Specialty electives		4
HS 693 or	Directed Study in Complementary Medicine and Wellness	2
approved elective		2

Non-course requirements

Credit toward the graduate certificate will not be given for courses with grades under 2.5. The program must be completed with a GPA of 3.0 or better.

Credit granted for successful completion of a course toward an undergraduate degree program may not be repeated for a graduate certificate. If a substitution is approved, the minimum number of program-approved graduate credits will be required. A Petition of Exception requesting the substitution must be approved.

■ Graduate Certificate in Corporate and Worksite Wellness

Program description

The Graduate Certificate in Corporate and Worksite Wellness is designed to offer advanced graduate courses to prepare exercise science practitioners for the demands of careers in corporate and worksite wellness.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Exercise Science Supplemental Program Form which includes a goal statement
- Two letters of recommendation from academics familiar with the student's abilities (preferred) or from employment supervisors
- Any other supplementary material that supports the admission application (e.g., resume, evidence of certifications or continuing education in the exercise science field).

Admission requirements

Admission to the Graduate Certificate in Corporate and Worksite Wellness program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

Admission decisions are based on a combination of factors including:

- A bachelor's degree from a regionally accredited school with an undergraduate cumulative grade-point average of 3.0 or above. Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this status must complete a minimum of 16 credits of graduate-level work with a GPA of 3.0 or above before conditional status is removed.
- A strong background in basic and applied health sciences
- It is strongly recommended that applicants have suitable work experience in the field of exercise science.

Graduate certificate requirements

The Graduate Certificate in Corporate and Worksite Wellness is awarded upon satisfactory completion of 18 credits in an approved program of study.

Course requirements

A candidate entering the fall or winter semester will spend one full-time academic year to successfully complete the graduate certificate program, which requires completion of the core courses and electives.

a. Core requirements

HS 501	Human Pathology	4
EXS 520	Advanced Exercise Physiology	4
EXS 525	Biomechanics	3
EXS 530	Diagnostic Testing and Exercise Prescription	3
EXS 565	Corporate and Worksite Wellness Programs	2

b. Electives

Students will select 2 credits of elective coursework from:

EXS 500	Introduction to Research	4
EXS 505	Health and Disease	2
EXS 510	Stress Management	2
EXS 521	Basic Athletic Training	2

EXS 540	Nutrition, Weight Management and Exercise	2
EXS 545	Physical Activity and Aging	2
EXS 560	Healthy Lifestyle Choices	2
EXS 580	Preventative Nutrition through the Life Span	2
EXS 605	Administration of a Cardiac Rehabilitation or Community Exercise Program	2
EXS 610	Clinical Biomechanics	2
EXS 615	Laboratory Instrumentation	2
EXS 620	Muscle Physiology	2
EXS 625	Exercise Electrocardiography	2
EXS 630	Seminar in Exercise Science	2
EXS 635	Environment and Human Performance	2
EXS 693	Directed Study and Research	1 or 2

Non-course requirements

Credit toward the graduate certificate will not be given for courses with grades under 2.5. A GPA of 3.0 or better must be obtained.

Credit granted for successful completion of a course toward an undergraduate degree program may not be repeated for a graduate certificate. If a substitution is approved, the minimum number of program-approved graduate credits will be required. A Petition of Exception requesting the substitution must be approved.

■ Graduate Certificate in Exercise Science

Program description

The Graduate Certificate in Exercise Science is designed to offer a logical, coherent, yet flexible program of study that will meet the needs of a select group of graduate students seeking to improve their skills in specialized areas of exercise science, such as ergonomics, human performance analysis, sports science and health promotion.

Certificate prerequisites

Completion of the following prerequisite courses is required. Students should have completed the required prerequisite coursework at the appropriate undergraduate or graduate level, prior to beginning coursework for the graduate certificate.

- Human anatomy
- Human physiology
- Exercise physiology
- Kinesiology (human motion analysis)
- Statistics
- First aid and cardiopulmonary resuscitation
- Four credits of health enhancement (or physical education activity/theory).

While not required, additional coursework in biochemistry, organic chemistry and mathematics through precalculus is highly recommended.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Exercise Science Supplemental Program Form which includes a goal statement
- Two letters of recommendation from academics familiar with the student's abilities (preferred) or from employment supervisors
- Any other supplementary material that supports the admission application (e.g., resume, evidence of certifications or continuing education in the exercise science field)

Admission requirements

Admission to the Graduate Certificate in Exercise Science program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- A bachelor's degree from a regionally accredited school with an undergraduate cumulative grade-point average of 3.0 or above. Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this status must complete a minimum of 16 credits of graduate-level work with a GPA of 3.0 or above before conditional status is removed.
- A strong background in basic and applied health sciences
- It is strongly recommended that applicants have suitable work experience in the field of exercise science.

Graduate certificate requirements

The Graduate Certificate in Exercise Science is awarded upon satisfactory completion of 18 credits in an approved program of study.

Course requirements

A candidate entering the fall or winter semester will spend one full-time academic year to successfully complete the graduate certificate program, which requires completion of the core courses and electives.

a. Core requirements

EXS 520	Advanced Exercise Physiology	4
EXS 525	Biomechanics	3
EXS 530	Diagnostic Testing and Exercise Prescription	3
HS 501	Human Pathology	4
or		
EXS 500	Introduction to Research	4

b. Electives

Students will select 4 credits of elective coursework from

EXS 500	Introduction to Research	4
EXS 505	Health and Disease	2
EXS 510	Stress Management	2
EXS 521	Basic Athletic Training	2
EXS 540	Nutrition, Weight Management and Exercise	2
EXS 545	Physical Activity and Aging	2
EXS 560	Healthy Lifestyle Choices	2
EXS 580	Preventative Nutrition through the Life Span	2
EXS 605	Administration of a Cardiac Rehabilitation or Community Exercise Program	2
EXS 610	Clinical Biomechanics	2
EXS 615	Laboratory Instrumentation	2
EXS 620	Muscle Physiology	2
EXS 625	Exercise Electrocardiography	2
EXS 630	Seminar in Exercise Science	2
EXS 635	Environment and Human Performance	2
EXS 693	Directed Study and Research	1 or 2

Non-course requirements

Credit toward the graduate certificate will not be given for courses with grades under 2.5. A GPA of 3.0 or better must be obtained.

Credit granted for successful completion of a course toward an undergraduate degree program may not be repeated for a graduate certificate. If a substitution is approved, the minimum number of program-approved graduate credits will be required. A Petition of Exception requesting the substitution must be approved.

■ Physical Therapy Program

201 Hannah Hall • (248) 370-4041 • Fax (248) 370-4287
www.oakland.edu/shs/pt

Program director:

Kristine A. Thompson

Associate professors:

Jacqueline S. Drouin, P.T., Ph.D., Wayne State University
John R. Krauss, P.T., Ph.D., Nova Southeastern University

Assistant professors:

Douglas S. Creighton, P.T., DPT, University of Augustine
Deborah Doherty, P.T., Ph.D., Michigan State University
Melodie Kondratek, P.T., DScPT., Oakland University
Sara Maher, P.T., DScPT, Oakland University
Marie-Eve Pepin, P.T., DPT, MGH Institute of Health Professions
Susan E. Saliga, P.T., DHSc, University of St. Augustine

Special instructors:

Christine Stiller, P.T., Ph.D., Michigan State University
Kristine A. Thompson, P.T., Ph.D., Michigan State University

Adjunct instructor:

R. Elizabeth Black, P.T., M.S., McMaster University (Canada)

Consulting professors:

Olaf Evjenth, Orthopedic Institute (Oslo, Norway)
Beth Marcoux, P.T., Ph.D., University of Michigan

Clinical assistant professors:

Cathy A. Larson, P.T., Ph.D., University of Michigan
Pamela A. Lemerand, O.T.R., Ph.D., University of Michigan
Frederick D. Pociask, P.T., Ph.D., Wayne State University
Gretchen D. Reeves, O.T.R., Ph.D., University of Michigan
Chris Wilson, P.T., DPT, University of St. Augustine

Senior clinical instructor:

David A. Tomsich, P.T., M.S., University of Kentucky

Clinical instructors:

Sara Arena, P.T., M.S., Oakland University
Henry D. Boutros, P.T., M.Ed., Wayne State University
Helene M. Graham, P.T., B.S., University of Michigan
Pamela S. Knickerbocker, P.T., M.S., Oakland University
Gregory Kopp, P.T., M.P.T., Oakland University
Kathleen Jakubiak Kovacek, P.T., B.S., Wayne State University
Peter R. Kovacek, P.T., M.S.A, Central Michigan University
Jeffrey Placzek, M.D., Wayne State University
Kim Schwartz, P.T., B.S., Wayne State University
Janet Siedel, P.T., M.P.T., Oakland University
Angela C. Strong, P.T., B.S., Spelman College
Jody L. Tomasic, P.T., M.S., Oakland University

Degree programs

Doctor of Physical Therapy (DPT)
Doctor of Science in Physical Therapy (DScPT)
Master of Science in Physical Therapy (MSPT)
Transitional Doctor of Physical Therapy (tDPT)

Graduate certificate programs

Graduate Certificate in Orthopedics
Graduate Certificate in Orthopedic Manual Physical Therapy
Graduate Certificate in Pediatric Rehabilitation
Graduate Certificate in Neurological Rehabilitation
Graduate Certificate in Teaching and Learning for Rehabilitation Professionals

■ Doctor of Physical Therapy (DPT)

Director:

Kristine A. Thompson

Program description

The Doctor of Physical Therapy is a professional graduate program which prepares individuals for licensure and entry into the physical therapy profession. As a graduate program, it includes theoretical, clinical practice, and research courses and experiences to prepare graduates to function in a variety of settings in physical therapy.

Physical therapy is concerned with the prevention and treatment of acute and chronic conditions that cause disorders of movement. In order to provide appropriate treatment, physical therapists evaluate the musculoskeletal, neuromuscular, cardiopulmonary, and associated systems, calling on the basic sciences and behavioral sciences in the interpretation of this evaluation. Patient programs are then developed to resolve movement dysfunctions. Physical therapists work in concert with all members of the health care team through a variety of referral relationships.

The Doctor of Physical Therapy at Oakland University is designed to prepare clinicians with the evaluation and examination skills necessary to make physical therapy differential diagnoses of movement related impairments affecting the neuromusculoskeletal system. In addition, this degree will prepare graduates to provide effective care in the areas of prevention, screening, rehabilitation and community reintegration for their clients. Finally, graduates will be able to interpret and conduct research related to physical therapy.

The entry-level Doctor of Physical Therapy program is accredited by the Commission on Accreditation in Physical Therapy Education.

Admission terms and deadlines

Students are admitted in the fall semester only. The deadline for applications is October 15 for full consideration. Applications received after the deadline will be considered at the discretion of the Admissions Committee.

Academic advising

Students who are considering applying to the DPT program may contact the academic adviser for the School of Health Sciences to review prerequisite courses and application requirements. Upon acceptance to the program, students are assigned a faculty adviser.

Program prerequisites

Students will be considered for admission, if they will be completing their baccalaureate degree and all prerequisite courses prior to the start of the program.

Prerequisite Course	Number of Courses	Lab Requirements
Introductory Biology	1	One lab is required in the biological sciences, and it may be taken in any of the following prerequisite courses: biology, human anatomy or physiology
Anatomy	1	Combined human anatomy and physiology course accepted; however, must take two semesters or be a minimum of 6 credits
Physiology	1	Combined human anatomy and physiology course accepted; however, must take two semesters or be a minimum of 6 credits
Chemistry I and II	2	Two-course sequence is required. Lab is required for one semester only.
Physics I and II	2	Two-course sequence is required. Lab is required for one semester only.
Exercise Physiology	1	
Introductory Statistics	1	
Introductory Psychology	1	
Developmental Psychology	1	Child or lifespan psychology courses may be used to fulfill this prerequisite.
Precalculus	1	Alternate way to fulfill requirement is to take one semester of college algebra AND one semester of analytical trigonometry.

