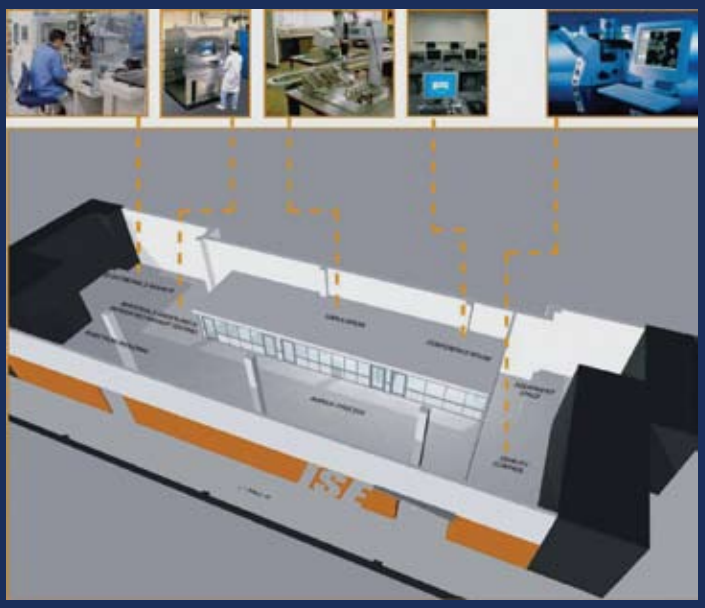
Summer 2008 Newsletter Vol. 5, No.1

Samuel Ginn College of Industrial And Systems Engineering

Manufacturing systems laboratory to advance department research capabilities and serve manufacturing base

The lower level of the Shelby Center for Engineering Technology is earmarked to house the ISE Manufacturing Systems Laboratory, and the department is assembling resources to build and equip this large and important laboratory. The space currently houses the manufacturing processes and metrology laboratories; however, the largest part of the bottom floor remains unfinished.



The objective of the Manufacturing Systems Lab is to provide the facility, equipment and integrated systems necessary to adequately prepare undergraduate and graduate students for work in the manufacturing sector. In addition to education, the lab will provide invaluable support for current and future faculty and student research programs. It will also provide a showcase for educational and research programs within the department and will help in the recruitment of new students, faculty and industry collaborators.

The lab will support five basic teaching and research areas: material handling and integrated manufacturing; inventory control and warehouse management; electronics manufacturing, packaging and reliability testing; quality control and simulation; and factory control. Collectively, the lab will allow ISE to integrate courses with hands-on manufacturing systems experience. It will also act as a significant force in moving ISE research capabilities and activities forward to serve the manufacturing base of the Southeast and beyond.

Again, the layout will integrate these areas:

1. Simulation and Factory Control

The simulation and factory control area will include state-of-the-art computing resources along with commercial simulation software packages and control devices (primarily PLCs). This equipment and software will support undergraduate and graduate simulation courses as well as manufacturing system design courses and a proposed factory control course.

The ISE Manufacturing Systems Laboratory will integrate courses with hands-on manufacturing systems experience and serve the manufacturing base of the Southeast and beyond.

AUBURN UNIVERSITY

2. Inventory Control and Warehouse Management

The inventory control and warehouse management area will include a mini-load AS/RS and several pieces of radio frequency identification (RFID) equipment. In addition to the instructional and research support, the mini-load AS/RS will provide storage facilities for raw materials, work-in-process and production from the other areas of the lab.

3. Electronics Manufacturing, Packaging and Testing

The electronics manufacturing, packaging and reliability testing area will include reliability testing equipment (thermal cycle/shock equipment, temperature and humidity storage equipment), low-temperature molding equipment and advanced packaging equipment (die placement, wire bonding and RFID packaging). It will provide the hands-on equipment and real-world applications to teach electronics manufacturing processes to undergraduate and graduate students. These courses include the entire electronics manufacturing area and provide specific opportunities to teach applied design of experiments, reliability testing, process capability and process control topics.

4. Quality Control

The quality control (QC) area will include precision measurement equipment, vision, laser and X-ray inspection equipment, and material measurement and testing equipment. For electronics and automotive research, it will provide the means to inspect defects from testing operations (such as electronics packaging reliability) and evaluate design and assembly in the manufacturing areas of the lab. Additional equipment will allow for characterization of new manufacturing materials (such as polyamide moldings) and existing materials (such as solder wetting balance). It provides inspection equipment for gauge R&R studies and measurement for DOEs throughout all manufacturing process labs and will be used to support the Six Sigma certification process.

