Dear SEEM Family,

As we are approaching to the end of the Spring semester, it is a great pleasure to look back and see the exciting growth and changes in the SEEM Department.

**Enrollment:** SEEM department is continuing to be one of the fastest growing departments in the College of Engineering and at UNC Charlotte. Our SEEM family has grown with additional students bringing our total enrollment to 167 (BSSE: 120 and MSEM: 47). This is 40 students more than what we had last year in Spring 2013.

**New Concentrations:** We have deployed new concentrations in the MSEM program on our thrust areas: Energy Systems, Lean Six Sigma, Logistics and Supply Chains and Systems Analytics. These concentrations align well with the greater Charlotte industry needs and aim to make our students more competitive in their careers.

**New Graduate Certificate Programs:** Similar to the concentrations, we have also deployed new graduate certificate programs on Energy Analytics, Lean Six Sigma, Logistics and Supply Chains and Systems Analytics. These certificate programs will provide a fast-track mechanism to industry professionals to build skills in respective areas. The Graduate Certificate Programs are also open for early entry to competitive engineering and technology undergraduate students with a high GPA and can be completed simultaneously.

**New faculty:** I would like to welcome Dr. Paris Stringfellow, Mr. Les Blankenship, Mr. Alfred D’Ambrosio and Dr. Srijib Mukherjee who joined “the SEEM family” as an adjunct faculty. Dr. Stringfellow works at AREVA and specializes in Human Factors and Ergonomics, and helps us teaching the Human Systems Interface course. Mr. Blankenship is an attorney for the Hunoval Law Firm and helps us teaching Legal Issues in Engineering Management. Mr. D’Ambrosio who works for Hess Corporation is also in the SEEM advisory board. Dr. Mukherjee is a principal advisor at Quanta Technology. Mr. D’Ambrosio and Dr. Mukherjee help us teach the Case Studies in the Energy Industry course. It is a great privilege to work with faculty with such a wealth of experience.

**US News Ranking:** it is my pleasure to let you know that our Graduate MSEM Online Program has been top ranked by US News. This is a very exciting milestone for SEEM and the William States Lee College of Engineering. A big part of the credit goes to faculty working hard to deliver a quality online program. On the other hand, credit also goes to our extended family: Distance Education Program, Classroom Support and Mosaic teams who provide continued infrastructure support and help us improve the quality. The US News recognition is timely and should further help with our growth and quality strategies.

**Labs:** We are building a new Systems Modeling and Analytics Research and Teaching lab in Cameron 158. This high-tech computing lab will enable advanced and large scale computations and simulations for our students and faculty. We are also working on making Cameron 154 more accessible for our students.

Last but not least, I would like to congratulate Dr. Tao Hong (Assistant Professor and Graduate Program Director) and his wife Dr. Pu Hong on their new baby girl, Angela.

As a growing department, we do have challenges, but with the excitement and positive energy in our SEEM family, I trust that we will prevail and make SEEM a leading department in the area of Systems Engineering and Engineering Management. If you have feedback or suggestions feel free to contact me any time.

Looking forward to seeing you all at the SEEM Spring Picnic on April 27.

Best Wishes,

Ertunga C. Ozelkan, Interim Chair, SEEM Department
Program Mission
Our program provides accessible, high-quality education in Systems Engineering that equips students with intellectual and professional skills, ethical principles, and a global perspective. In particular, we

- Furnish comprehensive and methodical curricula in Systems Engineering to students.
- Advance innovative research, industrial applications, and practices in the Systems Engineering discipline.
- Provide quality services to the public and industries in the Charlotte region, in the State of North Carolina, in the U.S., and in the world.

Society of Systems Engineers

The Society of Systems Engineers (SSE) launched as a new organization in the fall of 2013 for UNC Charlotte’s SEEM students under the advisement of Dr. Jonathan Mayhorn. The purposes of SSE are:

- To be a semi-professional organization for SEEM majors
- Build bonds between members that will last within industry
- Offer opportunities for professional development
- Act as a liaison between the SEEM department and students
- Provide an outlet for open discussion of ideas related to SEEM
- Expand UNC Charlotte’s SEEM department by reaching prospective students

We would like to thank the inaugural SSE officers for establishing the organization and hosting events over the last two semesters: Brett Thompson, Laurie Petrill, Coley Hodges, Melanie Cudney, and Darshan Desai.
The University of North Carolina at Charlotte
The William States Lee College of Engineering

