Ask logistics professionals to compare North American supply chains to those in India, China and the rest of the Asia-Pacific region, and you will quickly hear about unprecedented opportunities and challenges for those ready and willing to adapt.

Educating students with the skills and the knowledge necessary to navigate the international marketplace is now closer to home thanks to a $1.5 million commitment to Clemson University from the Fluor Foundation. The extension of Clemson and Fluor’s long-standing partnership establishes the Fluor-Clemson International Capital Projects Supply Chain Partnership Endowment.

Fluor’s association with the Department of Industrial Engineering began in 2007, when the company contributed $2 million to Clemson, matching an existing grant from the S.C. Centers of Economic Excellence (CoEE) program, now called SmartState. The combined $4 million endowment funds the Fluor Endowed Chair in Supply Chain Optimization and Logistics, which is currently held by Dr. Scott Mason.

The new endowment, announced in May, will help the successful Master of Engineering (M.Eng.) degree program expand on an international scale. It furthers the scope and geographic reach of previous Fluor-Clemson initiatives to support education and research in capital project supply chain.

“The importance of the global supply chain has increased exponentially for engineering, procurement and construction over the last six years,” said David Seaton, chairman and CEO of Fluor Corporation, who also serves as chairman of the Fluor Foundation.

“Now, with Fluor’s annual global procurement spending of $19 billion and with a majority of our project backlog overseas, this international expansion of the supply chain and logistics program is paramount for developing supply chain leaders of the future in our industry,” he said.

Anand Gramopadhye, I.E. Chair, commented on the M.Eng. program expansion. “This initiative will enable students to gain a greater understanding of supply chains on an international level, which will make their educational experience more relevant in global business, and more valuable to their employers,” said Gramopadhye.

For more information about the Master of Engineering program visit: www.clemson.edu/ces/ie/meng.
Surgical Safety for South Carolina

Ashley Kay Childers, Ph.D., Certified Professional in Healthcare Quality, and research assistant professor in the I.E. department, has been working with the Quality Improvement and Patient Safety Team at the South Carolina Hospital Association (SCHA) since 2010. She and her colleagues have been collaborating with the “Safe Surgery 2015” team from the Harvard School of Public Health to pilot “Safe Surgery 2015: South Carolina.”

The goal of the initiative is to help hospitals in the state meaningfully implement a modified version of the World Health Organization’s safety checklist for every surgical patient in the state by the end of this year. Lessons learned in South Carolina are being used to develop the program as it expands across the United States and around the world. Use of the surgical safety checklist has reduced mortality and complications by more than a third. In South Carolina, the checklist is expected to save approximately 500 lives per year.

Childers’ site visits have proven valuable in refining the program. She has visited more than 40 hospitals and ambulatory surgery centers in South Carolina over the past two years. She also serves as a master trainer for the “Safe Surgery 2015: South Carolina Operating Room Team Training Program.” She also shared lessons learned via the educational webinar series and has presented coaching and clinician engagement information across the state.

For more information, please visit http://www.safesurgery2015.org

INTERNATIONAL SUPPLY CHAIN CONFERENCE

Clemson University and the Ansal Institute of Technology & Management, Lucknow (AITEM), hosted the first Industry-University Conference on Supply Chain in India, March 22-23, 2013.

The events opened with a reception and banquet at the historic Ashok Hotel, located in the embassy district of New Delhi. Executives from India and U.S. industry, and faculty and administration from local universities were among the distinguished guests gathered to celebrate this landmark event. The keynote address was delivered by N.K. Singh, a current member of Indian Parliament and trained economist, with decades of public service. Singh has held positions as the Economic Affairs, Expenditure and Revenue Secretary; Ministry of Home affairs; Secretary to the Prime Minister; and ambassador in the United Nations.

The conference included presentations and discussions from experts about the supply chain challenges and opportunities within India. This event made it clear that industry and academia can unite to address the supply chain challenges in India and in other rapidly developing parts of the world. The conference was chaired by Clemson University Professor, Bill Ferrell and AITEM Professor, M.P. Singh. Clemson University Associate VP for Workforce Development, Anand Gramopadhye, and Sushil Ansal, Chairman of Ansal API, a leader in construction and development in India, were among those on hand supporting the events.

Special thanks to conference planners, partners in India, and corporate sponsors and leaders for making this inaugural conference a success. Plans for the 2014 Industry-University Conference on Supply Chain are underway.

