Message from the Department Chair

Let me share with you the exciting and wonderful events that occurred during the past 2013-2014 academic year.

Student enrollment increased again this year. Our undergraduate enrollment in fall 2013 grew from 289 to 317, while the graduate enrollment was similar to previous years with 64 master’s students and 57 doctoral students. We continue to develop strategies to provide our students with the best educational experience in the country. I am glad to report that in the past academic year, we awarded 55 bachelor’s degrees, 43 master’s degrees and eight doctoral degrees.

We have taken another step toward the goal to significantly expand manufacturing education at Auburn and build the premier center for vehicle manufacturing in the Southeast. A planning grant was awarded to our department by the National Science Foundation to develop a center for vehicle manufacturing with Tennessee Technology University and the University of Alabama in Huntsville. Read more about this effort on page 6.

Furthermore, our Occupational Safety and Ergonomics and the Occupational Injury Prevention programs achieved accreditation status.

I am happy to welcome our newest addition to the ISE faculty, Andres Carrano. He is profiled in the department updates section of this newsletter.

Our faculty members were again recognized for excellence in their fields. You can read about the multiple awards they received inside the newsletter. Imagine my excitement when I received the news that our team of five young ladies, ISE Ergo Divas, won the 7th Annual Ergonomics Design Competition for Student Teams.

I invite you to continue reading this newsletter to learn more details about the achievements of our faculty, students and alumni.

War Eagle!

Jorge Valenzuela
Department Chair

DEPARTMENT UPDATES

Andres Carrano joined the department as the Philpott-West Point Stevens associate professor. He comes to Auburn from the Rochester Institute of Technology in New York where he founded and directed the Toyota Production Systems Laboratory. Carrano will be teaching manufacturing classes and assisting with development of the Tiger Motors Manufacturing Lab, also known as the Lego Lab.

Richard Sesek was promoted to associate professor and was granted tenure.

Alice Smith and Jerry Davis were on sabbatical leave during the spring 2014 semester.

The Industrial and Systems Engineering Seminar Series exposes graduate students to current research and applications of industrial and systems engineering. Held every semester, the seminar series features speakers who include fellow graduate students and Auburn professors, industrial engineering faculty from peer universities, as well as practicing engineers and consultants.

Fall speakers included:

- **Andres Carrano**, Auburn University’s Department of Industrial and Systems Engineering, Philpott-WestPoint Stevens associate professor
- **Virginia A. Davis**, Auburn University’s Department of Chemical Engineering, Mary and John H. Sanders associate professor
- **Kimberly Ellis**, Virginia Tech’s Grado Department of Industrial and Systems Engineering, associate professor
- **Steve Lavender**, The Ohio State University’s Departments of Integrated Systems Engineering and Orthopaedics, associate professor
- **Tae-Eog Lee**, Center for Excellence in Learning and Teaching in KAIST, South Korea, director
- **Fadel M. Megahed**, Auburn University’s Department of Industrial and Systems Engineering, assistant professor
- **Mike Ogle**, UNC Charlotte’s Department of Systems Engineering and Engineering Management, assistant professor
- **Richard Sesek**, Auburn University’s Department of Industrial and Systems Engineering, associate professor
- **Sean Gallagher**, Auburn University’s Department of Industrial and Systems Engineering, associate professor
- **Onur Uludag**, Auburn University’s Department of Industrial and Systems Engineering, doctoral candidate
- **Hulya (Julia) Yazici**, Florida Gulf Coast University’s Information Systems and Operations Management, associate professor

Spring speakers included:

- **Kunter Akbay**, GE Global Research Center, principal engineer
- **Saad Biaz**, Auburn University’s Department of Computer Science and Software Engineering, associate professor
- **Marc Goetschalckx**, Georgia Institute of Technology’s H. Milton Stewart School of Industrial Engineering, associate professor
- **Mauricio R. Henriquez**, Universidad Austral of Chile’s Computing Engineering School, professor
- **Mary Beth Kurz**, Clemson University’s Department of Industrial Engineering, associate professor
- **Seyedamirabbas (Amir) Mousavian**, Auburn University’s Department of Industrial and Systems Engineering, doctoral candidate
- **William (Bill) Taylor**, Economic Development Partnership of Alabama, executive director and Mercedes-Benz US International, former CEO
- **Janis P. Terpenny**, Iowa State University’s Industrial and Manufacturing Systems Engineering, department chair and Joseph Walkup professor

We are always looking for engaging speakers who are willing to share their industrial engineering experience with graduate students. If you would like to be a speaker or are interested in sponsoring the series, please send an email to Jorge Valenzuela at valenjo@auburn.edu.
2014 IIE student chapter earns silver award

The student chapter of the Institute of Industrial Engineers (IIE) promotes an increased knowledge of the profession of industrial engineering in light of academic, social, and professional advancement, as well as a greater utilization at the student level of the principles and procedures of the field of industrial engineering. This year the student chapter again earned the silver award by sponsoring tutoring sessions, holding regular meetings and social events, and attending regional and international IIE conferences. LuAnn Sims is the faculty advisor.

2014 slate of officers includes:

President: Caroline Vasquez
President Elect: Michaela Merold
VP of Membership: Carli Schilleci
VP of Development: Meredith Gerlach
VP of Finance: Nick Wilson

New student chapter INFORMS

This spring a committee of students led by Amanda Chu and advised by Chase Murray formed the Auburn student chapter of the Institute for Operations Research and the Management Sciences (INFORMS). The first meeting of the newly formed organization will be held in September.

Greatest show at MODEX

The department was well represented at MODEX, “The Greatest Supply Chain Show on Earth,” in Atlanta this spring. The MODEX show is designed to offer supply chain efficiency solutions, learning opportunities and information by showcasing the products and services of more than 800 leading providers. Fifty-one students and three faculty members attended.

Senior design teams partner with companies

The formal end of undergraduate education is the commencement celebration; but, the informal end for ISE students is Senior Design. In this project-oriented class, teams of five to seven students work in partnership with local companies to solve real-world problems faced by the business partners. Senior design teams employ the Define, Measure, Analyze, Improve and Control (DMIAIC) Six Sigma structure as a guide for their projects and apply what they have learned during their four years of formal coursework. Students share their results with the Industrial and Systems Engineering Alumni Council during an informal poster discussion and then formally present their solutions to their partnered company.

This year’s project teams worked with Avery-Dennison’s Peachtree, Ga. plant, CoachComm, Donaldson’s Auburn plant, General Electric’s Pensacola, Fla. plant, Department of Dermatology at the Kirklin Clinic of UAB Hospital, Lee County Humane Society, MasterBrand Cabinets, Neptune Technology Group and the ISE Tiger Motors Manufacturing Lab.

From left: partnering with the Kirklin Clinic Department of Dermatology, senior design team members Preston Jones, Sarah Beth Wood, Megan Lewis and Audrey Branyon speak informally with alumni council members Victoria Jordan ‘87, ’06 and Clyde Willis ’68. Team member Jessica Belue is not pictured.
New members join honor society

Auburn’s chapter of Alpha Pi Mu, the industrial engineering honor society, inducted members on March 20 in the University chapel. Congratulations to these new members!

Yousif Abulhassan, graduate student
Robert Aid, senior
Nicole Furno, junior
Ana Gauthier, senior
Bess Glanton, junior
Vinod Govindhan, graduate student
Gang Hao, graduate student
Saman Lagzi, graduate student
Alexander Lechleiter, junior
Donghuang Li, graduate student
Shaomao Li, graduate student
Samrat Pandey, graduate student
Thelma Quansah, graduate student
Claire Schmidt, senior
Philip Searcy, junior
Sam Selvaraj, graduate student
Borga Usifo, graduate student
Evan Venable, junior
Cady Wilson, junior