Application requirements

Applicants for admission must submit the following:

- A completed application must be submitted through the Physical Therapy Centralized Application Service (PTCAS). Information and instructions for applying through the PTCAS can be found at www.ptcas.org.
- A Supplemental Program Form must be completed and submitted as instructed. The link to this form can be found on the Oakland University Program Page on the PTCAS Web site.
- Students must take the Graduate Record Exam (GRE) by September 1 and arrange for their official GRE scores to be sent to Oakland University. The institution code for Oakland University is 1497.
- Two written references must be submitted through the PTCAS.
- Students must review the Essential Functions for Physical Therapy which can be found with the Supplemental Program Form.

International application requirements

Applicants who are not U.S. citizens and/or applicants with foreign academic credentials are required to submit the following application materials:

- Official scores for the Test of English as a Foreign Language (TOEFL) from applicants who are graduates of programs taught in a language other than English.
- Word-for-word translations of all foreign language documents. Both the original transcript (in the native language) and the English translation are required for review.
- A transcript evaluation by a NACES member
- Additional requirements for international students may be required by Graduate Admissions.

Admission requirements

Admission to the Doctor of Physical Therapy degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Students must have completed a bachelor's degree from a regionally accredited institution prior to admission to the program.
- Students will be considered for admission if they will be completing their baccalaureate degree and all prerequisite courses prior to the start of the program.
- Foreign-educated students will be required to demonstrate an education level equivalent to a Bachelor of Science degree in the United States.
- Foreign-educated students must meet all university requirements for proficiency in English.
- An overall cumulative GPA of 3.0 or above is required. Applicants must have received a minimum grade of 2.0 in all prerequisite courses.
- All students must submit official scores for the Graduate Record Examination (GRE).
- Additional requirements include completion of an application through the Physical Therapy Centralized Application Service (PTCAS), satisfactory letters of recommendation, and the Supplemental Program Form.
- Students must meet the essential functions which consist of minimum physical, cognitive and behavioral abilities required for students to successfully complete the physical therapy program and to practice safely once students graduate. Students must meet the essential functions guidelines for admission, retention, and graduation from the program. Essential functions guidelines can be found with the Supplemental Program Form.
- Observation of physical therapists in several different settings is recommended. Documentation of hours by a physical therapist is not required and there is no minimum number of required observation hours.
- Students who are conditionally admitted to the program must meet all conditions before being fully admitted to the DPT program.
- All students who are admitted to the program must provide original transcripts to Graduate Admissions to be fully admitted to the DPT program.
- Students admitted to the program must meet the clinical education and internship requirements.
- Students admitted to the program will be required to take and pass a medical terminology competency exam in the fall semester in which they enter the program.

Degree requirements

The Doctor of Physical Therapy degree is awarded upon satisfactory completion of 122-130 credits in an approved program of study.

Course requirements

Core requirements

A minimum of 122-130 credits are required for the degree, consisting of the following courses:

HS 501	Human Pathology	4
HS 531	Pharmacology	2
PT 514	Pharmacology for Physical Therapy	1
PT 515	Gross Human Anatomy for Physical Therapy	4
PT 516	Neuroanatomy	4
PT 517	Functional Anatomy	4
PT 519	Clinical Medicine	4
PT 531	Professional Issues I	2
PT 540	Movement Science I (Biomechanics)	3
PT 551	Clinical Examination and Evaluation I	4
PT 552	Clinical Examination and Evaluation II	3
PT 556	Patient Management	3
PT 597	Critical Inquiry I	3
PT 627	Lifespan Development I	4
PT 628	Pediatric Examination and Interventions	4

PT 630	Administration and Practice Management	3
PT 635	Educational Theory and Practice	3
PT 641	Clinical Neuroscience	3
PT 642	Neurological Examination and Evaluation	2
PT 651	Modalities and Electrotherapeutic Interventions	4
PT 652	Foundations of Therapeutic Exercise Interventions	3
PT 653	Advanced Therapeutic Exercise Interventions	3
PT 655	Integumentary Diagnosis and Interventions	2
PT 660	Prosthetic and Orthotic Interventions	2
PT 661	Foundations of Musculoskeletal Diagnosis and Interventions	3
PT 681	Clinical Education Experience I	3
PT 682	Clinical Education Experience II	4
PT 698	Critical Inquiry II	3
PT 728	Lifespan Development II	2
PT 732	Professional Issues II	3
PT 734	Psychosocial Aspects of Patient Management	3
PT 735	Health Promotion and Wellness in Physical Therapy	4
PT 742	Neuromuscular Interventions I	4
PT 743	Neuromuscular Interventions II	4
PT 751	Differential Diagnosis: Screening for Referral	4
PT 755	Cardiopulmonary Interventions	3
PT 761	Arthology	1
PT 762	Advanced Musculoskeletal Diagnosis and Interventions	3
PT 783	Physical Therapy Internship III	4
PT 784	Physical Therapy Internship IV	4
PT 790	Capstone Examination in Physical Therapy	1
PT 799	DPT Research Practicum	3

With approval from the program director, students may graduate with fewer than 130 credits if they have completed an equivalent pharmacology and/or pathology course prior to entry into the professional program.

Non-course requirements

Students admitted to the DPT program are required to attend a full-time program of prescribed coursework. A new class of students begins this program each fall semester.

No course graded below 2.5 or graded Unsatisfactory (U) may be applied toward the degree.

Additional program requirements

Policies and procedures

Once admitted to the Doctor of Physical Therapy program, students should consult the Physical Therapy Student Handbook and the Clinical Education Manual for detailed information on policies and procedures.

Clinical Education and internship requirements

Physical therapy students are placed in a variety of clinical settings during the professional program. Students are responsible for their own transportation to clinical experiences and internships, as well as associated housing costs. Admission to and progression through the physical therapy program is contingent upon meeting all clinical education and internship requirements. Requirements include:

- Submission of a completed health assessment, including inoculation for tetanus, skin testing or chest xray for tuberculosis; proof of immunity to rubella, rubeola, mumps, varicella and Hepatitis B (or formal refusal of Hepatitis B vaccination)
- First Aid certificate: American Red Cross First Aid certificate or college credit course in First Aid.
- Current CPR certification: either the American Heart Association certificate: BLS Healthcare Provider OR American Red Cross CPR and AED for the professional rescuer for Adult/Child/Infant.
- Health insurance for illness and injury.

Criminal background checks and urine drug screens may be required by some clinical facilities. Requirements are subject to change based on current physical therapy clinical practice. Students are responsible for any costs associated with the requirements described above. Clinical sites are not required to provide free treatment for students and will bill students for use of their emergency or employee health services.

Students accepted to the physical therapy program must submit proof of all the above requirements by the deadline outlined during orientation. All requirements remain in effect throughout the professional DPT program. Students who have not provided or maintained the necessary documentation may not be admitted to the program or once admitted may not be allowed to enroll in academic or clinical courses.

Student progress policy

Good standing in the Doctor of Physical Therapy Program and progress through the program requires:

- No course grade below 2.5 or an Unsatisfactory grade
- Semester GPA above a 3.0
- Overall GPA above a 3.0
- Meeting essential functions guidelines, standards of professional conduct, ethical conduct and academic conduct.

Successful completion of the Doctor of Physical Therapy degree requires completion of the academic requirements. In addition, students must adhere to standards of academic conduct, professional conduct, ethical conduct, and meet the essential functions guidelines described in the Physical Therapy Student Handbook. A copy of the Physical Therapy Student Handbook is provided to each student in the first semester of the program.

Student academic progress, professional conduct, and compliance with the essential function guidelines are monitored by the Physical Therapy Program Promotions and Honors Committee. The Physical Therapy Promotions and Honors Committee also reviews any suspected violations of the standards of academic conduct or ethical conduct. Students who are not demonstrating satisfactory progress in any of these areas or who violate standards of academic, professional or ethical conduct are subject to probation, suspension or dismissal. Dismissal by Graduate Study and Lifelong Learning is based on a recommendation from the Physical Therapy Promotion and Honors Committee. Students will be informed of all probation decisions, and recommendations for suspensions and dismissals, in writing, including the grounds for the decision, a time frame for probation/suspension, and any recommendations, requirements, remedial work and/or repeat coursework that must be completed.

Academic progress

The physical therapy curriculum is sequentially designed so that early courses serve as the foundation and contain the pre-requisite knowledge and skills for coursework later in the curriculum. It is therefore expected that students complete coursework sequentially as indicated in the curricular plan outlined in the Physical Therapy Student Handbook. The curricular plan is subject to change and modification by the program faculty. The Promotion and Honors Committee may modify the curricular plan for particular students in extenuating or special circumstances.

An overall GPA of 3.0 or higher for all coursework taken in the professional program is required for graduation, and no grade below 2.5 may be applied toward this degree. For courses graded Satisfactory/Unsatisfactory (S/U), no coursework graded unsatisfactory may be applied to this degree. Students receiving a semester GPA below a 3.0 are subject to probation.

Students receiving an Unsatisfactory (U) course grade or a course grade below 2.5 are subject to any or all of the following:

- Probation: Students who are placed on probation may attend courses as determined by the Promotion and Honors Committee. The Promotion and Honors Committee makes the determination of the courses which students may attend based on the cognitive and psychomotor knowledge and skills needed to progress in the curriculum, as well as the student's professional, ethical and academic conduct.
- Suspension: Students who are suspended may not attend any classes in the physical therapy program without the permission of the Promotion and Honors Committee. A student who is suspended when the Promotion and Honors Committee has determined that the student does not have the prerequisite cognitive, psychomotor and affective knowledge and skills required to progress in the curriculum and/or does not meet the expectations for professional, ethical and academic conduct. In general, as courses are only offered once a year, students are suspended for one year until the course is offered again.
- Remediation: Remediation in the form of coursework, independent study, and/or supervised clinical experience may be required.
- Academic testing: Students may be recommended for academic testing to assess academic needs.

Clinical experiences and clinical internships: Students who have not sucessfully completed pre-clinical courses, pre-clinical practical exams and/or do not meet the expectations for professional, ethical and academic conduct may not be allowed to participate in clinical experience and clinical internship courses. Students receiving an Unsatisfactory (U) grade or a course grade below 2.5 must request, in writing, permission from the course instructor and Graduate Study and Lifelong Learning to retake the course when it is again offered.

Academic conduct

Students are expected to adhere to the procedures for Academic Conduct described in the Oakland University Graduate Catalog. The physical therapy program will follow the procedures described in the Oakland University Graduate Catalog. Students found guilty of academic misconduct by the university will be subject to university sanctions and to sanctions from the program by the Physical Therapy Promotion and Honors Committee including probation, suspension, or dismissal.

Professional conduct

Students are expected to adhere to the Guide for Professional Conduct published by the American Physical Therapy Association and to display the generic abilities/professional behaviors described in the Physical Therapy Student Handbook. Violations will be reviewed by the Physical Therapy Promotion and Honors Committee and could result in probation, suspension or dismissal from the program.

Ethical conduct

Ethical conduct is critical to a profession. Students are required to adhere to the Code of Ethics for Physical Therapists published by the American Physical Therapy Association. Violations will be reviewed by the Physical Therapy Promotion and Honors Committee and could result in probation, suspension, or dismissal from the program.

Essential functions guidelines

The essential functions consist of minimum physical, cognitive, and behavioral abilities required for students to successfully complete the physical therapy program and to practice safely once students graduate. Students must meet the essential functions guidelines for admission, retention, and graduation from the program. Essential functions guidelines can be found in the Supplemental Program Form, the Physical Therapy Student Handbook, or on the Physical Therapy Program Web site. Students

who do not meet the guidelines will be reviewed by the Physical Therapy Promotion and Honors Committee and are subject to probation, suspension or dismissal.

Students who have questions or need more information regarding accommodations to meet the essential functions may contact the Oakland University Disability Support Services office at (248) 370-3266 (voice) or (248) 370-3268 (TDD).

Practical examinations

Knowledge, skills, and professional behavior are required for safe and effective practice in the clinical setting. Practical examinations test the student's ability to practice safely, ability to perform psychomotor skills, and ability to demonstrate professional behavior. Based on the type of examination, critical thinking, decision making, time management, and organizational skills may also be tested.

