



The motto **Seguir Virtute E Canoscenza**, has a very 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

10:00 a.m. June 7, 1986

Varner Recital Hall Paula and Woody Varner Hall Oakland University Rochester, Michigan

	MUSICAL ARTISTS		
	John E. Smith, trumpet		
	PROCESSIONAL		
	Trumpet VoluntaryJeremiah Clark		
	1		
	RECESSIONAL		
	Rondeau	Mouret	
	10110Cau	····	
2			

## PROGRAM

#### PROCESSIONAL

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

WELCOME

John J. Metzner, Acting Dean

COMMENCEMENT ADDRESS Robert M. Sinclair, Vice President of Engineering Chrylser Corporation

#### PRESENTATION OF HONORS

PRESENTATION OF SPECIAL AWARDS

PRESENTATION OF CANDIDATES FOR THE PH.D. DEGREE

PRESENTATION OF CANDIDATES FOR THE M.S. DEGREE

PRESENTATION OF CANDIDATES FOR THE B.S.E. AND B.S. DEGREES

#### SALUTATION

Gerald S. Dittrich Graduating Senior

### ALUMNI WELCOME

Kathleen E. Simonyi Engineering and Computer Science Alumni Association

#### 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 volumnious 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 institutions 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 1985

## DOCTOR OF PHILOSOPHY

## SYSTEMS ENGINEERING

Abdul-Amir Ahmed Abdul-Wahab, B.E.E. Kuwait University, M.S. Electrical Engineering, Wayne State University Dissertation: Robust Stabilization of Linear Multivariable Systems

## MASTER OF SCIENCE

## COMPUTER AND INFORMATION SCIENCE

Joseph Lloyd Begovich Pamela K. Haron Ellen Anne Knapp

### ELECTRICAL AND COMPUTER ENGINEERING

Gary Kenneth Lowe

## MECHANICAL ENGINEERING

Farshid Ahmady-Izady

Keith Alan Hagan

### SYSTEMS AND INDUSTRIAL ENGINEERING

Trieu-Ky Ho Robert George Izak Phyllis Leigh McIntosh Fred William Schroeder

## BACHELOR OF SCIENCE

## COMPUTER AND INFORMATION SCIENCE

Barry Grant Bevier Timothy Joseph Borden Jeanette M. Carnaghi Laura Jean Cramer Kevin Paul Flemming Holly Coreen Henrichs Linda Diane Knight Andrew Paul Potter Catherine Colleen Quinlan Wilson Bryan Revenaugh, III Richard Allen Schummer Liping Shih Christine Sitko Nicholas Charles Sulkowski Barrie S. Vince Gayle Marie Waelchli

## BACHELOR OF SCIENCE

College of Arts and Sciences and School of Engineering and Computer Science ENGINEERING CHEMISTRY

Stephen Paul Cutts

## BACHELOR OF SCIENCE IN ENGINEERING

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Abdel-Fattah Musa Abualbusal A-Hamid Mohd S. A. Akbar Kurt C. Blust Cynthia Jean Grabowski David Anthony Hein Elise Lee Horowitz Mark Edward Hurley Scott Douglas Outland Linda Louise Pscheidl Steven Regueiro

### ELECTRICAL ENGINEERING

Faris Salim Abdulhadi Mark Robert Brorson Gordon Dale Cheever, Jr. Charles Lee Chisholm Glen Alexander DeGrendel Vincent Paul Mandarino Cary Drake Perttunen Mark William Peters Ron R. Peteuil Gary Walter Taraski Allen Zwierzchowski

#### ELECTRICAL AND COMPUTER ENGINEERING

Robert Thomas Arntz

Gregory Scott Heleski

### MECHANICAL ENGINEERING

Thomas John Allard William John Barz Joseph I. Boivin David Gordon Calderone David F. Copp Nancy Jane Ebach Elaine Irwin James Robert Keller Michael J. Kostrzewa Richard Lee Lux-Grant Scott Preston Newman Jason Thomas Raedy Lisa Mae Safford Gordon B. von Zellen Kevin Scott Weber

### MECHANICAL AND SYSTEMS ENGINEERING

Peter John Ventimiglia, Jr.