SYSTEMS ENGINEERING & ENGINEERING MANAGEMENT DEPARTMENT
Invites you to

PICNIC IN THE PARK
Sunday, April 27, 2014
1:00 pm – 4:00 pm
Reedy Creek Park – Shelter #4
2900 Rocky River Road, Charlotte, NC

Students  Staff  Fun
Music  Faculty  Drinks
Food  Alumni  Games

RSVP WITH THE NUMBER OF PEOPLE ATTENDING
To Email: UNCC-SEEUM@UNCC.EDU, or Call 704-687-1953,
NO LATER THAN WEDNESDAY, APRIL 16, 2014
U.S. News Ranks Lee College of Engineering in Top Online Graduate Programs

By Mike Hermann, Director of Communications, Lee College of Engineering.

U.S. News & World Report rates the online graduate program of The William States Lee College of Engineering as one of the nation’s best in its ranking of online learning programs released last week.

U.S. News places the Lee College of Engineering at UNC Charlotte 23rd in the category of Best Online Graduate Engineering Programs. The 2014 rankings evaluate information and data from nearly 1,000 online degree programs.

“This is recognition of the growing quality, size and reputation of our online Master of Science in Engineering Management program,” said Lee College of Engineering Dean Bob Johnson. “The online MSEM is currently the college’s only distance learning graduate program. It’s a very flexible program we have developed to meet the diverse needs of engineering professionals.”

The Masters of Science in Engineering Management (MSEM) program is offered by the Systems Engineering and Engineering Management Department (SEEM). MSEM started at the Lee College of Engineering in 2000 as a traditional classroom program. A distance learning option was added in 2009. In 2013, the distance option was expanded to international students.

“The beauty of the MSEM program is its flexibility,” said Dr. Ertunga Ozelkan, interim department chairman of SEEM. “We started the online options to meet the needs of engineering students around the world. The program allows students to take all or a portion of their classes online or on campus.”

The timing options of the program are also flexible. The distance learning classes are asynchronous, which means students do not have to be online at any specific time. All the lessons are recorded and can be viewed at any time. The flexibility of the program also extends to areas of study. Concentration areas include energy systems, lean six sigma, and logistics and supply chains.

The underlying component of all the MSEM options is quality. “Everything is quality driven,” Dr. Ozelkan said. “The online courses are taught by the same professors who teach on campus. Discussion and interaction is important to all the classes, and with online classes it is just more formal and organized. To be successful with distance learning you have to build an online community, and we are doing that on a global scale.”

The 2014 U.S. News Best Online Programs include online bachelor’s degrees and online master’s degrees in engineering, business, education, nursing and computer information technology. For the 2014, U.S. News decreased the emphasis on peer reputation and admissions selectivity while increasing the weights of student engagement, faculty credentials and training, and student services and technology.

Factors in the rankings are student engagement (weight 30 percent), faculty credentials and training (weight 25 percent), student services and technology (weight 20 percent), peer reputation (weight 15 percent), and admissions selectivity (weight 10 percent).

The full rankings are available:
Faculty Happenings

Hunoval Law Firm employees receiving their Lean Six Sigma Greenbelt Certification from the Center for Lean Logistics and Engineered System (CLLES).

SEEM faculty, staff and families enjoying a holiday gathering.

Celebrating Faculty and Staff Birthdays.

SEEM Advisory Board and faculty discussing SEEM programs and strategies on November 26, 2013.
Student Happenings

Dan Symons (MSEM Student) is receiving the best project presentation award in the EMGT 6980 Industrial and Technology Management Seminar Series course.

Appreciation event for the SEEM student workers.

SEEM Open House: experimental design demonstration using catapults

INES PhD Students Edil Demirel and Ben Futrell, (advised by Dr. Lim and Dr. Oz) after a research presentation at the 2013 Industrial and Systems Engineering Research Conference in San Juan, Puerto Rico.
Plant Tours

Carrier Corporation Manufacturing Plant Tour - Special thanks to Brent Sigmon (Sales Manager) for leading the SEEM participants to a great plant tour

Legrand Concord Manufacturing Plant - Special thanks to Dean Nestvogel (Quality & Continuous Improvement Manager) for a great presentation on Legrand’s lean manufacturing journey and for a tour of their Plant
New SEEM Graduate Certificate Programs

SEEM department is launching four new graduate certificate programs starting summer of 2014. The Graduate Certificate (GC) programs provide graduate students and professionals with the opportunity to reach a demonstrated level of competence in a focused specialty area under Systems Engineering and Engineering Management. A GC will be awarded upon completion of four graduate level courses (12 credit hours) in the selected GC program area. Currently, GC programs are available in Energy Analytics, Lean Six Sigma, Logistics and Supply Chains, and Systems Analytics.