Expectations for Safe Practice: Students must safely and effectively pass all practical examinations that have been required as part of their pre-clinical courses prior to going on their full-time clinical education experiences or clinical internships. Students who have not successfully completed a required practical examination will not have successfully completed the course and will not be allowed to go on their full-time clinical education experiences or internships until they have successfully completed the practical examination and course.

Dismissal from the DPT program

Students are subject to dismissal from the program for any one of the following:

- Receipt of two course grades of Unsatisfactory (U) and/or course grades below a 2.5 during the professional program
- A semester GPA lower than a 3.0 for any two academic semesters during the program
- An overall GPA lower than a 3.0 for any two academic semesters during the program
- Being subject to probation more than twice or to suspension more than once for any academic progress, essential functions guidelines, academic conduct, professional conduct or ethical conduct issue
- An egregious violation of essential functions guidelines, or an egregious violation of standards of professional conduct, ethical conduct or academic conduct.

Appeal process

Appeals of Physical Therapy Honors and Promotion Committee dismissal decisions may be made to Graduate Study and Lifelong Learning. Students should consult the section of the Oakland University Graduate Catalog dealing with appeal procedures concerning academic dismissal.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limit

If more than seven years have passed since the student has been admitted to the Doctor of Physical Therapy degree program and all requirements for degree have not been completed, the student must petition the program coordinator and Graduate Study and Lifelong Learning for an extension. Students who are deemed inactive may be dropped from the program, although they may petition for reinstatement.

■ Transitional Doctor of Physical Therapy (tDPT)

Coordinator:

Christine Stiller

Program Description

The post-professional Transitional Doctor of Physical Therapy degree is designed for physical therapists who have an entry-level Bachelor of Science in physical therapy or a Master of Physical Therapy or a Master of Science in Physical Therapy. The program consists of a set of courses that allows physical therapists who have obtained a Bachelor of Science in physical therapy, Master of Physical Therapy (MPT) or Master of Science in Physical Therapy (MSPT) to earn a Doctor of Physical Therapy (DPT) degree. These courses will transition an entry-level BSPT, MPT or MSPT physical therapist to a Doctor of Physical Therapy degree.

The Commission on Physical Therapy Education (CAPTE) does not accredit post-professional physical therapy education programs; thus, the Transitional Doctor of Physical Therapy is not accredited by CAPTE.

Admission terms and deadlines

Students may be admitted for the fall, winter or summer semester. Applications will be accepted until August 1 for the following fall semester, until December 1 for the following winter semester, and until April 1 for the following summer semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional

credential evaluation service.

As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.

- Professional vitae or resume and one page narrative goal statement outlining academic and professional goals
- Two recommendations submitted on Graduate Admissions Recommendation Forms or two letters of reference
- Official scores for the Test of English as a Foreign Language (TOEFL)
- International students must meet the application requirements described by Graduate Admissions
- Proof of licensure in the state of Michigan
- Documentation of at least two years of employment in the U.S. as a physical therapist for applicants with a master's degree and five years of employment in the U.S. as a physical therapist for applicants with a bachelor's degree. Documentation should include the name and contact information of the employer, as well as dates of employment.

Admissions requirements

Admission to the Transitional Doctor of Physical Therapy degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Be licensed as a physical therapist in the state of Michigan
- Have completed an entry-level physical therapy degree. The entry-level degree may be a Bachelor of Science in physical therapy, Master of Physical Therapy, or Master of Science in Physical Therapy degree from a regionally accredited institution or proof of a U.S. equivalent degree for foreign educated students.
- Have completed the bachelor's or master's degree with an overall GPA of 3.0 or higher
- Provide documentation of two years of physical therapy clinical experience in the U.S. for those who have a master's degree in physical therapy; documentation of five years of physical therapy clinical experience in the U.S. for those who have a bachelor's degree.

Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this course status must complete a minimum of 8 credits of graduate coursework achieving a grade point of 3.0 or above in each course before conditional status is removed.

Transfer credits

Graduate transfer credits from other regionally accredited institutions will be accepted as long as the student has followed all procedures for transferring graduate credit as outlined in the Oakland University Graduate Catalog. A maximum of 6 credits may be approved for transfer credit to the tDPT.

With approval of the program coordinator and Graduate Study and Lifelong Learning, students who have previously earned credits as part of one of the Oakland University post-professional certificates may apply those credits to the Transitional Doctor of Physical Therapy degree.

Degree requirements

The Transitional Doctor of Physical Therapy degree is awarded upon satisfactory completion of 26 or 30 credits in an approved program of study.

1. Students entering with a bachelor's degree in physical therapy

For students entering with a bachelor's degree in physical therapy, the Transitional Doctor of Physical Therapy degree is awarded upon satisfactory completion of 30 credits in an approved program of study.

Course requirements (30 credits)

a. Core requirements (11 credits)

PT 502	Understanding Evidenced-Based Practice	2
PT 503	Diagnostic Imaging	2
PT 631	Clinical Pharmacology of the Musculoskeletal System	1
PT 677	Advanced Differential Diagnosis: Screening for Referral	2
PT 795	Clinical Case Study	4
PT 536	Motor Control and Motor Learning Theory and Application	4
or		
PT 611	Applied Movement Sciences	3

b. Certificate courses (15-16 credits)

Students will be required to complete at least 15 credits in graduate certificate courses or an adviser-approved set of coursework which may include physical therapy or non-physical therapy courses.

Graduate Certificate in Orthopedics
Graduate Certificate in Orthopedic Manual Physical Therapy
Graduate Certificate in Pediatric Rehabilitation
Graduate Certificate in Neurological Rehabilitation
Graduate Certificate in Teaching and Learning for Rehabilitation Professionals
Graduate Certificate in Clinical Exercise Science
Graduate Certificate in Complementary Medicine and Wellness
Graduate Certificate in Exercise Science*
Graduate Certificate in Corporate Worksite Wellness*
Research Concentration: This would include a combination of research courses and projects worth a total of 15 credits in an area of clinical interest.**

Related Coursework: May include non-physical therapy related coursework that supports or complements the student's plan of study.**

* Must complete the appropriate prerequisites.

** Plan of study must be approved by the student's adviser.

2. Students entering with a master's degree in physical therapy

For students entering with a master's degree in physical therapy, the Transitional Doctor of Physical Therapy degree program is awarded upon satisfactory completion of 26 credits in an approved program of study.

Course requirements (26 credits)

a. Core requirements (11 credits)

PT 502	Understanding Evidenced-Based Practice	2
PT 503	Diagnostic Imaging	2
PT 631	Clinical Pharmacology of the Musculoskeletal System	1
PT 677	Advanced Differential Diagnosis: Screening for Referral	2
PT 795	Clinical Case Study	4

b. Certificate courses (at least 15 credits)

Students will be required to complete at least 15 credits in graduate certificate courses or an adviser-approved set of coursework which may include physical therapy or non-physical therapy courses.

Graduate Certificate in Orthopedics
Graduate Certificate in Orthopedic Manual Physical Therapy
Graduate Certificate in Pediatric Rehabilitation
Graduate Certificate in Neurological Rehabilitation
Graduate Certificate in Teaching and Learning for Rehabilitation Professionals
Graduate Certificate in Clinical Exercise Science
Graduate Certificate in Complementary Medicine and Wellness
Graduate Certificate in Exercise Science*
Graduate Certificate in Corporate Worksite Wellness*
Research Concentration: This would include a combination of research courses and projects worth a total of 15 credits in an area of clinical interest.**
Related Coursework: May include non-physical therapy related coursework that supports or complements the student's plan of study.**

* Must complete the appropriate prerequisites.

** Plan of study must be approved by the student's adviser.

Non-course requirements

Plan of study

All students will develop a plan of study that outlines coursework and plan for degree completion. The student's adviser must approve this plan of study.

Academic progress

Credit toward the degree will not be given for courses with grades under 2.5 or for any Unsatisfactory (U) grade. Students must have an overall GPA of 3.0 or better to graduate.

Additional program information

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limit

If more than seven years have passed since the student has been admitted to the Transitional Doctor of Physical Therapy degree program and all requirements for degree have not been completed, the student must petition the program coordinator and Graduate Study and Lifelong Learning for an extension. Students who are deemed inactive may be dropped from the program, although they may petition for reinstatement.

■ Doctor of Science in Physical Therapy (DScPT)

Coordinator:
Kristine A. Thompson

Program description
The post-professional Doctor of Science in Physical Therapy (DScPT) degree program is designed for physical therapists who received an entry-level bachelor's or master's degree in physical therapy and are interested in obtaining an advanced clinical doctorate which includes an individual research project under the guidance of a doctoral committee.

Admission terms and deadlines
Students may be admitted for the fall, winter or summer semester. Applications will be accepted until August 1 for the following fall semester, until December 1 for the following winter semester, and until April 1 for the following summer semester.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Professional vitae or resume and one page narrative goal statement outlining academic and professional goals
- Two Recommendation for Graduate Admissions Forms or two letters of reference
- Official scores for the Test of English as a Foreign Language (TOEFL) and GRE from applicants who are graduates of programs taught in a language other than English
- International students must meet the application requirements described by Graduate Admissions.
- Proof of licensure or eligibility for licensure in the state of Michigan. Students who do not have a license upon admission will be conditionally admitted until they provide proof of licensure. Proof of licensure is required to register for courses that require clinical hours.

Admission requirements
Admission to the Doctor of Science in Physical Therapy degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Be licensed or eligible for licensure as a physical therapist in the state of Michigan
- Have completed a BS/MPT, MSPT or DPT degree from a regionally accredited institution or proof of a U.S. equivalent degree for foreign educated students
- Have completed the GRE
- Meet Oakland University requirements for English proficiency.

Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this course status must complete a minimum of 8 credits of graduate coursework achieving a grade point of 3.0 or above in each course before conditional status is removed.

Degree requirements
The Doctor of Science in Physical Therapy degree requires completion of 75 credits beyond a bachelor's degree with up to 36 credits from a qualified master's degree or entry-level DPT degree*counting toward the DScPT degree.

* With approval of the program coordinator and Graduate Study and Lifelong Learning, students who have previously earned credits as part of one of the Oakland University post-professional certificates may apply those credits to the Doctor of Science in Physical Therapy degree.

Course requirements
Students will be required to take the professional core courses and select a physical therapy concentration (this can include a certificate, an advanced research practicum or an approved set of related coursework for a total of 15-51 credits).

a. Professional core requirements (24 credits)

PT 502	Understanding Evidence-based Practice	2
PT 800	Professional Seminar	4
PT 810	Educational Principles for Rehabilitation Professionals	4
PT 900	Advanced Scientific Inquiry	4
PT 901	Analysis of Clinical Findings	2
PT 950	Doctoral Research Practicum	8

b. Physical Therapy concentration (15-51 credits)
All students must develop a concentration that may include a certificate, a research concentration and/or a set of related coursework. Students must apply for and be accepted into certificate programs. See requirements for certificate programs.

Certificates

Graduate Certificate in Orthopedics
Graduate Certificate in Orthopedic Manual Physical Therapy
Graduate Certificate in Pediatric Rehabilitation
Graduate Certificate in Neurological Rehabilitation

Graduate Certificate in Teaching and Learning for Rehabilitation Professionals
Graduate Certificate in Clinical Exercise Science
Graduate Certificate in Complementary Medicine and Wellness
Graduate Certificate in Exercise Science*
Graduate Certificate in Corporate Worksite Wellness*
Research Concentration: This would include a combination of research courses and projects worth a total of 15 credits in an area of clinical interest.**
Related Coursework: May include non-physical therapy related coursework that supports or complements the student's plan of study.**

* Must complete the appropriate prerequisites.

** Plan of study must be approved by the student's adviser.

Non-course requirements

Students must have an overall GPA of 3.0 or better to graduate. Credit toward the degree will not be given for courses with grades under 2.5.

Plan of study

All students will develop a plan of study that outlines coursework and a plan for degree completion. The student's adviser must approve this plan of study.

Transfer credit

The transfer credit policy outlined in the Oakland University Graduate Catalog will be followed. Per this policy, students may be allowed to transfer up to 9 credits.

