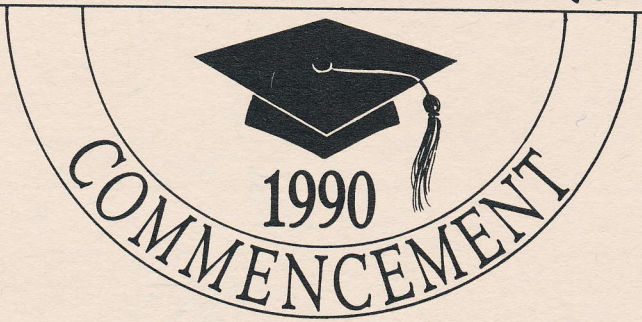
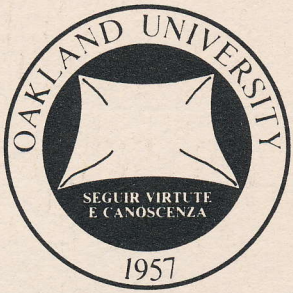
OAKLAND UNIVERSITY





The motto of Oakland University, *"Seguir Virtute E Canoscenza,"* which is incorporated in its seal, has a distinguished origin, Canto XXVI, 1. 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 2, 1990
1 p.m.

Howard C. Baldwin Memorial Pavilion
Oakland University
Rochester, Michigan

ORDER OF CEREMONY

Processional
Richard E. Haskell, *Marshal*
David E. Boddy, *Deputy Marshal*
Glenn A. Jackson, *Deputy Marshal*

Welcome
Howard R. Witt
Dean of Engineering and Computer Science

Commencement Address
Mr. Harry S. Kalajian
Executive Vice President and Chief Financial Officer
Michigan Bell Telephone Company

Presentation of Honors

Presentation of Special Awards

Presentation of Candidates for the Ph.D. Degree

Presentation of Candidates for the MS Degree

Presentation of Candidates for the BSE and BS Degrees

Salutation
Tina Anna Wink, *Graduating Senior*

Alumni Welcome
Bruce S. Wilber, B.S.E., 1987, M.S., 1989
Product Engineer, Chrysler Corporation
and President, School of Engineering and Computer Science Alumni Affiliate

Valediction
Joseph E. Champagne, *President*

Recessional
The audience is requested to stand and remain standing during the processional and the recessional.

Reception

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, the medieval scholar clothed himself 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 doctoral degree on his 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 1989

DOCTOR OF PHILOSOPHY

Systems Engineering
Hong Xing Hu
Dissertation: *Design and Analysis of Robust Optimal Parametric Control Systems*

MASTER OF SCIENCE

Computer and Information Science
Yin Chun Chu
Keith A. Dickey
Huimin Lin

Computer Science And Engineering
Maureen Bell Field
Duc-Khanh Bui
Roger Jen-Chang Hsu
Hugh Hui
Irving Rosenstein
Lary Waldon Sieh
Chia-Poh Tai

Electrical and Computer Engineering
Ronald Anthony Bizzocchi
Tejaswini K. Gokhale
Kevin Michael Plante

Mechanical Engineering
Timothy John Clever
John M. Griffin
Paul Russell Messina
Scott D. Parker

Systems Engineering
John Rolland Giampa
Thomas Kanjirath Joseph
David S. Nacy II
Afsaneh Nematollahi
Kadry William Rizk
Keok Swee Tan

BACHELOR OF SCIENCE

Computer and Information Science
Patrick Joseph O'Meara
Beena Paul
Sally June Rende
Anthony Angelo Vitale
Bruce Alan White

Computer Science
Rachelle Ann Fowler
Theodore Lee Hinz

Engineering Physics
Stephen Richard Diem

BACHELOR OF SCIENCE IN ENGINEERING

Computer Engineering
Sandeep Ahuja
Tamer A. Dandachi
Ruth A. Drellishak
Nicole Yvette Howard
AnnMarie Lebioda
Michael Gerard Schena
Richard Spariosu
Bradley Andrew Traub

Electrical Engineering
Russell John Joseph Astrino
Michael Roland Burke
Scott Anthony Campbell
Edwin Thomas Carlen
Paul Anselm Felcyn
Robert Mariani
Ronald William Reichenbach
Matthew James Reisner
Daniel Joseph Rhein
Manjote Kaur Sandhu
David Andrew Smyczynski
John Douglas Storey
Bradley Andrew Traub
James William Zeleznik
Michele Terese Zinger

Mechanical Engineering
Jeffrey Allan Boismier
Lance Joseph Butler Jr.
Timothy John Durand
Philip John Francis
Jon Paul Gleeson
Jeffrey Robert Holan
Gerald John Keller
Laura Lynn Koczkodan
Henry Martin LeMarbe
Mark Emil Lenz
Alexander John Petrusha
Diane Maureen Schwark
Victoria Kay Steffens
Steven John Stimson

CANDIDATES FOR DEGREES APRIL 1990

DOCTOR OF PHILOSOPHY

Systems Engineering
Abdallah Mohamed Elramsisi
Dissertation: *A Joint Domain Neural Net Approach for Image Representation and Classification*

MASTER OF SCIENCE

Computer and Information Science
Su-Ming Chen
Liuching Gail Cheng
James Paul Gouin
N. Ali Noui-Mehidi
Susanta Prasad Sarkar
Kelchen Shih
Inger Kirsten Tavi

Computer Science and Engineering
Chun Ada Dong
Glenn W. Foster
Mark James Kurowski
Rajani Mahadevan
Gregory James Mason
Tamra Lynne McIntyre
Mukesh C. Shah
Rajiv Kumar Synghal

