



OAKLAND UNIVERSITY
GENERAL INFORMATION BULLETIN
1972 GRADUATE STUDY 1973
ROCHESTER MICHIGAN

CORRESPONDENCE DIRECTORY

Mailing address: Oakland University, Rochester, Michigan 48063.
Officers of the University will be pleased to answer questions. For prompt attention address specific inquiries to the officers listed below.

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OAKLAND UNIVERSITY

GRADUATE STUDY

GENERAL INFORMATION

BULLETIN

1972-1973

Rochester, Michigan

This bulletin of general information is an abridgement of the **Graduate Bulletin** and contains in addition a detailed description of the master's degree program in special education for teachers of emotionally disturbed children. This program was not available when the 1970-71 graduate catalog was published. Persons desiring additional information not included in this publication may request a copy of the official **Graduate Bulletin**. Other information may also be obtained from the Office of Graduate Study, Oakland University, Rochester, Michigan 48063.

Oakland University affirms that an Assurance of Compliance with Title VI of the Civil Rights Act of 1964 has been executed and is fully applicable to the policies and practices of this University. Specifically, admission to the University or employment by the University is provided to qualified persons without discrimination on the grounds of race, creed, color, or national origin.

All announcements in this bulletin are subject to revision at the discretion of the University.

September, 1971

Volume 2, No. 1

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UNIVERSITY CALENDAR

1971-1972

Fall Semester, 1971

September 21	Tuesday	Advising
September 22	Wednesday	Classes begin
November 25-28	Thursday-Sunday	Thanksgiving recess
November 29	Monday	Classes resume
December 18-		
January 2	Saturday-Sunday	Christmas recess
January 3	Monday	Classes resume
January 7	Friday	Classes end
January 10	Monday	Final examinations begin
January 14	Friday	Final examinations end

Winter Semester, 1972

January 18	Tuesday	Classes begin
March 2-5	Thursday-Sunday	Winter recess
March 6	Monday	Classes resume
April 25	Tuesday	Classes end
April 27	Thursday	Final examinations begin
May 2	Tuesday	Final examinations end

Spring Session, 1972

May 3	Wednesday	Registration
May 4	Thursday	Classes begin
May 29	Monday	Holiday
June 3*	Saturday	Commencement
June 21	Wednesday	Classes end
June 22, 23	Thursday, Friday	Final examinations

Summer Session, 1972

June 26	Monday	Registration
June 27	Tuesday	Classes begin
July 4	Tuesday	Holiday
August 11	Friday	Classes end
August 14, 15	Monday, Tuesday	Final examinations

This calendar is subject to revision.

* All students who have received or expect to receive their degrees during this academic year participate in this Commencement ceremony.

UNIVERSITY CALENDAR

1972-1973

Fall Semester, 1972

August 28, 29	Monday, Tuesday	Orientation
August 30—		
September 1	Wednesday—Friday	Registration
September 5	Tuesday	Classes begin
November 23—26	Thursday—Sunday	Thanksgiving recess
November 27	Monday	Classes resume
December 15	Friday	Classes end
December 18—22	Monday—Friday	Final examinations

Winter Semester, 1973

January 2	Tuesday	Orientation
January 3—5	Wednesday—Friday	Registration
January 8	Monday	Classes begin
March 1—4	Thursday—Sunday	Winter recess
March 5	Monday	Classes resume
April 20	Friday	Classes end
April 23—27	Monday—Friday	Final examinations

Spring Session, 1973

April 30	Monday	Registration
May 1	Tuesday	Classes begin
May 28	Monday	Holiday
June 2*	Saturday	Commencement
June 20	Wednesday	Classes end
June 21, 22	Thursday, Friday	Final examinations

Summer Session, 1973

June 25	Monday	Registration
June 26	Tuesday	Classes begin
July 4	Wednesday	Holiday
August 15	Wednesday	Classes end
August 16, 17	Thursday, Friday	Final examinations

This calendar is subject to revision.

* All students who have received or expect to receive their degrees during this academic year participate in this Commencement ceremony.

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BOARD OF TRUSTEES

Oakland University is governed by an eight-member Board of Trustees appointed by the Governor. Legislation creating Oakland University as an independent institution, separate from Michigan State University, was established under Act No. 35, Public Acts of 1970. The President of the University is appointed by the Board and is the presiding officer of that body. The Board also appoints a secretary and treasurer. The following are the Board members and officers:

Mr. Leland W. Carr, Jr.	Term expires August 11, 1978.
Mr. Marvin L. Katke, Chairman	Term expires August 11, 1978.
Mrs. Roger M. Kyes (Helen G.)	Term expires August 11, 1974.
Mr. David B. Lewis	Term expires August 11, 1972.
Mr. Ken Morris	Term expires August 11, 1974.
Mr. Arthur W. Saltzman	Term expires August 11, 1976.
Mr. Alan E. Schwartz	Term expires August 11, 1972.
Mr. Otis M. Smith, Vice Chairman	Term expires August 11, 1976.
Donald D. O'Dowd, President	
John H. De Carlo, Secretary	
Robert W. Swanson, Treasurer	

ADMINISTRATION

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John H. De Carlo	Secretary to the Board of Trustees and Vice President for Public Affairs
Lowell R. Eklund	Dean of Continuing Education
Frederick W. Obear	Vice President for Academic Affairs and Provost
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Robert W. Swanson	Treasurer of the Board of Trustees and Vice President for Business Affairs

ACADEMIC ADMINISTRATION

Frederick W. Obear	Vice President for Academic Affairs and Provost
G. Philip Johnson	Dean of Graduate Study
Robert G. Gaylor	Acting Dean of the Library
John E. Gibson	Dean, School of Engineering
Laszlo J. Hetenyi	Dean, School of Education
William H. Jones	Assistant Dean of Graduate Study
Wilbur W. Kent	Associate Dean, School of Performing Arts
V. Everett Kinsey	Director, Institute of Biological Sciences
George T. Matthews	Dean, College of Arts and Sciences
Lewis N. Pino	Director of Research Services and Dean for Spring and Summer Sessions
Norton C. Seeber	Dean, School of Economics and Management

GRADUATE COUNCIL

G. Philip Johnson	Dean of Graduate Study
Maurice F. Brown	Professor of Mathematics
George E. Coon	Professor of English
John E. Gibson	Professor of Education
Sidney W. Graber	Professor of Engineering
Richard E. Haskell	Dean, School of Engineering
Laszlo J. Hetenyi	Associate Professor of Education
Philip Y. Howard	Associate Professor of Engineering
Keith R. Kleckner	Assistant Dean for Technical Services, Library
David G. Lowy	Associate Professor of Engineering
George T. Matthews	Assistant Dean, School of Engineering
John M. McKinley	Associate Professor Psychology
Roderic E. Righter	Clinical Psychologist
Paul Tombouljian	Professor of History
Reuben Torch	Dean, College of Arts and Sciences
Gilbert L. Wedekind	Associate Professor of Physics
Yel-Chiang Wu	Associate Professor of Education
	Director of Special Projects
	Professor of Chemistry
	Chairman, Department of Chemistry
	Professor of Biological Sciences
	Associate Dean, College of Arts and Sciences
	Associate Professor of Engineering
	Associate Professor of Mathematics

OAKLAND UNIVERSITY

ACADEMIC STRUCTURE

Oakland University, an institution supported by the State of Michigan, offers programs in liberal arts and sciences and professional training in economics and management, engineering, teacher education, and the performing arts. The University comprises the College of Arts and Sciences, the School of Economics and Management, the School of Education, the School of Engineering, the School of Performing Arts, and the Faculty of the Library. Diversified non-credit courses are given by the Division of Continuing Education.

GRADUATE PROGRAMS

The College of Arts and Sciences offers programs leading to the degree of Master of Arts in English, mathematics, and psychology and to the degree of Master of Science in chemistry and physics. The School of Education offers programs of instruction leading to the degree of Master of Arts in Teaching in elementary education, in reading instruction, and in special education (for emotionally disturbed children). The College of Arts and Sciences and the School of Education jointly offer programs leading to the degree of Master of Arts in Teaching in English and in mathematics. The School of Engineering offers work leading to the degree of Master of Science in engineering, with concentrations in systems engineering, energy engineering, and electromagnetic and optical engineering.

ACCREDITATION AND AFFILIATIONS

All Oakland University baccalaureate and master's degree programs are fully accredited by the North Central Association of Colleges and Secondary Schools, and the University is authorized to begin new programs at these levels without prior Association approval. The American Chemical Society has accredited the undergraduate program of the Department of Chemistry, and the Engineers' Council for Professional Development has accredited the undergraduate program of the School of Engineering.

The University is an institutional member of the following associations:

The American Association of Colleges for Teacher Education
The American Council on Education
Institute of International Education, Incorporated

Latin American Scholarship Program of American Universities

The appropriate departments of the College of Arts and Sciences are institutional members of the following associations:

American Chemical Society
American Institute of Physics
American Mathematical Society
Midwest Art Association
Sigma Xi

CENTRALIZED AND SPECIALIZED RESEARCH FACILITIES

THE COMPUTING AND DATA PROCESSING CENTER

The Computing and Data Processing Center is a centralized facility that supports research programs and projects at Oakland University by supplying equipment, documentation, and consulting personnel for the computative, simulative, pedagogical, and instrument-control applications of the faculty and students of all disciplines. It provides a conducive computer-oriented environment in which students can explore and complete investigative, communicative, and computative assignments and in which faculty may draw on advisory and demonstration services for their courses of instruction. The Center is located on the second floor of Dodge Hall of Engineering in especially designed quarters having full software facilities for faculty and students. It operates an IBM 360/40 computer with peripheral equipment including high-speed printer, tape drives, and disc memory units.

THE DEPARTMENT OF BIOLOGICAL SCIENCES LABORATORIES

In the Dodge Hall of Engineering the Department of Biological Sciences has over 14,000 net square feet of facilities constructed largely with the aid of a matching-funds grant from the National Institutes of Health. These facilities are expressly designed to stimulate and support the planned involvement of qualified undergraduates in faculty research programs as well as in student research projects. The facilities will also be supportive of research at the graduate level as graduate programs are added to the curriculum. Major fields of research strength at present are: cell biology, molecular biology, biochemistry, genetics, developmental biology, and physiology.