Professor Fadel Megahed advises Auburn’s chapter of Alpha Pi Mu. Officers for 2014-2015 are:

President: Yousif Abulhassan
Vice president: Amanda Chu
Treasurer: Evan Venable
Secretary: Claire Schmidt
E-Council Representative: Nicole Furno

Study abroad in Chile program

The second annual Engineering Study Abroad in Chile program in International Logistics accomplished its mission again this year. In the first summer mini semester, eight engineering students enrolled in the study abroad program and expanded their understanding of Chilean culture, made new friends, toured four companies, attended lectures, practiced Spanish, swam in the Pacific Ocean, dune surfed and received credit for a course in International Logistics at the Universidad Técnica Federico Santa María. “A spontaneous decision to enroll in this study abroad program resulted in one of the most enriching experiences I have had through Auburn University,” said Molly McCartney, senior engineering student. Carl Register, industrial management ’63 alumnus, provided a portion of the funding for this program.

Terminal Pacifico Sur Valparaiso industrial engineers (in neon yellow) give an educational tour of the port to, from front left, Molly McCartney, Katie Gauthier and Jessie Sackett, from back, Anna Smith Bradley, Derek Jones, Becca Menke, Nicole Furno, Chago (an engineering student/tutor from the University of Southern Mississippi) and Suzanne Crisanti.
Dunstan Hall was razed this spring as a part of the Comprehensive Campus Master Plan. Built in 1959, the building was the first completely air conditioned building on campus. While Dunstan Hall brings back memories to engineering faculty and students of several generations, it was not considered a viable renovation project. The vacated space has been landscaped with sod, shade trees and shrubs.

Dunstan Hall undergoes demolition this spring.

Green space creates a quiet space along the Samuel Ginn Concourse where Dunstan Hall once stood.

E-day offers an opportunity to share information about an ISE education with middle and high school students. Faculty and student volunteers informally visit with students and their parents, answer questions about Auburn engineering and discuss potential careers for ISE graduates. This spring 3,000 students and teachers representing 21 states attended E-day.

Smith presents research in South America

Alice Smith visited the industrial engineering department of the Pontifical Catholic University of Valparaiso, Chile to discuss research collaborations on facilities design for the wine industry. She also visited the University EAFIT (School of Management, Finance and Technology) of Medellin and the University of the Andes in Colombia to conduct short courses and to discuss future research collaborations. Smith commented, “There is a lot of potential for Auburn University to collaborate in industrial engineering with South America and especially with Chile and Colombia which have multiple, high quality IE programs.”

Alice Smith gave a research seminar and an overview of Auburn University during her visit to South America.
John Evans is leading an intercollegiate team to establish the Southern Alliance for Advanced Vehicle Manufacturing. Endorsed by more than 40 companies in manufacturing and the government, as well as the automotive manufacturing associations in Georgia, Alabama and Tennessee, the Alliance aims to provide support for the unprecedented expansion in vehicle manufacturing in the South. The Alliance is planned as a National Science Foundation (NSF) center with industry-driven, multidisciplinary research conducted by university faculty and students. The team’s planning grant proposal was recently funded by the NSF.

Evans and a committee of Auburn engineering faculty members are working with colleagues from Tennessee Tech University and the University of Alabama in Huntsville to establish the center. During a planning meeting at Auburn in May, educational and industry representatives provided input for the development of the center. Presenters included Rick Walker, president of the Georgia Automotive Manufacturers Association; Ron Davis, president of the Alabama Automotive Manufacturers Association; and Paul Coker, president of the Alabama Aerospace Industry Association.

“We would utilize the expertise and facilities of each university for the benefit of our industry partners,” said Evans. “They will gain real dollar savings by applying the research into their manufacturing processes.”

In addition to benefits to industry, students would also reap the benefits of the center. “Students will gain experience with real-world manufacturing problem solving and will be able to work with professors and programs at Auburn and our peer institutions,” he said.

