

OAKLAND UNIVERSITY

C O M M E N C E M E N T



SCHOOL OF ENGINEERING
AND COMPUTER SCIENCE



The motto of Oakland University, "*Sequir Virtute E Canoscenza*," which is incorporated in its seal, has a distinguished origin, Canto XXVI, l. 120, of Dante's *Inferno*.

These are the final words of Ulysses' great speech to his men urging them to sail on and on in pursuit of knowledge and experience of the world—even beyond the pillars of Hercules, traditionally the frontier and limit of legitimate exploration.

This is the three-line stanza:

*Considerate la vostra semenza
Fatti non foste a viver come bruti
Ma per seguir virtute e canoscenza*

*Consider your birth
You were not made to live like brutes
But to follow courage and knowledge*

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

June 7, 1997

10:00 a.m.

Howard C. Baldwin Memorial Pavilion
Oakland University
Rochester, Michigan

ON ACADEMIC REGALIA

An edifying note contributed by a certain anonymous doctor of philosophy.

On at least two solemn occasions during the academic calendar—spring and fall commencement—the faculty of the university publicly displays its full academic regalia and participates in the liturgy of processional and recessional, that curious coming and going that symbolizes the ceremony of commencement. The purposes of commencement are well known, but the reasons for the peculiar garb of the celebrants and their odd order of march are often as obscure to the audience as they are, in fact, to the faculty itself. This note may serve to explain academic dress and the professional pecking order it costumes.

Contemporary academics are descendants of clerical schoolmen in the universities of medieval Europe. Like the clergy, members of the bench and bar, and other learned professions, medieval scholars were clothed in heavy robes to stay warm in unheated stone buildings. Like all members of a hierarchical society, the medieval faculties rejoiced in visible insignia of rank. These outward signs of accomplishment and authority were tailored into the robes. Although the need for such voluminous garments to keep the scholar from freezing is long past, the use of them as

emblems of dignity remains. You will observe that all caps and gowns worn by our faculty are black, with certain disturbing exceptions. Black was the color adopted by mutual agreement among American universities at the end of the 19th century. In Europe each university has its own distinctive gown, varying in color and cut from all others. A European academic assemblage is a far gaudier occasion than its counterpart in America. Recently, certain universities in this country rashly broke the agreement and authorized robes in their own colors: for example, the crimson of Harvard and the green of Dartmouth may be seen in our ranks. This unsuitable spontaneity has been frowned on by sister institutions, yet the mavericks not only persist in their madness, but gain adherents to their ranks with each passing year.

There are three basic academic degrees: the baccalaureate or bachelor's degree, the master's degree, and the doctorate. A special style of robe is prescribed for each. The bachelor's gown is sparsely cut, neat, but a bit skimpy and unadorned, as befits apprentices. The master's gown is still simple, but fuller, sports a sleeve of extraordinary design impossible to describe, and has a

hood draped from the shoulders down the back. Once used to keep the frost from the tonsured heads of medieval clerks, the hood now is solely a badge of a degree of scholarly achievement. The master's hood is small and narrow, but displays the colors of the institution that awarded the degree. If you knew the colors of American universities, you could easily identify whence came our masters. The doctoral robe is the most handsome of academic raiment. Generous of cut, of fine aristocratic stuff, it is faced with velvet and emblazoned with velvet chevrons on the ample sleeves. You will note that most of the velvet facings and chevrons are black, but that some are of other colors. According to personal taste, the doctor may display the color of his or her doctoral degree on the sleeves and facings: light blue for education, pink for music, apricot for nursing, orange for engineering, and many more. The royal blue of the Doctor of Philosophy (Ph.D.) is the most commonly seen in liberal arts institutions such as Oakland. The doctor's hood is the most elegant of all academic appurtenances. Large and graceful, it is lined in satin with the colors of the university that awarded the degree and is bordered with the color of the degree itself. Most academic costumes include the square cap called a mortarboard; the doctor's tassel may be either black or gold — tassels of all other degrees are black and stringy.