These facilities include six teaching laboratories, twelve research laboratories, a large common laboratory for advanced student research, cold rooms, an incubation room, a sterile room, an electron microscopy laboratory, three dark rooms, a radioactive isotope room, preparation and store rooms, an instrument shop, animal quarters, and marine aquaria. Both in functional design and specialized equip-

ment these facilities constitute a major research resource of the University.

INSTITUTE OF BIOLOGICAL SCIENCES

The Institute of Biological Sciences of Oakland University occupies some 6,500 net square feet of laboratory and office space contiguous to, but separate from, the facilities of the Department of Biological Sciences. These facilities, too, were constructed with the aid of a matching-funds grant from the National Institutes of Health. The facilities of the Institute include six main research units, each with an office for the principal investigator, and central facilities consisting of a cold room, a computer facility, a radioactive isotope laboratory, an animal holding room, an animal surgery, an instrument room for major pieces of apparatus, and a conference room.

In this modern and well-equipped center a group of research scientists perform grant-supported basic research having applications to medicine and centering in living systems. The aim of the Institute is to bring together many disciplines to concentrate on biological problems. A broadly interdisciplinary program of research in molecular biology, biochemistry, physiology, and pharmacology draws on the combined insights of specialists in engineering, chemistry, physics, and mathematics. Current research is related to eye neurology, eye chemistry, and ophthalmology.

THE INSTRUCTIONAL MATERIALS CENTER

The Instructional Materials Center is a teaching and resource agency of the School of Education. The Center contains a variety of printed materials, such as pamphlets, curriculum guides, and manuals, for research and instructional purposes. Multi-media instructional devices are also concentrated here. In addition to the simpler equipment, such as film strips, tape, and overhead projectors, the Center has facilities to produce and make available for use video tapes and educational television materials. Students have the opportunity to acquaint themselves with new developments in instructional techniques, and educational researchers have at their disposal the technological and recording facilities needed for their investigations.

THE KETTERING MAGNETICS LABORATORY

The Kettering Magnetics Laboratory, built with money given by the Kettering Foundation, constitutes another important research facility. This building is constructed of non-ferrous material and is particularly suited for research requiring accurate cancellation of the earth's magnetic field. Half of the laboratory is used by Gifford G. Scott of the General Motors Research Laboratory for his very accurate measure-

ments of gyromagnetic ratios of ferrous materials (the Einstein-de Haas effect). This work is done in an area in which the ambient magnetic field is reduced to less than one gamma by large Helmholtz coils. Research is also in progress on a new gas torque effect which appears to be capable of giving information about the rotational gyromagnetic ratios of gas molecules and about collision cross sections of molecules.

THE LIBRARY

Most Oakland University library collections and services are centralized in Kresge Library, an open-stack facility. The Library presently contains approximately 196,000 books and related library materials, 127,000 units in microform, and 5,500 recordings on disc or tape. The development of collections has been carefully planned to support undergraduate curricula of high quality. Now under way is a drive to build research strength for the graduate programs. The Matilda R. Wilson Memorial Collection of reference and bibliographic works, funded by student gifts, constitutes a major addition to library holdings and affords a substantial research facility for faculty and students. Among other special collections recently initiated is the Martin Luther King, Jr. Memorial Collection of materials related to black culture in America.

The library offers a variety of services to the user. Service points include: the listening center, a versatile audio system; a microform reading room; the documents room, which houses archives and government publications and is a partial depository for documents issued by the United States government and by the State of Michigan; the science area, a concentration of monographs, indexes, periodicals, and abstracts in this broad subject field; a general reference department; and the circulation department, which has an automated circulation system. A specialized collection of materials on music, theatre, and the dance is located in Varner Hall.

THE LEARNING STRATEGY CENTER

The Learning Strategy Center is an agency in the School of Education, financed through cooperative ventures with neighboring school districts. The Center produces experimental devices in a variety of areas and develops teaching units for demonstration and model purposes. Scholars and experimentalists from across the nation have participated in preparing special units of instruction, and these units have been made available to cooperating school districts for field trials. Similarly, gifted teachers in cooperating schools have prepared video tapes and other materials demonstrating successful approaches to specific teaching problems. These materials are also disseminated by the Learning Strategy Center.

OFFICE OF INSTITUTIONAL RESEARCH

The Office of Institutional Research concerns itself with research on students. It maintains research-oriented files of student information and carries out analyses of this data to aid the University in planning and in program development. It also assists faculty and students in organizing, systematizing, and carrying out research regarding student behavior and learning. In addition, its staff is available for consultation on problems in social research wherever appropriate.

UNIVERSITY INSTRUMENT AND ELECTRONICS SHOPS

The University maintains several machine shops to serve the academic community. The Student Shop has a basic complement of machine tools for the use of students who wish to construct devices for their research projects. The Instrument Shop is completely equipped with precision machine tools and manned by skilled machinists and instrument makers. It constructs devices for both faculty and student research projects. A faculty committee works with the University Instrument and Electronics Shops Manager to insure an equitable allocation of resources.

UNIVERSITY READING CENTER

The University Reading Center is primarily a service agency of the School of Education through which undergraduates may receive assistance in improving their reading and study skills. The Center is not merely a clinical facility for remedial purposes, but also is designed to assist already skillful students in improving themselves further. The Reading Center also functions as a laboratory for research and training in the field of reading improvement.

OTHER RESEARCH FACILITIES DESCRIBED IN THIS BULLETIN

Further data on the research facilities and activities of the departments and schools offering graduate programs may be found in the sections of this bulletin related to the Department of Chemistry, the Department of Physics, and the School of Engineering.

COLLEGE OF ARTS AND SCIENCES

DEPARTMENT OF CHEMISTRY

THE MASTER OF SCIENCE IN CHEMISTRY

The program leading to the degree of Master of Science in chemistry can be arranged to satisfy the needs of students seeking either further professional training, industrial employment, or teaching at the secondary school or two-year college level. The program is designed especially for full-time students, but provision is made for part-time students who wish to pursue an advanced degree during the daytime. All graduate students must receive approval of the departmental graduate program adviser before enrolling in courses.

Admission to Course

An applicant for admission to the Master of Science program should have received a bachelor's degree within the past five years from an accredited institution. Students should have completed not fewer than 36 credits in chemistry (including all major areas), 12 credits in mathematics (calculus and above), and 8 credits in physics. Students with deficiencies in these areas may be asked to correct these deficiencies, and their graduation may thus be delayed. A grade point average of at least 2.75 (on a 4.0 scale) in these courses is usually required, but applicants will be considered on their individual merits upon recommendation of persons familiar with the applicant's academic background. The Graduate Record Examination may be required, especially if the applicant does not hold an American degree.

Any of the above requirements may be waived by the Department. By petition to the Department, a maximum of 10 credits of graduate work may be transferred from another institution.

Requirements for the Degree

The candidate for the degree of Master of Science in chemistry ordinarily must complete the following minimum requirements: 32 credits in courses carrying graduate credit, of which 26 credits must be in chemistry. Of these 26 credits, 16 must be from four of the following areas: biochemistry, inorganic chemistry, organic chemistry, physical chemistry, and analytical chemistry. (Permission of the graduate program adviser is required if 300-level courses are to be used.) Of the remaining 10 credits in chemistry, a minimum of 8

credits must be in CHM 690. The candidate must have demonstrated accomplishment in research and must have a thesis approved by a departmental committee prior to receiving the degree. Since the degree is awarded for the attainment of a level of proficiency and maturity, no minimum amount of time can be specified for the degree program.

RESEARCH FIELDS AND FACILITIES

Because graduate work in chemistry involves research and presentation of a master's thesis, the programs, facilities, and staff available are important. The various current research activities of the staff include: organolithium condensation reactions, high-resolution infrared spectroscopy, photochemistry of natural products, insect biochemistry, stereochemistry of crowded aromatic systems, kinetics of azine pyrolyses, chromatographic separations of diastereomers, electron spin resonance of solid-state and biological systems, microwave spectroscopy, quantum mechanical models, organoboranes, ionic aromatic polymers, atmospheric chemistry, gas reaction kinetics, molecular structure and dynamics, Fourier spectroscopy, psychochemistry, gas chromatographic pollutant analysis, limnological chemistry, instrumentation design, theoretical quantum mechanics, non-equilibrium statistical mechanics.

Among research facilities available to chemistry students are: electronic computers, high- and low-resolution infrared spectrophotometers, analytical and preparative gas-liquid chromatographs including fraction collectors, catalytic hydrogenation equipment, nuclear magnetic resonance spectrometer, radio-chemical counting equipment, low-energy beta-ray counter, polarographic and automatic titration equipment, electron spin resonance spectrometer, spinning-band fractionating columns, a variety of high- and low-resolution visible and ultraviolet spectrophotometers, high-resolution far-infrared interferometer, ultracentrifuge, fluorometric and nephelometric equipment, and a large amount of electronic and vacuum instrumentation. Nearby facilities include two digital computers, electron microscope, helium leak detector, and liquid scintillation counters.

COURSE OFFERINGS

(One credit hour is equal to one semester hour.)

Selected 300-Level Courses Which May Carry Graduate Credit

CHM 312	Inorganic Chemistry	(4 credits)
CHM 317	Inorganic Chemistry Laboratory	(1 credit)
CHM 324	Analytical Chemistry	(2 credits)
CHM 328	Analytical Chemistry Laboratory	(2 credits)
CHM 345	Physical Chemistry	(4 credits)

CHM 348	Physical Chemistry Laboratory	(2 credits)
CHM 351	Biochemistry	(4 credits)
CHM 357	Biochemistry Laboratory	(1 credit)
CHM 371	Environmental Chemistry	(3 credits)

Upper-Level and Graduate Courses

CHM 400	Seminar	(1 credit)
CHM 405	Selected Topics	(2, 4, or 6 credits)

Prerequisite: Permission of the Department.

