Dean Sees Progress During Tough Times

The College of Engineering continues to make significant progress in enhancing its academic excellence under difficult financial circumstances. Here I wish to share with you, our alumni and friends, the fulfillment of our plans in one area of instruction and one area of research, and to briefly describe the steadily increasing fiscal difficulties which the college faces.

In an earlier message, I reported the college's plan to incorporate interactive computer graphics into all curricula at all academic levels through the establishment of the Computer Aided Engineering Laboratory (CAEL). The laboratory now exists because of generous support from industry, from an alumnus, and from the University, which matched private gifts with an equal amount of University funds. Computer hardware and general purpose software have been acquired. Faculty in each program are developing specialized instructional software appropriate to their academic program. Thus, superb progress is being achieved toward providing our students with a pervasive and continuing experience in interactive computer graphics.

An article elsewhere in the newsletter describes a dedication ceremony which was held on September 22 to recognize all contributors and to demonstrate to them the impact that the laboratory is having on the curriculum in each of our academic programs. The college is grateful to the contributors who were so essential to the establishment of this laboratory. Students are now receiving an increasing amount of experience with modern tools for engineering design and practice.

The Center for Computer Aided Design (CCAD) was established two years ago to encourage interdisciplinary research on mechanical system dynamics and structural optimization. The research activities of the faculty, staff, and students of this center have grown enormously—externally sponsored research projects last year amounted to $800,000. This success in such a short period of time created space and facility needs far beyond our original expectations. Consequently, the University provided funds to renovate a 4,000-square-foot area in the lower level of the electrical engineering wing to establish spacious and well-appointed staff and student offices, a mainframe computer room, a computer terminal center, and a specially constructed area for animated computer graphics work. The renovated space was occupied by CCAD staff and students on September 1. Now the space and facilities reflect the extraordinary level of activity and excellence of the research under way, which we believe to be unsurpassed by any other group in the nation.

The University, and hence the college, continues to be allocated inadequate funds in the state budget at a time when enrollments are rising. No funds were provided this fiscal year for faculty and staff salary increases. Furthermore, because of the slow economic recovery of the state, coupled with serious damage to the agricultural yields last summer, the governor has announced a 2.8 percent across-the-board budget cut for all state agencies. These events are occurring at a time when the college sorely needs capital improvements to its physical plant and seriously depreciated equipment; faculty additions to provide adequate attention to students; and salary increases to attract and retain a distinguished, productive, and highly mobile faculty. Under these severe constraints, the University has been responsive to some of the most pressing needs of the college. For example, new faculty positions were granted to the college this fiscal year to alleviate the critical faculty resource deficiencies in the high student demand programs of biomedical engineering and electrical engineering. Funds have been provided to make the last few available square feet of the Engineering Building useful for instruction and research. The college's need to expand space by the addition of a wing to the Engineering Building is near the top of the University's list of capital fund requests.

Elsewhere in this newsletter you will find a report on the growing success of the College of Engineering Development Fund. Designed as a long-term effort to improve the campus life and to enrich (cont. on next page)
the educational experience of our engineering students through private gifts, the fund has elicited an enthusiastic response from alumni and friends. Although these funds do not ease the major fiscal problems mentioned earlier, which are normally borne by state funds, they provide the college with flexibility to meet some of the educational needs of a very talented student body. State funds do not permit this flexibility, nor can they be used for many of the activities for which the fund was established. I ask you to examine the materials sent to you about the fund, to reflect upon your career, and to consider the impact your contribution to the fund will have on the education of our students.

On behalf of the faculty and staff, I invite you to visit the college at your earliest convenience. We welcome the opportunity to renew acquaintances, to learn of your career experiences, and to personally demonstrate our commitment to offering a high quality and contemporary educational experience to all our students.

Robert G. Hering, Dean

## Special Activities

### Industry Open House

The college’s second Open House for Industry attracted 110 visitors from across the country—nearly a 50 percent increase over attendance the previous year.

The morning session of the April 5, 1983, open house featured a series of mini-seminars on current research in each of the college’s six academic programs. In the afternoon, the guests were invited to visit programs of special interest to them and to tour selected research laboratories.

Visitors’ responses to an evaluation questionnaire confirmed a growing interest in the annual open house as a vehicle for communication and cooperation. Most participants rated the event “very worthwhile.” One industry representative commented, “I think the open house is a chance for mutual support. I was impressed by the number and breadth of things you are studying.” Another participant wrote that the open house “certainly gives us a better understanding of the activity and research under way at the College of Engineering and affords us an opportunity to share in this activity.”