While the core research would include manufacturing systems analysis, lean production, safety and ergonomics, advanced manufacturing processes and data analysis, the research will be industry-driven. Industry partners will direct the goals and objectives of the research.

Companies interested in joining the alliance or wanting additional information should contact John Evans at evansjl@auburn.edu.
Professor Emeritus Saeed Maghsoodloo is the recipient of the 2014 Auburn Engineering Superior Service award. This award recognizes Maghsoodloo’s more than 40 years of outstanding service to the Samuel Ginn College of Engineering and Auburn University.

Saeed Maghsoodloo was Nancy Bissinger’s advisor in 1975 and is now a member of her doctoral committee.

Sean Gallagher received the prestigious 2013 International Ergonomics Association /Liberty Mutual Medal for his paper “Examining the Interaction of Force and Repetition on Musculoskeletal Disorder Risk: A Systematic Literature Review.”

Sean Gallagher, center, receives the Liberty Mutual Medal, from left, Ian Noy, director of the Liberty Mutual Research Institute for Safety and Andy Imada, past-president of the International Ergonomics Association.

J T. Black was honored by the Graduate School’s Auburn Author Awards on April 23 for the publication of his book, “Lean Engineering.” The undergraduate/graduate course, Lean Production, is enhanced through the use of this textbook.


Alice Smith gave a keynote address at the 2014 International Conference on Quality, Reliability, Risk, Maintenance, and Safety Engineering, in Dalian, Liaoning, China. She spoke on multi-objective genetic algorithms for optimization of reliable systems, based on the paper she co-authored for the journal “Reliability Engineering & System Safety.” She also was elected as the next senior vice president for publications for IIE. She will serve a three-year term that began this spring.

Sean Gallagher is now a fellow of the American Industrial Hygiene Association (AIHA). Only 5 percent of the AIHA membership can qualify for the fellow award. It is given to those individuals who have made significant contributions to the field of industrial hygiene.

Sean Gallagher receives fellow award from Barbara Dawson, president of the American Industrial Hygiene Association.

Congratulations to Kevin Gue. Kevin, who joined the Auburn University Industrial and Systems Engineering department in 2004, has accepted a position with the industrial engineering faculty at the University of Louisville as the Duthie Endowed Chair of Engineering Logistics and as director of the Logistics and Distribution Institute. While at Auburn, Kevin served as the faculty advisor to Alpha Pi Mu and taught courses in supply chain engineering, operations planning and control and stochastic operations research. He is the editor-in-chief of the “U.S. Material Handling and Logistics Roadmap,” a planning document on how business should prepare now to address the technological issues expected in the future (2025) of the material handling and logistics industry. Kevin held the Tim Cook professorship for the past four years and this year was named a full professor as well as the department’s outstanding faculty member. Best wishes go to Kevin in the next stage of his career.
Jeff Smith developed Simio Lab Series modules that are used by at least five universities in their simulation courses.

Chan Park published “Introduction to Engineering Economics” and is working on a major revision of his textbook, “Contemporary Engineering Economics” (6th edition). He was nominated for the National Engineering Economy Teaching Excellence Award of the American Society of Engineering Education. In the summer of 2013, he taught an undergraduate course at the Korea Institute of Science and Technology.

Fadel Megahed developed two new courses, “Analytics and Visualization of Big Data” and “Innovations in Material Handling, Quality and Lean Manufacturing.”

Andres Carrano was elected president of the College-Industry Council in Material Handling Education. In addition, he received the IIE UPS Minority Advancement award given by the Institute of Industrial Engineers.

Grant Funding

Grants provide income to help support graduate education as well as departmental research. During the 2013-2014 academic year, the department was granted more than $2.8 million in new research awards, an increase of 96 percent from the previous year, and reported $1.77 million in research expenditures. Our faculty members manage grants, perform research, teach and participate in related tasks like outreach, mentoring, and service.

Fadel Megahed received grants from the National Institute for Occupational Safety and Health and Amazon.