Research project

All students will complete an individual research project under the direction of a committee chaired by a member of the physical therapy faculty.

DScPT research report submission requirements

One copy of the approved DScPT research report must be delivered to Graduate Study and Lifelong Learning by the date listed in the Schedule of Classes for the term in which the student expects to graduate. The research report must be graded prior to submission. Submission requirements are provided under "Terminal research project" in the Professional Doctoral Degree section of this catalog).

Additional program information

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

Time limits

If more than seven years have passed since the student has been admitted to the DScPT program, and all requirements (including an approved research report) have not been completed, the student must petition the program coordinator and Graduate Study and Lifelong Learning for an extension. Students who are deemed inactive may be dropped from the program, although they may petition for reinstatement.

■ Master of Science in Physical Therapy (MSPT)

Coordinator:

Kristine A. Thompson

Program description

The Master of Science in Physical Therapy (MSPT) degree program is designed to provide practicing physical therapists with advanced knowledge in theoretical and clinical aspects of the profession. The clinical curriculum addresses orthopedic, pediatric, and adult neurological aspects of physical therapy while the theoretical curriculum focuses on biomechanics and motor learning. Optional clinical experiences, in a residency format, are gained through cooperating internship sites for some specialty areas. Graduates of the program are prepared for autonomous specialty practice within their area of study.

Students can elect to complete specific subsets of courses leading to a graduate certificate in orthopedic manual physical therapy, a graduate certificate in pediatric rehabilitation, graduate certificate in orthopedic physical therapy, graduate certificate in neurological rehabilitation, or a graduate certificate in teaching and learning.

Admission terms and deadlines

Students are admitted in the fall semester only. Applications will be accepted until August 1 for the following fall semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

As part of the admission requirements, graduate programs

may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Curriculum vitae and personal statement describing career experiences and goals
- Two Recommendation for Graduate Admission forms
- Official scores for the Graduate Record Examination (GRE)
- Official scores from the Test of English as a Foreign Language (TOEFL) from applicants who are graduate of programs taught in a language other than English
- International students must meet the application requirements for International students described by Graduate Admissions.
- Proof of licensure or eligibility for licensure in the state of Michigan. Licensure is required to participate in clinical and/or residency program courses.

Admission requirements

Admission to the Master of Science in Physical Therapy degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Applicants should hold a bachelor's degree or entry-level master's degree in physical therapy from a regionally accredited institution with a cumulative GPA of 3.0 or above.
- Two years of clinical experience is strongly recommended.
- Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this status must complete a minimum of 8 credits of graduate coursework achieving a grade point of 3.0 or above in each course before conditional status is removed.

Degree requirements

The Master of Science in Physical Therapy degree program is awarded upon satisfactory completion of 36 credits in an approved program of study.

Course requirements

a. Core requirements

PT 502	Understanding Evidence-based Practice	2
PT 550	Clinical Anatomy and Neuroanatomy	3
PT 590	Advanced Clinical Research Design	4
PT 631	Clinical Pharmacology of the Musculoskeletal System	1
PT 677	Advanced Differential Diagnosis: Screening for Referral	2
PT 536	Motor Control and Motor Learning Theory and Application	4
or		
PT 611	Applied Movement Sciences	2 or 3
PT 570	Musculoskeletal Biomechanics	3
or		
EXS 525	Biomechanics	3

b. Electives

Completion of 13 or more credits of electives as approved by the student's faculty adviser. Elective options include those listed below and other adviser-approved courses.

PT 500	Foundations of Pediatric Practice	4
PT 503	Diagnostic Imaging	2
PT 507	Developmental Aspects of Pediatric Rehabilitation	4
PT 509	Biomechanics of Growth and Development	2
PT 510	Advanced Orthopedics I	2
PT 511	Advanced Orthopedics II	2
PT 520	Advanced Orthopedics III	2
PT 523	Craniomandibular System	1
PT 525	Pediatric Musculoskeletal Examination and Intervention	3
PT 536	Motor Control and Motor Learning Theory and Application	4
PT 537	Foundations of Geriatric Neurological Practice	3
PT 538	Assessment of Neurological Dysfunction	4
PT 539	Developing Interventions for Patients with Neurologic Dysfunction	4
PT 540	Movement Science I (Biomechanics)	3
PT 598	Independent Study	1 to 4
PT 601	Clinical Orthopedic Internship I	1
PT 602	Clinical Orthopedic Internship II	1
PT 603	Pediatric Clinical Internship I	2
PT 611	Applied Movement Sciences	2 or 3
PT 695	Special Topics in Physical Therapy	1 to 4

c. Exit

Completion of the research projects or comprehensive examination. The research option requires the completion of a minimum of 4 credits in PT 690. The comprehensive examination option requires the completion of a minimum of 4 credits in PT 650.

Non-course requirements

Completion of a minimum of 36 credits with a GPA of 3.0 or better. Credit toward the degree will not be given for courses with grades under 2.5.

Additional program requirements

Academic advising

Upon acceptance into the program, students are assigned a faculty adviser who will assist the student in developing a plan of study.

Research or comprehensive examination option

Candidates for the Master of Science degree must choose either to carry out an independent research project or to conduct in-depth study in a number of approved areas, followed by a comprehensive examination covering these areas.

Students who choose the research option select an adviser who serves as the committee chair and two committee members agreed upon by the student and chair. A research proposal is presented orally and in writing to the committee for approval. The findings will be presented and defended by the candidate to their research committee and the university community, at an open meeting. The final paper must be submitted in designated format.

The comprehensive examination option is designed to provide those students who do not wish to conduct thesis research an opportunity for in-depth study in several areas. Under this option, students, with their adviser's approval, select a minimum of three topics. Extensive reading lists for each topic are compiled from recommendations submitted by three or more faculty members who have expertise in the areas. A written paper or a written examination, consisting of selected questions for each topic area, is given in order to determine if the candidate has the in-depth knowledge expected of a master's degree candidate. The written exam can be arranged to be given in three parts, covering each of the topics studied. This is followed by the oral examination covering all three topics.

MSPT research report submission requirements

One copy of the approved MSPT research report must be delivered to Graduate Study and Lifelong Learning by the date listed in the Schedule of Classes for the term in which the student expects to graduate. The research report must be graded prior to submission. Submission requirements are provided on the Graduate Study and Lifelong Learning Web page.

Time limits

If more than six years have passed since the student has been admitted to the MSPT program, and all requirements (including an approved research report) have not been completed, the student must petition the program coordinator and Graduate Study and Lifelong Learning for an extension. Students who are deemed inactive may be dropped from the program, although they may petition for reinstatement.

■ Graduate Certificate in Neurological Rehabilitation

Coordinator:

Sue Saliga

Program description

The Graduate Certificate in Neurological Rehabilitation (GCNR) is designed to provide advanced theoretical and clinical training for physical and occupational therapists interested in specializing in the areas of neurorehabilitation and geriatrics. The GCNR will allow practicing therapists to take graduate-level courses aimed at developing the specialty skills of a master clinician in treating those individuals with a neurological injury such a stroke, multiple sclerosis, traumatic brain injury and Parkinson's disease. Physical therapists may apply the 17 GCNR credits toward completion of the post-professional Doctor of Science in Physical Therapy degree program or the post-professional Master of Science in Physical Therapy degree program. Occupational therapists who gain specialization in neurological rehabilitation, however, are not eligible for the MSPT or the DScPT degrees.

Admission terms and deadlines

Students are admitted in the fall semester only. Applications will be accepted until August 1 for the following fall semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Professional vitae or resume and one page narrative goal statement outlining academic and professional goals
- Two Recommendation for Graduate Admissions forms
- Official scores for the Test of English as a Foreign Language (TOEFL) and GRE from applicants who are graduates of programs taught in a language other than English
- International students must meet the application requirements described by Graduate Admissions.
- Proof of licensure or registration, or eligibility for licensure or registration, in the state of Michigan. Students who do not have a license upon admission will be conditionally admitted until they provide proof of licensure. Proof of licensure is required to register for courses that require clinical hours.

Admission requirements

Admission to the Graduate Certificate in Neurological Rehabilitation program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Individuals must hold an entry-level degree in physical therapy and occupational therapy and be licensed or registered in their respective disciplines (or eligible for such).
- Two years of clinical experience is highly recommended.

Graduate Certificate requirements

The Graduate Certificate in Neurological Rehabilitation program is awarded upon satisfactory completion of 17 credits in an approved program of study.

Course requirements

PT 502	Understanding Evidence-Based Practice	2
PT 536	Motor Control and Motor Learning Theory and Application	4
PT 537	Foundations of Geriatric Neurological Practice	3
PT 538	Assessment of Neurological Dysfunction	4
PT 539	Developing Interventions for Patients with Neurologic Dysfunction	4

Non-course requirements

Students must have an overall GPA of 3.0 or better to graduate. Credit toward the graduate certificate will not be given for courses with grades under 2.5.

■ Graduate Certificate in Orthopedics

Coordinator:

John R. Krauss

Program description

The Graduate Certificate in Orthopedics is a one-year, part-time certificate with a broader area of focus than the OMPT program at Oakland University. The Graduate Certificate in Orthopedics will offer additional flexibility and another point of entry for individuals interested in pursuing graduate education at Oakland University. Coursework in this program may be applied toward the post entry-level Doctor of Science in Physical Therapy (DScPT) or the Master of Science (MS).

The graduate certificate program is offered as a part-time course of study accommodating the needs of working professionals. Students enrolled in the program will participate in 17 credits of coursework including orthopedic theory, techniques, and clinical training. Courses are offered primarily on a weekend and evening basis.

Admission terms and deadlines

Students are admitted in the fall semester only. Applications will be accepted until August 1 for the following fall semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Professional vitae or resume and one page narrative goal statement outlining academic and professional goals
- Two Recommendation for Graduate Admissions forms or two letters of reference
- Official scores for the Test of English as a Foreign Language (TOEFL) and GRE from applicants who are graduates of programs taught in a language other than English
- International students must meet the application requirements described by Graduate Admissions.
- Proof of licensure or registration or eligibility for licensure or registration in the state of Michigan. Students who do not have a license upon admission will be conditionally admitted until they provide proof of licensure. Proof of licensure is required to register for courses that require clinical hours.

Admission requirements

Admission to the Graduate Certificate in Orthopedics program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Individuals must hold an entry-level degree in physical therapy and be licensed (or eligible for licensure) in physical therapy.
- Two years of clinical experience is highly recommended.

Graduate Certificate requirements

The Graduate Certificate in Orthopedics program is awarded upon satisfactory completion of 17 credits in an approved program of study.

Course requirements

a. Core requirements

PT 502	Understanding Evidence-based Practice	2
PT 510	Advanced Orthopedics I	2
PT 511	Advanced Orthopedics II	2
PT 601	Clinical Orthopedic Internship I	1

PT 611	Applied Movement Sciences	2 or 3
PT 631	Clinical Pharmacology of the Musculoskeletal System	1
PT 677	Advanced Differential Diagnosis: Screening for Referral	2

b. Electives (5 credits)

Five credits of electives which may include the following or other adviser-approved courses:

PT 503	Diagnostic Imaging	2
PT 523	Craniomandibular System	1
PT 526	Advanced Arthrology	1
PT 695	Special Topics in Physical Therapy	1 to 4

Non-course requirements

Students must have an overall GPA of 3.0 or better to graduate. Credit toward the graduate certificate will not be given for courses with grades under 2.5.

Fees

Special course fees are assessed for the manual therapy theory and technique classes (PT 510, 511) required for the certificate.

■ Graduate Certificate in Orthopedic Manual Physical Therapy (OMPT)

Coordinator

John R. Krauss

Program description

The Graduate Certificate in Orthopedic Manual Physical Therapy is designed to offer advanced, graduate-level courses in orthopedics to physical therapists interested in developing clinical specialty skills. This educational program provides advanced theoretical and clinical training, emphasizing differential diagnosis and manual therapy procedures.