To instructed eyes, the order of march in the processional and recessional reveals the standing of individuals in the institution's formal hierarchy. In the processional the order of entrance into the hall is, quite fittingly, from most junior to most senior. The baccalaureate candidates enter first, followed successively by the masters and doctoral candidates with the whole separated from the faculty by a decent interval. In the faculty order, the instructors precede the assistant professors who in turn are followed by the associate professors. The august full professors bring up the rear. After a respectful distance come the deans who in turn are separated by a significant space from the awful majesty of the platform party, the president, the vice president, and the members of the board of trustees. All remain standing until the board is seated. After the ceremony, the order of recessional is the reverse of the processional. The greatest dignitaries stream out of the hall first, with the artfully organized ranks of priority wallowing in their wake.

It is hoped that these notes may make more intelligible the spectacle you are witnessing today. A discerning intelligence may detect in it many clues to an understanding of the academic profession as it confronts the ambiguities of the future with ancient wisdom and dignified confidence.

DEGREES AWARDED

December 1996

DOCTOR OF PHILOSOPHY

Systems Engineering

Aftab Ali Khan

Dissertation: *Application of Probabilistic Evidential Reasoning Theory (Pert) and Genetic Search and Optimization to Multi-Sensor Fusion with Dynamic State Estimation*

Chi-Dar Lin

Dissertation: *Lossless and Near-Lossless Comprehension of Digitized Images*

Byoung-Gu Park

Dissertation: *Development and Implementation of 3-D Computer Vision Technique for Measurement of Specularly Reflective Surface*

MASTER OF SCIENCE

Computer Science and Engineering

William R. Bernard

Rajesh Baldeu Chawla

Michael Christopher Conner

Kurt Louis Fischer

Laura W. Grills

Murthy N. Guduguntla

Padmavathi Kalyana

Richard Anthony Keller

Ajit K. Kumar

Andrew James Randall

Kevin Patrick Tracy

Sue-Ting Wang

David Paul Wright

Electrical and Computer Engineering

Mahmoud Ali Al-Nsour

Mark James Brudnak

Esterlene Naylor Dukes

Tahir Mirza Hussain

Lubna Khaled

Larry Dean Laws

Torcy M. Powell

Arthur M. Rutyna

Cassandra Taliaferro

Haidar Mohamed Younes

Wei Zhao

Engineering Management

Reinhard Ematinger

Leopold Gerstmayr

Thomas Hudetz

Bernd Kopacek

Astrid Lenz

Tom Meniga

Michael Schloissnik

Johann Schweiger

Brandie Nicole Sigers

Jasminka Smejkal

Sarah Jane Tison

Martin Zauner

Mechanical Engineering

Jeffery Richard Campbell

Sarah Therese Harding

Christopher George Hermanson

Weinong Huang

Asifhusen I. Khatri

Richard A. Lenzen, Jr.

Bradley Dean Morrow

Jeffrey D. Roman

Donald W. Schonhoff

Stephen P. Toepfner

George F. Wells

Systems Engineering

Cynthia Lynn Emery

Maher Farah

Barry Franklin Haun

Thomas E. Moylan

Lance Joseph Schwartz

Christopher Louis Van Dan Elzen
Mark Allen Zurawski

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Computer Science

Pritpal K. Aulakh
Steven Nicholas Frishcosy
Dante Eugene Gagne
Stephen A. Glowacki
Gregory Russell McCallum
David Paul Reinke
Scott Steven Shonts
Terrence James Smith

Engineering Chemistry

Douglas John Keller
John Michael Kostusyk

Engineering Physics

Todd C. Morey

BACHELOR OF SCIENCE IN ENGINEERING

Computer Engineering

Venus LaShawn Henry
Gregg Eddy Jones
Kerry Thomas Klempf
David William Ludwig
Robert William Martin

Electrical Engineering

Catherine Jean Aton
Anthony Coelho Carvalho
Chad Andrew Corum
Stacy Ryan Crowley
Kathryn Jean Ditter
Brian Christopher Donnellon
Venus LaShawn Henry
David Matthew Insana
Jeffery Scott Johnston
Gregg Eddy Jones
Tatyana Passater
Robert P. Spinks
Christopher Edward Tate
David Christopher Turner