Tom Devall received grants from Continental Motors, CoachComm and Pinson Valley.

Continental Motors is the market leader producing general aviation piston engines for light aircraft OEMs such as Piper and Cessna. Ph.D. student Yamkelani Moyo is on-site conducting the research at Continental, implementing the lean discipline of kanban material pull in the crankcase machining department. Continental currently utilizes MRP planning for their entire vertically integrated organization.

Chase Murray and Richard Sesek are members of a research team on a Federal Highway Administration project to test truck platooning, with the goal of saving fuel and decreasing traffic congestion.

John Evans, Richard Sesek along with graduate student Tenchi Gao are working with a team of Auburn researchers to build a prototype Extended Mobility System that will help navigate the visually impaired to their desired locations.

Chase Murray received a grant from the Office of Naval Research which involves the development of algorithms to determine optimal unmanned vehicle control strategies for intelligence, surveillance, and reconnaissance missions. Such algorithms will direct the activities of multiple autonomous assets in a dynamic, rapidly evolving battle space.

ALUMNI NEWS

Carol Godfrey ’86 was recognized as the Outstanding Alumnus of the year. Godfrey is the vice president of marketing and product development for Southwire’s energy division. She has been a member of the ISE Alumni Council since 2010 and is also a member of Auburn Engineering’s 100 Women Strong. A native of Louisville, Ky., Carol and her husband Gary ’86, an industrial engineering graduate, live in Atlanta.

Tim Cook ’82 received the 2013 Lifetime Achievement Award by the College of Human Sciences as well as the Auburn Alumni Association’s Lifetime Achievement Award.

From left: Tim Cook with Dean Christopher Roberts.
The Auburn Ergo Divas team won the 7th Annual Ergonomics Design Competition for Student Teams. More than 40 teams from the United States and its territories participated. The competitors worked together to assess ergonomics problems, design solutions and demonstrate and explain their responses to a panel of judges. Graduate students Menglu Li, Neely Ketzler, Brittani Edwards, Viviana Valenzuela De La Vega, and Menekse Salar worked for several months in fall 2013 on the competition. The Ergo Divas, along with faculty adviser Richard Sesek, received the award at the Applied Ergonomics Conference in Orlando where they networked and built relationships with professionals in the ergonomics community.

Applied ergonomics problems cover three broad areas: survey and screening to identify and specify the problem, analysis and evaluation to further define the problem, and design to clarify improvements needed, as well as to select the most appropriate improvements to implement. The applied ergonomics problem resolution process is an efficient and effective method of understanding and resolving risks from ergonomic job exposures.

The international competition was sponsored by Auburn Engineers, Inc., an ergonomics consulting firm, and included three stages of events developed and designed by engineers. In the first stage, each team completed the analysis phase of a problem using the Auburn Engineers electronic Applied Ergonomics Tools (eTools), www.ergosite.com. The second stage was a lightning round where each team wrote an “ergo” song and recorded an MTV-like music video. In the third stage, teams solved the annual case problem.

This year’s case problem called “Moving Day” required teams to plan a move from one small apartment to another, using ergonomics principles. The deliverable to judges was a formal written report. The judging criteria included the quality of the design, the clarity of identified risks, the appropriate use of eTools to analyze the problem, and the overall clarity of the chosen alternatives and final solution.

The five Ergo Divas are studying in master’s degree programs with emphasis on the use of ergonomics in the workplace.

- **Menglu Li** earned both her bachelor’s and master’s degrees in safety engineering in China. Having completed the MISE at Auburn, she has taken a job in Philadelphia. Menglu believes the reason for the Ergo Divas success was hard work and the desire to win.

- **Neely Ketzler**, originally from Montgomery, received her undergraduate degree in civil engineering from Georgia Tech in 2011. She worked as a civil site project design engineer for a consulting firm in Atlanta before returning to graduate school at Auburn. She plans to graduate with her master’s degree in May 2015 and pursue a career in ergonomics consulting. Neely commented, “The competition was a wonderful experience, providing me the opportunity to supplement my education with real world experience, all while forming lasting friendships with my other teammates.”