### Symposium: The Social Impact of Computers

The “information revolution”—the current rapid development and dissemination of computer technology—has implications for all elements of society, from science to small business to the student in the classroom. How can we best prepare for this change so that it is constructive, rather than threatening? Some answers to this question were explored at a recent Technology and the Spirit of Man Symposium entitled “Man of the Year? The Social Impact of Computers.” Symposium speakers were Jeff Boschee, director of executive office communications for Control Data; James Johnson, director of the Office of Information Technology at the UI; and Howard Karten, a freelance writer with a background in computers and a special interest in the impact of science and technology on people.

Each year the local chapter of Tau Beta Pi, the engineering honor society, organizes the symposium around a current theme as a forum for the exchange of views among people in the sciences and the humanities. A Chapter Project Grant from the society’s executive council helped underwrite the costs of the April 14, 1983, symposium.

### NATO Institute

For the second time in four years, the UI was the site of a two-week NATO advanced study institute under the leadership of Professor Edward J. Haug, director of the college’s Center for Computer-Aided Design.

The August 1983 institute focused on emerging developments in computer-aided analysis and design of mechanical systems. The principal lecturers, who had previously been named Johnson County’s Handicapped Employee of the Year, described the free world’s leadership in the field, including experts from the U.S., Canada, the Netherlands, and the Federal Republic of Germany.

The institute participants numbered approximately 80 and represented most of the NATO countries as well as Japan, Korea, and Taiwan. All were postdoctoral researchers chosen from more than 150 applicants.

The institute proceedings, including the principal lectures and selected technical papers contributed by participants, will be published by Springer-Verlag.

### Midwestern Mechanics Conference

Over 200 professionals from education and industry attended the Eighteenth Midwestern Mechanics Conference, held at the UI for the first time on May 16-18, 1983.

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Change Has Been The Only Constant During Professor Mielnik’s Many Decades Here at Iowa

Large distillation columns and dryers, dynamometers and steam engines, motors and generators—lab equipment that was state-of-the-art in the 1930s—reappeared on a screen at the alumni reunion luncheon on campus last June 3.

Professor Edward M. Mielnik spoke to the alumni group on the historical evolution of the College, illustrating his talk with slides from the University archives and films of educational activities and facilities made in 1934-35. His audience seemed astonished at the antiquity of the equipment—even though, for most of the alumni, it had represented the most modern equipment of the day, equipment of which they were once very proud.

Mielnik is uniquely qualified to offer such a historical perspective, since his association with the college spans over four decades. He came to the UI as a student in 1939, earned a B.S. degree in mechanical engineering in 1943, and returned in 1946 to teach in that department.

Change, says Mielnik, has been the only constant in his long and diverse experience in engineering education. “Progress has been exponential. When I began teaching, I couldn’t have imagined the expanded technical capabilities that we have now.” He is especially enthusiastic about the innovations in computer-aided design and computer-aided manufacturing, which economize effort for routine tasks and free up the engineer to “do what he does best—deal with the creative aspects of design and planning.”

This application of contemporary technology relates to one of Mielnik’s major concerns. “It seems that none of us is really working up to our full potential—and I often wonder why.”

Mielnik’s desire for the fullest possible realization of human capability is evident in his philosophy of teaching. His role as an educator, he believes, is “to teach people to think.” The teacher’s challenge, particularly in undergraduate education, is to present information in ways that will lead students to independently draw conclusions and solve problems.

Mielnik didn’t plan to become a teacher. Following a tour of duty with an engineering aviation battalion, he expected to take a job in industry. But

when Professor H. O. Croft—then chairman of the UI Department of Mechanical Engineering—called him in Pennsylvania to fill a sudden vacancy, he arrived four days later, still in uniform. He subsequently took a leave of absence to do graduate work at MIT, where he received an M.S. degree in physical metallurgy in 1951. Contrary to the expectations of his MIT professors, he once again returned to the University of Iowa—where he has taught ever since in the areas of materials science, materials processing, and manufacturing engineering.

Mielnik will retire at the end of the fall semester 1983. He intends to write a book on materials processing, but beyond that, he says, he’s still too occupied with teaching to plan the next phase in detail. “I expect that I’ll find more to do than I have time for.”
Program Highlights: News of Recent Accomplishments

Biomedical Engineering

The program gained two new faculty members in August 1983.