Mechanical Engineering

Amanda Marie Blumke
Dennis Ames Burton
Michael Albert Buss
Sean Cornell Case
Lori Michelle Dallmann
Robert Michael Gaydosch
Nikolla Gojcaj
Deborah Lynne Hartman
Steven Patrick Herbert
David Joseph Kraft
Ramon Christopher Kuczera
Ezequiel Jorge Larroquette
Maximiliano Pablo Larroquette
Brian Keith Lehman
Charon Merucci
Munira Kutub Mesiwala
Holly Christine Myers
Rachael Ellen Nichols
Matthew Gregory Nilsen
Christopher Patrick O'Bryan
Daniel Andrew Olivieri
Martin Ronald Pawlos
Daniel Kenneth Pink
Gina Raffin
Paul A. Reading
Erich Robert Reemmer
Matthew David Scrase
Lisa M. Stephen
Lisa Ann Ternes
Bryant August Tokarz
Adam K. Trappe
Duane Parks Ward

Systems Engineering

Lisa Anne Cenowa
Stacy Ryan Crowley
Eric William Kaczor
Vinod Kumar Kalothia
Mary Catherine Trott

CANDIDATES FOR DEGREES

April 1997

MASTER OF SCIENCE

Computer Science and Engineering

Namrata Bajaj
Yixin Chen
Tai D. Chung
Crisy Rachel George
Michelle E. Johnson
Paul Anthony Jozefowicz
Sangita Anant Kamat
Chris John Karras
Mark Tivis Lewis
Anthony Louis Mansour
William Steven Materna
Rama Nagaraju
Ramakrishna Nallapati
Sunil Vittal Rao
Ajay P. Singh
Paul A. Smith
Gary Wendell Snyder
Boddu Sreenivas
Hema Sridhar
Brij Mohan Talwar
Danny Trinh
Revathi Vasudevan
George Yu

Electrical and Computer Engineering

Arvin Baalu
John David Begin
Clayton M. Mackey, Jr.
Donald Allan Misson
Sheshankh Nookala Reddy
Christina Marie Schulte
Stan Lawrence Seely
Michael K. Sutherland

Engineering Management

Ruthanne Annette Abbott
Diane Marie Bick
Scott A. D'Eath
Lori B. Fox
Michael C. Lefebvre
Christopher Robert Pennoni

Michael Edward Reibling
Raul Sosa
Taj Ahmed Zaman

Mechanical Engineering

Basel A. Abbasi
Glenn T. Babiak
Deborah Marie Bordo
Kevin Barry Brogan
Mike Gerald Dreer
Brian Charles Finstrom
Douglas William Hartley
Jeffrey Kim Harvey
Kimberly Dawn Hensley
Darren S. Idukas
Raymond Clay Janssen
Kent E. Johnston
Peter J. Jonko, Jr.
Thomas A. Jurecko
Christopher Charles Kennedy
Joseph Leo Lagodzinski
Steven Allen Maynard
John L. Myers
James Francis O'Connor
Stephen B. Pass
Dorinda Ruth Peach
Kevin John Royce
Benjamin Chauncey Stasa
James Frank Szewczyk
Keith Gerard Van Gorder
Philip Verdura
Zhichun Wang
Thomas Albert Wierzchon
Patrick Douglas Wolf
He Zhang

Systems Engineering

Jeffrey Kenneth Clark
George Joseph DeHelian
Kenneth Raymond Marcath
William A. Nowicke
Jason Andrew Ryska
Atheel Antwan Saleem
Arthur Earl Stephenson
Scott Alan Zimmerman

BACHELOR OF SCIENCE

Computer Science

Salem A. Akroush
Walter Carl Boehrer
Matthew Sands Catalano
Kasey Diane Currado
Valentina Elezaj
Benjamin Francis Hoogterp
Matthew John Kroll
Charles Joseph Lupo
Michael Christopher McGrath
Timothy D. Sechowski
Sudesh Jai Sonki
Nelson Ashley Tazzia
Kevin James Underwood
James Scott Zeitunian

Engineering Chemistry

Mark Patrick Allen
Stephen Joseph Genoff
Brian C. Jordan
Shirlee Ann Nicholson

BACHELOR OF SCIENCE IN ENGINEERING

Computer Engineering

Michael Scott Grant
Troy B. Griesse
Steven Douglas Klaty
Amy Lynn Nankervis
Richard Warner Rutherford
Jacobe Ann Schalk
Theodora A. Shlien