CHM 413	Advanced Inorganic Chemistry	(4 credits)
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Prerequisite: CHM 312.

CHM 422	Advanced Analytical Chemistry	(4 credits)
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Prerequisite: CHM 324.

CHM 426	Instrumentation	(3 credits)
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Prerequisites: CHM 238, 328, 348; PHY 158.

CHM 434	Advanced Organic Chemistry	(4 credits)
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Prerequisite: CHM 204 or 235.

CHM 444	Advanced Physical Chemistry	(4 credits)
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Prerequisite: CHM 345.

CHM 448	Spectroscopy Laboratory	(2 credits)
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Prerequisite or corequisite: CHM 444.

CHM 452	Advanced Biochemistry	(4 credits)
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Prerequisite: CHM 351 or BIO 407.

CHM 487	Advanced Preparations	(2 or 4 credits)
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Prerequisite: Permission of the instructor is required prior to registration.

CHM 512, 513	Topics in Inorganic Chemistry	(4 credits each)
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Prerequisite: CHM 413 or equivalent.

CHM 523, 524	Topics in Analytical Chemistry	(4 credits each)
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Prerequisite: CHM 422 or equivalent.

CHM 531, 532, 533	Topics in Organic Chemistry	(4 credits each)
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Prerequisite: CHM 434 or equivalent.

CHM 543, 544	Topics in Physical Chemistry	(4 credits each)
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Prerequisite: CHM 444 or equivalent.

CHM 552, 553	Topics in Biochemistry	(4 credits each)
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Prerequisite: CHM 452 or equivalent.

CHM 690	Research	(1, 2, 4, 6, or 8 credits)
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Prerequisite: Permission of the Department.

DEPARTMENT OF ENGLISH

The Department of English offers programs leading to the degrees of Master of Arts in English and Master of Arts in Teaching in English. The latter program is jointly sponsored by the College of Arts and Sciences and the School of Education.

ADMISSION TO COURSE

Admission to course in either of the Department's advanced degree programs is selective. Chief qualifications are the degree of Bachelor of Arts from an accredited institution, academic ability as indicated by past record, capacity to meet standards of advanced scholarship as estimated by informed referees (e.g., undergraduate professors), and interest in continued study of letters. 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. Evidence of additional reading in the literature of history, philosophy, and theology is welcome; prior study in linguistics and philology is also recommended.

Undergraduate course work in language and literature should show a grade point average of no less than 3.0 (on a 4.0 scale). Superior performance in these areas during the latter part of a student's undergraduate career, together with strong letters of recommendation, may in the Department's judgment counterpoise a cumulative GPA in all courses as low as 2.75. An applicant expecting consideration for admission must, however, have a cumulative GPA no lower than 2.75.

When students of specially recommended ability, but with insufficient background—in extent or balance of previous studies—are admitted, they will be advised concerning improvement of their preparation and will usually be asked to take an appropriate number of departmental undergraduate courses before commencing graduate work. Their degree programs, accordingly, may require a proportionately longer period to complete.

Students in either the M.A. or M.A.T. program whose undergraduate record shows no course in English language or linguistics will be asked to include one such course among their graduate undertakings.

Applications for admission will be reviewed November 15, March 15, and July 15 by the Graduate Committee of the Department of English. Candidates are advised to have all documentary support in the Office of Graduate Study well in advance of the review board's dates.

THE MASTER OF ARTS IN ENGLISH

The program leading to the degree of Master of Arts in English has

been designed to provide training for students interested in increasing their proficiency in the study of English and American language and literature. Upon completion of the program, candidates may continue work toward the Ph.D. at another institution, or find the master's degree work useful in teaching and other professional activities.

Requirements for the Degree

Nine courses (36 credits) are required, three of which are specified: ENG 690 and two graduate seminars in English. The six additional courses are to be chosen in consultation with the student's program adviser. Within the 36 credits required for the degree, a student may be permitted to take one course in a cognate liberal arts field, or ENG 510 in lieu of a cognate, but only with specific approval of the adviser. Candidates for the degree will be expected to show competence in the reading of a second language (ancient or modern) by examination early in the program. Language competency examinations will normally be given in mid-November and mid-March. Students will not be accepted to degree candidacy or allowed to continue course work beyond 12 credits until they have satisfied the language requirement. (See also the Master of Arts with English language concentration below.)

THE MASTER OF ARTS WITH ENGLISH LANGUAGE CONCENTRATION

The program leading to the degree of Master of Arts with English language concentration is not a separate degree program but a concentration within the existing Master of Arts in English program. The Master of Arts with English language concentration is provided for those students who wish to study the structure and history of the English language on the graduate level.

Admission to Course

Any students duly admitted into the M.A. program may, in consultation with their advisers, arrange a program with English language concentration. The only added prerequisite for this program is any one of the following three courses: ENG 376, History of the English Language; ENG 377, Modern English Grammar; or ENG 382, Old English. The equivalent of any one of these will also be accepted.

Requirements for the Degree

Nine courses (36 credits) are required, six of which are specified: the two undergraduate courses from the above list (ENG 376, 377, 382) which were not taken as prerequisite; ENG 534, Language History; ENG 642, Studies in Old and Middle English Literature; ENG 647,

Studies in the Structure of English; and ENG 690, The Master's Project. The other three courses will be elected from graduate offerings in English literature. The language requirement for the Master of Arts in English is also applicable to this concentration.

THE MASTER OF ARTS IN TEACHING IN ENGLISH

The program leading to the degree of Master of Arts in Teaching in English addresses itself to the same ends as those of the program leading to the Master of Arts in English, but is designed more particularly for students who wish to pursue graduate study to improve their competence as teachers of English and American literature and language. It is sponsored jointly by the College of Arts and Sciences and the School of Education.

Requirements for the Degree

Nine courses (36 credits) are required, five of which are specified: ENG 510, ENG 690, one graduate seminar in English; one course chosen from the following group of four alternates: ED 601, ED 602, ED 603, or ED 604; and one course from the following group of two: PSY 510 or PSY 512. The remaining four courses in English are to be chosen in consultation with the student's program adviser.

CLASSIFICATION OF COURSE OFFERINGS

The graduate program of the Department of English offer three kinds of courses:

(1) Undergraduate Courses (300 level)

The student may take a maximum of two undergraduate courses to be chosen from regular departmental 300-level offerings. Such courses are deemed useful principally in preparing students to take seminars in areas of language and literature for which they are not yet adequately trained. No more than five graduate students may enroll in any 300-level course. Enrollment for all undergraduate courses is subject to the approval in writing of the student's adviser.

(2) Core Courses (500 level)

Core courses are designed to familiarize the student with principal approaches to language and literature and with methods and tools appropriate to those approaches. The Department considers these courses to be central to the graduate program and recommends that the student take at least three of them. They should be considered as helpful aids in coping with the more specialized work of the seminars. Each of these courses will be offered at least once during the year. (ENG 500 and 510, as noted below in the list of course offerings, are specialized courses, not core courses.)

(3) Seminars and The Master's Project (600 level)

(a) Seminars

The purpose of the graduate seminar is to allow the student to do independent work in an area in which the instructor has special sophistication, at the same time to gain criticism and support from other students working in the same area. Classes will consist mainly of the reading and discussion of papers prepared by the students on topics specified by the instructor. The instructor will prescribe the particular subject matter of each course during any given term. First-term students may not enroll in a seminar without permission of the Department Committee on Graduate Programs. Seminars are limited to twelve students.

(b) ENG 690 The Master's Project

ENG 690 involves completion of a modest project of creative, 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 course work, and candidates are advised to register for English 690 at any time after degree candidacy (i.e., after completion of 12 credits). Upon acceptance of a proposal, the Department Committee on Graduate Programs will appoint a faculty member to supervise and evaluate the undertaking. An application form for ENG 690 is available in the Department office. It must be used by the student in submitting a conspectus of the project and seeking approval to proceed.

Cognate Courses (M.A. Program)

Students in the M.A. program may, with the written approval of their program advisers, offer one course from another department of this University for credit toward their degrees. Such a course should be advanced work in a field relevant to the student's special interests in English language or literature.

COURSE OFFERINGS

(One credit hour is equal to one semester hour.)

ENG 500	Advanced Topics in Literature and Language	(4 or 8 credits)
ENG 510	Literature and Composition	(4 credits)
ENG 533	Formal Analysis	(4 credits)
ENG 534	Language History	(4 credits)
ENG 541, 542	Literary History	(4 credits each)
ENG 561, 562	Literary Kinds	(4 credits each)
ENG 600	Studies in Language and Literature	(4 credits)

ENG 640	Studies in American Literature	(4 credits)
ENG 641	Studies in American Literature	(4 credits)
ENG 642	Studies in Old and Middle English Literature	(4 credits)
ENG 643	Studies in Renaissance Literature	(4 credits)
ENG 644	Studies in Eighteenth Century Literature	(4 credits)
ENG 645	Studies in Nineteenth Century Literature	(4 credits)
ENG 646	Studies in Modern Literature	(4 credits)
ENG 647	Studies in the Structure of English	(4 credits)
ENG 648	Studies in Literary Theory	(4 credits)
ENG 690	The Master's Project	(4 credits)

DEPARTMENT OF MATHEMATICS

The Department of Mathematics offers programs leading to the degrees of Master of Arts in mathematics and Master of Arts in Teaching in mathematics. The latter program is jointly sponsored by the College of Arts and Sciences and the School of Education.

THE MASTER OF ARTS IN MATHEMATICS

The curriculum leading to the degree of Master of Arts in mathematics is designed primarily to be the first part of a doctoral program. Nearly half of the program's graduates to date have transferred to other universities to continue work for the degree of Doctor of Philosophy. Of the remainder, who have gone to positions in teaching, government, or industry, or have entered the armed services, the majority expect eventually to seek that degree. A normally prepared and progressing student can, while holding a teaching assistantship, satisfy all the requirements for the degree of Master of Arts in four semesters by taking an average of nine credits per semester. Because enrollment in the graduate program is small, students can expect to receive a good deal of individual attention and encouragement from the faculty.