5. Material Handling and Integrated Manufacturing

The material handling and integrated manufacturing area will include conveyor equipment, robotic equipment and table-top processing equipment. Students will be able to use the equipment in either a stand-alone mode or as an integrated system. As such, the area will support a wide-variety of courses, from manufacturing processes and material handling courses to manufacturing systems and lean manufacturing courses. Within this lab, students will be able to learn hands-on programming and applications for robotics manufacturing, assembly and materials handling. This training cell will include applications for flexible manufacturing systems. In addition to robotics, this facility will have the ability to evaluate the impact of setup time reduction and design of the manufacturing environment. When integrated, manufacturing materials can be explored.

Because the department sends approximately half of its graduates to manufacturing enterprises for permanent employment, Auburn ISE has made manufacturing a growing component of its curriculum. The growth in this sector for Alabama has been fueled primarily by the rapid expansion in automotive manufacturing. The state's automotive sector includes five OEM plants and more than 250 tiered suppliers supporting these large plants, all developed within the past 10 years. While the focus remains on the vehicle assembly process, the tiered supplier base generally employs more individuals than the assembly plants and involves a broader set of industrial engineering-related topics.

The estimated construction cost to establish and outfit the space is approximately $500,000. A number of resources needed for the construction of this lab are in place, but the department still requires additional alumni support and funding to turn the space into a hands-on, state-of-the-art laboratory for ISE students.

For additional information related to financial support and naming opportunities, please visit: **www.eng.auburn.edu/admin/development/make-a-gift.html**

Message from the department chair

We are nearly settled in our new home in the Shelby Center. Some photos of the complex are included in this newsletter and you can see how different the environment is from Dunstan Hall and the Shop Buildings. If you visit Auburn, please stop by — the Shelby Center is on Magnolia Avenue, just west of Dunstan Hall and just east of the Lowder Business Building. It is an impressive building. We are located primarily on the third floor of the complex's west wing. Our students are delighted with the light-filled, spacious rooms, which are mostly equipped with new technology. Our laboratories (safety, ergonomics and work measurement, metrology, manufacturing processes, electronics manufacturing and computing) are vastly improved and allow our students more hands-on activities relevant to their ISE education. One piece remains — the large, now unfinished, lab space on the bottom floor, which is earmarked for the ISE Manufacturing Systems Laboratory. The space will complete our mission to have state-of-the-art facilities for learning and research in manufacturing systems. To complete construction of this lab, we are in need of support and donations from alumni, friends and corporations.

Alice Smith, ISE department chair, with May 2008 graduate Alvin Weaver, his mother and father.

While facilities are important, our primary mission and product is our students. ISE enrollment continues to rise — we now have over 180 undergraduates and 100 graduate students. Moreover, the academic quality of our students is high. We currently have 34 students on academic scholarships. Among our incoming pre-ISE freshmen for fall 2008, we have 20 academic scholarship holders, including one recipient of a Presidential Scholarship and one with a National Achievement Scholarship. E-Day 2008, held on Feb. 29, was a resounding success with more than 2,000 students, parents and educators attending. ISE gave tours of our new facilities in Shelby Center along with the popular displays we have in Foy Union.

This edition of the ISE newsletter recognizes an important component of our graduate student body — our outreach (off campus) students. At the graduate level, we have students from around the world including six Korean military officers. We are especially proud of our outreach students as their challenges for learning and degree completion are steeper than on-campus students. Our outreach students truly embody the Auburn creed.

Alice E. Smith

Graduate rankings improve nationally

Auburn ISE's graduate program was recently ranked 21st nationally by the 2008 U.S. News and World Report. This ranking is an improvement from 27th nationally in 2007.

New endowment founded

ISE alumnus Thomas D. Senkbeil '71 has established an ISE Fund for Excellence through a generous endowment. Senkbeil, an Atlanta area resident, is the chief information officer of Post Properties, Inc. Earnings from this fund will be used for student and faculty support, scholarships, fellowships and equipment.