Electrical Engineering

Norbert A. Bikos
Jason Alan Blair
John Paul Brock
Michele T. Canale
Robert Allen Draker
Eric Sean Fulcher
Michael L. Henderson
Christopher Gerald Hunt
Benjamin Isaac Jackson
Jeffrey Getschow King
Thomas G. King
Michael Anthony Martelli
Preena Mathew
Oswald Wilhelm Messner
Charles Lee Mosley
Amy Lynn Nankervis
Joseph John Piva, Jr.
Erik Anthony Roberts

Jeff Andrew Simpson
Gina Elizabeth Skowronek
Kenneth Thomas Tabacchi
Jerry Don Zajac

Mechanical Engineering

James E. Adams
Jason M. Adams
J. Michael Andreatta
Shane Michael Bendert
H. William Bothe
Thomas Joseph Buday, Jr.
Raymond Todd Carter
Paul Brian Cobble
Eric Michael Coulier
Craig Richard Dotter
Jeffrey Andrew Fenoseff
Douglas Alan Feys
Amy Marie Francis
Craig Matthew Frohock
Andrew Mark Gehman
Nichole L. Hunter
Ryan Rankin Isabell
Brian Lee Ishmael
Andrew Orestes Kaltsounis
David L. Mancier
Bobbi Ann Markell
Deborah J. McDougald
Kirk Ronald McLeod
Pero T. Milosavljević
Julie Ann Nalezty
Christopher David Nutt
Catherine Bollman Pawlowski
Joshua William Payne
Christopher Ian Roman
Michael J. Rose
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Kirk Michael Sassak
Cassand Senical
Christopher Todd Sjolander
Matthew David Stuck
Brian Michael Swanson
Rick Michael Talbot
Marina L. Tuttle
Mark Thomas Van Dellen
Clinton Douglas Venuto
Anthony Verrino
Jeffery Scott Wiggers
Becky Anne Zaslona
Brian Zoss

Systems Engineering

Michele T. Canale
Joel Scott Gibson
Hetal M. Patel

ABOUT HONORS AND AWARDS

On the occasion of commencement, the university offers special recognition to those students who have attained outstanding levels of academic achievement and service.

Students who have demonstrated superior performance in the courses of their major subject area are awarded Departmental Honors. The faculty of the School of Engineering and Computer Science has elected several graduating seniors to receive Departmental Honors in engineering or in computer science. They are identified by red cords worn over their academic regalia.

The University Senate of Oakland University has established three levels of University Honors to recognize superior academic performance in all subject areas. Students who have completed at least 62 credits of study at Oakland University and whose cumulative grade point average ranges between 3.60 and 3.74 graduate cum laude. A student who has earned a grade point average between 3.75 and 3.89 graduates magna cum laude. Students attaining the highest academic level, grade point averages of 3.90, and above, graduate summa cum laude. Students who have earned University Honors wear gold cords over their academic regalia.

Additionally, the faculty of the School of Engineering and Computer Science has created several awards to honor graduating seniors who have distinguished themselves by truly outstanding scholarship in engineering studies, by outstanding technical development toward the engineering profession and by exemplary service to the school. These special awards are marked by the presentation of certificates and prizes to the recipients and also by the engraving of the recipients' names on permanent commemorative plaques in Dodge Hall of Engineering.

Membership in the Golden Key National Honor Society, an academic honors organization, is indicated by a purple cord with white tassels worn over academic regalia. The faculty extends most hearty congratulations to all of the students receiving honors and awards at this commencement exercise.

Membership in Tau Beta Pi, the National Engineering Honor Society, is indicated by a brown cord worn over academic regalia.

Membership in Eta Kappa Nu, the National Electrical Engineering Honor Society, is indicated by a royal blue cord worn over academic regalia.

HONORS AWARDED

December 1996

UNIVERSITY HONORS

Magna Cum Laude

Gregg Eddy Jones

Cum Laude

Nikolla Gojcaj

Rachael Ellen Nichols

DEPARTMENTAL HONORS

Computer Engineering

Gregg Eddy Jones

Venus LaShawn Henry

Electrical Engineering

Brian Christopher Donnellon

Kathryn Jean Ditter

Gregg Eddy Jones

Venus LaShawn Henry

Engineering Physics

Todd C. Morey

Mechanical Engineering

Robert Michael Gaydosh

Nikolla Gojcaj

Ramon Christopher Kuczera

Rachael Ellen Nichols

Matthew Nilsen

Matthew David Scrase

Lisa Ann Ternes

Systems Engineering

Eric William Kaczor

Vinod Kumar Kalothia

HONORS COLLEGE

The Honors College has been established for highly motivated students who wish an unusually challenging undergraduate education. It provides a specially designed general education and additional requirements in conjunction with a departmental major in the College of Arts and Sciences or in one of the professional schools.