Professor Thomas D. Brown (Ph.D. Carnegie-Mellon) holds a joint appointment in biomedical engineering and in orthopaedic surgery in the College of Medicine. He came to the UI from the University of Pittsburgh, where he was a research associate professor of orthopaedics and of civil engineering.

Professor Joon B. Park, a noted authority in biomaterials research, was on the faculty at Tulane University before joining the Biomedical Engineering Program. Prior to that he was with Clemson and the University of Illinois at Champaign-Urbana. Park holds a Ph.D. in materials engineering from the University of Utah.

Professor Roy Crownshields resigned in March 1983 to accept a position with Zimmer, a manufacturer of orthopaedic, surgical, patient care, and hospital products. Crownshields also taught in the Mechanical Engineering Program and was on the faculty of the College of Medicine.

Faculty Activities

Three members of the Biomedical Engineering Program are on UI Faculty Developmental Assignments during the 1983-84 academic year.

Professor Krishnan B. Chandran is spending the fall semester studying in vivo echocardiographic imaging and left ventricular functional analysis. In the spring he plans to introduce a new elective course entitled Cardiovascular Biomechanics.

Professor Roderic S. Lakes will be on leave second semester to conduct research on bone fracture at Queen Mary College of the University of London. He will work with Dr. William Bonfield, a British expert on bone mechanics.

Professor Y. King Liu will devote his second-semester leave to writing a textbook on biomechanics and traveling in the People's Republic of China, where he has been invited to lecture at Shanghai University of Science and Technology and Chengdu University of Science and Technology. In April 1983, Liu was elected the central U.S. representative of the International Society for the Study of the Lumbar Spine.

Professor Vijay K. Goel, in conjunction with a three-year National Institutes of Health grant, is establishing a new laboratory for the study of spine kinematics.

CAEL Dedication

The Computer Aided Engineering Laboratory (CAEL) ensures that future UI engineering graduates will have valuable hands-on experience in an area that is in the forefront in industry. CAEL, established through cooperative support from the University and private donors, was formally dedicated on September 22, 1983.

The dedication, which honored corporate and individual donors, opened with addresses by Dean Robert G. Hering; Richard D. Remington, UI vice-president for academic affairs and dean of faculties; and John K. Lawson, factory manager, John Deere Dubuque Works and John Deere Davenport Works. Following a faculty presentation on CAEL capabilities and their applications in the various academic programs, the guests toured the CAEL facilities.

The Computer Aided Engineering Laboratory was initiated in 1981 as the CAD/CAM instructional facility. Its purpose is to integrate interactive computing and graphics into under-graduate and graduate courses in all of the college's academic programs. Over two dozen courses now use CAE concepts and technology; other courses are being revised to incorporate them.

The self-contained CAEL system centers around a PRIME 750 minicomputer, which is linked to 30 graphics terminals. Most of the terminals, along with printers and plotters, are located in the CAE Laboratory itself. The facilities also include a development laboratory for special projects and a demonstration classroom equipped with a large projection screen.

Industrial firms that contributed to the development of CAEL include ALCOA; J.I. Case; Deere & Company; Exxon; IBM; Minnesota Mining and Manufacturing; Natural Gas Pipeline; and Raytheon, on behalf of its subsidiaries, Amana Refrigeration and Iowa Manufacturing. Substantial support also came from a UI alumnus, Delno W. Brown (B.S.E. '42, B.A. '42).

Student Activities

To learn of recent developments and innovations in industry, the biomedical professional seminar class made a field trip to Minneapolis to visit Medtronic and Cardiac Pacemakers, Inc.

Two biomedical engineering students presented design papers at national meetings in the spring of 1983. Julie Fahri's paper, on orthodontic bonding materials, was presented at the National Orthodontics Meeting in San Francisco. Caroline Van Ingen delivered a paper concerning stress analysis of hip prostheses at the national meeting of the Society of Women Engineers, held in Seattle.

Chemical and Materials Engineering

Faculty Activities

Professor John Keith Beddow was one of the chief organizers of a joint meeting of the Fine Particle Society and the Society of Powder Technology of Japan, held August 1-5, 1983, in Honolulu. Beddow is secretary of the Fine Particle Society and editor of the first two issues of that organization's journal.

Professor Gregory R. Carmichael, program chair, traveled to Japan in June

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1983 for six months of research in connection with his University Faculty Scholar grant. Carmichael has been working with colleagues at the National Institute for Environmental Studies in Tsukuba and at the Toyahashi University of Technology.