ISE Alumni Council members needed

Several positions for the ISE Alumni Council will be open starting in fall 2008. Interested alums should contact Alice Smith (**smithae@auburn.edu**) with a brief overview of past and current professional experience, current location or residence and year of graduation. See the link below for more information regarding the roles and duties of the council. **http:/www.eng.auburn.edu//programs/insy/alumni**

Seminar series attracts speakers nationwide

As in previous years, the 2008 ISE graduate seminar series has been active and dynamic. The department has hosted academics, industry leaders and governmental specialists who have spoken with our students and faculty on technical or societal issues. Some of the speakers for this academic year include:

Cohen

Massey

Candi Yano, University of California - Berkeley

Paul Cohen, North Carolina State University

John Calvert, U.S. Patent and Trademark Office

Bob Rummer, U.S. Forest Service

Joe Pinatiello, Florida State University

Michael Park, Mackenzie Inc.

Phil Farrington, University of Alabama - Huntsville

Bill Massey, Princeton University

Ron Askin, Arizona State University

Shabbir Ahmed, Georgia Tech

Michel Boudin, Lean Manufacturing Consultant

Gunter Sharp, Georgia Tech

Harriet Nemhard, Penn State University

Michael ten Hompel, Fraunhofer Institute

Through the generous donations of alumni, corporations and friends, ISE has benefited greatly in 2007. Below are the donors to the various ISE gift funds and endowments, which include scholarships, funds for excellence and unrestricted gifts. The students and faculty of ISE would like to thank each donor for their support!

Donations up to $99

Mr. Justin Paul Allred '05
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Mr. Thomas D. Senkbeil '71

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Lockheed Martin Corp.
Minnesota Mining Manufacturing
Nike Employee Matching Gift
PACCAR Foundation
Southern Company
Temple Inland Foundation
Wachovia Educational Foundation

Student Highlights

Maj. Rick Bell (right) with Gen. David Petraeus in Iraq. Bell has been selected by the U.S. Army to attend Auburn University for his ISE doctorate. He will begin classes in August. Bell has a bachelor's degree from the U. S. Military Academy and a master's degree from Georgia Tech.

Alpha Pi Mu, the ISE honorary society, inducted 22 new members at its April ceremony. This is the largest group to be inducted in recent history. Alpha Pi Mu is advised by professor Rob Thomas.

E-Day 2008

ISE graduate student Dumakas Snipes tells prospective students about Auburn ISE.

Along with the displays and demos, ISE offered tours of new facilities and labs in the Shelby center. ISE doctoral student Bobbie Watts demonstrates an ergonomic analysis tool.

ISE undergraduates Kevin Johnson, Jill Hodges, Candi Clark and Siobhan O'Reilly volunteered to speak with visiting students about ISE and life at Auburn.

Team members earn OSHA Safety Cards

Team Members

Standing: Matthew Thomason (Concrete Canoe), Steven Crace (ChemE Car), Ryan Whaley (Concrete Canoe), David Graham (Concrete Canoe)
Seated: Amar Tiwari (ChemE Car), Josh Connell (Sol of Auburn), Haley Allen (Student Launch Initiative) and Mohammad Biswas (ChemE Car)

Members from five College of Engineering student teams recently completed their Occupational Safety and Health Administration (OSHA) 10-hour, general industry training requirements.

In order to participate on a student team sponsored by the College of Engineering, Dean Larry Benefield requires that each team member undergo mandatory basic safety training related to the construction, transportation or demonstration of the project on which they have volunteered to work. The training, which varies based on the complexity and nature of each individual team's project, ranges from approximately one to eight hours and is available whenever team members desire to take it online.

"When we first created the training and offered it to the teams, most folks realized the necessity for it but also saw it as an additional requirement," said Jerry Davis, project coordinator. "To sweeten the pot, we realized that most of the topics required for the OSHA 10-hour card were already being taken by the students. Therefore, we added a couple of additional modules to satisfy OSHA requirements and put those up on the project Web site for students to complete, if desired."

The goal of the project is to train each engineering student team member in the nature of on-the-job safety and hazard recognition. These eleven students represent the first in what Davis hopes will be a long line of OSHA card recipients. "While the OSHA 10-hour card provides students with a valuable resume builder, there's no way to measure the value of increasing safety awareness for dozens of future engineers every year," said Davis.