The graduate certificate program is offered as a part-time course of study accommodating the needs of working professionals. Students enrolled in the program will participate in 18 credits of coursework including orthopedic theory, techniques and clinical internship training. The length of study for this part-time program is two years, with courses being offered primarily on a weekend and evening basis. The clinical training entails clinical training at an approved clinical site. All of the required courses that comprise this graduate certificate can be applied to the Master of Science or Doctor of Science in Physical Therapy degree.

Admissions terms and deadlines

Students are admitted in the fall semester only. Applications will be accepted until August 1 for the following fall semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Professional vitae or resume and one page narrative goal statement outlining academic and professional goals
- Two Recommendation for Graduate Admissions forms or two letters of reference
- Official scores for the Test of English as a Foreign Language (TOEFL) and GRE from applicants who are graduates of programs taught in a language other than English
- International students must meet the application requirements described by Graduate Admissions.
- Proof of licensure or eligibility for licensure in the state of Michigan. Students who do not have a license upon admission will be conditionally admitted until they provide proof of licensure. Proof of licensure is required to register for courses that require clinical hours.

Admission requirements

Admission to the Graduate Certificate in Orthopedic Manual Physical Therapy program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Hold an entry-level physical therapy degree (i.e., Bachelor of Science or Master of Physical Therapy) from an APTA accredited program, or its equivalent
- Be licensed as a physical therapist in the state of Michigan
- Two years of clinical experience is highly recommended.

Class size is limited due to the nature and sequencing of the manual therapy technique courses. A new group of students is accepted every fall.

Graduate Certificate requirements

The Graduate Certificate in Orthopedic Manual Physical Therapy is awarded upon satisfactory completion of 17 credits in an approved program of study.

Course requirements

PT 502	Understanding Evidence-based Practice	2
PT 510	Advanced Orthopedics I	2
PT 511	Advanced Orthopedics II	2
PT 520	Advanced Orthopedics III	2
PT 530	Advanced Orthopedics IV	2

PT 601	Clinical Orthopedic Internship I	1
PT 602	Clinical Orthopedic Internship II	1
PT 605	Clinical Orthopedic Internship III	1
PT 611	Applied Movement Sciences	2 or 3
PT 677	Advanced Differential Diagnosis: Screening for Referral	2
PT 680	OMPT Practicum	1

Non-course requirements

Students must have an overall GPA of 3.0 or better to graduate. Credit toward the graduate certificate will not be given for courses with grades under 2.5.

Fees

Special course fees are assessed for the manual therapy theory and technique classes (PT 510, 511, 520, 530) required for the certificate.

■ Graduate Certificate in Pediatric Rehabilitation

Coordinator:

Christine Stiller

Program description

The Graduate Certificate in Pediatric Rehabilitation is designed to offer advanced, graduate-level courses in pediatrics to physical therapists and occupational therapists interested in developing clinical specialty skills. The certificate program is offered as a part-time course of study accommodating the needs of working professionals. Students enrolled in the program will participate in 17 credits of coursework including advanced theoretical and clinical training, emphasizing clinical decision-making, case management skills, and therapeutic procedures. For physical therapists, all of the required courses that comprise this certificate can be applied to the Master of Science in Physical Therapy degree or the Doctor of Science in Physical Therapy degree.

Admission terms and deadlines

Students may be admitted for the fall, winter or summer semester. Applications will be accepted until August 1 for the following fall semester, until December 1 for the following winter semester, and until April 1 for the following summer semester.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Professional vitae or resume and one page narrative goal statement outlining academic and professional goals
- Two Recommendation for Graduate Admission forms or two letters of reference
- Official scores for the Test of English as a Foreign Language (TOEFL) and GRE from applicants who are graduates of programs taught in a language other than English
- International students must meet the application requirements described by Graduate Admissions.
- Proof of licensure or registration or eligibility for licensure or registration in the state of Michigan. Students who do not have a license upon admission will be conditionally admitted until they provide proof of licensure. Proof of licensure is required to register for courses that require clinical hours.

Admission requirements

Admission to the Graduate Certificate in Pediatric Rehabilitation program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- An entry-level physical therapy or occupational therapy degree from an APTA or AOTA accredited program or its equivalency
- Must be a licensed physical therapist or a registered occupational therapist, or eligible for licensure or registration, respectively.
- Two years of clinical experience in pediatrics is highly recommended.

Graduate Certificate requirements

The Graduate Certificate in Pediatric Rehabilitation is awarded upon satisfactory completion of 17 credits in an approved program of study.

Course requirements

PT 500	Foundations of Pediatric Practice	4
PT 502	Understanding Evidence-based Practice	2
PT 507	Developmental Aspects of Pediatric Rehabilitation	4
PT 525	Pediatric Musculoskeletal Examination and Intervention	3
PT 536	Motor Control and Motor Learning Theory and Application	4

Non-course requirements

Students must have an overall GPA of 3.0 or better to graduate. Credit toward the graduate certificate will not be given for courses with grades under 2.5.

■ Graduate Certificate in Teaching and Learning for Rehabilitation Professionals

Coordinator:
Christine Stiller

Program description
The Graduate Certificate in Teaching and Learning for Rehabilitation Professionals is designed to provide an in-depth understanding of the theoretical background of the principles of teaching and learning used in all aspects of rehabilitation. In addition, it will provide students with advanced skill in teaching methodology and the development of educational materials. Students will complete a teaching practicum under the guidance of full-time faculty in the physical therapy program. All of the required courses that comprise the certificate can be applied by physical therapists to the post-professional Master of Science in Physical Therapy degree or the Doctor of Science in Physical Therapy degree.

Admission terms and deadlines
Students may be admitted for the fall, winter or summer semester. Applications will be accepted until August 1 for the following fall semester, until December 1 for the following winter semester, and until April 1 for the following summer semester.

Application requirements
Applicants for admission must submit the following:

- Application for Admission to Graduate Study.
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Professional vitae or resume and one page narrative goal statement outlining academic and professional goal
- Two Recommendation for Graduate Admission forms or two letters of reference
- Official scores for the Test of English as a Foreign Language (TOEFL) and GRE from applicants who are graduates of programs taught in a language other than English
- International students must meet the application requirements described by Graduate Admissions.
- Proof of licensure, registration or certification or eligibility for licensure, registration or certification in the state of Michigan. Students who do not have a license upon admission will be conditionally admitted until they provide proof of licensure. Proof of licensure is required to register for courses that require clinical hours.

Admission requirements
Admission to the Graduate Certificate in Teaching and Learning for Rehabilitation Professionals program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Individuals must hold an entry-level degree in a rehabilitation or other health profession, and must be licensed, registered or certified in their respective discipline (or eligible for such).
- Two years of clinical experience is highly recommended.
- All other admissions requirements for graduate application as determined by Graduate Admissions must also be met.

Graduate Certificate requirements
The Graduate Certificate in Teaching and Learning for Rehabilitation Professionals is awarded upon satisfactory completion of 17 credits in an approved program of study.

Course requirements

PT 502	Understanding Evidence-based Practice	2
PT 592	Methods of Teaching and Learning in Rehabilitation	3
PT 593	Professional Education in Rehabilitation	4
PT 594	Teaching Practicum for Rehabilitation Professionals	4
PT 810	Educational Principles for Rehabilitation Professionals	4

Non-course requirements
Students must have an overall GPA of 3.0 or better to graduate. Credit toward the graduate certificate will not be given for courses with grades under 2.5.

■Safety Management Program

360 Hannah Hall • (248) 370-4038 • Fax (248) 370-4227
http://www.acs.oakland.edu/shs/programs/exs/index.htm

Program director:
Charles W. McGlothlin, Jr.

Assistant professor
Aaron J. Bird, Ph.D., West Virginia University

Adjunct assistant professor
Thomas W. Schenk, Ph.D., State University of New York at Buffalo

Special instructor:
Charles W. McGlothlin, Jr., Ph.D., Colorado State University

■ Master of Science in Safety Management (MSSM)

Coordinator:
Charles W. McGlothlin, Jr.

Program description

The Master of Science in Safety Management degree was developed through a cooperative effort between the School of Health Sciences and the School of Business Administration at Oakland University. This master's degree program focuses on the business aspects of safety management in the workplace and combines an effective balance of core MBA coursework with application of these business skills to safety-related case studies in risk assessment, loss control, risk management, and safety program planning, administration and management.

This master's degree is intended to benefit college graduates and in-service safety professionals with a safety-related bachelor's degree or other bachelor's degree coupled with safety-related work experience or required prerequisite safety courses. The goal of the MSSM degree program is to provide the business analytical tools and skills necessary for making sound management decisions in business and industry as they relate to occupational safety, health, and environmental issues in the workplace. Upon completion of this program of study, the graduate should be able to:

- Communicate effectively with top management and cost justify interventions necessary to protect employees, property, and the environment
- Enhance management commitment to workplace improvements in safety and health through development of better management understanding of the safety and health impact on bottom line performance
- Develop increased employee involvement in development of safety and health interventions through better understanding of the business ramifications and needs for safety and health improvements in the workplace
- Implement safety and health programs/interventions that optimize business and safety performance in unison
- Develop return of investment evaluations that demonstrate understanding for the financial and operational impacts of safety interventions on a business operation
- Effectively integrate occupational safety and health programs that play a significant role in business total quality management efforts and that enhance operational efficiency and productivity
- Translate moral, ethical, legal, and operational needs for safety and health programs/interventions into terms that enable a business CEO or other corporate manager to recognize a valid business need
- Identify strategies that align safety and health improvements with organizational priorities
- Demonstrate that safety in the workplace makes good business sense
- Contribute as a key member of an organizational management team.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Curriculum vitae and personal statement describing career experiences and goals
- Three Recommendation for Graduate Admission forms
- The Graduate Record Examination (GRE) may be required.
- Official scores from the Test of English as a Foreign Language (TOEFL) from applicants who are graduates of programs taught in a language other than English
- International students must meet the application requirements for international students described by Graduate Admissions.

Admission requirements

Admission to the Master of Science in Safety Management degree program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Applicants must hold a bachelor's degree in occupational safety and health or a related field of study from a regionally accredited institution with a cumulative GPA of 3.0 or above.

- Two years of safety-related work experience is strongly recommended.
- Applicants with an undergraduate GPA less than 3.0 with the appropriate academic background and strong letters of recommendation may be considered for conditional admission. Students who qualify for this status must complete a minimum of 8 credits of graduate coursework achieving a grade point of 3.0 or above in each course before conditional status is removed.

Degree requirements

The Master of Science in Safety Management degree is awarded upon satisfactory completion of a minimum of 32 credits in an approved program of study.

Course requirements

OSH 500	Introduction to OSH Research	4
OSH 520	Advanced Safety and Health Administration	3
OSH 540	Risk Assessment and Loss Control	3
OSH 560	Applied System Safety Analysis	3
OSH 699	Capstone Course	4
QMM 510*	Statistical Analysis for Managers	3
ACC 511	Financial Accounting	2 or 3
POM 521	Operations Management	3
ORG 530	Organizational Behavior	3
ORG 631	Human Resources Management	3
MGT 550	Legal Environment of Business	3

* May be waived based on student undergraduate/graduate statistics courses.

Non-course requirements

Completion of a minimum of 32 credits with a GPA of 3.0 or better in all courses taken at Oakland University.

Additional program information

Academic advising

Upon acceptance into the program students are assigned a faculty adviser who will assist the student in developing a plan of study.

Time limits

If more than six years have passed since the student has been admitted to the MSSM program, and all requirements have not been completed, the student must petition the program coordinator and Graduate Study and Lifelong Learning for an extension. Students who are deemed inactive may be dropped from the program, although they may petition for reinstatement.