Admission to Course

Applicants for the program should have strong undergraduate backgrounds in mathematics. It is highly desirable that their preparation include two courses in elementary real variable theory or advanced calculus, a course in linear algebra, and a course in abstract algebra. A course in general topology is also recommended. Students with deficiencies in these areas will be asked to correct the deficiencies early in the graduate program.

Requirements for the Degree

A total of 36 credits is required for the degree. Of this total, a maximum of 12 credits may be in 400-level courses; the remainder must be in 500-level courses. Each student must take at least 4 credits in problem seminars (MTH 590). Each student's program is supervised by a committee of three department members. The committee is charged with passing on the acceptability of the student's program and with setting a comprehensive examination for him or her near the end of the program.

COURSE OFFERINGS

(One credit hour is equal to one semester hour.)

MTH 325 Probability (4 credits)

MTH 431	Methods of Mathematical Physics	(4 credits)
MTH 435	Introduction to Mathematical Science	(4 credits)
MTH 451-52	Analysis	(4 credits each)
MTH 461	General Topology	(4 credits)
MTH 475-476	Abstract Algebra	(4 credits each)
MTH 525-526	Probability and Statistics	(4 credits each)
MTH 541-542	Advanced Mathematical Science	(4 credits each)
MTH 551-552	Real Analysis	(4 credits each)
MTH 555-556	Complex Analysis	(4 credits each)
MTH 561-562	Topology	(4 credits each)
MTH 565	Topological Algebraic Structures	(4 credits)
MTH 571-572	Algebra	(4 credits each)
MTH 590	Directed Reading and Research	(2, 4, 6, or 8 credits)

THE MASTER OF ARTS IN TEACHING IN MATHEMATICS

The program leading to the degree of Master of Arts in Teaching in mathematics is sponsored jointly by the College of Arts and Sciences and the School of Education. It is intended to serve the needs of teachers in secondary schools or community colleges in southeast Michigan and is designed to accommodate those who are primarily interested in the teaching of mathematics as well as those who are primarily interested in mathematics. The program will prepare people for leadership positions in terms of teaching advanced courses and of determining directions of curriculum development. Through the courses offered in the program, the candidate will have ample opportunity to learn of the applications of mathematics, of the construction of mathematical models, and of the art of problem-solving and to consider in depth problems of the secondary mathematics curriculum.

Students normally pursue work for the Master of Arts in Teaching on a part-time basis. During each of the Fall and Winter Semesters they normally take a single course which meets in the late afternoon to afford minimum disruption to the schedules of those engaged in secondary school teaching. Participation in the eight-week Summer Session, on the other hand, is usually full time. In this way the degree requirements can be satisfied in about two and one-half years.

Admission to Course

A background of at least 30 credits in undergraduate mathematics is normally required of the applicants. A special one-semester transitional course will be offered occasionally for those who are interested in the program but have not studied mathematics for some time.

Requirements for the Degree

The requirements for the degree of Master of Arts in Teaching are 36 credits of graduate work. In general, the candidate will take seven 4-credit courses arranged by the Department of Mathematics, one 4-credit course in education, and one in psychology. Among the courses arranged by the Department of Mathematics there must be included 4 credits in independent study, either in mathematics or in an interdisciplinary area involving mathematics, to be concluded with a written report. Each candidate must take a 4-credit course in analysis or topology and a 4-credit course in abstract algebra. At least one of these courses is offered each fall to insure that candidates can complete requirements for the degree in approximately two and one-half years, if summer courses are taken. The other four mathematics courses can be chosen from a variety of offerings.

Each candidate's program is supervised by a committee of two advisers, who will assist in formulating a meaningful plan of action for the candidate and periodically review progress made toward the completion of the degree. As soon as possible after candidates have completed their six mathematics courses and prior to their independent reading assignment, they must take an examination. The examination will consist of a list of about ten problems, selected by the adviser, varied both in context and in difficulty. Candidates will have one month in which to work on these problems, after which they will give an oral presentation on the solutions of a proper subset of these problems, to be selected by their advisers.

Maximum flexibility is allowed in the choice of the required courses in education and psychology. Normally a candidate will choose the education course from among ED 601, 602, 603, or 604. However, a course in the teaching of reading in the content area would be of special interest to teachers of mathematics. In general, a course in Development Psychology (PSY 510), Tests and Measurement (PSY 512), or Behavior Theory and Learning (PSY 540) is chosen to fulfill the psychology requirement.

COURSE OFFERINGS

(One credit hour is equal to one semester hour.)

MTH 514	Concepts in Abstract Algebra	(4 credits)
MTH 517	Concepts in Analysis	(4 credits)
MTH 590	Directed Reading and Research	(2, 4, 6, or 8 credits)

The above courses are required of each candidate, with General Topology (MTH 461) as an alternative to MTH 517. Other mathematics courses can be taken from departmental offerings at the upper under-

graduate and graduate levels. These include Linear Mathematics (MTH 519), Introduction to Mathematical Statistics (MTH 325), Probability (MTH 425), Number Theory (MTH 372), Introduction to Numerical Analysis (MTH 335), Foundations of Mathematics (MTH 415), Concepts of Geometry (MTH 416), Computers and Secondary Mathematics (MTH 516), and The Secondary Mathematics Curriculum (MTH 510). Candidates should consult with their advisers each semester on courses to be taken to complete requirements for the degree.

DEPARTMENT OF PHYSICS

THE MASTER OF SCIENCE IN PHYSICS

The program leading to the degree of Master of Science in physics consists of courses, research, seminar participation, and a final research report or critical essay. A formal thesis is not required. Students receiving the degree will be prepared to work toward the degree of Doctor of Philosophy in physics, to teach at the junior college or secondary school 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 could complete the required courses and research credits in three semesters. Students' programs will be adjusted to their interests and backgrounds. PHY 673, research, and a final written report or critical essay are the only fixed requirements.

Admission to Course

An applicant for admission to the Master of Science program should have a bachelor's degree from an accredited institution or proof of equivalent achievement. The Graduate Record Examination may be accepted in lieu of a formal degree. The applicant's background should be strong in physics and mathematics.

Transfer Credits

A student may request transfer credits for work done at another institution. A petition, endorsed by the student's adviser, should be submitted to the Department's Graduate Program Committee, and transcripts and catalog descriptions of the courses for which credit is requested should accompany the petition. In all cases, it shall be the responsibility of the candidates to demonstrate that the work done is relevant and complementary to their Oakland programs. Such a petition should be made as early as possible in the student's program and must be made before the student has completed 12 credit hours at Oakland University.

Requirements for the Degree

The basic degree requirement is successful completion of 36 credits of graduate courses distributed as follows: 4 credits of PHY 673: Quantum Mechanics II; 24 credits of additional 400-, 500-, or 600-level courses approved by the Department; 8 credits of research, including a final written report or critical essay.

RESEARCH FIELDS AND FACILITIES

The faculty of the Department of Physics now consists of two theoretic-

cal nuclear physicists, four low-energy experimental nuclear physicists, and two solid-state physicists. Current research fields include theoretical programs in nuclear structure and elementary particles, experimental programs in low-energy nuclear physics and low-temperature solid-state physics, and a unique program in the gyromagnetic properties of solids. Available for low-energy nuclear physics are a 450 kv. Cockroft-Walton nuclear particle accelerator, a 1024 channel pulse-height analyzer, a time-of-flight analyzer and associated fast-pulse electronics for work in particle scattering, gamma-ray spectroscopy, and nuclear instrumentation development. Available for solid-state physics are a high-field nine-inch Varian magnet, liquid helium cryostats and associated equipment for measurements of superconductivity, electronic structures of metals, phase transitions, and the cryogenic properties of solids utilizing ultrasonic techniques at VHF, UHF, and microwave frequencies. For gyromagnetism, the Kettering Magnetics Laboratory, operated in cooperation with General Motors Research Laboratories, provides a special non-magnetic facility containing eight-foot diameter Helmholtz magnetic field neutralizing coils for use in gyromagnetic studies of solids (Einstein-de Haas Effect) and in gases (Scott Effect) or other research requiring a stable magnetic and/or mechanical environment. Supporting facilities include an electronics shop, a student shop, and a well-equipped machine shop staffed by experienced instrument makers. Computer facilities include an on-campus IBM 360/40 as well as off-campus access to a medium-size fast CDC 3600 and a large fast-timesharing CDC 6500.

COURSE OFFERINGS

(One credit hour is equal to one semester hour.)

Selected 400-Level Courses Which May Carry Graduate Credit

PHY 417-418 Advanced Laboratory (2 credits each)

Prerequisites: PHY 317-318, 341, and 347-348, or equivalent.

Prerequisites or corequisites: PHY 331, 361, and 371, or equivalent.

PHY 421 Thermodynamics (4 credits)

Prerequisites: PHY 151 and MTH 254, or equivalent.

PHY 472 Quantum Mechanics I (4 credits)

Prerequisites: PHY 361 and MTH 255, or equivalent.

PHY 482 Electricity and Magnetism II (4 credits)

Prerequisites: PHY 381 and MTH 255, or equivalent.

Graduate Courses

PHY 542 Advanced Electronics (4 credits)

Prerequisite: PHY 341 or equivalent.

PHY 548 Advanced Electronics Laboratory (2 credits)

Prerequisite: PHY 348 or equivalent.

PHY 562	Mechanics II	(4 credits)
Prerequisites: PHY 361 and MTH 255, or equivalent.		
PHY 573	Nuclear Physics	(4 credits)
Prerequisite: PHY 472 or equivalent.		
PHY 574	Introduction to Solid-State Physics	(4 credits)
Prerequisites: PHY 472 and 562, or equivalent.		
PHY 600	Seminar	(1 credit)
PHY 673	Quantum Mechanics II	(4 credits)
Prerequisites: PHY 472 and 562, or equivalent.		
PHY 674	Quantum Mechanics III	(4 credits)
Prerequisite: PHY 673.		
PHY 690	Research	(2 to 12 credits)

DEPARTMENT OF PSYCHOLOGY

THE MASTER OF ARTS IN PSYCHOLOGY

The primary purposes of the programs leading to the degree of Master of Arts in psychology are to train students at the intermediate professional level and to initiate students into advanced scholarship in preparation for additional graduate study at other institutions. The areas in which a student may concentrate are clinical psychology or developmental psychology.