M Eng.
Master of Engineering in Supply Chain & Logistics

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For more information on MEng, contact us at iemeng@clemson.edu or visit our website www.clemson.edu/ces/ie/meng
Department of Industrial Engineering awards recognize superior academic performance based upon grade point average. The Sophomore and Junior Awards recognize individuals with the highest grade point average in their class. The Senior Award recognizes the outstanding individual with a grade point average greater than 3.5 and other outstanding achievements.

Sophomore Academic Achievement
- Nora Elizabeth Harris

Junior Academic Achievement
- Lauren Patricia DeZervos

Senior Academic Achievement
- Kyle Henry Lassiter

Outstanding Junior
- Samantha Elizabeth Paris

Jim Chisman Outstanding Senior
- Jacey Rae Gombert

Karen & Carl R. Lindenmeyer Award
- Michelle Anne Jahn

IIE Award of Excellence
- David Edward Parker

Elisabeth D. & Delbert L. Kimbler Award
- Kyle Henry Lassiter

Janine Bowen ’89 Undergraduate Scholar
- Laura Michelle Huxtable

Janine Bowen ’89 Graduate Fellow
- Reshmi Koikkara

Outstanding Graduate Research Assistant
- Gregory Louis Boylan

Outstanding Graduate Teaching Assistant
- Kevin Anderson Juang

Teaching Assistant of the Year
- Sreenath Chalil Madathil

2012–13 Officers

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Mary Beth Kurz, Ph.D.

Mary Beth Kurz was voted the 2012-13 Industrial Engineering Professor of the Year. The recipient of this annual award is chosen by the I.E. student body. This award recognizes and celebrates outstanding professors in the Department of Industrial Engineering for their roles in teaching, research, and student leadership.

NEW STAFF

Jim Piekutowski

- Program Manager – Master of Engineering

Jim Piekutowski, who has worked at Clemson for the last 14 years, came to the I.E. Department in December, 2012, from Computing and Information Technology (CCIT). His main focus for I.E. is to support the Master of Engineering (M.Eng.), as well as the other related logistics and supply chain centers. His current roles include supporting the faculty and students with programmatic and marketing needs.

Rebecca Hartley

- Program Coordinator – Master of Engineering & Clemson University Center for Workforce Development (CUCWD)

Rebecca Hartley has spent the last 14 years working in the areas of undergraduate and graduate admissions, academic records, and student affairs. Most recently Rebecca served as the Director of Graduate Admissions and Records for the University of Montevallo in Alabama. She joined Clemson University in January, 2013, as a program coordinator and overseeing the CUCWD and Duke Energy Foundation, and assists in managing the Master of Engineering program. Rebecca is a Ph.D. candidate in Public Administration and Public Policy at Auburn University.

Amin Khademi, Ph.D.

- Assistant Professor

Khademi comes from the University of Pittsburgh in Pennsylvania and will start in August, 2013. He completed his doctoral studies at the University of Pittsburgh in Industrial Engineering. He earned both his B.S. and M.S. degrees from Sharif University of Technology in Tehran, Iran.

Gramopadhye Named Dean of CES

Industrial Engineering is proud to announce that Anand Gramopadhye, Ph.D., Department Chair, has been appointed Dean of Clemson University’s College of Engineering and Science. He will begin his new position with the college in July.

Gramopadhye joined the I.E. department in 1992, as an assistant professor. In 2003 he became the Department Chair, and then in 2010, became the assistant to the Dean of the College of Engineering and Science. Most recently, in 2011, he was named the Associate Vice President for Workforce Development for Clemson University.

Gramopadhye’s vision and entrepreneurial leadership style have enabled I.E. and its related centers to form strategic partnerships that have helped the department and programs thrive in recent years. The I.E. faculty and staff look forward to “Dr. G.” beginning his new leadership role in the College of Engineering and Science and helping the college advance Clemson’s goal of becoming a top-20 public university.
Creating the Next Generation WORKFORCE

“The surest path to prosperity is education. And economic and workforce development continues to be Clemson’s highest priority as an institution.” observed Clemson University President James Barker.

The disparity between the available jobs in advanced manufacturing in South Carolina and the number of qualified workers is significant, and reflects a national trend. At the height of the recession, 32 percent of manufacturing jobs nationwide went unfilled due to an under-skilled labor pool.