Professor Ravindra Datta is initiating funded research in biocatalysis through a recently secured National Science Foundation grant to evaluate a proposed continuous membrane reactor-separator for homogeneous catalysis. Datta has also developed a new course in biochemical engineering.

Professor Emeritus Karl Kammermeyer has completed a textbook on genetic engineering for chemists and chemical engineers—the first such text for that audience. The book, which grew out of a course in the same subject, will fill a need in an important but little-explored area.

Under the leadership of Professors Beddow and Arthur Vetter, the program’s entire Fine Particle Research group attended the annual Powder and Bulk Solids Conference, held May 1983 in Atlanta, where they presented nine papers. The group, composed primarily of graduate students, is conducting research in cooperation with four companies in the U.S. and abroad, as well as with several universities in other countries.

Student Award

The American Institute for Chemical Engineering Student Chapter awarded second place in its annual Midwest student paper competition to a recent UI graduate, James Knapp (B.S.Ch.E. ’83).

Curriculum and Facilities

A new element of the Chemical and Materials Engineering Program is a working seminar in bioseparations as related to genetic engineering. This innovation is in line with the program’s long history of work in the area of novel separations processes.

The undergraduate curriculum has been enriched with a segment on process control, incorporated into the design sequence. An instructional lab to complement this course work is currently under development.

The program has expanded its computational facilities through additional terminals, graphics capabilities, and real-time data acquisition and control facilities. Continued growth in this area is foreseen.

Civil and Environmental Engineering

Faculty Activities

Professor Jasbir S. Arora delivered a paper at the Eleventh International Federation of Information Processing Conference on System Modeling and Optimization, held in July 1983 in Copenhagen, Denmark. In August he traveled to Korea, where he presented a short course on computer-aided optimal design of systems at the Korean Advanced Institute of Science and Technology, Seoul.

Professor Dan E. Branson has been elected vice-chairman of the Iowa State Board of Engineering Examiners.

Professor Robert Ettema presented two papers in Helsinki, Finland, at the Port and Ocean Engineering under Arctic Conditions Conference.

Professor Forrest Holly developed and piloted a new course titled Computational Hydraulics, dealing with the practical application of numerical methods for solution of free surface unsteady flow in natural watercourses.

Professor John F. Kennedy is chairman of the National Research Council’s Committee on Natural Disasters for 1983-84. He is also a member of the American Society of Civil Engineers Committee on Design and Operation of Water Intake Structures.

Professor Keith R. Long has been appointed to the White House Office of Science and Technology Consensus Workshop on Formaldehyde.

Professor Howard W. McCauley served as visiting professor of civil engineering at Georgia Institute of Technology during spring quarter 1983.

Professor Tatsuaki Nakato has been named to ASCE’s Committee on Hydraulic Laboratory Techniques.

Professor Richard L. Valentine is working in two research areas new to the UI: radium removal (in cooperation with The University of Iowa Hygienic Laboratory) and chemical kinetics.

Student Activities

Steve Banwart, a graduate student in environmental engineering, received a fellowship to study acid rain transport at the Von Karman Institute in Brussels, Belgium.

John Vadnal, a doctoral candidate in mechanics and hydraulics, is spending a year of study in Kyoto, Japan, through an exchange agreement between the Civil and Environmental Engineering Program and several engineering departments of Kyoto University.

Marshall C. Richmond (M.S. Washington State University) was chosen as the new recipient of the Exxon Teaching Fellowship, established in 1982 with the purpose of encouraging the development of talented faculty in vital engineering areas.

Michael Kyte, a doctoral candidate who was responsible for services and route planning for the Tri-County...
Metropolitan Transportation District of Portland, Oregon, from 1974 to 1982, received the George Krambles Transit Foundation Scholarship at the American Public Transit Association meeting in Denver this past October.

Electrical and Computer Engineering

Professor Hewlett E. Melton left the program in January 1983 to join Diasonics, a medical instrumentation firm in Milpitas, California.

Faculty Activities

Professor Steve M. Collins has been appointed cochairman of the American Society of Echocardiography Subcommittee on Digital Image Processing. The Cardiovascular Image Processing and Ultrasonic Imaging Laboratories, directed by Professor Collins and Dr. David J. Skorton of the College of Medicine, is gaining increasing recognition. Their research activities have attracted media attention as well as new funding, including grants from the National Institutes of Health, the Iowa Heart Association, and private industry.