Watts awarded Humantech Scholarship in Ergonomics

Watts

Humantech Inc. of Ann Arbor, Mich., announced in December 2007 that doctoral student Bobbie Watts has been awarded one of three scholarships by the 2007 Humantech Scholarships in Ergonomics. The award is intended to encourage college students who are studying ergonomics or related fields and provide incentive and career motivation in practical applications. Watts holds a master's degree in industrial and systems engineering from Auburn and a bachelor's degree from Clemson University. She is a certified professional ergonomist and worked as a human factors engineer for UPS and as a consultant to the U.S. Postal Service. She is currently conducting research that incorporates manual material handling ergonomics concerns into operation research-based scheduling in warehousing operations.

Patterson named 2008 ISE Outstanding Student of the Year

Chris W. Patterson was selected as the 2008 Industrial and Systems Engineering Outstanding Student of the Year. From January to May 2005, August to December 2005, and May to August 2006, Patterson worked as a manufacturing engineering co-op student at Kaydon Custom Filtration Corporation of LaGrange, Ga. He worked in the manufacturing engineering and research and development departments; completed time studies and statistical process analysis; led equipment acquisition and implementation projects; managed product development and testing projects; and worked in process improvement efforts. Patterson was also able to work as a 3-D drafter for the company part time while attending classes.

Patterson

Since May 2007, Patterson has been an undergraduate research assistant to faculty member Jeffrey Smith. As a research assistant, Patterson has built and performed statistical analysis with simulation models as part of the Center for Advanced Vehicle Electronics (CAVE) project.

Patterson's honors include memberships in Tau Beta Pi national engineering honor society and Alpha Pi Mu industrial engineering honor society, of which he is president. He is also the president of Auburn's Institute of Industrial Engineers (IIE) chapter. In spring of 2007, Patterson was selected as a recipient of the inaugural Joe Forehand Leadership Scholarship.

Patterson is a senior with an overall 3.53 GPA and has completed coursework for a Spanish minor. He is a resident of Vestavia Hills, Ala.

Murugesan named Outstanding ISE Master's Student of the Year

Vijay Murugesan has been selected as the 2008 ISE Outstanding Masters Student of the Year. Murugesan is a dual MBA/MISE candidate and plans to graduate in December 2008 upon completing both degrees.

Murugesan

Murugesan joined Auburn University in fall 2006. Since his arrival, he has been a teaching assistant to faculty member LuAnn Sims for introduction to industrial engineering and a research assistant to John Evans in the CAVE program. He enjoys working with potential undergraduates and being involved in the cutting-edge research taking place at CAVE. His current research interests include work with Evans on automotive technology and the implementation of RFID technology in manufacturing facilities.

Murugesan has worked as an industrial engineer for Wallenius Willhelmsen Logistics, a logistics provider for the automotive industry. Murugesan was born in the south Indian city of Coimbatore. He spent his early childhood in Mumbai before moving around the world to the Caribbean island of Curacao, where he lived for 12 years and still calls home. He has a bachelor's degree in industrial engineering from Purdue University.

Muhdi named Outstanding ISE Ph.D. Student of the Year

Muhdi

Rani Muhdi was recently selected as the 2008 Industrial and Systems Engineering Outstanding Ph.D. Student of the Year. Muhdi has worked on interdisciplinary projects that involve human factors, occupational safety, ergonomics, work measurement and simulation modeling applied to areas such as manufacturing, healthcare and education. His research primarily involves the study of occupants' physical and psychological characteristics in emergency evacuation and the application of simulation modeling to building layout design.

Muhdi's dissertation focused on the development and representation of occupant performance data in evacuation modeling. He recently defended his doctoral work and graduated on May 10. He has accepted a tenure-track faculty position starting summer 2008 in the Engineering Management and Systems Engineering Department at Old Dominion University in Norfolk, Va. He was advised by faculty member Jerry Davis.

Spotlight on Outreach

Auburn ISE has long had an outreach (off campus) graduate program that attracts working professionals who desire a flexible and academically rigorous master's program in industrial and systems engineering. Unlike many other off-campus programs, Auburn's is the same as the on-campus program — with the same instructors, classes, timetables and degree requirements. In fact, some students combine both methods — coming on campus during some terms and remaining off campus some terms. Now, it is possible to work towards a doctorate in the off-campus program.