Honors College graduates are identified by a white cord worn over academic regalia.

April 1997

Craig Mathew Frohoek

Stephen Joseph Genoff

HONORS AWARDED

April 1997

UNIVERSITY HONORS

Summa Cum Laude

Preena Mathew

Magna Cum Laude

Raymond Todd Carter

Jeffrey Andrew Fenoseff

Troy B. Griesse

Brian C. Jordan

Theodora A. Shlien

Becky Anne Zaslona

Cum Laude

Craig Matthew Frohock

Andrew Mark Gehman

Michael Christopher McGrath

Kenneth Thomas Tabacchi

DEPARTMENTAL HONORS

Computer Engineering

Troy B. Griesse

Steven Douglas Klaty

Theodora A. Shlien

Computer Science

Michael Christopher McGrath

Electrical Engineering

Norbert A. Bikos

Christopher Gerald Hunt

Thomas G. King

Preena Mathew

Kenneth Thomas Tabacchi

Engineering Chemistry

Mark Patrick Allen

Brian C. Jordan

Mechanical Engineering

Raymond Todd Carter

Jeffrey Andre Fenoseff

Amy Marie Francis

Craig Mathew Frohock

Andrew Mark Gehman

Michael J. Rose

Anthony Verrino

Becky Anne Zaslona

SPECIAL AWARDS

SCHOOL OF ENGINEERING & COMPUTER SCIENCE

Award for Exceptional Achievement

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgment of the faculty, has achieved the highest level of scholastic excellence.

Preena Mathew

Award for Academic Achievement

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgment of the faculty, has demonstrated an outstanding level of academic performance.

Becky Anne Zaslona

Award for Service

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgment of the faculty, has rendered the greatest service to the School.

Thomas G. King

Award for Professional Development

Awarded annually to the graduating senior in the School of Engineering and Computer Science who, in the judgement of the faculty, has demonstrated the greatest technical development in his/her studies and shown an outstanding measure of initiative in connection with a project.

Theodora A. Schlien

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SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

Oakland University's School of Engineering and Computer Science offers instruction leading to the Bachelor of Science in Engineering (B.S.E.); with majors in computer, electrical, mechanical and systems engineering and the Bachelor of Science (B.S.), with a major in computer science. Programs leading to the Bachelor of Science degree in engineering chemistry and engineering physics are offered jointly with Oakland's College of Arts and Sciences. The school also offers graduate programs leading to masters and doctoral degrees.

The school consists of three departments and the Center for Robotics and Advanced Automation (CRAA). The school is of medium size, with 1,200 undergraduate and graduate students and features an outstanding faculty - dedicated to classroom instruction of the highest quality as well as to research in their fields of specialization. Its size permits close student/faculty interaction, small classes and individualized attention.

Undergraduate engineering and computer science programs at Oakland University place an emphasis on a well-rounded education characterized by:

- A broad-based perspective of engineering and computer science that stresses creative thinking - preparation for solving complex technological problems.
- Relevant laboratory instruction as an integral part of course work - giving a balance between theory and practice.
- Integration of computer instruction and utilization throughout the curricula.
- Design and creative development as a central activity of engineering and computer science.
- A social and humanistic perspective through a comprehensive program of general education.

All academic programs at Oakland University are accredited by the North Central Association of Colleges and Schools (NCA). Besides the NCA accreditation, the undergraduate programs in computer, electrical, mechanical and systems engineering are accredited by the Accreditation Board for Engineering and Technology (ABET), and the computer science program by the Computing Sciences Accreditation Board (CSAB).

Graduate programs at the masters level are offered in electrical and computer engineering, mechanical engineering, systems engineering, and computer science and engineering.

The Doctor of Philosophy degree is offered in systems engineering. The goal of the doctoral program is to prepare engineers who have a broad competence that crosses the boundaries of traditional engineering disciplines and who are capable of dealing with complex large-scale problems.



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