Electrical and Computer Engineering
Gary Lee Aldrich
Joseph Prasanna Fernando
Kenneth George Mick
Ricardo Antonio Pastor
Anupama Sampathi Reddy
Kevin James White

Mechanical Engineering
Jeffrey E. Lewis
Daniel E. Ostberg
Paul Steven Pakizer
Susan Carol Stroker-Lee

Systems Engineering
Paul David Benedict

Systems and Industrial Engineering
Christopher A. Hecker
Jerome James Kendrek
Robert Frank McGraw
Gerald Lee Thweatt

BACHELOR OF SCIENCE

Computer Science
Rita Khatri
Kenneth James Taylor
Michael Ward Wilhelm

Computer and Information Science
John E. Brady
Christine Bea Cameron
Charlotte Marie Klein
Gary Thomas Leitner
Keith Allen MacFadyen
Anthony William Robinson
William Alton Russell-Proctor

Engineering Chemistry
Julianna Brigitta Froehlich
Steven James Martin

BACHELOR OF SCIENCE IN ENGINEERING

Computer Engineering
Azmar Hatat Anis
David John Higgins
Michael Myron Klink
Hng Kay Lim
Arthur Paul Roberts
Patrick William Schoening
Lisa Cara Sobetski
William George Varon
Thanh Van Vu
Jeffrey Melvin Wojtalewicz

Electrical Engineering
Basel Osama Abdulmajid
Paul Kenneth Baker
Andrew Martin Barba
John Edward Clausen
Mary Lou Delia
William S. Edwards
Anne Fadler
John Mario Fantin
Jeffrey T. Grondz
Norris Gene Hardeman II
David J. Kujawa
Daniel Joseph Luzenski
Pamela Sue Mabee
Alec Roland Mis
Terry Nathan Murray
Victor James Paul
Trudy Marie Perry
Ekaterini N. Prantzalos
Arthur Paul Roberts
Arthur M. Rutyna
Patrick William Schoening
Daniel John Serafin Jr.
David F. Taylor
Theresa Ann VanDenBerghe
Tina Anna Wink
Dean Thomas Wisniewski
Joellin Stella Wojtczak
Peter Zura

Mechanical Engineering
Rachelle Ashman
William S. Edwards
Vincent J. Griffiths
John Carl Lohr
James Edward Louwsma
Wayne A. Lowmaster
Ted Raymond Martin
Mary Ann Monteleone
David Carl Noel
Jill Anne Palazzolo
Darren Lee Pontin
Leanne Marie Rucker
Robert Michael Scully
Donald Nicholas Stacey
Daniel William Thomas
James Robert Westbrook III
Susan Marie Young
Patrick John Zelinski

Systems Engineering
Robert Ronald Misch
Dean Thomas Wisniewski

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 School Honors. The faculty of the School of Engineering and Computer Science has elected several graduating seniors to receive School Honors in engineering or in computer science.

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.*

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.

The faculty extends most hearty congratulations to all of the students receiving honors and awards at this commencement exercise.

HONORS AWARDED DECEMBER 1989

UNIVERSITY HONORS

SUMMA CUM LAUDE
Manjote Kaur Sandhu

CUM LAUDE
Ruth A. Drellishak
Jon Paul Gleeson

DEPARTMENTAL HONORS

Computer Engineering
Ruth A. Drellishak

Electrical Engineering
Heather Lynn Creps (June 1989)
Ronald William Reichenbach
Manjote Kaur Sandhu
James William Zeleznick
Michele Terese Zinger

Computer Science
Kenneth Joseph Reinhardt (August 1989)
Sally June Rende
Bruce Alan White

Mechanical Engineering
Jon Paul Gleeson
Victoria Kay Steffens

HONORS AWARDED APRIL 1990

UNIVERSITY HONORS

CUM LAUDE
Wayne A. Lowmaster

DEPARTMENTAL HONORS

Computer and Information Science
Christine Bea Cameron

Computer Science
Kenneth James Taylor

Electrical Engineering
Andrew Martin Barba
John Mario Fantin
David F. Taylor
Joellin Stella Wojtczak

Mechanical Engineering
John Carl Lohr
Wayne A. Lowmaster
Patrick John Zelinski

SCHOOL OF ENGINEERING AND COMPUTER SCIENCE SPECIAL AWARDS

Award for Exceptional Achievement:
Manjote Kaur Sandhu

Award for Academic Achievement:
Patrick John Zelinski

Award for Professional Development:
Christine Bea Cameron

Award for Service:
Tina Anna Wink
Dean Thomas Wisniewski

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GMF Robotics

Allen A. Alper, Ph.D.
GTE Products Corporation

Ronald R. Boltz
Chrysler Corporation

Gerald DeClaire
Rockwell International

Herbert H. Dobbs, Ph.D.
Consultant, Rochester, Michigan

Lamont Eltinge, Ph.D.
Eaton Corporation

Gordon England
General Dynamics

Sidney D. Jeffe
Engineered Systems Division

Ronald P. Knockeart
Siemens-Bendix

Ian Macpherson, Ph.D.
Ford Motor Company

Ronald L. McIntyre
Detroit Edison

James R. Nette
Michigan Bell

Donald W. Rees
Survivability Division,
U.S. Army, TACOM

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Stephan Sharf
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Joseph E. Champagne, *University President*
John H. De Carlo, *Secretary*
Robert J. McGarry, *Treasurer*

Rochester, Michigan