Smith

The ISE graduate classes on campus are taped in classroom studios and transferred to streaming video on the Internet (or DVD, if the student prefers). Outreach students view classes and interact with faculty, teaching assistants and fellow students by Internet, phone and the occasional on-campus visit, if their schedule allows. Outreach students typically take one to two classes per term. For the spring semester, there are 27 outreach students enrolled in the program. Among those are a number of military officers, including several stationed overseas in locations such as Iraq and England. Below are profiles of several current outreach students, which will provide an appreciation of the breadth of the program.

Ginger Smith (Washington, D.C. area) I accepted a position at Lockheed Martin as part of their Operations Leadership Development Program. After learning and growing within this aerospace company, along with my degrees in policy and communication, I realized the necessity of knowing intricacies surrounding systems from all angles. Working with engineers on a daily basis is one thing, but to have a working knowledge of the product from design to completion puts me on an entirely different level of competitiveness and company value. I made the decision to pursue a master's degree in systems engineering last fall and began attending weekend classes at another university. I was not impressed by the program or interaction I had with staff and students. I later searched other recommended programs that fit my constant travel schedule and expectations, which made Auburn the clear choice.

Hill

Nicole Hill (England) I am currently a maintenance officer in the U.S. Air Force stationed at Royal Air Force Mildenhall in the United Kingdom. My work deals with ensuring that aircrafts are available and equipped for any mission they may be given. We work with C-130

aircrafts in the Special Operations Command. I studied basic sciences as an undergraduate at the U.S. Air Force Academy and first gained interest in operations research when I took an introductory operations research class as a senior. The Air Force is putting a lot of impact on LEAN, and I find it very interesting and rewarding to make processes more efficient. When I started researching where I should get my degree, Auburn came to the forefront of the competing colleges as far as convenience as an outreach student and value of the education.

Warren

Josh Warren (Newton, Ga.) I'm happy to be participating in Auburn's Graduate Outreach Program. I am a 2000 graduate of Valdosta State University and have been managing an analytical chemistry laboratory for an ecological research facility since that time. My post-Auburn plans are to work in the pharmaceutical, biotech or renewable energy industries. In my spare time, I enjoy a variety of outdoor activities including fishing, golf and nature exploration.

Barnes

Jeremy Barnes (Huntsville, Ala.) I earned my bachelor's degree in mechanical engineering at Auburn University and my master's degree in management technology from the University of Alabama in Huntsville, with part of my coursework coming from Harvard University. In addition, I have also earned my black belt in Six Sigma. I am currently working on my doctoral degree at Auburn University in the Department of Industrial and Systems Engineering while employed with the MITRE Cooperation in Huntsville. My role is to act as a government defense contractor to the Missile Defense Agency's (MDA) Terminal High Area Altitude Defense (THAAD) Program. Prior to the assignment in Huntsville, I spent almost three years in the Boston area working on the THAAD Radar with Raytheon. I have chosen Auburn University for my doctorate due to the outstanding education I received during my undergraduate studies, the pride I take in the school and the opportunities that I know Auburn can provide as an alumni. War Eagle!

Ike Stutts talks with head football coach Tommy Tuberville on the coach's recent tour of military bases in the Middle East.

Ike Stutts (at sea) I am a lieutenant in the U.S. Navy, currently assigned as the assistant air officer and deployed overseas onboard the USS NASSAU (LHA-4). I fly SH-60B helicopters for the Navy, but am currently working for the ship directing and controlling Navy and Marine Corps aircraft into and around the shipboard environment. Working for me are 150 young men and women who are inspiring in their work and tenacity, while operating in what has proven to be a very challenging environment. I have been enrolled in Auburn's MISE Outreach program since fall 2005. I plan on graduating in summer 2008 and am focusing on safety and how it pertains to the aviation-shipboard environment. Out of high school I applied to two institutions, the United States Naval Academy and Auburn University. I chose the Naval Academy because of a childhood dream to be a pilot and graduated in 1999 with a degree in systems engineering. I've never regretted that decision, but when it came time to pursue my graduate degree there was only one logical choice, Auburn. I chose Auburn in hopes of becoming a third generation graduate. War Eagle!

Karlan

Marsha Karlan (Byron, Ga.) I graduated from Georgia Tech with a bachelor's degree in chemical engineering. Upon graduation, I entered active duty as an Air Force officer. I currently specialize in the engineering and sustainment of the F-15. I am pursuing a master's degree at Auburn because I would like to learn more about optimization and operations research. Application of the tools from these areas of study will allow me to give the warfighter the best options available. I also hope to use it in future opportunities in the Air Force, particularly in the Space Command. In researching universities for the next level in my education, I was interested in the array of research conducted by faculty at Auburn. I look forward to learning from the professors and students within Auburn's industrial and systems engineering community.