Professor Jon Kuhl and Professor Sudhakar M. Reddy, program chair, presented a paper at the Thirteenth International Symposium on Fault-Tolerant Computing, held in June 1983 in Milan, Italy.

Professor Karl E. Longren is the recipient of a National Science Foundation Creativity Award, which provides two-year funding for a study of nonlinear waves and plasma physics.

Faculty Award

Professor Norbert R. Malik was honored by undergraduate students in electrical and computer engineering, who chose him to receive their first annual Outstanding Professor Award. The award was instituted by the IEEE student branch and Eta Kappa Nu, the electrical engineering honor society.

New Student Assistantships

A selective new program employing upper-level undergraduates as teaching assistants is proving very successful. While earning funds for their schooling, participants gain insight into the teaching profession and make a special contribution through their close identification with student needs and concerns. It is hoped that the experience may lead them to consider careers in engineering education.

Renovated Facilities

A new 1800-square-foot electronics laboratory, completed in spring 1983, occupies the former quarters of WSUI Studio E. A second level added to the high-ceilinged room created additional space for graduate student offices.

Industrial and Management Engineering

Faculty Activities

During 1982-83 the industrial and management engineering faculty produced two books, about 25 papers or book chapters, and approximately 10 theses. Faculty members are engaged in a wide range of research and related activities.

Under a National Science Foundation grant, Professor Ronald G. Askin will investigate new ways to improve plant layout and materials handling using computer graphics.

Professor Askin and Professor James R. Buck, program chair, have been funded to develop a system for detecting lower back pain resulting from work methods in industry. They will conduct research in cooperation with orthopaedic specialists and physical therapists at the University Hospitals.

Professor Dennis L. Bricker spent the 1982-83 academic year on a Faculty Developmental Assignment. Spring and summer 1983 took him to the Far East, where he taught and lectured in Taiwan, the People's Republic of China, and Korea.

Professor Buck and Professor Voratas Katchivichyanukul have received a three-year National Science Foundation grant to develop a new methods engineering theory for people in process control.

Professor Edward M. Mielnik plans to retire in the spring of 1984.

Student Activities

A UI chapter of the national honor society Alpha Pi Mu was chartered in the fall of 1982. In addition to recognizing industrial engineering students of exceptional ability and character, the society organizes service projects and other activities of professional interest.

The local student chapter of the Institute of Industrial Engineers has been active in arranging plant visits and sponsoring outside speakers. Another professional organization, the Society for Computer Simulation, is now represented on campus in a student chapter established last year with Professor Katchivichyanukul as adviser.
research laboratories under the sponsorship of the U.S.-Japan Cooperative Research Program in Ship Hydrodynamics. In September, Patel gave a paper at the Fourth Symposium on Turbulent Shear Flow in Karlsruhe, Federal Republic of Germany, and attended a conference at the Ship Research Center in Varna, Bulgaria.

Professor Theodore F. Smith organized two thermal radiation sessions at the Twenty-first National Heat Transfer Conference, held July 24-27 in Seattle.

Professor Ralph I. Stephens conducted a course in metal fatigue at the Korean Advanced Institute for Science and Technology, Seoul, during July and August 1983. In November he traveled to the People's Republic of China, where he presented a paper at the International Conference on Fracture in Beijing.

Student Activities

Four undergraduate mechanical engineering students—George Castle, Kent Edwards, Matthew Haken, and Jan Kolwey—took first place in the annual student paper contest of the Society of Automotive Engineers Mississippi Valley Section. Their prize-winning design, for a parts adapter to increase the efficiency of a robotic welder, was conceived in response to a suggestion from engineers at John Deere and represents a practical solution to an actual industrial problem.

Another undergraduate team, including Kurt Hoffmeister, Steven Lary, Alan Lynch, Nabeel Sufi, and Jeffrey Trom, designed and constructed a vehicle which they entered in Mini-Baja competitions at Lubbock, Texas, and Milwaukee, Wisconsin.

Both of these design efforts were based on projects in the senior design course.

Research Facilities

Faculty associated with the Center for Computer Aided Design now have access to expanded and upgraded facilities. A new laboratory, completed in September 1983, houses a modern computer room, terminals, graphics facilities, and office space. The center's capabilities have been substantially enhanced by a high-speed, 64-bit CSPI array processor acquired through the Department of Defense university equipment grants program and a PS300 high-resolution graphics processor donated by Evans and Sutherland.

Construction of a building for a new large wind tunnel for the Iowa Institute of Hydraulic Research was begun in fall 1983.