■SCHOOL OF NURSING

428 O'Dowd Hall • (248) 370-4253 • Fax (248) 370-4279
www.oakland.edu/nursing

Dean:
Linda S. Thompson Adams

Associate dean:
Diane M. Norris

Assistant deans:
Sherry F. Abernathy
Pamela A. Marin

Director of nursing laboratories:
Patricia T. Ketcham

Professors emeriti:
Justine J. Speer, Ph.D., R.N., University of Minnesota
Diane R. Wilson, Ph.D., R.N., Michigan State University
Carol S. Zenas, Ph.D., R.N., University of Michigan

Professors:
Linda S. Thompson Adams, Dr.PH., R.N., FAAN, Johns Hopkins University
F. Darlene Schott-Baer, Ph.D., R.N., Wayne State University

Visiting distinguished professor:
Ann Whall, Ph.D., R.N., Wayne State University

Associate professors:
Karen Dunn, Ph.D., R.N., Wayne State University
Frances C. Jackson, Ph.D., R.N., Wayne State University
Suha Kridli, Ph.D., R.N., University of Missouri, Columbia
Anne Mitchell, Ph.D., R.N., Wayne State University
Mary E. Mittelstaedt, Ph.D., R.N., Michigan State University
Gary Moore, Ph.D., R.N., Wayne State University
Sarah E. Newton, Ph.D., R.N., University of Michigan
Barbara Penprase, Ph.D., R.N., Wayne State University

Assistant professors:
Margaret A. Harris, Ph.D., R.N., Wayne State University
Barbara Harrison, Ph.D., R.N., University of Michigan
Sharon Mills-Wisneski, Ph.D., R.N., Widener University
Carrie L. Motyka, Ph.D., R.N., Wayne State University
Diane M. Norris, Ph.D., R.N., University of Michigan
Laura Pittiglio, Ph.D., R.N., Wayne State University
Cheryl K. Riley-Doucet, Ph.D., R.N., Wayne State University

Adjunct assistant professors:
Anne Hranchook, M.S.N., Oakland University
Patricia Ketcham, M.S.N., Oakland University
Lisa Ann Mileto, M.S., CRNA, Mercy College of Detroit
John Nagelhout, Ph.D., CRNA, Wayne State University

Adjunct instructor:
John Roebuck, M.S.N., CRNA, Oakland University

Clinical education coordinator:
Laurie Heline, M.S., CRNA, University of Detroit Mercy

Visiting professor:
Jenn-Tser Pan, Ph.D., Wayne State University

Visiting instructors:
Yvonne Anthony, Ph.D., Brandeis University
Janith Beres, M.S.N., R.N., University of Phoenix
Chesanny Butler, M.S.N., R.N., University of Phoenix
Marissa Ferrari, D.N.P., R.N., Oakland University
Kara Freeman, M.S.N., R.N., New York University
Sharon Heskitt, M.S.N., R.N., St. Louis University
Kimberly Holka, M.S.A., R.N., Central Michigan University
JoAnn Kapa, M.S.N., University of Phoenix
Marilyn Mouradijan, M.S.N., R.N., Texas Woman's University
Ronald Piscotty, Jr., M.S.N., University of Michigan
Lynda Poly-Droulard, M.Ed., R.N., Wayne State University
Ali Salman, Ph.D., R.N., Case Western Reserve University
Deborah Tierney, M.S.N., R.N., University of Michigan
Vicki Varbedian, M.S.N., R.N., Wayne State University

Special instructors:
Claudia Grobbel, M.S.N., R.N., Oakland University
Stephanie Vallie, M.S.N., R.N., Indiana University
Rosalind Woodson, M.S.N., R.N., University of Phoenix

Board of Visitors

The Board of Visitors for the School of Nursing is composed of community leaders in the metropolitan Detroit area. The board assists the School of Nursing in developing its goals, objectives and curricular design, as well as clinical and research programs that meet the rapidly changing requirements of the health care field. Board members consult on such matters as facilities, equipment requirements, special topics and long-range planning.

Board members

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Kathleen Van Wagoner, Chief Nurse Executive, Crittenton Hospital Medical Center
Christine Zambricki, Chief Operating Officer, CNO, Henry Ford West Bloomfield Hospital

■ Doctor of Nursing Practice (DNP)

Program director:
Frances C. Jackson

Program description

The Doctor of Nursing Practice (DNP) is the terminal degree for nurses in clinical practice. It is a 32-credit post-MSN program intended to prepare nurse leaders for clinical practice.

Nurses holding the DNP will be prepared to assume clinical and leadership roles in both academic and a variety of service settings. Skills and knowledge beyond the current master's preparation include the ability to analyze organization and clinical systems, to critique evidence to support improved practice, and to develop practice guidelines to improve patient care and safety.

Graduate program objectives

The post-master's DNP curriculum will prepare advanced practice nurses beyond current graduate education by preparing nurses to:

- Function as advanced clinical leaders in service and academic settings
- Function as practitioners at the highest level of nursing practice in at least one area of specialized advanced nursing practice: nurse practitioner, nurse anesthetist, nursing administrator, or clinical nurse specialist.

Application terms and deadlines

Applications for admission are accepted at any time. Currently, students are admitted for the fall semester only. However, applications are accepted until all openings have been filled.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Copy of nursing license
- Two letters of recommendation, including one from a faculty member familiar with the applicant's graduate work and one from a person familiar with the applicant's clinical practice
- Written goal statement of 500 to 1,000 words. The goal statement should focus on recent clinical experience, how the DNP will enhance the applicant's professional development, and career goals following completion of the program. The goal statement will be evaluated on many areas, including content and appropriate use of grammar, spelling and punctuation.
- Individual interview with a School of Nursing faculty member will be scheduled after admission materials have been submitted.

Admission requirements

Admission to the Doctor of Nursing Practice degree program is selective. In addition to Graduate Admissions General Requirements specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- Compliance with Oakland University graduate admission requirements
- Compliance with required university policies regarding international student admission requirements
- Completion of a master's degree in nursing in a clinical area (includes nursing administration but not nursing education) from an institution accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education with a graduate cumulative grade-point average of 3.0 or above
- Students who have a master's degree in nursing in a non-clinical area may still apply to the DNP degree program, but may have to complete a post-master's certificate program in a nursing clinical area.
- Licensed as a registered nurse in one of the 50 states or U.S. territories.

Transfer credit

A maximum of 9 credits may be transferred to a graduate degree at Oakland University, provided these courses have not been used to satisfy degree requirements for another degree. All transfer credits require both School of Nursing and Graduate Study and Lifelong Learning approval.

Degree requirements

The Doctor of Nursing Practice degree requires nurses with a clinical focus in their MSN program to complete a minimum of 32 credits post-MSN, depending on prior coursework taken for the master's degree. Nurses without a clinical focus in their MSN program will complete the necessary coursework to obtain a post-MSN certificate as either a Family Nurse Practitioner or Adult/Gerontology Nurse Practitioner plus the 32 credits of DNP coursework.

Transcripts of nurses with a non-clinical master's degree in nursing or an MSN from another school will be evaluated for equivalency to the School of Nursing clinical programs. Any necessary additional coursework can be completed during the DNP program. All students graduating with a DNP will be eligible to take the appropriate certification exam, if they have not done so after their MSN program.

All post-MSN DNP students must complete a minimum of 32 credits of approved coursework, of which at least 24 credits must be taken at Oakland University. In the DNP program, graduate credit will not be awarded for courses in which a grade less than 3.0 is earned. All numerical grades earned are used in computing a student's grade-point average. Students who have advisory committee approval of their DNP research projects must complete a minimum of 8 credits of NRS 899.

Course requirements

a. Core requirements

NRS 800	Advanced Nursing Theory	4
NRS 810	Health Systems, Policy and Regulation	4
NRS 820	Leadership and Collaboration	4
NRS 830	Health Care Informatics	4
NRS 595	Statistics in Advanced Nursing Practice	4

b. Exit (research sequence)

The Oakland University School of Nursing DNP research sequence consists of three components:

NRS 890	Advanced Research Methods	4
Graduate-level statistics course		
NRS 899	DNP Research Project	minimum of 8

The purpose of the research sequence is to prepare DNP students to evaluate current research, develop a research proposal, carry out the research process, and prepare a report that could take the form of a manuscript submitted for publication, a grant proposal submitted for funding, or a report that represents the outcomes of the research effort. The AACN DNP Essentials and the policies of Graduate Study and Lifelong Learning will be used as guides for what constitutes appropriate format for the final project.

DNP students must identify faculty who will serve as advisers on their DNP project and supervise the student's progress in completing the project, ensuring that all human investigation requirements are met. It is permissible for students to work in pairs (no more than two students) on the final project, with permission of the advising committee. The Oakland University School of Nursing Doctor of Nursing Practice Student Handbook provides information and policies related to the project.

Non-course requirements

Advising

Students are responsible for requirements and policies stated in the School of Nursing Doctor of Nursing Practice Student Handbook and each course syllabus. Every student admitted to the DNP program is assigned to an academic adviser who is available to assist with the interpretation and implementation of relevant policies and procedures.

Academic progress

Students are required to follow university policies and procedures for graduate students, as described in the Oakland University Graduate Catalog. In addition to the university requirements, specific School of Nursing policies and procedures are outlined in the School of Nursing Doctor of Nursing Practice Student Handbook.

Students are expected to earn a grade of 3.0 or above in each course in the DNP program. In courses graded Satisfactory/ Unsatisfactory (S/U), students are expected to earn a course grade of satisfactory.

Students who are not making satisfactory progress in the program may be placed on probation with conditions imposed for retention in the program or may be recommended for dismissal from the program.

Continuous enrollment

The continuous enrollment policy for doctoral students requires continuous registration of graduate students for at least 1 credit each semester in the academic year to maintain an active graduate student status. This includes semesters in which the comprehensive, preliminary or qualifying examination is taken, defense, and each subsequent term (fall and winter) until the degree requirements are met and the dissertation is submitted to Graduate Study and Lifelong Learning.

Some agency and graduate assistantship eligibility may have course-load requirements that exceed the minimum registration requirements of the Continuous Enrollment Policy (e.g., Veterans Affairs, Immigration and Naturalization for international students, and federal financial aid programs). Therefore, it is the student's responsibility to register for the appropriate number of credits that are required for funding eligibility and/or compliance as outlined by specific agency regulations under which they are governed.

■ Master of Science in Nursing

Program director:
F. Darlene Schott-Baer

Accreditation
The Master of Science in Nursing degree program is accredited by the Commission on Collegiate Nursing Education. In addition, the Nurse Anesthesia program is accredited by the Council on Accreditation of Nurse Anesthesia Educational Programs.

Graduate program objectives
In keeping with the philosophy of the School of Nursing, master's degree graduates achieve the following student learning outcomes:

- Incorporate concepts and theories from nursing and related disciplines into advanced nursing practice or nursing education
- Provide advanced nursing practice or nursing education in a variety of settings in accordance with standards appropriate to their specialty area
- Qualify to take the certification examination for advanced nursing practice or nursing education.

Program descriptions
The Master of Science in Nursing degree program prepares professional nurses for advanced nursing practice, leadership in the nursing profession and future doctoral study. Four tracks are offered:

1. Adult/Gerontological Nurse Practitioner
The plan of study for the Adult/Gerontological Nurse Practitioner (Adult/GNP) program prepares the advanced practice nurse as a primary care provider for adult, older adult and frail elder clients in a variety of settings. The curriculum focuses on culturally sensitive care, incorporating health promotion and management of acute and chronic health problems. The graduate is prepared to apply nursing theory, principles of advanced practice nursing and the research process in the design and delivery of primary care. Knowledge for advanced nursing practice is synthesized from concepts in nursing as well as the biological and social sciences. Graduates of the Adult/GNP program are prepared to take an Adult Nurse Practitioner national certification examination and/or a Gerontological Nurse Practitioner national certification examination.

2. Family Nurse Practitioner
The plan of study for the Family Nurse Practitioner (FNP) program prepares the advanced practice nurse as a primary care provider for clients across ages in a variety of settings. The curriculum focuses on culturally sensitive care, incorporating health promotion and management of acute and chronic health problems. The graduate is prepared to apply nursing theory, principles of advanced practice nursing and the research process in the design and delivery of primary care. Knowledge for advanced nursing practice is synthesized from concepts in nursing, as well as the biological and social sciences. Graduates of the Family Nurse Practitioner program are prepared to take a Family Nurse Practitioner national certification examination.