Semrau

Nolan Semrau (Edwards AFB, Calif.) – I am originally from the Chicago area, and I have a bachelor's degree in mechanical engineering from Iowa State University. I am an active duty Air Force officer stationed at Edwards Air Force Base, Calif., currently working with the Global Hawk Unmanned Aerial System. I chose Auburn University because I want to further my knowledge base by extending out to other degree programs. There are not many dual programs available nationwide to distance students, but Auburn offers the MBA/MISE program, in which I am enrolled. I hope to pursue a career in program management, and I look forward to my time working with faculty, staff and students at Auburn University.

Faculty Briefs

Wade joins Auburn ISE department

Wade

Lloyd "Chip" Wade has accepted the position of visiting assistant professor with the ISE department. Wade has an excellent educational background with degrees from Auburn University, University of West Florida and University of Georgia. He has held academic appointments at University of Pittsburgh and Mississippi State University.

Wade's research focus is in biomechanics, occupational injury prevention and occupational safety and ergonomics (OS&E). His duties will include teaching portions of graduate level OS&E courses including INSY 7070 (Ergonomics II), INSY 7080 (Human Factors Engineering) and INSY 8060 (Advanced Ergonomics); writing extramural research proposals and conducting related research; and serving as co-director of our OS&E laboratories. As laboratory co-director, he is responsible for set up and operation of equipment, training of graduate students and providing guidance to students who utilize the labs in their research activities.

His most recent experience as director of research of the Andrews Institute in Florida will enable many potential sponsored research opportunities. Before moving into academia, Wade was a professional baseball player with the Minnesota Twins organization. He is a certified professional ergonomist.

Management at Generac Power Systems recreated Gue and Meller's non-traditional, diagonal aisle design in a Whitewater, Wisc., warehouse.

Generac Power Systems incorporates aisle design

Faculty member Kevin Gue and colleague Russ Meller from University of Arkansas are pleased to announce what they believe is the first implementation of non-traditional, diagonal aisles in a warehouse. The warehouse, owned by Generac Power Systems, is located in Whitewater, Wisc. The warehouse stores finished goods (generators and switches) from several Generac plants and contains 200,000 square feet of warehouse space. During the design phase, managers at Generac saw Gue and Meller's work in a trade publication and attempted to recreate it. Six months later, it was completed. Managers and workers at Generac are pleased with the results. Gue and Meller visited the site in February and hope to announce more implementations of their design in the near future.

Visiting scholar from Germany joins department

Marc Schleyer is spending 2008 with Auburn ISE studying with faculty member Kevin Gue. Schleyer is sponsored by the German Research Foundation and will be teaching a special topics course on supply chain analysis during fall term.

Schleyer

"I'm an industrial engineer from the University of Karlsruhe, Germany, and I got my doctorate in 2007," said Schleyer. "I'm interested in stochastic modeling of logistic systems. Logistics is a highly competitive business, supplying customers with materials and products from all over the world on time. Companies of every industrial sector recognize that high customer service levels give them a competitive advantage."

After his research work at the University of Karlsruhe, Schleyer started a research project entitled "Modeling of Picking Systems in Warehouses Using Discrete Time Queuing Models" at Auburn.

"I hope that I can develop some interesting models which give new insights to the research community and are useful for industrial practice," said Schleyer. "My aim for this year is to submit two articles to international journals. Furthermore, I look forward to teaching a course at Auburn. I will teach analytical approaches which enable students to understand the complex behavior of supply chains. The class should provide students with a helpful tool for their careers in industrial practice."

Park accepts affiliate professorship

Woojin Park has accepted the position of affiliate professor. Park is an expert in the field of biomechanics and has a doctorate from the University of Michigan. He was previously an assistant professor of industrial engineering at University of Cincinnati. Park is currently in South Korea, his native country, on a 24-month civil service appointment. As an affiliate faculty member, he will contribute to the National Institute for Occupational Safety and Health-funded Center for Occupational Safety and Ergonomics as well as educational efforts in the areas of human factors, ergonomics, biomechanics and safety. He will also make contacts with Korean industry, particularly the automotive industry, to further research efforts in the human aspects of automotive manufacturing. Though he is in South Korea, he will interact with Auburn faculty and students via e-mail, phone calls and other means.