Student Awards

The 1982-83 academic year brought recognition for excellence and achievement to a number of UI engineering students.

William Farrell (B.S.E., biomedical, '83), of Iowa City, received a Hancher-Finkbine Medallion honoring him as the University's most outstanding male undergraduate student. Four such awards are conferred each year—two each to graduate and undergraduate students—in recognition of leadership and academic accomplishment.

Another University honor, the Susan B. Hancher Award, went to Cynthia Miller (B.S.Ch.E., '83), from West Des Moines, Iowa. This award, named for the widow of former University president Virgil M. Hancher, is presented annually to the senior woman who best exemplifies Mrs. Hancher's contributions to University and community life.

On the national level, two UI students won recognition in a scholarship competition sponsored by the American Consulting Engineers Council. Linda Schroeder, a senior in mechanical engineering from Dubuque, Iowa, placed third in the nationwide competition, while Leo Haman, an electrical engineering senior from Swisher, Iowa, received an honorary award.

Also in national competition, Rhett E. Livengood, a chemical engineering junior from Freeport, Illinois, was awarded a two-year scholarship through the Fireman's Fund Foundation Scholarship Program.

Reunion Weekend

The classes of '23, '33, '43, and '58 were represented by nearly 50 engineering alumni and spouses at the alumni reunion weekend June 3-4, 1983.

The University-wide reunion, sponsored annually by the UI Alumni Association, provides alumni an opportunity to maintain links with University tradition, discover new points of interest on campus, and renew acquaintances with others in their fields.

Following a luncheon hosted by Dean Herig, the engineering alumni joined What's New with You?

To help us keep our files up-to-date and accurate, please use this return form to provide information on your current career status.

Name ____________________________________________

UI Degree(s) and Years ______________________________

Home Address ____________________________________

Work Address ____________________________________

Position Title ____________________________________

Recent career information about yourself, or comments you'd like us to see:

□ Please send me information on how I may help Iowa engineering students through the UI Alumni Association's Career Information Network.

□ Please send me information on the Engineering Development Fund.
the academic program chairs for walking tours of labs and facilities. On the second reunion day, the group gathered at an open house with a special guest—Mary Sheedy, who served as secretary to the dean of the college from 1928 until her retirement in 1969.

As in 1982, alumni from the classes of 25, 40, 50, and 60 years ago showed generous support of the college through the recently initiated class gift project, designed to generate funds earmarked for special purposes. The donations received to date will provide furnishings for the engineering student lounge, which is soon to be renovated.

Fund Appeal

The first broad, formal appeal for alumni support of the College of Engineering met with strong success. In 1982, more than 600 alumni and friends contributed to the College of Engineering Development Fund, compared with 164 contributors the previous year.

The development fund provides flexible resources for a variety of programs and projects. During 1982-83, for example, the fund helped meet advisory board expenses, enabled engineering students to attend regional and national conferences, and provided partial funding for the popular Technology and the Spirit of Man Symposium.

Future gifts to the development fund will enhance faculty development, state-of-the-art research, student aid, and alumni outreach programs, while affording the flexibility to respond to unforeseen opportunities and needs as they arise.

Ware Award

To honor the contributions of a distinguished emeritus professor and to assist and encourage promising students, the Electrical and Computer Engineering Program has established the L. A. Ware Scholarship Fund.

Professor Emeritus Lawrence A. Ware received his undergraduate and graduate degrees from the University of Iowa and subsequently taught electrical engineering at the University from 1937 until his retirement in 1969.

Ware significantly influenced the development of the Electrical Engineering Program as well as the careers of its graduates. He introduced course work in emerging technologies, coauthored a pioneering textbook, directed the research of more than 100 graduate students, and inspired an unusually large number to choose teaching careers.

Thanks to enthusiastic support from alumni, faculty, and friends, the first Ware Scholarship Fund Award is planned for the academic year 1984-85.

Placement

The University of Iowa engineering graduates are holding their own in a still-tight employment market, according to Corinne Hamilton, engineering placement director.

An overall slowdown in recruiting activity during 1982-83 reflected the sluggish economy, with potential employers cutting back on campus visits and candidate interviews.

Even though recruitment was down, the placement rate was good. Of those reporting by August 1983, 96 percent of December graduates and 83 percent of May graduates had accepted positions in industry, made graduate school plans, or entered military service. Moreover, the number of companies represented on campus actually increased slightly—even though the total number of visits was down.

This issue was written by Jean Tucker, Iowa City, Iowa, free-lance writer.