Accenture and Auburn create professorship in honor of ISE graduate

Accenture and Auburn University’s Samuel Ginn College of Engineering have established the Joe W. Forehand/Accenture Distinguished Professorship. Made possible by a $1 million gift from Accenture, the endowed professorship is named in honor of the global management consulting, technology services and outsourcing company’s retired chairman and 1971 Auburn graduate Joe Forehand.

The Joe W. Forehand/Accenture Distinguished Professorship was created to honor Forehand’s dedication, leadership and service to Accenture, its employees and shareholders.

“Joe’s legacy, like that of great universities, is one of educating, energizing and inspiring those around him,” said William D. Green, Accenture’s chairman and CEO. “This professorship is a fitting tribute to Joe who, during his more than 30 years with Accenture, personified the highest values and character while giving so much of himself to the company and to our people.”

The goal of the Joe W. Forehand/Accenture Distinguished Professorship is to recruit, retain and support distinguished and internationally recognized faculty with a record of excellence in instruction, research and service in industrial and systems engineering. Specifically, its role will be to strengthen and enhance Auburn’s industrial and systems engineering program through the quality of teaching and research activities.

“This professorship reflects Joe’s commitment to the Samuel Ginn College of Engineering and his well-known love for Auburn,” said Dean Larry Benefield. “We appreciate this gift from Accenture and the doors it will open within the Department of Industrial and Systems Engineering.”

Raised in Alexander City, Ala., Forehand graduated from Auburn with a bachelor’s degree in industrial engineering in 1971. He received a master’s degree in industrial engineering from the Krannert School of Management at Purdue University in 1972, as well as an honorary doctorate of management.

Forehand joined Accenture in 1972 in its Atlanta office and became a partner 10 years later. He served as Accenture’s CEO from November 1999 through August 2004, leading the company through a period of significant change and growth. During that time, Accenture grew from 66,000 employees and $9.6 billion in net revenues to 103,000 employees and $13.7 billion in net revenues. It was under Forehand’s leadership that the company moved from a conventional consulting model to a focus on business consulting, technology leadership and outsourcing. Forehand also oversaw the company’s change from partnership form to a corporate structure, as well as its IPO and listing on the New York Stock Exchange in July 2001. He was named Accenture chairman in February 2001 and held that post until he retired in August 2006.
“So much of what I have achieved and what I have become - as a man and a professional - is due to the foundation of my education at Auburn,” said Forehand. “I am very proud to be honored in this public, yet very personal, way by an institution that had such an impact on me and my success.”

About Accenture

Accenture is a global management consulting, technology services and outsourcing company. Committed to delivering innovation, Accenture collaborates with its clients to help them become high-performance businesses and governments. With deep industry and business process expertise, broad global resources and a proven track record, Accenture can mobilize the right people, skills and technologies to help clients improve their performance. With more than 152,000 people in 49 countries, the company generated net revenues of $16.65 billion for the fiscal year ended Aug. 31, 2006. Its home page is www.accenture.com.

Inaugural Forehand Leadership Scholars Named

Through an initial gift of more than $570,000 from alumnus Joe W. Forehand, the Samuel Ginn College of Engineering has established the Forehand Leadership Scholarship Endowment. This endowment will provide scholarships to recognize current Auburn University industrial and systems engineering (ISE) students who have demonstrated academic excellence along with strong leadership potential. Forehand’s gift reflects his ongoing commitment to Auburn Engineering. The Department of Industrial and Systems Engineering named two inaugural Forehand Scholars for spring 2007.

Heather Layne, a senior from Montgomery, has been involved in numerous and varied campus organizations that have promoted service to the university and community. Within these activities, she has served in a number of leadership capacities that have incorporated organizational and interactive planning. Layne has served as a member of the Student Government Association’s (SGA) Freshman Forum, treasurer of her social sorority, SDS orientation leader for students transferring to Auburn, and a member of the AU Academic Honesty Committee. Through the Birdsong scholarship program, she was granted a study abroad opportunity to Austria last summer.