Park

Alumni Updates

Olson named Outstanding Young Engineer of the Year

John Olson, a 2003 doctoral graduate, has been named the 2007 Outstanding Young Engineer of the Year by the College of Engineering. Olson is the Exploration Transition Manager in the Exploration Systems Mission Directorate (ESMD) at NASA Headquarters in Washington, D.C. He is responsible for directing, integrating and coordinating all exploration transition activities, processes, plans, organizations, structures and studies in support of the largest transition in NASA history. He serves as the senior manager and strategic advisor for space operations and exploration systems transition and integration, rapid transition and mission scenario planning.

John Olson (second from left) receives the Distinguished Young Engineer Award at the Alumni Council's November Awards Banquet.

Olson holds a bachelor's degree in engineering sciences and mechanical engineering from the U.S. Air Force Academy; a master's degree in materials science and engineering (with research on high temperature composite materials) from the University of Illinois at Urbana-Champaign; a master's degree in aviations systems (human factors and avionics emphasis research on composite mishap risk control) from the University of Tennessee Space Institute; and a doctorate in industrial and systems engineering (occupational safety and ergonomics focus) from Auburn. His dissertation was entitled "Tactile Display Landing Safety and Precision Improvements for the Space Shuttle." His dissertation research won the Young Investigator Award at the 75th Annual Aerospace Medical Association Technical Symposium in 2004.

Olson was elected to Alpha Pi Mu, the industrial engineering honor society in 2003. He is a veteran, having served during the Gulf, Bosnia/Kosovo, Afghanistan and Iraq conflicts. Olson and his family currently reside in Arlington, Va.

Amos named Alumnus of the Year

Amos

Richard Amos has been named the department's Alumnus of the Year for 2008. Amos recently completed a 25-year career as a civilian manager with the U.S. Army. In January 2008, he became chief operating officer of the COLSA Corporation. COLSA provides system engineering and information technology services to NASA and Department of Defense agencies in five states.

Amos was the deputy to the commanding general for the U.S. Army Aviation and Missile Command (AMCOM) at Redstone Arsenal. In this position, he was responsible for a workforce of more than 10,000 military and civilian employees, providing logistics, production and maintenance support to Army Aviation and Missile units deployed around the globe. His organization provided logistics and maintenance support in 26 states and 10 countries and operated large production facilities in Texas and Pennsylvania as well as maintenance operations for more than 400 helicopters at Ft. Rucker, Ala.

Amos holds a bachelor's degree in industrial engineering from Auburn, a master's degree in engineering management and a doctorate degree in systems engineering from the University of Alabama in Huntsville.

Amos is a native of Huntsville. He and his wife, Joyce, have two children, Christina and Katherine, both students at Auburn University. Christina is a current student in industrial and systems engineering.

The Shelby Center for Engineering Technology

The Shelby Center's west wing overlooks the Kingsley Portico and Courtyard.

The electronics manufacturing lab features the latest in new equipment and technology. Doctoral student Tao Zhang solders in the lab using tools available to students.

Student lounge spaces are available to all ISE students.

Computer labs are spacious and accessible.

Faculty member Emmett Lodree teaches a class in the Shelby Center.

Pursuing the vision for Auburn Engineering

Achieving our vision to become one of the top engineering programs in the country is always in our sights, and the college has set an ambitious vision goal of raising $153.5 million that will move Auburn Engineering to the next level of excellence. Our generous alumni and supporters continue to play a vital role in our pursuit of these efforts, even as we have met our goal in the "It Begins at Auburn" campaign.

Reaching this vision goal will provide benefits that can be seen in a number of outcomes. For example, your gift will fund professorships, which are critical for attracting talented faculty. They will also support scholarships that help us recruit the best and brightest students, as well as fellowships, which enable us to attract exceptional graduate students.

Help this generation of students realize their potential. Your support has never been more important as the college works to maintain its competitive edge. For more information on giving to the Samuel Ginn College of Engineering, visit **www.eng.auburn.edu/givenow/**.

The ISE Newsletter is published by the Department of Industrial and Systems Engineering. Mailing and e-mail address changes, news items and suggestions should be sent to 3301 Shelby Center, Auburn, AL 36849-5346.

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