Admission to and Requirements for Clinical Psychology

The program in clinical psychology is designed to prepare students to evaluate and treat patients in a clinical setting. Individuals interested in becoming school diagnosticians will require some further preparation in educational psychology, but will find the basic program appropriate for acquisition of needed clinical skills. Students who complete the Master of Arts in clinical psychology are eligible for certification by the State of Michigan as psychological examiners.

An applicant for admission should have a bachelor's degree from an accredited institution or proof of equivalent achievement. While an undergraduate major in psychology is not required, students are expected to be acquainted with the field to the extent of having had the following courses or their equivalents: Foundations of Contemporary Psychology (PSY 146), Experimental Psychology (PSY 351 or 352), Statistics and Research Design (PSY 252), and Abnormal Psychology (PSY 220). Theories of Personality (PSY 320) is additionally recommended. Applications for admission are reviewed and decisions rendered March 15, for admission the following September, which is the only time that new students are admitted. The number of students admitted to this program is limited.

The clinical program is a two-year program. The first year the typical student takes two courses each semester. These courses are generally offered in the late afternoon. The second year the student must have sufficient time for the practicums, which require half time during the traditional work week. It is the student's responsibility to have the time available for the practicums. Nine courses (36 credits) are required. All students must take the Pro-Seminar (PSY 691) and Research Methods and Project (PSY 692). In addition, the curriculum must include Advanced Abnormal (PSY 521), Individual Testing (PSY 620), Projective Tests (PSY 621), Clinical Psychology (PSY 622), and Practicums I and II (PSY 625). Students in the clinical program have the option of completing a research project (PSY 690) or of taking an elective course, such as Child Clinical Psychology (PSY 623). Those students who plan to go on for a Ph.D. are strongly urged to complete the research project.

Practicum placements are arranged through faculty members and must be approved by the clinical faculty. Ordinarily, one semester (20 hours per week) is devoted to diagnostic workups and the second semester to therapy under intensive supervision. No practicum placements may be made during the summer.

Since the clinical program is sometimes a terminal professional one, the clinical faculty must assume responsibility for the qualifications of the students who graduate. Therefore academic standing is only one of the criteria used to evaluate student qualifications.

Inquiries should be directed to David Lowy, Associate Professor of Psychology.

Admission to and Requirements for Developmental Psychology

The program in developmental psychology is designed to familiarize students with the theoretical, research, and applied issues relevant to the developmental process as manifested in specified age groupings: childhood, adolescence, maturity, old age. Emphasis is on training the student in the application of developmental psychology in a wide variety of community settings.

An applicant for admission should have a bachelor's degree from an accredited institution or proof of equivalent achievement. While an undergraduate major in psychology is recommended, it is not required. All applicants are expected, however, to be acquainted with the field to the extent of having had the following courses or their equivalents: Foundations of Contemporary Psychology (PSY 146), Statistics and Research Design (PSY 252), Experimental Psychology (PSY 351 or 352), and Child Development (PSY 271). Applications for admission are reviewed and decisions rendered in March, May, and July of each year for admission the following September, which is the only time that new students are admitted.

Nine courses (36 credits) are required. All students must take the Pro-Seminar (PSY 691), Research Methods and Project (PSY 692), Theories of Development (PSY 575), Perceptual and Cognitive Development (PSY 571), Social and Personality Development (PSY 570), Psychology of Adolescence and Aging (PSY 572), Applied Developmental (PSY 670), and an elective, and must complete a research thesis.

Students take two courses a semester (courses meet in the late afternoon or evening), requiring a minimum of two academic years for acquiring a degree.

Inquiries should be directed to Irving Torgoff, Associate Professor of Psychology.

COURSE OFFERINGS

(One credit hour is equal to one semester hour.)

PSY 510	Developmental Psychology	(4 credits)
Prerequisite: Permission of the instructor or acceptance into the Master of Arts in Teaching program.		
PSY 512	Tests and Measurement	(4 credits)
Prerequisite: Permission of the instructor or acceptance into the Master of Arts in Teaching program.		
PSY 513	Psychopathology of Childhood	(4 credits)
Prerequisite: PSY 510 or 512, or acceptance into the Master of Arts in Teaching program in special education, or undergraduate major in psychology, or permission of the instructor.		
PSY 521	Advanced Abnormal	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 540	Behavior Theory and Learning	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 541	Advanced General Psychology	(4 credits)
Prerequisite: Permission of the instructor.		
PSY 551	Advanced Statistics	(4 credits)
Prerequisite: An undergraduate course in statistics.		
PSY 570	Social and Personality Development	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 571	Perceptual and Cognitive Development	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 572	Psychology of Adolescence and Aging	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 575	Theories of Development	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology or permission of the instructor.		
PSY 590, 591, 592, 593, 594, 595	Seminar	(4 credits each)
Prerequisite: Permission of the instructor.		
PSY 597-598	Apprentice College Teaching	(4 credits each)
Prerequisite: Permission of the instructor.		
PSY 620	Individual Testing	(4 credits)
Prerequisite: Acceptance into the graduate program in clinical psychology.		
PSY 621	Projective Tests	(4 credits)
Prerequisite: Acceptance into the graduate program in clinical psychology.		
PSY 622	Clinical Psychology	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 623	Child Clinical Psychology	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 625	Practicums I and II	(8 credits)
Prerequisite: Admission to degree candidacy in the graduate program in psychology and permission of the instructor.		
PSY 670	Applied Developmental Psychology	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 690	Research Project	(4 credits)
Prerequisite: Admission to degree candidacy in the graduate program in psychology.		
PSY 691	Pro-Seminar	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		
PSY 692	Research Methods and Project	(4 credits)
Prerequisite: Acceptance into the graduate program in psychology.		

SCHOOL OF EDUCATION

THE MASTER OF ARTS IN TEACHING

The College of Arts and Sciences and the School of Education jointly sponsor secondary education candidates for the degree of Master of Arts in Teaching. Secondary education programs are available now in English (see p. 11) and mathematics (see p. 15); additional programs (social science, French, history) are projected for the future.

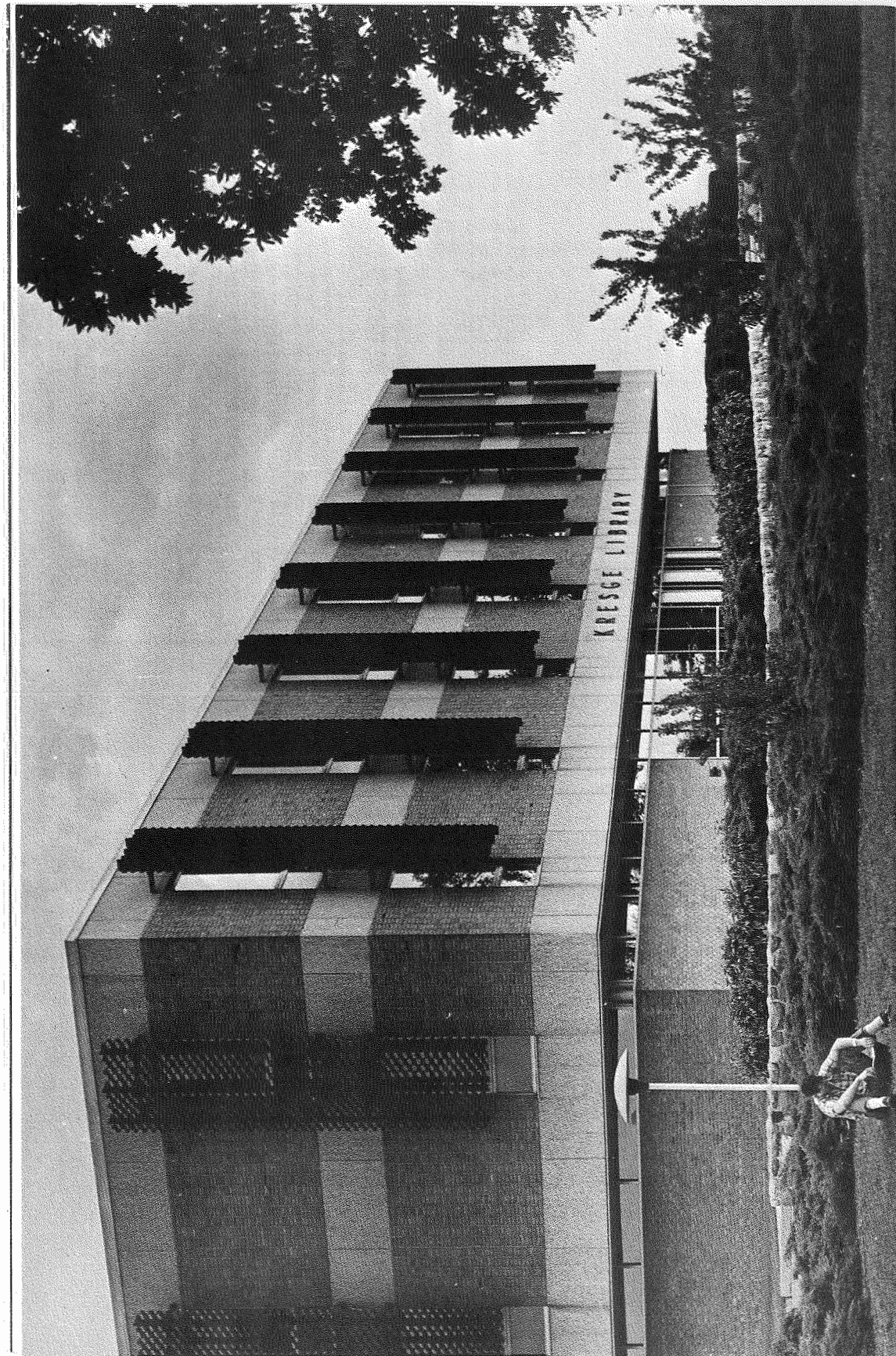
The School of Education sponsors candidates for the degree of Master of Arts in Teaching in elementary education, in reading instruction, and in special education (for emotionally disturbed children). At a later date the School expects to offer degrees in counseling and guidance and in administration, and also work in the preparation of school diagnosticians.