“Aside from the European culture in which I was immersed, my study abroad experience exposed me to people literally all over the world,” Layne said. “I hope that this exposure to different cultures has shaped and will continue to shape me into a better student and future engineer.”

During her senior year, she served as vice-president of her sorority and was selected a member of Cater Society, an honorary group of fifteen senior women recognized for their leadership qualities and contributions to Auburn University. Currently, Layne serves as a member of SGA’s Elections Board whose goal is to maintain a fair campaigning season. She has also served as an ambassador to the College of Engineering through the Cupola Engineering Society for the past three years.
Chris Patterson, a junior in ISE, is from the Birmingham area. A recent inductee into Alpha Pi Mu Industrial Engineering Honor Society, Patterson has completed three co-op semesters with Kaydon Custom Filtration Corporation in LaGrange, Ga.

"While my hands-on learning experiences have enriching my learning experience at Auburn, I believe even more beneficial is the level of professionalism, maturity and leadership my co-op experience has afforded me," says Patterson. "While these traits are not necessarily learned through one’s course of study, they are essential in the workplace and are among those characteristics expected by employers."

Patterson is also an active contributor to the greater community. He is involved with Auburn Christian Fellowship as well as Auburn University Housing and Residence Life.

"Each of these activities has allowed me to grow and refine my leadership skills," Patterson said. "My involvement has been a real complement to the academic experience I have been blessed to have."

A message from the chair

This is the last newsletter that will be issued from Dunstan Hall. The best history I can get is that industrial management (IM) moved to the lower level of Dunstan about 1961, sharing the building with electrical engineering (EE). In 1984, Broun Hall was completed, EE moved there, and industrial engineering (IE) ascended the stairs and took over the upper levels of Dunstan Hall.

For generations of IE/IM/industrial and systems engineering (ISE) graduates, Dunstan is home. It is also home to the many faculty and staff that have worked in the department over the past 45-plus years. Dunstan has been a good home, an accessible location with big windows and extremely durable materials. However, Dunstan cannot accommodate the number of students now studying in the department (more than 250), much less the technology used daily for teaching and research. We will be moving around the first of the year. Shortly thereafter, Dunstan will be razed.

Our new home will be in the Shelby Center for Engineering Technology, which will also house the Department of Computer Science and Software Engineering and the Dean of Engineering, as well as his staff and supporting units. The building will also have technical labs and much needed state-of-the-art classrooms.

The Shelby Center has been constructed with a mix of government and private dollars. It is a facility to be proud of. It is beautifully designed, with a Georgian theme to fit with the more iconic engineering buildings. There are plenty of outdoor and indoor areas to accommodate students – studying, chatting and just hanging out. We have been able to work with the architects and designers since its inception to customize the space for ISE - it will be welcoming, functional and flexible.

When you come to campus after January 1, I urge you to visit us in our new home. We will be on the third floor in the central and west parts of the buildings. Our manufacturing labs will move from Shop 3 to the basement area of Shelby Center, also on the west side.
Our new home won’t have the memories of Dunstan Hall, but we will bring our heritage of more than 75 years of IE with us to the Shelby Center. In 2050, one of my successors will no doubt still be communicating with new generations of AU IE alumni from the Shelby Center and will cite those long ago years when we were in Dunstan Hall, just as we now speak of when the department was housed entirely in the Shop Buildings.

Time moves on and we in the department feel fortunate to be here for this undertaking. It is a rare event – one that we have anticipated for years and will savor leisurely. Please join us in saluting Dunstan Hall for its years of service and in welcoming the Shelby Center!

Alice Smith  
Professor and Chair

Visiting faculty member joins ISE

Edgardo Escalante joined the ISE faculty this fall as a visiting professor. He was a professor of industrial engineering at Monterrey Tech in Mexico for 27 years. Escalante received his bachelor's degree in electronics and communications engineering from Monterrey Tech, a master's degree in signal processing from Universite De Rennes in France, another master's degree in industrial engineering from Ohio State University, and a doctorate in management science from Lancaster University in England. A year ago, Escalante spent his sabbatical year at Auburn with his wife Leticia and his three children. This summer, he was brought into the ISE program as a professor. He is currently teaching statistical quality control, probability and statistics, and statistics for biology and health sciences. He is also working with Alice Smith and Jeff Smith in the development of NASA's Academy of Aerospace Quality. Escalante's focuses within ISE are problem solving and quality and productivity improvement through the application of statistics, as well as other methods and techniques such as Six Sigma.