- **Brittani Edwards**, the Ergo Divas team leader, is from Montgomery. She earned the BISE degree with a business minor and an MISE degree with a graduate certificate in occupational safety and ergonomics, both from Auburn University. She currently is working at her dream job in healthcare as a performance excellence engineer at the Kirklin Clinic of UAB Hospital. Brittani believes that the teamwork applied by this dynamic group of minority women was the key to their success.

- **Viviana Valenzuela** was born in Chile but also considers Auburn her home. She received her bachelor’s degree from Auburn University in industrial and systems engineering and will graduate in August with a master’s degree in industrial and systems engineering. After graduation she plans to begin her career in Birmingham, Ala., and is enthusiastic about her exciting future. She thoroughly enjoyed working with the Ergo Divas and is proud to be a part of the winning team.

- **Menekse Salar** was born in Monterey, Calif. and grew up in Ankara, Turkey. She earned a bachelor of arts degree in management and a bachelor of science degree in industrial engineering from Attilim University in Ankara, an MISE from Auburn and expects to graduate with her doctorate in safety and ergonomics from the Industrial and Systems Engineering department in 2016. Her future plans are to work as a faculty member in academia. Competing with a team of “powerful ladies from diverse cultures” was a pleasure for Menekse. This experience led her to understand the huge difference that can result from hard work in a coordinated team environment.

Participating in competitions and projects like the Ergonomics Design Competition for Student Teams teaches young engineers the importance of teamwork, attention to detail, and adherence to budgets and timelines in the life of a professional.
Sarah Perry, outstanding undergraduate student of the year, graduated in May as a University Honors scholar with a bachelor degree in industrial and systems engineering. Sarah is from Gainesville, Ga., and is actively involved in several campus organizations including the Honors Congress, Alpha Pi Mu and Tau Beta Pi. She has served as both the president and secretary of Alpha Pi Mu and as the treasurer and spirit chair of the Honors Congress.

Vijay Elumalai was named by the faculty as the outstanding master’s student for 2014. Prior to beginning the master’s program in 2013, he completed a bachelor of engineering degree in electrical engineering from Anna University in Chennai, India. His undergraduate research work titled “High Voltage Power Supply to Electrostatic Precipitator with Planar Transformer of Helical Winding Structure” was published in an IEEE journal. Vijay is currently a graduate teaching assistant for methods engineering and has industry experience working for Coca Cola, FLSmith and most recently at Steelcase in Athens, Ala. Vijay is passionate about cars and is a diehard Formula 1 fan.

Ashkan Negahban, outstanding doctoral student, received his bachelor of science degree in industrial engineering from the University of Tehran, Iran as well as his master’s degree in industrial and systems engineering from Auburn University and expects to finish his doctorate by May 2015. As an instructor, he has taught courses in simulation modeling and analysis at the undergraduate level. His research involves the application of simulation in manufacturing systems and diffusion of new products which has led to publications including several journal articles and conference proceedings.

Huw Smith, outstanding international undergraduate student of the year, is a spring 2014 graduate of the industrial and systems engineering program. Huw is originally from Great Britain and plans to pursue a dual MBA/MISE degree at Auburn starting fall 2014. He was the main author of a paper submitted for publication to Quality and Reliability Engineering International entitled “Using Visual Data Mining to Enhance the Simple Tools in Statistical Quality Control: A Case Study” and currently works at CoachComm in Auburn as a contractor.