In 2007, Advance SC provided seed funds to support “e-learning” in manufacturing education. This success fed into a multi-year process of fine-tuning a statewide vision for collaborative workforce development. The result of these efforts is the Clemson University Center for Workforce Development (CUCWD).

CUCWD addresses foundational deficiencies in science, technology, engineering, and math (STEM). K-12 math and science efforts in South Carolina are not producing graduates with an ability to master the basics. Thirty-seven percent of South Carolina students who enter technical college programs require remediation in basic math courses at a cost to the state of nearly $13 million a year. Of those students who enter technical college programs, only 14 percent graduate.

“Our goal is to develop more qualified technicians to work in industries that drive the nation’s economy. Every advanced manufacturing job in South Carolina should, and can be, filled.” said Anand K. Gramopadhye, director of the center and Clemson University associate vice president for workforce development.

Whether through certificate programs, continuing education programs or advanced degree programs, South Carolina will benefit from keeping a homegrown labor force.

Source: Roadmap to Education Reform for Manufacturing sponsored by Deloitte and Manufacturing Institute

STUDENT CHAMPION of PATIENT SAFETY AWARD

Susie Robinson, a 2012 Industrial Engineering B.S. graduate and current M.S. student focusing on healthcare improvement, was recently recognized for her accomplishments as the President of the Institute for Healthcare Improvement (IHI) Open School Chapter at Clemson University.

Robinson helped transition the local chapter from being faculty-led to a student-led organization. She also developed a volunteer component for the chapter, where members can give back to the community through the Clemson Life program and the South Carolina Benefit Bank.

In addition to these initiatives, Robinson also helped a local clinic evaluate patient wait-times and proposed a number of process improvement opportunities. She helped develop an innovative concept for nonintrusive time studies using clinic video images. She became the primary author of a related academic paper submitted to the 2013 Industrial and Systems Engineering Research Conference titled, “An Effective Nonintrusive Approach to Time Studies in Health Care.”

She is currently working with faculty members examining how the use of personal health information management systems affects health outcomes.

Freeman Hall update

Freeman Hall, home of the Clemson IE Department, is scheduled to begin a major renovation and expansion early this winter. The construction will integrate upgrades to the existing building as well as new indoor and outdoor areas to provide additional space and improved access to the building. The primary goal of this expansion is to enhance the synergy of the academic community by improving faculty-faculty and faculty-student collaborating areas and research clusters. The new addition will provide advanced infrastructure for all academic pursuits and includes a 100-seat auditorium. Plans call for upgraded teaching spaces with enhanced technology and flexibility, new office space and a state-of-the-art laboratory for graduate students, faculty and staff.

IE Tailgate

Friday, August 30th

11am - 2:00pm - FREEMAN HALL LAWN

More Info: www.clemson.edu/ces/ie/tailgate
IE 467 – Systems Design II, better known as the “Senior Capstone Design Project” provides a “Win-Win-Win” opportunity for students, industry collaborators, and Clemson University. “This is a truly unique experience that sets Clemson’s industrial engineering program apart from other industrial engineering programs.” said Clemson’s I.E. Department Chair and IE 467 instructor, Anand Gramopadhye. “It is a valuable chance to work with industry sponsors to address real world problems.” he said. “The result is that Clemson students gain marketable experience that they can put on their resumes and sell to employers. Our corporate partners benefit by the exposure they gain to our bright, talented students and, more importantly, by implementing the ideas and solutions that the teams recommend,” he adds.

This year’s topics included: workflow efficiency analysis; throughput optimization; evaluation of product lifecycle management systems; set-up reduction; process improvement and waste elimination; development of a decision support system; and optimizing processes for reducing ergonomic hazards.

IE. seniors and corporate partners gathered on April 25th for the capstone presentations at the Conference Center & Inn at Clemson University. Sponsoring companies represented included the Boeing Company; GE Energy Power and Water; Robert Bosch LLC; Milliken & Company; Fabri-Kal; Nutra Manufacturing, Inc.; Electrolock, Inc.; and Schneider Electric North America. Student teams competed against one another to pitch their proposals to their industry sponsors who ultimately had the task of selecting the approach that best addressed their needs. Everyone was a winner on that day with sponsors taking home the solutions from the proposals, and the winning student teams taking home gift certificates to dine at local restaurants. Congratulations to all seniors!