"My family and I are glad to have the opportunity to be in Auburn, working in this excellent university with my exceptional colleagues in the ISE department," Escalante said.

Maghsoodloo retires after four decades of service

If you graduated from Auburn with a degree in industrial and systems engineering, the chance of Saeed Maghsoodloo having taught you is quite high. Unfortunately, for all the current and future undergraduate ISE students, Maghsoodloo has retired from teaching, although he will continue to teach a graduate course this fall. Maghsoodloo taught undergraduate classes for 44 years. He came to Auburn in December 1958 from Tehran, Iran, and started his undergraduate work in January 1959. He received his bachelor's degree in physics in 1962, his master's degree in applied mathematics in
1963, and his doctorate in applied statistics in 1968. Maghsoudloo's main attention was focused on engineering statistics and quality control.

When asked what brought him to Auburn, Maghsoudloo said “…Alabama Polytechnic Institute was the first engineering school listed in a dictionary of all the colleges in the United States at the library of the Iran-American Society. Hence, Auburn was one of the four colleges that I applied to for undergraduate studies.” Unlike most students, after receiving three degrees from Auburn, Maghsoudloo decided to stay in Auburn and began teaching as an instructor for the mathematics department. In spring 1966, ISE was looking for someone to teach two sections of introduction to probabilities. Maghsoudloo was recommended by the math department because he had one course in statistics from the late Norman C. Perry.

Maghsoudloo said, “Perry was so impressed with how intensely interested I was in and how fast I could learn mathematics. As a result, we became good friends.” Maghsoudloo taught in ISE from 1966-1968 when he received his doctorate with Perry as his advisor. After receiving his doctorate, he took an offer from East Tennessee State University, because it was closest to his first wife's home in Montgomery, and it paid substantially higher than all the other offers he had received. After being at ETSU for less than a year, Maghsoudloo received a letter from George Brooks inquiring if he would consider returning to Auburn.

“I did not get a chance to accept the offer, because that night my wife wrote a letter to Dr. Brooks saying that we were returning to Auburn immediately,” said Maghsoudloo. He was asked what kept him at Auburn and Maghsoudloo answered, “I liked my colleagues – especially Dr. Hool whom I have worked with on many articles – and more importantly, the department was becoming more demanding of its faculty due to its evolution from just an undergraduate program to a full-fledged doctoral program.”

Even though Maghsoudloo is retired, he is still on several graduate committees. He intends to honor and complete his membership, but after carrying out his time with them, he and his wife intend to travel abroad. He also still has some difficult research problems that he has not been able to solve, therefore he will continue to work on them. Maghsoudloo said his good memories range from “teaching to working with graduate students, especially assisting my doctoral students to complete their degrees exactly like Dr. Perry did for me.”

Students and faculty receive awards

Volkan Ustun, doctoral student in industrial and systems engineering, recently received the Gene Newman Award for Excellence in Modeling and Simulation Research at the 2007 Modeling, Simulation and Gaming Student Capstone Conference, held at Old Dominion University in Norfolk, Va. Ustun received a certificate, trophy and $100 cash prize. His adviser is Jeff Smith, professor in industrial and systems engineering.