3. Nurse Anesthesia
The plan of study for the Nurse Anesthesia (NA) program prepares nurses as specialists in anesthesia care. Nursing courses and clinical internships provide the opportunity for students to gain experience in nurse anesthesia practice in all specialty areas. Students study physiology, pathophysiology, pharmacology and anatomy in cognate courses. The graduate applies nursing theory, principles of nurse anesthesia practice and research in the delivery of anesthesia care. After 28 months of full-time study, nurse anesthesia graduates are prepared to take the certification examination offered by the Council of Certification of Nurse Anesthetists leading to the designation CRNA.

4. Nursing Education
The plan of study for the Nursing Education (NE) program prepares nurses to teach in an academic setting by focusing on curriculum and instruction, program and course design, development, and evaluation. Students study learning styles, teaching methods, and evaluation strategies. A field experience, which will occur in an academic setting, provides students with the opportunity to apply these skills in actual classroom and clinical environments under the guidance of expert School of Nursing faculty. Graduates of the Nursing Education program are prepared to teach in both classroom and clinical settings.

Application terms and deadlines
Applications for admission for the following programs are accepted at any time:

- Adult/Gerontological Nurse Practitioner
- Family Nurse Practitioner
- Nursing Education

Nurse Anesthesia applications are accepted anytime, but the final deadline is September 1 for the class that begins full-time study the following fall semester.

Application requirements
Applicants for admission must submit the following:

- An Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Two recommendations from professionals who are able to attest to the applicant's ability. (Nurse Anesthesia program applicants must have one recommendation from their current nurse manager.)
- Official Graduate Record Examination (GRE) results for those applicants whose undergraduate GPA's are less than 3.2. If GRE results are necessary but not available, the applicant may be admitted under Special Graduate Status pending test scores.
- 500- to 1,000-word professional goal statement. The goal statement should focus on recent clinical experience, how a

master's degree will enhance professional development, and career goals after completion of the program. The goal statement will be evaluated on content and appropriate use of grammar, spelling and rhetoric.

- Individual interviews with faculty are required for Adult/ Gerontological Nurse Practitioner, Family Nurse Practitioner, Nursing Education, and Nurse Anesthesia applicants.

Admission requirements

The admission process begins with submitting the Application for Admission to Graduate Admissions, 160 North Foundation Hall, (248) 370-3167. Concurrently, the applicant is advised to schedule an appointment with an academic adviser in the School of Nursing (248) 370-4253.

Admission is selective. Preference is given to applicants evaluated as best qualified to undertake the program of study. Regular admission to the program will be considered when all application materials have been received by the university.

In addition to Graduate Admissions General Requirements specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed. Applicants for admission to the Master of Science in Nursing program must have completed a Bachelor of Science in Nursing degree with an undergraduate cumulative grade-point average of 3.0 or above from an institution accredited by the National League for Nursing or the Commission on Collegiate Nursing Education. Applicants must show satisfactory achievement on the Graduate Record Examination (GRE) (for applicants with undergraduate GPA's of 3.2 or above, the GRE is not required), and be eligible for a current Registered Nurse license in the state of Michigan. Applicants should have at least one year clinical experience prior to starting clinical courses, and must have completed an undergraduate physical assessment course.

For applicants to the Nurse Anesthesia program, undergraduate physiology and pathophysiology courses must be within seven years of applying to the program. Undergraduate anatomy, pharmacology and either organic chemistry or biochemistry must be within 10 years of applying to the program. Grades in each of these courses must be at or above a 3.0. A minimum of one year of critical care clinical experience as an R.N. is required during which time the applicant has functioned as an independent decision maker, demonstrated advanced psychomotor skills, and used and interpreted advanced monitoring techniques. Intensive Care Unit (ICU) experience must have occurred within two years of the application deadline. Emergency room, recovery room and step-down units typically do not satisfy the ICU requirement.

Also required for admission to the nurse anesthesia program is proof of BLS and ACLS certification. Applicants will attend an interview and complete a brief quiz about critical care nursing.

Advising

Students are responsible for requirements and policies stated in the School of Nursing Graduate Student Handbook and in each course syllabus. Every student admitted to the MSN program is assigned both an academic adviser and a faculty adviser who has teaching responsibilities in the graduate program. These advisers are available to discuss coursework, plans of study, concerns regarding progression in the program, and student career goals.

Academic progress

Students are required to follow the university policies and procedures for graduate students, as described in the Oakland University Graduate Catalog. In addition to the university requirements, specific School of Nursing policies and procedures are outlined in the School of Nursing Graduate Student Handbook.

Students are expected to earn a grade of 3.0 or above in each course in the MSN program. In c ourses graded Satisfactory/ Unsatisfactory (S/U), students are expected to earn a course grade of satisfactory. Students who are not making satisfactory progress in the program may be placed on probation with conditions imposed for retention in the program or may be recommended for dismissal from the program.

Components of the MSN curriculum

Foundation courses

Foundation courses address critical content needed by all graduate nursing students. These courses include content on nursing theory, diversity, research, ethics, health policy and roles of advanced practice nursing. A total of 15 credits are required in the foundation courses.

Clinical core courses

The clinical core courses provide graduate students with advanced clinical knowledge and skills in pharmacology, assessment, anatomy and physiology, pathophysiology, and advanced nursing interventions.

Specialty courses

The specialty courses are comprised of didactic and clinical courses that prepare students for the advanced practice specialties of Family or Adult/Gerontological Nurse Practitioner, Nurse Anesthetist, or Nursing Education. The specialty courses build upon nursing knowledge and skills learned at the undergraduate level and during foundation and clinical core courses.

Degree requirements

The Adult/Gerontological and Family Nurse Practitioner tracks are 47 credits including 630 clinical practice hours each. These programs of study allow full-time students to complete the requirements in two academic years. Part-time students may complete the program in three to six academic years. The Nursing Education program is 36-37 credits, which includes 210 hours of field experience and also can be completed in two years.

The program of study for Nurse Anesthesia is 55 credits and requires 28 months of full-time study, commencing in September. Extensive time is required in the clinical setting, beginning with 16 hours a week the first term and concluding with 40 or more hours a week during the final internship. Clinical requirements by the accrediting body require a minimum of 550 cases, in all specialty areas, with at least 800 hours of anesthesia time.

Specific requirements for the four tracks are as follows:

1. Adult/Gerontological Nurse Practitioner Program (47 credits)

Foundation courses (15 credits)

NRS 500	Theoretical Foundations of Advanced Nursing Practice	3
NRS 521	Diversity and Social Issues	2
NRS 531	Research in Advanced Nursing Practice	3
NRS 610	Health Policy and Finance	3
NRS 643	Professional Role Development and Ethics	3
NRS 687	Graduate Research: Project	1

Clinical core courses (13 credits)

NRS 611	Pathophysiology for Adult Health and Illness	3
NRS 613	Advanced Health Assessment	4
NRS 616	Advanced Nursing Interventions	2
NRS 648	Pharmacology for Advanced Practice	4

Specialty courses (19 credits)

NRS 598	Holistic Perspectives on Aging	2
NRS 631	Health Promotion Across the Lifespan	2
NRS 638	Advanced Nursing Care of Adults and Older Adults I	5
NRS 639	Advanced Nursing Care of Adults and Older Adults II	5
NRS 641	Advanced Nursing Care of Frail Elders	5

2. Family Nurse Practitioner Program (47 credits)

Foundation courses (15 credits)

NRS 500	Theoretical Foundations of Advanced Nursing Practice	3
NRS 521	Diversity and Social Issues	2
NRS 531	Research in Advanced Nursing Practice	3
NRS 610	Health Policy and Finance	3
NRS 643	Professional Role Development and Ethics	3
NRS 687	Graduate Research: Project	1

Clinical core courses (13 credits)

NRS 611	Pathophysiology for Adult Health and Illness	3
NRS 613	Advanced Health Assessment	4
NRS 616	Advanced Nursing Interventions	2
NRS 648	Pharmacology for Advanced Practice	4

Specialty courses (19 credits)

NRS 620	Pediatric Pathophysiology	2
NRS 631	Health Promotion Across the Lifespan	2
NRS 638	Advanced Nursing Care of Adults and Older Adults I	5
NRS 639	Advanced Nursing Care of Adults and Older Adults II	5
NRS 646	Advanced Nursing Care of Pediatric Population	5

3. Nurse Anesthesia Program (55 credits)

Foundation courses (15 credits)

NRS 500	Theoretical Foundations of Advanced Nursing Practice	3
NRS 521	Diversity and Social Issues	2
NRS 531	Research in Advanced Nursing Practice	3
NRS 610	Health Policy and Finance	3
NRS 643	Professional Role Development and Ethics	3
NRS 687	Graduate Research: Project	1

Clinical core courses (18 credits)

NRS 605	Pharmacology for Nurse Anesthesia Practice I	3
NRS 651	Pharmacology for Nurse Anesthesia Practice II	3
NRS 652	Pharmacology for Nurse Anesthesia Practice III	3
BIO 501	Physiology and Pathophysiology I	3
BIO 502	Physiology and Pathophysiology II	3
BIO 503	Gross Anatomical Dissection	3

Specialty courses (22 credits)

NRS 607	Introduction to Nurse Anesthesia Practice and Clinical Internship I	3
NRS 615	Nurse Anesthesia Practice II	4
NRS 617	Nurse Anesthesia Clinical Internship II	1
NRS 618	Biophysics for Nurse Anesthesia	2
NRS 625	Nurse Anesthesia Practice III	4
NRS 627	Nurse Anesthesia Clinical Internship III	1
NRS 635	Regional Anesthesia and Pain Management	3
NRS 637	Nurse Anesthesia Clinical Internship IV	1
NRS 647	Nurse Anesthesia Clinical Internship V	1
NRS 657	Nurse Anesthesia Clinical Internship VI	1
NRS 667	Nurse Anesthesia Clinical Internship VII	1

4. Nursing Education Program (36-37 credits)

Foundation courses (15 credits)

NRS 500	Theoretical Foundations of Advanced Nursing Practice	3
NRS 521	Diversity and Social Issues	2
NRS 531	Research in Advanced Nursing Practice	3
NRS 610	Health Policy and Finance	3
NRS 643	Professional Role Development and Ethics	3
NRS 687	Graduate Research: Project	1

Clinical core courses (5-6 credits)

NRS 616	Advanced Nursing Interventions	2

Select one course from the following:

NRS 611	Pathophysiology for Adult Health and Illness	3
NRS 613	Advanced Health Assessment	4
NRS 648	Pharmacology for Advanced Practice	4

Specialty courses (16 credits)

NRS 632	Curriculum and Instruction in Nursing Education	4
NRS 634	Evaluation in Nursing Education	4
NRS 636	Field Experience in Nursing Education	4
Elective	Elective	4

■ RN/MSN Degree Completion Sequence

Program description

The RN/MSN program is for diploma or associate degree prepared registered nurses who wish to follow an accelerated plan of study for the Master of Science in Nursing in family nurse practitioner, adult/gerontology nurse practitioner or nursing education.

Students who wish to enter one of these programs must first be admitted to the RN/BSN program. A change in program status from the RN/BSN program to the RN/MSN program can be requested if: 1) a graduate from an associate degree program achieved an ADN cumulative GPA of 3.5 or higher, or 2) a student who does not have an ADN program GPA above 3.5 can request a change in status to the RN/MSN program after maintaining an OU undergraduate GPA of 3.0 or better in 12 credits of courses required for the RN/BSN program (including NRS 310).

Once a student in the RN/MSN program attains undergraduate senior level status (minimum of 91 credits), he/she will be able to formally apply to either the nursing education, family nurse practitioner or the adult/gerontology nurse practitioner programs.

NRS 515 and NRS 516 replace NRS 310 and NRS 340 in the RN/BSN program and graduate courses NRS 521 and NRS 610 will be waived, once a student begins coursework toward the MSN degree.

■ Graduate Certificate in Nursing Education

Program description

The Graduate Certificate in Nursing Education program is a 15-credit program that prepares nurses for teaching positions in clinical education and staff development. The program emphasizes instruction in program and course design, development, and evaluation. The content focuses on learning styles, teaching methods, and evaluation strategies.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Official transcripts from all colleges and universities previously attended
- Supplemental Program Form
- Goal statement
- Two recommendation letters from nurse colleagues who can speak to the applicant's potential ability to complete a post-BSN program
- Official GRE test scores, if the undergraduate GPA is less than 3.2.