The graduate certificate may act as a standalone graduate option for post-baccalaureate and post-masters students, or may be pursued concurrently with a related graduate degree program at UNC Charlotte. The twelve credit hours in the certificate may be applied to the graduate programs in the Systems Engineering and Engineering Management (SEEM) department per approval of the department Program Director. The program also provides an early entry option for exceptional UNC Charlotte undergraduate engineering and technology students who accumulated more than 75 credit hours in their respective degree programs.

Courses are available face-to-face on-campus or online. The certificate programs accept students in fall, spring and summer semesters.

Highlights

- Start in fall, spring or summer
- Flexibility: Time, Location, Learning Style
- Evening On-Campus classes
- Online classes
- Fast Track: can be completed part-time in 12 months
- Applied - industry oriented with best practices emphasized.
- Project-based learning: Industrial & Research Projects
- International Online: complete your degree anywhere on the globe
- Accredited: SACS: Southern Association of Colleges and Schools
- Certified: USDLA: United States Distance Learning Association
- Top ranked by US News
- No GRE/GMAT requirement
Dr. Ertunga Ozelkan from the Center for Lean Logistics and Engineered Systems (CLLES) and Kevin Divine from Hunoval Law Firm have accepted the second place award on behalf of the CLLES faculty and Hunoval project team at the IIE’s Annual Engineering Lean Six Sigma Conference in Atlanta, GA on Sept 24, 2013. The paper titled “Lean Six Sigma to Reduce Lead Times in Legal Business Processes” has been co-authored by Kevin Divine, Cara Clausen, Tiffany Smith, Cameron Scott, Kim Beacham, Matt Hunoval from the Hunoval Law Firm, Charlotte, NC and Dr. Ertunga C. Ozelkan, Dr. S. Gary Teng, and Dr. Jonathan Mayhorn from SEEM and CLLES at the University of North Carolina at Charlotte, Charlotte, NC. The purpose of this paper is to present how the Hunoval-UNC Charlotte team introduced metrics and measures into the legal business processes, and present step-by-step results from greenbelt projects, which produced significant improvements reducing lead times in the first legal action milestones for default services both judicial and non-judicial foreclosure states, North Carolina and South Carolina, respectively.
Our vision is to be one of the leading systems engineering and engineering management programs in North Carolina and in the U.S. by providing high quality education to our students and accomplishing research that conveys regional, national and global interest. Feel free to contact us for any questions about the SEEM Department and its programs.

CONGRATULATIONS TO ALL BSSE GRADUATES!

Prospective Spring 2014
Stephen Belle Isle
Christopher M. Buck
Ivan C. Butler
Benjamin S. Fesperman
Thomas J. Galloway
Alexander M. Gold
Ebony M. Green
Quentin K. Rice
Abel L. Rios
Aaron A. Rollinson
Michael S. Van Buren
Joshua Aaron Vargas Perez

Fall 2013
Kofi Addai
Djibrilla Djibo
Michael T. Gabriel
Shamita L. Houpe
Matthew T. Peeler
Malcolm J. Scott

CONGRATULATIONS TO ALL MSEM GRADUATES!

Prospective Spring 2014
Precious A. Cuthbertson
Daniel C. Symons
Robert W. Turner

Fall 2013
Srimanth Reddy Challa
Joseph A. Chenette
Shweta Girish Dabholkar
Bobbi B. Hodge
Yao-Chung Liu
James T. Pearce
Avinash Ramdas
Rakshit Ramesh
Reshma B. Reddy
Perry R. Seifert
Manish A. Tapadiya
Garrett C. Watts

Summer 2013
Eric D. Rankin,
Timothy Gallacher,
Brendan Roisin
Victoria G. Watlington

We would like to thank Dreu Dixon and Kelsey Hedspeth for their support in creating this newsletter.

If you have any feedback, suggestions or news items for the future, please feel free to share with any SSE officers or with the SEEM department office.

Aly Fink
ssecharlotte@gmail.com