The 2007 Industrial Engineering Research Conference program committee has awarded a paper co-written by Kevin Gue, associate professor in industrial and systems engineering, with the Best Paper Award in the facility logistics track. He joins Tish Pohl and Russell Meller from the University of Arkansas as co-authors of the paper, “An Evaluation of Two New Warehouse Aisle Designs for Dual-Command Travel.” The committee presented the award at a reception held in May at the annual conference in Nashville. In addition, the award was recognized during sessions of the conference.
The Public Risk Management Association (PRIMA) announced that ISE graduate student Adam Piper was named the winner of the 2007 Dr. John Beno Memorial Scholarship. The scholarship included a $2,000 cash award and covered all expenses related to attending the 2007 PRIMA Annual Conference, held in Boston this past June. Piper’s doctoral efforts focus on attempting to improve wordless safety training for a multi-lingual and multi-cultural workforce by involving the workers themselves in its development. He is advised by assistant professor Jerry Davis. PRIMA is a non-profit association offering risk management educational programs, management information and publications to people involved in public sector risk management. This is the second consecutive year that a doctoral student from Auburn’s Department of Industrial and Systems Engineering has been selected for this prestigious honor. Rani Muhdi, was selected last year for his work involving the human performance aspects of evacuation models.

J T. Black, professor emeritus in the Department of Industrial and Systems Engineering, has received the Award for Excellence in the Teaching of Lean Concepts by the Lean division of the Institute of Industrial Engineers (IIE). Black was presented with the award in May at the annual IIE conference in Nashville. Lean concepts lay out a process for improving quality, eliminating waste, reducing time and minimizing cost in order to develop more efficient systems in manufacturing and other processes.

Football and ISE

Brandon Haley is one of the few football players ISE has had over the years. Both his parents being Auburn alums, the College of Engineering, and football drew Haley all the way from Lakeland, Fla. When asked what influenced him to pursue a degree in ISE, Haley said, “I came to E-Day and looked at the different engineering programs Auburn had. I walked into the ISE booth where Dr. Smith asked me if I had decided which engineering field I was interested in. I told her I wasn’t sure. We ate some pizza and here I am.”

Haley began playing organized football in ninth grade and became an Auburn football player in 2003. His favorite football memories include being a part of the Auburn football team during the SEC championship and the Sugar Bowl. However, his best personal experience was playing in his first SEC game against South Carolina.

During football season, Haley has practice six days a week. In the spring and summer, he has conditioning and lifting at 5 a.m. Monday through Friday. Haley described the balance between football and engineering as a challenge. He is going to be the only fifth year senior on the team to graduate with a bachelor’s degree in engineering in quite some time. Haley will also receive a minor in business administration. He hopes to find a manufacturing job in the south when he graduates in spring 2009. “That is the type of job I would like, getting out there and getting my hands dirty. I can’t sit behind a desk and crunch numbers all day; that would drive me crazy.”

When asked who is favorite teacher has been, Haley responded, “I would have to say it’s a three-way tie between Dr. Payton, Dr. Evans and Dr. Davis. All three of those guys are not only extremely knowledgeable about their respective fields, but they also really go the extra mile to make sure students understand the material. I felt like I got the most out of their classes, because they put the extra effort into teaching the material.
Family Connections

One of the most important parts of our lives is our family. So when students from the same family come into the ISE program, the department must be doing something right. To have a family member recommend ISE reaffirms the direction the department is moving. We have father-and-son, brother-and-brother, father-and-daughter, and mother-and-daughter connections. It seems one set of brothers, Brian and Kevin Johnson, were destined to be industrial engineers.

Where are you from?

[Both]: Birmingham, Ala.

What year did/will you graduate from Auburn?

[Brian]: I graduated in spring 2007.

[Kevin]: 2011, hopefully.

What do you want to do with your degree?

[Brian]: I work at Alabama Power Company in Birmingham.

[Kevin]: I hope that my industrial engineering degree will help me to think. An industrial engineering degree will be a versatile degree to have and should help me to excel in any area. I’m not sure exactly how I plan to use my degree, but I know it will have a positive influence on my mindset and approach to problems and situations.

What brought you to Auburn?

[Brian]: The College of Engineering, the campus and definitely the football!

[Kevin]: My brothers definitely played a part in my decision to come to Auburn. I see Auburn as a place of opportunity, and I think that four years in Auburn will provide me with many chances to learn, have an impact, and gain experience in was that I may not be able to do elsewhere.

What persuaded you to get a degree in Industrial Engineering?