Requirements for the Degree: General Requirements in All Programs

Students who wish to enter any Master of Arts in Teaching program must complete application procedures for admission to graduate study. Admission is selective, and the School of Education will consider each applicant's case on its merits. After initial acceptance (admission to course), the student is assigned a guidance committee and an adviser to assist in program planning. After students have completed 12 credits (normally three courses), the committee will evaluate their progress and plan the remainder of their programs. A grade point average of 3.0 or better is expected for good academic standing. In addition, two grades below 3.0 or one grade below 2.0 render a student subject to suspension from the degree program.

The School of Education reserves the right to expand typical requirements in order to correct deficiencies or to bring up to date the preparation of degree aspirants.

The Master of Arts in Teaching programs consist of 36 credits, of which 4 are normally reserved for a terminal project. This project may, but need not, be a thesis. The student and the committee will plan the nature and scope of the project appropriate for each individual. Many types of projects may be approved. One student may decide to write a master's thesis. Another may wish to do a controlled study on the effectiveness of various instructional techniques. A third may wish to try out an experimental unit, and a fourth may propose the development of a teaching device of novel design. In some instances the stu-



dent and committee may decide that a special set of comprehensive or field examinations might be appropriate. The latitude permitted is extremely broad.

School of Education Requirements for the Degree of Master of Arts in Teaching in English and in Mathematics

In general, most of the student's work will be in the discipline area of the major, with such cognates as the major department prescribes, but each program will contain 4 credits chosen from History of Education (ED 601), Philosophy of Education (ED 602), Comparative Education (ED 603), or Sociology of Education (ED 604); 4 credits in either Developmental Psychology (PSY 510) or Tests and Measurement (PSY 512); and 4 credits devoted to problems of teaching the discipline of the major (in courses conducted by the major departments).

Requirements for the Degree of Master of Arts in Teaching in Elementary Education

Each student's program will be developed by the assigned guidance committee. In planning the course of study, the guidance committee will not only take into account the student's current needs and interests, but will also attempt to strengthen or supplement those areas of preparation in which the student may be deficient or in which new data have made further work desirable.

Requirements for the Degree of Master of Arts in Teaching in Reading Instruction

The degree program in reading instruction includes a group of courses required for most students and an area of flexibility designed to adjust requirements to the needs and previous preparation of each student.

CERTIFICATION

Programs leading to the degree of Master of Arts in Teaching are based on the assumption that students already hold (or are eligible for) at least the Michigan Provisional Certificate in the area of their specialization. Students who hold no certificate or who wish to change specialization must expect a longer period of study than is implied by the programs described. Usually, however, combining certification with a Master of Arts in Teaching program will require a shorter sequence of preparation than that involved in obtaining certification and the master's degree separately. Those interested in a combined program should ask the School of Education for assistance in planning a course of study. Due to budgetary limitations only degree-seeking students can be accepted for certification. In these cases student teaching will be delayed until all degree requirements have been completed.

COURSE OFFERINGS

(The School of Education reserves the right to restrict enrollment in any graduate course where pedagogical or physical limitations make a restriction desirable. One credit hour is equal to one semester hour.)

- | | | |
|--|---|-------------------------|
| ED 509 | The School and the Disadvantaged Child | (2 or 4 credits) |
| Prerequisite: Permission of the instructor. | | |
| ED 511 | Interaction Analysis | (4 credits) |
| Prerequisite: Admission to course in a graduate program or permission of the instructor. | | |
| ED 521 | Education of Exceptional Children | (4 credits) |
| Prerequisite: Admission to a graduate program, or one year's teaching experience, or permission of the instructor. | | |
| ED 522 | Behavior Modification Techniques for Classroom Management | (4 credits) |
| Prerequisites: Bachelor's degree and current teaching experience. | | |
| ED 523 | Educational Procedures for Children with Learning Disabilities | (4 credits) |
| Prerequisite: One year's teaching experience. | | |
| ED 524 | Perception in the School Setting | (4 credits) |
| Prerequisite: Graduate standing. | | |
| ED 530 | Advanced Topics in Literature for Children | (4 credits) |
| Prerequisite: Admission to course in a graduate program or permission of the instructor. | | |
| ED 531 | Current Trends in the Teaching of Reading | (4 credits) |
| Prerequisite: Admission to course in any graduate program or permission of the Department. | | |
| ED 532 | Teaching Reading in the Primary Grades | (4 credits) |
| Prerequisite: Admission to course in any graduate program or permission of the Department. | | |
| ED 533 | Teaching Reading in the Upper Grades | (4 credits) |
| Prerequisite: Admission to course in any graduate program or permission of the Department. | | |
| ED 534 | Language Arts Instruction in the Elementary Schools | (4 credits) |
| Prerequisite: ED 331 or ED 531 or equivalent preparation in reading instruction. | | |
| ED 535 | The Perceptually Handicapped in Reading | (4 credits) |
| Prerequisite: Permission of the instructor. | | |
| ED 536 | Teaching Reading to the Special Child | (4 credits) |
| Prerequisite: ED 521 or permission of the instructor. | | |
| ED 537 | Teaching Learning Strategies for Reading and Related Language Arts Instruction | (4 credits) |
| ED 538 | Reading Development in Junior and Senior High Schools | (4 credits) |
| ED 555 | Practicum for Teachers of the Urban-Rural Disadvantaged | (8 credits) |
| Prerequisite: Open to graduate students enrolled in special projects. | | |

- ED 560 Special Problems in Guidance and Personnel Work** (2, 4, 6, or 8 credits)
Prerequisite: Permission of the instructor.
- ED 561 Guidance and Counseling for Children** (4 credits)
Prerequisite: Permission of the instructor.
- ED 562 Assessment of Children** (4 credits)
Prerequisite: Permission of the instructor.
- ED 563 Group Procedures in Guidance** (4 credits)
Prerequisite: Permission of the instructor.
- ED 567 Workshop in Guidance and Personnel Services** (2, 4, 6, or 8 credits)
Prerequisite: Permission of the instructor.
- ED 581 Teaching About Black Africa in the Public School** (4 credits)
- ED 590 Special Problems in Education** (2, 4, 6, or 8 credits)
Prerequisite: Admission to course in any graduate program or permission of the Department.
- ED 591 Ecology of the Classroom** (4 credits)
Prerequisite: Permission of the instructor or acceptance into any graduate program.
- ED 592 Research Techniques in Education** (4 credits)
Prerequisite: Permission of the instructor or acceptance to candidacy in a master's program in education.
- ED 601 History of Education** (4 credits)
Prerequisite: Admission to course in any graduate program.
- ED 602 Philosophy of Education** (4 credits)
Prerequisite: Admission to course in any graduate program.
- ED 603 Comparative Education** (4 credits)
Prerequisite: Admission to course in any graduate program.
- ED 604 Sociology of Education** (4 credits)
Prerequisite: Admission to course in any graduate program.
- ED 611 Problems in Elementary Education** (4 or 8 credits)
Prerequisite: Admission to course in a graduate program in elementary education or in reading instruction.
- ED 612 Curriculum Studies** (4 credits)
Prerequisite: Admission to course in a graduate program in elementary education or in reading instruction.
- ED 621 Management and Curriculum for Emotionally Disturbed Children** (4 credits)
Prerequisites: ED 521 and one graduate course in psychology.
- ED 622 Practicum in the Education of the Emotionally Disturbed** (6 credits)
Prerequisites: Completion of all other requirements for the degree of Master of Arts in Teaching in special education or permission of the instructor.
- ED 623 Seminar in the Education of the Emotionally Disturbed** (2 credits)
Corequisite: Must be taken simultaneously with ED 622.
- ED 624 Directed Teaching in Special Education** (6 credits)

Prerequisites: Acceptance to degree candidacy in a master's program in special education and approval by the director of the special education program.

- ED 630 Seminar in Reading** (4 credits)
Prerequisites: Two courses in reading instruction and permission of the instructor.
- ED 631 Problems in Reading Instruction** (4 or 8 credits)
Prerequisites: Admission to course in a Master of Arts in Teaching program and at least one previous course in reading instruction.
- ED 632 Diagnosis of Reading Disabilities** (4 credits)
Prerequisites: Admission to course in a Master of Arts in Teaching program and at least one previous course in reading instruction.
- ED 633 Correction of Reading Disabilities** (4 credits)
Prerequisites: Admission to course in a Master of Arts in Teaching program and at least one previous course in reading instruction.
- ED 634 Advanced Study of Approaches to the Development of Reading-Language Abilities** (4 credits)
Prerequisite: ED 537.
- ED 664 Consultation in Pupil Personnel Work** (4 credits)
Prerequisite: Admission to the program in guidance and counseling or permission of the instructor.
- ED 699 Terminal Project** (4 credits)
Prerequisites: Admission to degree candidacy in a graduate program in elementary education or in reading instruction and written approval of the student's guidance committee.

Related Courses

Certain courses offered by the Department of Psychology are of special interest to graduate students preparing for a Master of Arts in Teaching degree: PSY 510, PSY 512, PSY 513.

Other related courses appropriate for the Master of Arts in Teaching program are:

- MTH 511 Mathematics for the Elementary School Teacher I** (4 credits)
- MTH 512 Mathematics for the Elementary School Teacher II** (4 credits)
- MTH 513 Topics in Elementary School Mathematics** (4 credits)
- SCI 505 Basic Concepts and New Developments in Science** (4 credits)
- SS 570 Social Studies in the Elementary School** (4 credits)

THE MASTER OF ARTS IN TEACHING IN SPECIAL EDUCATION (FOR EMOTIONALLY DISTURBED CHILDREN)

Approval for the Master of Arts in Teaching degree in special education (for emotionally disturbed children) was given following printing of the official 1970-71 **Graduate Bulletin**. For that reason the program description is more detailed in this publication than that of the other degree programs.