## CANDIDATES FOR DEGREES APRIL 1986

## DOCTOR OF PHILOSOPHY

### SYSTEMS ENGINEERING

Gabriel Sabino Castelino, B. Tech. in Electronics and Electrical Communication Engineering, Indian Institute of Technology, Kharagpur, India, M.S. Electrical and Computer Engineering, Oakland University

Dissertation: Remote Procedure Calls for a Network of Loosely Coupled Single-Chip Micro Computers

## MASTER OF SCIENCE

## COMPUTER AND INFORMATION SCIENCE

Maria Dolores Aguirre-Cobo William Curtis Haga Faramarz Khoshnoud Martin John Novak Stephen Eugene Riley Mark Andrew Steury Frances Maureen Vallely Ming-Ching Alicia Yee

### ELECTRICAL AND COMPUTER ENGINEERING

Norman Thomas Caramagno Marc Bryan Center Dennis Michael D'Hondt Lorraine E. Krolikowski William Hubert Mattingly II

#### Abu Muzaffar Charles Henry Nagi Alexander Allen Reid Diane C. Ross Peter Alois Tropper

### MECHANICAL ENGINEERING

Patricia Ann Bammel Thomas William Bulliner Gregory Neal Corey Gregory W. Davis Donald Gerard Hillebrand Robert David Johnson Edmund Walter Matkowski Susan Marie Phillips Suzanne Marie Stahl James Willis Tindall James Stephen Walsh Matthew Ward Witte

### SYSTEMS AND INDUSTRIAL ENGINEERING

Timothy J. Barnard Harry William Bedard III Suzanne Martha Bulver Peter Charles Hadad Scott B. Holland John M. Hrit Robert Franklin Norman Jinghua Zhao

## BACHELOR OF SCIENCE COMPUTER AND INFORMATION SCIENCE

Kim Alan Bloxsom David A. Borland David A. Borle Charles William Braidwood, Jr. Jacqueline Maria Brown Nancy E. Calme Craig James Christensen Armando Andres Diccion Mary Ann Dimercurio Susan Ann Fagan Thomas Edmund Gallop Anu Radha Gavini Mark Dana Guthrie Debra Sue Haberland Brian Keith Hibbard Michele Higbee Mary Lee Hyde Gail M. Karbal William Kevin Kirkpatrick John Frank Kloc Charles Henryk Kusmirek Laura Ann Lamparski Judith Ann Maiers

Nanette Elaine Mapes David Matthew Marttila Joseph Michael Maywood Tracy Leigh McDermott Jeffrey Alan McLean Michael Casmere Murawka **Brian Keith Reetz** David Bernard Ring Judith Lynne Rudolph Mark Allen Ruprich Linda Sattler Gary Donald Schmidt Howard Jeffrey Spector Shou-Yin Ho Su Jan Marie Thomas Inger Kirsten Tingstad Todd William Townley Ronald Alan Tran Karyl Lee Upleger Sandra Sue Vink Michael James Wallace Ann Margaret Marie Withey

## BACHELOR OF SCIENCE

College of Arts and Sciences and School of Engineering and Computer Science ENGINEERING CHEMISTRY

David A. Inkpen

## BACHELOR OF SCIENCE IN ENGINEERING

## COMPUTER ENGINEERING

Michael James Gietzen John William Hoffman Donald J. MacDonald Dinu Petru Madau David Anthony Monacelli Harmon Sequoya Nine

#### ELECTRICAL ENGINEERING

Christian Gregor Bjelica Mark R. Bornais Mary Evangeline Bournais Mark Edward Buccini Christopher Michael Chowning Steven E. Christenson John Paul Christiansen Thomas David Costello Gerald Steven Dittrich Kin C. Fung Thomas David Hasse Denise Carol Hodges Peter Joseph Hoopfer Alan Robert Pluta Michael Joseph Polan Mitchell Paul Radelt Edward J. Ruiz Faye Dorothy Schilkey Richard James Woerner

William Hoke Jenkins III David Leonard Kwapis Ronald Joseph Landry Theresa Lynn Lawler Charles William Modzinski Jeffrey Mohr Edward John Nowak Abed El-Jalil Shiban Okab Steven J. Roskowski Stephen George Rosneck III Garrett Angelo Taormina Jeffrey Edwin Zenisek

#### ELECTRICAL AND COMPUTER ENGINEERING

Sonia N. Choksi Evelyn Jane Klauer Michele Marie Kost Jean Louise Kwapis Donald Stewart Letosky Gary Keith Lewis Edward J. Ring

### MECHANICAL ENGINEERING

Christopher Todd Archutowski Michael Walter Gajewski Anthony Paul Glover Gregory Neil Goestenkors Ronald Scott Kemp Michael Lee Kulhanek Kenneth Taylor Milne III

#### SYSTEMS ENGINEERING

Colin W. Carpenter Daniel Joseph Erhardt Steven Michael Glisky Robert Simmons Morrow Saed Nazari Holly Ann Smith George Soulis Flavio Antonio Stoppa Aaron Lynn Tuck Dennis Alan Vroman

Kimberly Ann Pogue Julia Elva Rivard Susan Anne Shimokochi

## HONORS COLLEGE

The Honors College has been established for highly motivated students to provide an unusually challenging general education along with additional requirements to augment the elected major.