Sivasubramanian Thirugnanasambandam, outstanding international graduate student, received his bachelor’s degree in mechanical engineering from Anna University, Chennai, India as well as his master’s degree in industrial and systems engineering from Auburn University and expects to finish his master’s in statistics along with his doctorate in industrial and systems engineering next year. His research involves component and systems level reliability of electronic packages and characterization of new alloy compounds which has led to a number of international publications in journal articles and conference proceedings. He has taught courses in electronic manufacturing systems, automotive manufacturing systems, vehicle technology and instructed Tiger Motors lab sessions at the undergraduate level. During his graduate course of study, he has also represented Auburn University as a continuous improvement mechanical engineer at Johnson Controls as a co-op.

Forehand Leadership Scholars for 2014-2015 are Joshua Farrington and Eduardo Robison-Rivera. Established through a gift from Joe Forehand (BIE’71), the scholarships recognize current ISE students who have demonstrated academic excellence along with strong evidence of leadership accomplishments and potential.

Joshua Farrington, a senior from Huntsville, Ala., with a business minor, volunteers both on and off campus in Auburn as a member of the Institute of Industrial Engineers and at the Auburn Wesley Foundation, a Methodist student ministry on campus. In his work at the Wesley Foundation, he helps incoming freshmen make the transition from high school to college. In his work with Steelcase in Athens, Ala., Josh learned how his decisions affect employees. He said, “It is important to work with the employees if you want them to accept the changes you are trying to make.”

Eduardo Robison-Rivera is a senior from Pleasanton, Calif. While working on the Disney College Program, he refined his leadership skills by taking an Engineering Professional Development Series course which allowed him to interact with engineering leaders at Walt Disney World. He says, “Even though my original role with the company was not specifically in an industrial engineering capacity, that did not stop me from seeking out relevant events that I could participate in.” In addition to his academic excellence, Eduardo enjoys volunteer-
ing, especially through Auburn's Impact Volunteer Organization. He is a founding member of Auburn University's first improvisation troupe, the Lee County Flannel Club.

The Tim Cook Leadership Scholars for 2014-2015 are Claire Schmidt and Samantha Swords. Established through a gift from Tim Cook (ISE, ’82), chief executive officer of Apple Computer, the scholarship recognizes students with significant academic achievements, strong evidence of non-academic university involvement and leadership as well as community involvement and commitment.

Claire Schmidt, a senior from Daphne, Ala., is a member of the Society of Women Engineers, Alpha Lambda Delta Honor Society, Lambda Sigma Honor Society, Cardinal Key Honor Society and Alpha Pi Mu Honor Society. In addition to these scholastic honor societies, Claire is involved in social activities both on and off campus and is employed in downtown Auburn.

After graduation she looks forward to being hired as an industrial engineer in healthcare. She said, "Being an IE for a hospital would directly affect the quality of life for its patients and, in turn, help many people regain their health."

Samantha Swords is a sophomore from Birmingham, Ala. A member of the Society of Women Engineers, Institute of Industrial Engineers, and National Society of Collegiate Scholars, Samantha will begin the Business-Engineering-Technology program at Auburn fall 2014. She is a volunteer both on and off campus.

Her experience as a co-op student with Southern Company Services has confirmed her desire to pursue her Industrial Engineering degree by illustrating the ‘real-world’ application of IE principles.

Samantha is looking forward to continuing her academic studies this fall at Auburn and utilizing those skills in future co-op rotations. She and her family are grateful to Cook for his support of Auburn's Industrial Engineering program and his generosity towards its students. Samantha thanks Cook for the opportunity to further pursue her education at Auburn.

Sabahattin (Gokhan) Ozden has been awarded the Ergonomic Assist Systems and Equipment Council Honor Scholarship for the 2014-2015 academic term from the Material Handling Education Foundation, Inc.

Yousif Abulhassan, Charletta Burrell, Emin Ciftci, Brittani Edwards, Robert Funcik, Vuong Le, Menglu Li, and Howard Masco received OSE certificates in May 2014.

Graduate students Nader Al Theeb, Mohammadnaser Ansari, Tenchi Gao, Masood Jabarnejad, Sabahattin Gokhan Ozden, Eren Sakinc, and Alejandro Teran-Somohano participated in the fall 2013 Graduate Engineering Research Showcase. Masood Jabarnejad received the department award for his research, “A Novel Approach to Reducing the Price of Electricity.”