This program will prepare teachers in special education for work with emotionally disturbed children. Upon successful completion of all requirements, the School of Education will sponsor students for the Master of Arts in Teaching degree and for certification as special education teachers for emotionally disturbed children.

Admission to Course

Requirements for admission to course are those currently in effect for other Master of Arts in Teaching programs in the School of Education. Admission to degree candidacy includes those requirements currently in effect in other Master of Arts in Teaching programs in the School of Education plus the following requirement.

Students may receive the degree of Master of Arts in Teaching in special education (for emotionally disturbed children) only after they have presented evidence of satisfactory full-time teaching of one year or more in a regular grade placement. This requirement may not be waived, but equivalencies may be accepted at the discretion of the program director. This requirement may be fulfilled at any time during the student's graduate course work, but must be completed prior to the granting of the degree of Master of Arts in Teaching.

The following courses are required for completion of the Master of Arts in Teaching program in special education:

ED 521 Education of Exceptional Children (4 credits)

This course is devoted to the special provisions, remedial procedures, care, treatment, education, and rehabilitation of several types of exceptional children. These include emotionally disturbed, mentally retarded, gifted, blind, deaf, physically handicapped, and other health-impaired children. Site visits to clinical and hospital as well as educational settings are included.

Prerequisite: Admission to course in a graduate program or permission of the instructor.

ED 536 Teaching Reading to the Special Child (4 credits)

A general discussion of the reading process as it relates to slow learners, emotionally disturbed, handicapped, but also gifted children. A study of remedial instructional materials is included.

Prerequisite: ED 521 or permission of the instructor.

ED 591 Ecology of the Classroom (4 credits)

The course deals with the ecological context for learning in classroom, school, and community. The primary task will be to describe, to analyze, and to make inferences about the structure of the ecological environment. These findings will then be related to pupil learning.

Prerequisite: Permission of the instructor or acceptance into a master's program.

ED 621 Management and Curriculum for Emotionally Disturbed Children (4 credits)

A study of the diagnosis and treatment, curriculum development, methods and materials, and classroom procedures in programs for emotionally disturbed children in educational and clinical settings. The use of video tapes, role play, demonstrations, as well as direct observation of emotionally disturbed children will be included.

Prerequisites: ED 521 and one graduate course in psychology.

***ED 622 Practicum in the Education of the Emotionally Disturbed (6 credits)**

A specialized laboratory experience, including educationally related work in an interdisciplinary treatment setting with emotionally disturbed children. Observation, tutoring, diagnostic and prescriptive teaching on a one-to-one basis and in group instruction are part of the course. ED 623 must be taken concurrently.

Prerequisites: Completion of all other requirements for the Master of Arts in Teaching degree in special education or permission of the instructor.

***ED 623 Seminar in the Education of the Emotionally Disturbed (2 credits)**

The study and interpretation of psychological information, development of understanding of psychiatric intervention, the use of case study, and educational relevance of case materials in dealing with the emotionally disturbed. Must be taken simultaneously with ED 622.

ED 624 Directed Teaching in Special Education (6 credits)

A supervised full-time teaching experience in classrooms corresponding to the student's concentration in special education. Those qualifying for exemption from the supervised teaching requirement in the certification code may not take this course.

Prerequisites: Acceptance to degree candidacy in a master's program in special education and approval by the director of the special education program.

PSY 510 Developmental Psychology (4 credits)

Description and evaluation of the principles and theories of development from birth to maturity. Maturation processes, learning, and emotional disturbances will be some of the issues considered.

Prerequisite: Permission of the instructor or acceptance into the Master of Arts in Teaching program.

PSY 512 Tests and Measurement (4 credits)

Theories of measurement and evaluation. Construction and examination of tests of ability, achievement, interests, and special aptitudes. Objective tests of personality.

Prerequisite: Permission of the instructor or acceptance into the Master of Arts in Teaching program.

PSY 513 Psychopathology of Childhood (4 credits)

A survey of the psychopathology of children and adolescents, emphasizing dynamic and cognitive-perceptual-motor variables.

Prerequisite: PSY 510 or PSY 512, or acceptance into the Master of Arts in Teaching program in special education, or permission of the instructor.

Elective Courses

These courses may be elected only with permission of the special education adviser. Under special circumstances, i.e., previous experience in the field, undergraduate degree in special education, it may be possible to substitute any of the following courses for those required for the degree: ED 511, ED 522, ED 523, ED 524, ED 535, ED 561, or ED 632.

* It should be noted that the curriculum for the Master of Arts in Teaching in special education (for emotionally disturbed children) does not include ED 699 (Terminal Project). The planning and execution of a significant research or action project will be undertaken as part of course requirements of the joint Practicum-Seminar in the Education of the Emotionally Disturbed (ED 622 and ED 623).

SCHOOL OF ENGINEERING

THE MASTER OF SCIENCE IN ENGINEERING

The School of Engineering offers work leading to the degree of Master of Science in engineering, with concentrations in systems engineering, energy engineering, and electromagnetic and optical engineering. Minor concentrations may be arranged in physics and mathematics. Students whose special interests cross the boundaries of these areas may arrange interdisciplinary courses of study. Special graduate courses offered by the School of Economics and Management are also available to students who wish to gain training in technical management of large-scale projects. For information on these courses contact the School of Economics and Management. Programs ordinarily do not require a thesis; emphasis is rather placed on a design project carried out by the individual or by a small group. The object of the Master of Science program is to provide participants with a broad training in an area of engineering rather than a narrow apprenticeship in a specific research area. Specialized research is perhaps more appropriately delayed for doctoral thesis preparation.

Many courses are arranged in the late afternoon and early morning for the convenience of students employed in industry. Such part-time students should be aware, however, of the very real demands placed on them by graduate studies and should keep outside work commitments within reasonable bounds.

Admission to Course

The program leading to the degree of Master of Science in engineering is designed to accommodate students with a wide variety of undergraduate backgrounds. A bachelor's degree in physics, mathematics, or any recognized field of engineering represents excellent preparation; a degree in any other field of science is also acceptable, but a student presenting such a degree should plan to spend additional time in residence in order to gain proficiency in the fundamentals of engineering.

Admission to master's study in engineering is selective; applicants should have upper-quartile rank. In addition to the bachelor's degree, an applicant should present academic transcripts and recommendations from two members of the undergraduate department who are familiar with the student's level of accomplishment and promise. These recommendations form a most important part of the admission credentials.

Requirements for the Degree

A student's progress toward the Master of Science degree is guided

by a Master's Committee, a group composed of three School of Engineering faculty members, two selected by the student and one appointed by the Dean of Engineering. Students must form a Master's Committee during their first semester of enrollment.

The master's degree in engineering is never conferred for completing a random selection of courses; a planned program is essential. The basic degree requirement is successful completion of at least 32 credits of graduate courses in engineering and related areas of the sciences, mathematics, or management, the whole to form an integrated program of study proposed by the student and approved by the Master's Committee.

Students are encouraged to propose programs which best suit their special interests, subject only to the following general requirements.

(1) Each candidate for the degree of Master of Science shall be required to demonstrate proficiency in independent design or research by successfully completing a master's thesis or project. Ordinarily this requirement is satisfied by completion of 4 to 12 credits in EGR 509. In special cases, a student may be exempted from EGR 509, but must still satisfy the design-research requirement. In such cases the burden of proof of satisfaction of this requirement shall rest with the student, the manner of which is outlined in paragraph 3 below.

(2) It is required of each student taking EGR 509 to submit to the project director two copies of an engineering report describing all facets of the investigation. One copy shall remain with the project director; the other copy will be placed in a central file maintained by the Dean of the School of Engineering for perusal by any interested party. Detailed information concerning the format of the report is available in the Office of the School of Engineering. In addition, a project director will usually require a student to deliver a short oral presentation of the work before interested faculty and students.

(3) In some instances, candidates may feel that they have already demonstrated proficiency in independent research or design at the master's level by virtue of projects completed previously while they were employed as practicing engineers. Such students should submit to their Master's Committee for its consideration a detailed report of the project, with reprints of any related publications. If the project was a joint effort, the report should clearly indicate the extent of the candidate's role in the undertaking. If the Master's Committee judges the effort to be of a magnitude and at a level commensurate with standards set for work leading to the degree of Master of Science in engineering at Oakland University, it may then certify the candidate as having satisfied the design-research requirement. As an aid in its deliberations, the Committee may wish to request of the student additional substantiation of the case. (Graduate credit for project work is

awarded only for participation in a satisfactorily completed undertaking directed by a faculty member of Oakland University.)

(4) Of the 32 credits required for the degree, at least 20 must be earned in courses offered by the School of Engineering. Graduate credits are awarded only for courses numbered 500 and above.

(5) A student may request transfer credits, not to exceed 12, for work done at another institution. A petition, endorsed by the Master's Committee, should be submitted to the Engineering Graduate Committee, and transcripts and catalog descriptions of the courses for which credit is requested should accompany the petition. In all cases, it shall be the responsibility of the candidates to demonstrate that the work done is relevant and complementary to their Oakland programs.

(6) Full-time students may register for as many as 13 credits per semester, and students holding half-time assistantships in the School of Engineering may register for as many as 9 credits per semester. Students with high academic standing may be permitted to register for an additional course by special petition. (See paragraph 7 below.)

(7) In extraordinary cases, a student may petition to be relieved of a degree requirement. A petition form should be obtained from the Office of the Dean of the School of Engineering; it should then be presented to the Master's Committee for endorsement and submitted to the Engineering Graduate Committee for action.

RESEARCH FACILITIES

The laboratories of Dodge Hall are excellently equipped for engineering research and design studies. Virtually all equipment is new and available for graduate student use. Areas of research for which laboratories have been established include: coherent optics, experimental stress analysis, heat transfer, system simulation, communications and control, mechanical and electrical properties of materials, and thin-film micro-electronics. Special facilities exist for research in: two-phase flow phenomena, optical data-processing, holography, p-n junction devices, and large-scale systems analysis. All students have access to digital computing facilities (an IBM 1130 in the School of Engineering and an IBM 360/40 in the Computing and Data Processing Center) as well as to the several analog computers operated by the School. In addition, there is a large hybrid machine ideally suited to simulations of complex systems. All of these facilities are complemented by fully-equipped and staffed electronics and machine shops.