[Brian]: The well-roundedness of the industrial engineering curriculum really attracted me. I also really enjoy working with and being around people. I felt that an IE degree would allow me a wide variety of career paths to choose from – and that definitely has been the case!

[Kevin]: As I said, the versatility of the industrial engineering degree really appeals to me. It could be the most people-oriented of the engineering disciplines, and I really enjoy being around people. I know that my personality and desire to meet and develop relationships with people will play a major part in my occupation one day, so the industrial degree seemed like the right fit. The degree also came with high recommendations from Brian!

Do you have any memories of you and your brother working that somehow involve industrial engineering?
[Brian]: Whenever we had a cleaning day at the house when we were younger, Mom would give each of my brothers and me a list of cleaning assignments we had to complete before we were free to go and play. In order for us to get done in a hurry, we would swap different cleaning jobs with each other according to each others' efficiency at each task. This way we could minimize the amount of time until we were free to enjoy the day! We were always trying to figure out the fastest and easiest way to get things done — and hey, for the most part we did quality work!

[Kevin]: My brothers and I were always creators and builders growing up. A rainy day at my house meant a pile of legos and lots of creations. Brian was always at the forefront, and I might attribute a lot of my lego-building success to my brother. Ha ha. Sorry, we don’t have any assembly line optimization experiences together just yet…

Editor’s note: Currently, we have another brother pair, Spencer Mitchell, a freshman in ISE, and Max Mitchell, a May 2007 ISE graduate now with Accenture in Atlanta. We also had two students graduate this year whose fathers were AU IE graduates — Alvin “Brett” Kenerly, May 2007 (father John Kenerly, BIE 1972) and Chase Pelham, August 2007 (father Tom Pelham, BIE 1982).

ISE hosts NSF REU site

Jorge Valenzuela and Jerry Davis were awarded a three-year National Science Foundation (NSF) grant to host a Research Experience for Undergraduates (REU) site in automotive manufacturing systems. The site provides an eight-week summer research experience to ten undergraduate students each year. During this past summer, ten students participated in the program, representing ten different schools: University of Florida, University of Oklahoma, Louisiana State University, University of Saint Thomas, University of Buffalo, Western New England College, Southern Polytechnic State University, University of Iowa, North Carolina State University and Auburn University. Faculty members, graduate students and academic advisor Lu Ann Sims were involved as students’ advisors and mentors. The students worked on automotive research projects related to manufacturing systems such as operations management, computer simulation, occupational safety, ergonomic safety, quality, scheduling, reliability and supply chain

[Image of REU participants with their graduate students and faculty mentors at the closing research poster session]
management. They had the opportunity to observe the growing automotive industry in Alabama by visiting two local automakers, Mercedes-Benz and Hyundai. They were also able to visit a tier one supplier, Mando Inc.

When asked about his experience this summer, Brian Krogsgard, the student from Auburn, said, “I am grateful I had the chance to learn about all the opportunities that the engineering field holds. There are so many possibilities that I did not know about. I greatly enjoyed my experience.” We recently learned that one of our initial REU students, Sean Salvas from Western New England College, intends to pursue his master's degree in ISE at Auburn in fall 2008. Salvas intends to work with Robert Thomas and Jerry Davis in the areas of ergonomics and safety.

ISE Alumni Council

The ISE Alumni Council was formed in 2000 with the purpose to act as the primary source for both alumni and industry input to the activities and plans of the department. The areas of greatest input are:

• **curriculum and instructional activity**: undergraduate and graduate course offerings, content, methods of teaching and learning, relevance to industry, importance and place in the curriculum, technology support of instruction (laboratories, internet, software, etc.); input into the accreditation process (e.g., ABET) regarding curriculum, instruction and graduates.

• **students**: serve as role models; participate in recruiting efforts, especially at the undergraduate level.

• **development and publicity**: broadening the soft money resources of the department; increasing the department’s profile among alumni, industry and peer departments.

The council meets twice a year with faculty and students on Auburn’s campus.