DONATIONS and DEVELOPMENT NEWS

Anna Fears and Alejandro Teran, two research scholars, were supported by a departmental donation from Barbara and Larry Davis. Anna Fears is an undergraduate research assistant on the NASA project and is fully funded by this gift. Alejandro Teran presented his research at the 2013 IEEE CEC conference. His travel to the conference was funded by this gift.

Facts and figures for 2013-2014

Undergraduate enrollment (fall): 317
Graduate enrollment (fall): 121
Master’s students: 64
Doctoral students: 57
Bachelor’s degrees awarded: 55
Master’s degrees awarded: 43
Doctoral degrees awarded: 8
OSE certificates awarded in 2014: 8
Departmental Gifts May 2013–April 2014

Donations Up To $99
Mr. Mark Christian Ciamarra ’12
Dr. Gerard Albert Davis ’96
Mr. Richard M. Garwood ’67
Ms. Briana D. Palmer
Mr. John S. Rumble
Dr. Gokhan Sarpkaya ’09
Mr. Mark Gordon Scheirer ’74
Dr. Alice E. Smith
Mrs. Julia Cheape Wood ’82
Mr. Mark Joseph Wood ’83

$100-$499
Mr. Justin Paul Allred ’05
Mr. John W. Brodak
Mr. Patrick Joseph Carey ’89
Mrs. LuAnn Sims Carpenter ’11
Ms. Nancy Kay Denning ’84
Mr. Gary Wayne Gray ’69
Mr. Donald W. Griffis ’61
Capt John H. Hessey V ’74
Mr. Keith F. Hornbuckle ’80
Mr. Charles C. Huang ’74
Mr. Jyh Cheng Lin ’88
Mr. Lawrence L. Lynch Jr. ’72
Dr. Noel Quentin Martin, II ’66
Mr. Steven James McDonough ’84
Mr. Lionel C. Mitchell Jr. ’71
Mr. William Victor Moore, Jr. ’78
Mr. Charles Winfred Powell ’60
Mr. John H. Reaves ’69
Mr. John S. Rumble
Mr. Jason Scott Shaw ’11
Dr. Jorge Fernando Valenzuela
Dr. Andrew Donald Veren ’72
Mr. Nathan Thomas Vogt ’02

$500-$999
Mr. James O’Neal Ballenger ’59
Mr. Stephen Garrard Hill ’80
Ms. Cynthia Louise Kirk ’07
Mr. Roy A. Richardson ’57
Ms. Jane Kathleen Spinks ’08
Dr. Sheng-Hsien Teng ’89
Mr. Qi Wu ’10
Southern Champion Tray Fund

$1,000-$4,999
Mr. Rafael E. Alfonso ’73
Dr. David Stanley Cochran ’86
Dr. Nathan T. Dorris ’04
Mr. Charles Earley Gavin III ’59
Mr. Ruskin Clegg Green ’91
Mr. Patrick D. Higginbotham ’81
Mr. Lester Killebrew Sr. ’68
Mr. Kevin Andrew Partridge ’87
Mr. David I. Rach ’69
Mr. Thomas D. Senkbeil ’71
Mr. Stuart Chris Shirley ’87
Dr. Jeffrey Scott Smith ’86
Mrs. Laura Crowe Turley ’87
Mr. David Troy Veal ’91
Mr. Clyde E. Wills Jr. ’68
Continental Motors, Inc.
Exxon Mobil Corporation
Pinson Valley Heat Treating Co Inc

$5,000+
Dr. J Temple Black
Mr. Timothy Donald Cook ’82
Mr. Hal N. Pennington ’59
Mr. Carl A. Register ’63
Borbet Alabama, Inc.
Comer Foundation
Greater Cincinnati Foundation
The Greater Kansas City Community Foundation
International Institute of Acoustics & Vibration