COURSE OFFERINGS

(One credit hour is equal to one semester hour.)

EGR 500 Graduate Seminar (1 credit)

EGR 505	Special Topics in Engineering	(4 credits)
EGR 509	Engineering Design Project	(4, 6, 8, 10, or 12 credits)
EGR 510	Introduction to Continuum Mechanics	(4 credits)
EGR 520	System Modeling and Analysis	(4 credits)
EGR 521	Engineering Optimization	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 530	Engineering Probability and Statistics	(4 credits)
EGR 531	Operations Research	(4 credits)
Prerequisite: EGR 530 or a course in probability.		
EGR 535	Large Scale Systems	(4 credits)
EGR 540	Electromagnetic Signals and Waves	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 548	Thermal Energy Transport	(4 credits)
EGR 549	Fluid Transport	(4 credits)
EGR 550	Coherent Optics	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 551	Convective Transport Phenomena	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 552	Thermal Transport Phenomena	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 555	Energy and Information Systems	(4 credits)
EGR 572	Electronic Properties of Materials	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 573	Solid-State Electronic Devices	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 580	Numerical Methods in Engineering	(4 credits)
Prerequisite: Working knowledge of FORTRAN or other programming language.		
EGR 581	Hybrid Computation and Simulation	(4 credits)
Prerequisites: Working knowledge of FORTRAN and some previous experience with analog computation.		
EGR 585	Switching Theory	(4 credits)
Prerequisite: Permission of the instructor.		
EGR 586	Computer Architecture	(4 credits)
Prerequisite: EGR 585 or permission of the instructor.		

Related Courses

MTH 531	Mathematical Methods in Engineering I	(4 credits)
Prerequisite: Permission of the Department of Mathematics.		
MTH 532	Mathematical Methods in Engineering II	(4 credits)
Prerequisite: MTH 531.		

ADMISSION, DEGREE CANDIDACY, AND GRADING

REQUIREMENTS FOR ADMISSION

The graduate admissions policy of Oakland University is selective. Admission will be granted upon recommendation of the department or school concerned on the bases of the applicant's undergraduate record, letters of recommendation, and such other evidence as may be required by the department or school.

An applicant must have an acceptable baccalaureate or its equivalent from an accredited undergraduate institution. The degree should have been conferred within the past ten years; occasionally applicants with degrees awarded more than ten years ago will be admitted. Additional admissions information may be found in the various school and departmental program descriptions.

APPLICATION FOR ADMISSION BY FOREIGN STUDENTS

Foreign students should write to the Office of Graduate Study, Oakland University, Rochester, Michigan 48063, at least six months prior to the date they hope to enter the University. They will be sent instructions and application forms, which they should complete and return promptly. If their applications are approved, they will receive a certificate of admission to the University. Foreign students are normally required to submit scores from the Graduate Record Examination Aptitude Test prior to admission, and scores from one or more Advanced Tests of the Graduate Record Examination may be required in addition at the discretion of the department or school concerned. Scores from the Test of English as a Foreign Language or a comparable examination are also required.

Prior to a student's official registration, proof of adequate medical insurance must be on file in the University's Health Center.

ADMISSION TO COURSE

Admission to course is the first level of admission to a degree program and is normally followed by admission to degree candidacy. Admission to course does not imply admission to degree candidacy.

Application for admission to course must be accompanied by an official record of work done at undergraduate and graduate institutions and by two letters of recommendation.

DEGREE CANDIDACY

Students must apply for admission to degree candidacy upon completion of 12 graduate credits at Oakland University unless they are registered under Special Graduate Status. Application forms are available in the department or school in which the student is enrolled.

When students apply for degree candidacy the sponsoring department or school will:

- (1) accept them as degree candidates, or
- (2) permit them to continue on a non-matriculated basis, or
- (3) recommend that they withdraw from the University.

The recommendation of the department or school will normally be regarded as final.

TRANSFER OF CREDIT

Graduate students wishing to transfer credit from other colleges or universities must have such credit approved by their academic advisers. The credit to be transferred will be included on the Application for Admission to Degree Candidacy. A maximum of 12 semester hours (10 in the Department of Chemistry) will be accepted toward a graduate degree, assuming the credit is approved by the academic adviser and the Dean of Graduate Study. One semester hour equals one credit hour. Conversely, 20 or 24 semester hours constitute the normal minimum residence requirement, depending on the number of hours required by the department or the school for a degree. After approval, transfer credit will be recorded on the student's official transcript in the Office of the Registrar.

SPECIAL GRADUATE STATUS

Special Graduate Status may be granted a student who wishes to take graduate courses but not to work toward a degree. An applicant wishing to strengthen course background prior to admission to a graduate degree program, or to work toward provisional or permanent teacher certification, may apply for admission under this status.

Credit earned under Special Graduate Status will be officially recorded and may be applied toward degree requirements if a student later chooses to seek a degree and if the credit is appropriate to the degree objective. However, admission under Special Graduate Status in no way implies admission to a degree program. A Special Graduate Status student who wishes to apply for admission to course or degree candidacy must file a request for change of status with the Office of Graduate Study. Approval of this request is at the option of the academic department or school.

POST-BACCALAUREATE STATUS

Post-baccalaureate status may be granted applicants who have a baccalaureate degree from an accredited college or university and who wish to enroll in undergraduate courses, either to develop an additional major or to prepare for admission to a graduate program.

ACADEMIC ADVISING

Every student admitted to a graduate degree program is assigned an adviser upon admission. The adviser will be a faculty member in the school or department in which the student is enrolled. Only those students enrolled in degree programs are assigned advisers. Students admitted under Special Graduate Status are encouraged to contact the Office of Graduate Study if advice regarding course selection is required. Post-baccalaureate students will be assigned an undergraduate adviser when such an assignment is appropriate.

PHYSICAL EXAMINATION

All graduate assistants and those graduate students who plan to take 10 or more credits in a semester are required to offer evidence of a physical examination. The physical examination form will be mailed to the applicant if admission is granted. The form must be completed and returned before registration.

COURSE NUMBERING SYSTEM

Courses numbered 100 to 299 are introductory or intermediate undergraduate courses. Courses numbered 300 to 499 are advanced courses primarily for undergraduates. Courses numbered 500 and above are primarily for graduate students. A department or school at its discretion may authorize or refuse to authorize graduate credit for any course numbered 300 to 499.

FINANCIAL AID

Oakland University seeks to make a variety of financial aids available to full-time graduate students. Teaching and research assistantships are awarded selectively at the discretion of the various departments and schools; graduate fellowships are awarded on a competitive basis to students nominated by the various academic departments and schools. Inquiries concerning other kinds of financial aid, such as National Defense Education Act Loans and employment under the College Work Study Program, should be directed to the Financial Aid Office following admission but as early as possible before registration.

A limited number of graduate assistantships are awarded to qualified students in the departments and schools of the University offering graduate programs. These assistantships are unrestricted as to citizenship; foreign students are therefore eligible to apply. Graduate students who receive assistantships may also be awarded fellowships. The 1971-72 stipends for graduate assistants range up to \$2,500 for two semesters, depending on the nature of the assignment and on the hours of work. The 1972-73 stipends may be somewhat higher. Inquiries and applications for assistantships should be addressed to the chairman of the department or the dean of the school in which the assistantship is desired. An official University application form must be filled out and submitted. Students must apply for admission to graduate study, however, before they can be considered for an assistantship.

COURSE FEES AND OTHER FEES

GENERAL POLICY

The Board of Trustees of Oakland University reserves the right to change any and all rates of charge at such times as conditions or circumstances may make change necessary. All charges are assessed and payable in U.S. dollars. Checks and money orders should be made payable to Oakland University. To cover the cost of required expenses at registration, students are urged to use checks or money orders rather than cash. If those checks or money orders are in excess of the required payments, the balance will be paid to the student.

COURSE FEES

Course fees for each semester are assessed on the basis of the credit value of the courses taken. All course fees must be paid in full at registration. One credit hour is the equivalent of one semester hour.

Graduate course fees for Michigan residents are \$20 for each credit hour carried. The corresponding fee for nonresidents is \$46.50.

APPLICATION FEE

A fee of \$15 must accompany an application for admission. This is a processing fee and is not refundable.

LATE REGISTRATION FEE

Students registering or paying fees after the regular registration date are required to pay an additional, non-refundable fee of \$1 per

credit hour on the first day and \$2 per credit hour on the second and subsequent days.

SPECIAL FEES

Graduate students who register for 10 or more credits are charged additional \$26 (\$15 health service fee, \$10 student center fee, and \$1 Wilson Memorial library fee). **Course fees and special fees must be paid in full at registration.**

PARKING FEE

Parking of automobiles on campus is regulated by the University's Department of Public Safety. The yearly parking fee is payable at the time of registration by those students who will find it necessary to park on campus before 5:00 p.m. For further information students should contact the Public Safety Office in the Gate House.

RESIDENT HOUSING: RESERVATIONS, DEPOSIT, FEES

Graduate students interested in University housing can procure information from the Director of Residence Halls, Oakland University. Requests for room reservations must be accompanied by a \$25 deposit, which is refundable up to July 1 if the University is notified. Room and board charges are \$595 per semester. An advance payment on room and board of \$100 will be due during the month of August. The balance of the room and board fee is due at registration or may be paid in three installments, the first of which is due at registration. The second and third installments are due on the first day of the two months following registration.

OUT-OF-STATE TUITION RULES

1. A resident of Michigan (except for aliens) is defined as a person who has resided in this State for six months immediately preceding his or her first enrollment.
2. No one may gain or lose the status of a resident while a student at the University.
3. The residence of a minor shall be the same as that of his or her legal guardian except where guardianship has been established in this State for the purpose of evading the fee.
4. Aliens who have secured their Declaration of Intent papers and have otherwise met the residence requirements shall be considered residents.
5. The residence status of any person other than a parent or legal guardian who may furnish funds for the payment of University fees shall in no way affect the residence status of the student.