## SCHOOL OF ENGINEERING AND COMPUTER SCIENCE AND COLLEGE OF ARTS AND SCIENCES HONORS COLLEGE CANDIDATE DECEMBER 1985

Stephen Paul Cutts

## 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 designated to graduate with 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 sustained 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 special 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 1985

## UNIVERSITY HONORS SUMMA CUM LAUDE

Gordon Dale Cheever, Jr.

## MAGNA CUM LAUDE

Kurt C. Blust Joseph I. Boivin

## CUM LAUDE

Stephen Paul Cutts Cary Drake Perttunen

## SCHOOL HONORS

## COMPUTER AND INFORMATION SCIENCE

Timothy Joseph Borden Laura Jean Cramer Richard Allen Schummer

## **COMPUTER ENGINEERING**

Kurt C. Blust David Anthony Hein

## ELECTRICAL ENGINEERING

Gordon Dale Cheever, Jr. Cary Drake Perttunen

### ENGINEERING CHEMISTRY

Stephen Paul Cutts

### MECHANICAL ENGINEERING

Joseph I. Boivin David F. Copp Lisa Mae Safford

## HONORS AWARDED APRIL 1986

## UNIVERSITY HONORS SUMMA CUM LAUDE

Linda Sattler

## MAGNA CUM LAUDE

Mark Dana Guthrie William Hoke Jenkins, III Theresa Lynn Lawler Nanette Elaine Mapes

## CUM LAUDE

Michael Walter Gajewski Debra Sue Haberland Michael Casmere Murawka Harmon Sequoya Nine Edward John Nowak Inger Kirsten Tingstad

## SCHOOL HONORS COMPUTER AND INFORMATION SCIENCE

Kim Alan Bloxsom Nancy E. Calme Mark Dana Guthrie Debra Sue Haberland William Kevin Kirkpatrick Nanette Elaine Mapes Tracy Leigh McDermott Michael Casmere Murawka Linda Sattler Jan Marie Thomas Inger Kirsten Tingstad Todd William Townley

#### **COMPUTER ENGINEERING**

Harmon Sequoya Nine

#### ELECTRICAL ENGINEERING

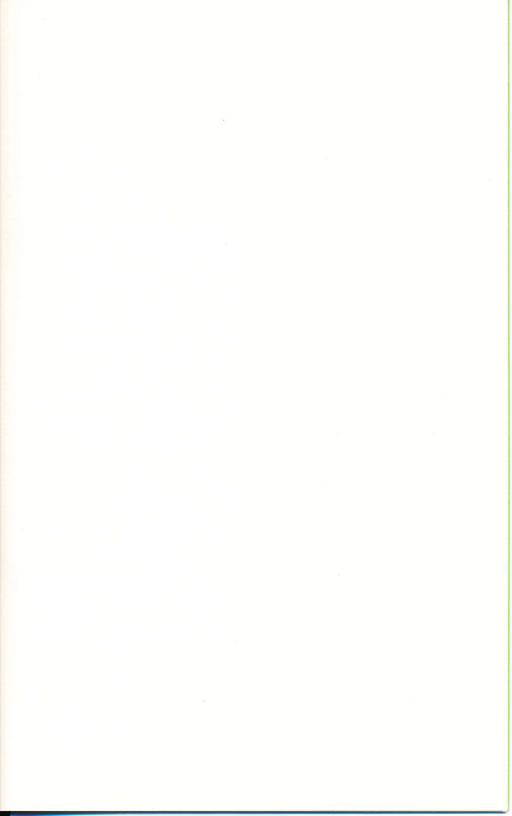
William Hoke Jenkins, III David Leonard Kwapis Ronald Joseph Landry Theresa Lynn Lawler Donald Steward Letosky Edward John Nowak Garrett Angelo Taormina

#### MECHANICAL ENGINEERING

Michael Walter Gajewski

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Oakland University is a legally autonomous state institution of higher learning. Legislation creating Oakland University as an independent institution, separate from Michigan State University, was established under Act No. 35, Public Acts of 1970. The university is governed by an eightmember board of trustees appointed by the governor with the advice and consent of the state senate. The president of the university is appointed by the board of trustees and is an ex officio member without vote. The board also appoints a secretary and treasurer.

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