Admission requirements

In addition to Graduate Admissions General Requirements specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program.

Certificate requirements

The Graduate Certificate in Nursing Education is awarded upon satisfactory completion of 15 credits in an approved program of study. Successful completion of the graduate nursing program will be considered as equivalent credit for two of the specialty courses (NRS 632 and NRS 634) of the MSN in nursing education.

Course requirements (15 credits)

NRS 517	Teacher and Learner in Nursing Education Environment	5
NRS 518	Teaching Methods Supportive of Critical Thinking in Nursing Education	5
NRS 519	Evaluating Student Learning and Grading in Nursing Education	5

■ Post-Master's Graduate Certificate Programs

The School of Nursing offers four post-master's graduate certificate programs: Adult/Gerontological Nurse Practitioner, Family Nurse Practitioner, Nurse Anesthesia, and Nursing Education. These programs are designed to provide students who have a Master of Science in Nursing degree with additional coursework in a specific area of nursing.

1. Post-Master's Graduate Certificate: Adult/Gerontological Nurse Practitioner

Program description

The plan of study for the Post-Master's Graduate Certificate: Adult/Gerontological Nurse Practitioner (Adult/GNP) program prepares the advanced practice nurse as a primary care provider for adult, older adult and frail elder clients in a variety of settings. The curriculum focuses on culturally sensitive care, incorporating health promotion and management of acute and chronic health problems. The graduate is prepared to apply nursing theory, principles and advanced practice nursing and the research process in the design and delivery of primary care. Knowledge for advanced nursing practice is synthesized from concepts in nursing, as well as the biological and social sciences. Graduates of the Adult/GNP graduate certificate program are prepared to take an Adult Nurse Practitioner national certification examination and/or Gerontological Nurse Practitioner national certification examination.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Goal statement
- Two recommendations are required, including at least one from a faculty member familiar with the student's graduate work.

Admission requirements

Admission to the Post-Master's Graduate Certificate: Adult/Gerontological Nurse Practitioner program is selective. In addition to Graduate Admissions General Requirements specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- MSN degree from an accredited institution (see admission standards for MSN programs)
- Evidence of a graduate-level pathophysiology course must also be submitted
- The GRE requirement is waived.
- Students must meet the same admission requirements as those students entering the Adult/GNP program.

Certificate requirements

The Post-Master's Graduate Certificate: Adult/Gerontological Nurse Practitioner is awarded upon satisfactory completion of 19 to 32 credits in an approved program of study.

General core requirements (19 credits)

NRS 598	Holistic Perspectives on Aging	2
NRS 631	Health Promotion Across the Lifespan	2
NRS 638	Advanced Nursing Care of Adults and Older Adults I	5
NRS 639	Advanced Nursing Care of Adults and Older Adults II	5
NRS 641	Advanced Nursing Care of Frail Elders	5

Additional credits are required for students who have not completed coursework in the following courses:

NRS 613	Advanced Health Assessment	4
NRS 616	Advanced Nursing Interventions	2
NRS 643	Professional Role Development and Ethics	3
NRS 648	Pharmacology for Advanced Practice	4

2. Post-Master's Graduate Certificate: Family Nurse Practitioner

Program description

The Post-Master's Graduate Certificate: Family Nurse Practitioner is a graduate certificate program that prepares the advanced practice nurse as a primary care provider for clients across a variety of settings. The goals and focus of this certificate program are the same as the Family Nurse Practitioner master's program. Upon completion of the certificate program, the advanced practice nurse is prepared to take a Family Nurse Practitioner national certification examination.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.

- Supplemental Program Form
- Goal statement
- Two recommendations are required, including at least one from a faculty member familiar with the student's graduate work.

Admission requirements

Admission to the Post-Master's Graduate Certificate: Family Nurse Practitioner program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- MSN degree from an accredited institution (see admission standards for MSN programs)
- Evidence of a graduate-level pathophysiology course must also be submitted.
- The GRE requirement is waived.
- Students must meet the same admission requirements as those students entering the FNP-MSN program.

Certificate requirements

The Post-Master's Graduate Certificate: Family Nurse Practitioner is awarded upon satisfactory completion of 19 to 32 credits in an approved program of study,

General core requirements (19 credits)

NRS 620	Pediatric Pathophysiology	2
NRS 631	Health Promotion Across the Lifespan	2
NRS 638	Advanced Nursing Care of Adults and Older Adults I	5
NRS 639	Advanced Nursing Care of Adults and Older Adults II	5
NRS 646	Advanced Nursing Care of Pediatric Population	5

Additional credits are required for students who have not completed coursework in the following courses:

NRS 613	Advanced Health Assessment	4
NRS 616	Advanced Nursing Interventions	2
NRS 643	Professional Role Development and Ethics	3
NRS 648	Pharmacology for Advanced Practice	4

3. Post-Master's Graduate Certificate: Nurse Anesthesia

Program description

The Post-Master's Graduate Certificate: Nurse Anesthesia is a program of full-time study that prepares nurses as specialists in anesthesia care. Clinical core and specialty courses, including clinical internships, are the same as the MSN nurse anesthesia program. Upon completion of the 40-credit, 28-month post-master's graduate certificate program, the nurse is prepared to take the certification exam offered by the Council of Certification of Nurse Anesthetists leading to the designation CRNA.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Goal statement
- Advanced Cardiac Life Support (ACLS) Certification
- Basic Life Support (BLS) Certification
- Two recommendations are required, including at least one from a faculty member familiar with the student's graduate work.

Admission requirements

Admission to the Post-Master's Graduate Certificate: Nurse Anesthesia program is selective. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- MSN degree from an accredited institution (see admission standards for MSN programs)
- Evidence of a graduate-level pathophysiology course must also be submitted.
- The GRE requirement is waived.
- Students must meet the same admission requirements, process and deadlines as those students entering the MSN Nurse Anesthesia program.

Certificate requirements

The Post-Master's Graduate Certificate: Nurse Anesthesia is awarded upon satisfactory completion of 40 credits in an approved program of study.

Clinical core requirements (18 credits)

NRS 605	Pharmacology for Nurse Anesthesia Practice I	3
NRS 651	Pharmacology for Nurse Anesthesia Practice II	3
NRS 652	Pharmacology for Nurse Anesthesia Practice III	3
BIO 501	Physiology and Pathophysiology I	3
BIO 502	Physiology and Pathophysiology II	3
BIO 503	Gross Anatomical Dissection	3

Specialty courses (22 credits)

NRS 607	Introduction to Nurse Anesthesia Practice and Clinical Internship I	3
NRS 615	Nurse Anesthesia Practice II	4
NRS 617	Nurse Anesthesia Clinical Internship II	1
NRS 618	Biophysics for Nurse Anesthesia	2
NRS 625	Nurse Anesthesia Practice III	4
NRS 627	Nurse Anesthesia Clinical Internship III	1
NRS 635	Regional Anesthesia and Pain Management	3
NRS 637	Nurse Anesthesia Clinical Internship IV	1
NRS 647	Nurse Anesthesia Clinical Internship V	1
NRS 657	Nurse Anesthesia Clinical Internship VI	1
NRS 667	Nurse Anesthesia Clinical Internship VII	1

4. Post-Master's Graduate Certificate: Nursing Education

Program description

This 15-credit graduate certificate program prepares nurses for teaching positions in higher education and staff development. The program emphasizes instruction in curriculum, program and course design, development and evaluation. A field experience, which may occur in either an academic or service setting, provides students with the opportunity to apply these skills in actual classroom and clinical environments under the guidance of expert School of Nursing faculty. Content focuses on learning styles, teaching methods and evaluation strategies.

Application requirements

Applicants for admission must submit the following:

- Application for Admission to Graduate Study
- Official transcripts for all post-secondary educational institutions from which the applicant earned a degree (beginning with the first baccalaureate) and for all enrollment in graduate-level coursework beyond the bachelor's degree. International university transcripts must be evaluated by a professional credential evaluation service.

  As part of the admission requirements, graduate programs may require official transcripts from post-secondary educational institutions from which the applicant earned an associate's degree and all enrollment in coursework both pre- and post-bachelor's degree.
- Supplemental Program Form
- Goal statement
- Two recommendations are required, including at least one from a faculty member familiar with the student's graduate work.
- Evidence of a graduate-level pathophysiology course must also be submitted.

Admission requirements

Students must meet the same admission requirements, process, and deadlines as those entering the MSN program. In addition to Graduate Admissions General Requirements, specified in the front section of this catalog, applicants must also satisfy the admission requirements established by the academic program as listed below:

- MSN degree from an accredited institution (see admission standards for MSN programs).
- Evidence of a graduate-level pathophysiology course must also be submitted.
- The GRE requirement is waived.

Certificate requirements

The Post-Master's Graduate Certificate: Nursing Education is awarded upon satisfactory completion of 15 credits in an approved program of study.

Course requirements (15 credits)

NRS 632	Curriculum and Instruction in Nursing Education	4
NRS 634	Evaluation in Nursing Education	4
NRS 636	Field Experience in Nursing Education	3
Elective	Elective	4

■University Library

"A teaching library with an outstanding student-centered information literacy program."

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Managers:
Eric Condic, Library Systems
Louann Stewart, Access Services
Patricia Clark, Interlibrary Loans

Library facilities

Located in the center of campus, the Kresge Library houses collections of books, journals, reference works, government documents, musical scores and recordings, as well as a wireless network and computer workstations to access an array of digital resources. The library features seating for individual study, rooms for group work, meeting rooms, audiovisual rooms, rooms with adaptive equipment for students with disabilities, and a student lounge. The Information Commons offers a combination of hard-wired desktop workstations, areas for wireless laptop use, mobile presentation screen computers, and areas with flexible furniture arrangements to accommodate different configurations of students and technology. In addition, for instructional purposes there are also two networked computers labs with 25 workstations in each. Laptop computers are available for checkout to students at the Circulation Desk.

Library collections

The Kresge Library's collections include over 747,000 books, approximately 1,200 print and print journal subscriptions and electronic access to more than 37,000 titles, over 240,000 federal and state documents, and more than 1.1 million microforms.

The Library's Homepage and online catalog serve as gateways to well over 100 specialized and general research databases, and tens of thousands of full-text electronic journals and e-books, covering a wide range of disciplines and research areas.

In addition to electronic reference resources, the Matilda R. Wilson Reference Collection includes atlases, bibliographies, dictionaries, encyclopedias, indexes, yearbooks, and other print reference materials.

Special collections include the Hicks Collection of Early Books By and About Women, the Springer Collection of Lincolniana, the James Collection of Books on Folklore and Witchcraft, and the Bingham Collection of Historical Children's Literature.

The University Archives is a repository of materials relating to the history of Oakland University, and includes copies of all dissertations written at Oakland University, as well as a substantial number of faculty authored monographs.

Library services

Web site: library.oakland.edu
Phone: (248) 370-4426
Send an e-mail message to a librarian: ref@oakland.edu
Instant message access: http://library.oakland.edu/ask/im.htm.

Reference assistance and research consultations

Librarians provide reference and research assistance in-person at the Reference Desk, by telephone, by e-mail, and via instant messaging. Librarians also offer individualized and customized research consultation sessions by appointment. These in-depth, one-to-one sessions are designed to help students identify and use print and digital resources pertinent to their research topics.

Library instruction

As information literacy specialists, librarians provide extensive instruction for students on using print and digital resources, constructing effective research strategies, and evaluating the information identified. These instruction sessions are a core component of every Rhetoric 160 course. Librarians also provide customized, course-related sessions in the disciplines, as well as workshops on special topics.

Circulation and course reserve services

At the Circulation Desk, graduate students may borrow books for a period of eight weeks, with unlimited renewals, unless another borrower has requested the materials. Students may also borrow Course Reserve materials that have been placed on reserve by their professors. An increasing number of reserve items are available in electronic format on the Web.

Interlibrary loan service

Students may request books and articles not owned by the Kresge Library through the Library's interlibrary loan service. Requests can be made in-person, or through the forms available on the Web.

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