**Current Members:**

W. Coby Frampton, C.M.C. (Chair)
BIE 1970
President, Charles Brooks Associates, Inc.

Marenda C. Caldwell, C.P.E.
BIE 1992
Air Industrial Engineering Manager, United Parcel Service / GA District

Kathryn L. Gardner Caspar
BIE 2001
S&OP Demand Manager, Cooper Lighting

Thomas C. Channell (Tom), P.E.
BIE 1991; MISE 2006
Engineer, U.S. Army Aviation and Missile Command

Timothy P. Cummins (Tim), J.D.
BIE 1992
Associate, Bradley Arant White & Rose LLP

Andrew T. Fischer (Andy)
BIE 1993; MIE 1994
Corporate Safety and Environmental Director, Hager Company
ISE impresses young students

In July, the TIGERs camp for aspiring young engineers came to ISE with a new look. Two TIGERs camps were offered this year, one for middle school and one for high school students. This meant that a more in-depth look at the department was available for the older students, some of which had already had high school chemistry.

With the help of several ISE graduate student mentors, students in both camps were exposed to the parameters and technologies studied in ergonomics. Other stations focused on the physical and chemical properties of metals that are foundational to the research done through the Center for Advanced Vehicular Electronics (CAVE).

Three middle school teachers employed by the ISE department through a National Science Foundation Research Experiences for Teachers grant (Mark Jones, Seth Clark and Rebecca Balkcom) were present to interact with the students and guide them through the stations. Students learned about malleability and melting point and applied this in an introduction to soldering and sweating copper pipes. Their favorite of these physical-properties stations allowed them to make their own copper rings and challenged them to bend a two-centimeter thick, 64/36 solder bar into a knot. In addition, oxidation and dissolution were the subjects of other stations focused on the chemical properties of
metals. While wearing safety goggles, students conducted hydrogen testing after dissolving magnesium in hydrochloric acid. In addition, they looked at the different colors they could make from copper when they heated it with propane torches and made copper oxides.

Finally, the groups were able to try their skills at soldering components together onto a circuit board to make English-style sirens that flashed and wailed. A few of them actually worked!

The Engineering Eagles Society recognizes supporters who donate $1,000 or more each year to Auburn Engineering. There are two membership levels: Engineering Eagles and Associate Eagles. After five consecutive years of membership, Engineering Eagles are recognized in the Dean’s Circle and are invited to a yearly luncheon with the dean to discuss educational trends, the college’s vision for the future and strategic plans to achieve that vision.

The Associate Eagles designation was established to encourage young alumni to become society members. Associate Eagles are required to give $500 each year and may remain at this level until they pass the 10-year mark.

Corporate matching gifts can be used towards membership. For more information about joining the Engineering Eagles Society, contact Heather Crozier at 334.844.1138 or vannhea@auburn.edu.
The construction of the new Sen. Richard C. and Dr. Annette N. Shelby Center for Engineering Technology is progressing steadily, with the completion of the first phase anticipated in fall 2007.

The $108 million complex is the cornerstone of the college’s vision to become one of the top public engineering institutions in the country. The center will enable Auburn Engineering to recruit world class faculty, compete for the best and brightest students, and conduct innovative research.

Phase I will house the departments of Computer Science and Software Engineering and Industrial and Systems Engineering, with Phase II consisting of a new Mechanical Engineering Building and an Advanced Research Laboratory Building. The entire complex will boast modern classrooms, lecture halls and general and specialized laboratories to support a variety of disciplines. Students and faculty from every department will benefit from these technologically advanced facilities.

Sen. Richard Shelby’s efforts helped secure $65 million for the project. In addition to funding from revenue bonds and other university funds, the college is committed to raising $15 million in private support to ensure the completion of the complex.

The support of our alumni and friends for the Shelby Center for Engineering Technology will enable Auburn Engineering to create a progressive learning and research environment that keeps pace with the emerging disciplines of today’s engineering fields.

For more information on contributing to the Shelby Center for Engineering Technology, contact the Office of Engineering Development at 334.844.2736 or www.eng.auburn.edu/shelbycenter.