OVERVIEW

The College of Computing, Engineering and Construction had a strong and productive year. Enrollments in computing in particular continued to grow at an annual rate of approximately 3%. While construction and civil Engineering had small decreases, mostly related to the slow economic recovery in the construction industry, Mechanical Engineering enjoyed a significant increase. The result is that the overall FTE production of the College was flat.

The Faculty of the College continued to maintain a high level of productivity and engagement with our students, consistent with the College’s aspiration to be nationally known for its outstanding degree programs, scholarship and service and seeks to contribute significantly to the economic vitality of the Northeast Florida region, the State and the Nation.

NOTABLE AWARDS AND RECOGNITIONS

- **Dr. Don Resio** was selected by the American Society of Civil Engineers’ Coasts, Oceans, Ports and Rivers Institute (COPRI) Board of Governors to receive the 2013 International Coastal Engineering Award. The award citation is "For outstanding contributions to coastal engineering research, design, education, and leadership that have led to practical and effective solutions to some of the field’s most difficult problems." In selecting Dr. Resio for this award, the committee particularly noted his important research effort in a variety of significant coastal engineering topics. **Dr. Resio** was also appointed to the membership of the U.S. Army Corps of Engineers Water Resources Science, Engineering, and Planning Committee on Coastal Risk Reduction. Further, as part of Engineer’s Week, **Dr. Resio** was also selected as the Professor of the Year.

- **Dr. Sanjay P. Ahuja** was selected to join the Standard Performance Evaluation Corporation (SPEC). SPEC is an international, vendor-neutral body that provides computer system benchmarks which are used within the computer industry to assess the overall system performance of the newest generation of high-performance computer systems.

- **Dr. David Lambert** was appointed to serve on the USGBC North Florida Chapter Board of Directors. Dr. Lambert has been actively involved with the Chapter since its creation a decade ago.
AWARDED FACULTY CONTRACTS & GRANTS

The Faculty of CCEC were awarded over $1.4 million in research grants and contracts in the 2012-2013 fiscal year. Some of the notable awards include:

- **Dr. Nick Hudyma** of Civil Engineering was awarded over $319,000 by the National Science Foundation to purchase a state-of-the-art Rock Triaxial Testing System which now forms the bases of a new geotechnical research and teaching facility in the College.

- **Dr. Jim Fletcher** of Mechanical Engineering was awarded over $340,000 by the Florida Department of Transportation to advance the integration of HVS instrumentation data into the overall APT effort and for the Planning, Design, and Oversight of FDOT Certification Track for Inertial Profilers.

- **Dr. Behrooz Seyed-Abbassi** of the School of Computing was awarded $160,000 from Florida Blue to continue a long-standing BCBSF/UNF Partnership for Educational Collaboration for 2013-2015.

- **Dr. Patrick Kreidl** of Electrical Engineering was awarded over $110,000 by the Defense Advanced Research Projects Administration (DARPA) for his work on Introduction Based Routing and the Mathematical Theory of Model Identification for Distributed Hypothesis Testing over Networks.

- Under the Direction of **Dr. Don Resio**, the Taylor Engineering Research Institute was awarded over $130,000 from various private and public sources, including the Federal Emergency Management Administration (FEMA), the National Oceanic and Atmospheric Administration (NOAA) and the Office of Naval Research (ONR) for various research activities in coastal and Port Systems.

STUDENT COMPETITIONS AND SCHOLARSHIPS

The success of CCEC students in regional, state national competitions is one of the best indicators that we are achieving our mission to provide our students with the highest quality education and professional experiences, to achieve excellence in our teaching, scholarship and service, and to continually enhance our programs through interactions with professional constituents in the community. A few highlights of this year’s successes include:

- Computer Science student **Jared Wheeler** was one of four students worldwide to win the Student Chapter Scholarship Award from the Association for Computing Machinery (ACM).

- School of Computing students **Lisa Lamontagne** and **Joseph Hoeppner** were awarded academic scholarships by Upsilon Pi Epsilon (UPE), the international computing sciences honor society. Twenty six scholarships were awarded to applicants who applied from the two hundred sixty chapters worldwide. **Dr. Robert Roggio** serves as the UPE faculty advisor.

- Students in the UNF chapter of the Society of Automotive Engineers successfully competed at the Michigan International Speedway. This is the second time UNF has
competed in the Formula SAE annual competition. The UNF racing team finished 61st out of 120 competitors. Dr. John Nuszkowski serves as the team advisor.

- Civil Engineering student Blanca Franco was awarded a $2,500 first prize in an essay contest sponsored by the Florida Concrete and Materials Association. Dr. Chris Brown served as her advisor in the competition.

- Dr. Adel El Safty serves as the faculty advisor in the annual Precast Concrete Institute Big Beam Design Contest. Two University of North Florida student civil engineering teams won the regional competition (first and second places) for 2013. One of the teams also placed sixth in the national competition. The first-place winning team included George El-Gharib, Kirk Philips and Hector Flores. The second-place winning team included William Vaughn, Douglas Rhatigan and Willard Casale.

- Dr. Chiu Choi, Dr. Jerry Merckel and MBA students David Burt and Evan Kell participated in a Department of Energy “Cleaner Technology” business plan competition. The UNF team finished second out of thirty six teams and received a $10,000 prize.

JOURNAL PUBLICATIONS

Peer-reviewed journal publications remain one of the highest and most recognized metrics of scholarly activity in the academy. Over the last academic year, the Faculty of the College have produced numerous important scholarly works.


PROMOTION AND TENURE

In recognition of their work to date and the promise of continued excellence, the following professors awarded tenure and/or promotion this academic year.

• Dr. Paul Eason was tenured and promoted to Associate Professor, School of Engineering
• Dr. Alan Harris was tenured and promoted to Associate Professor, School of Engineering
• Dr. Nick Hudyma was promoted to Professor, School of Engineering
• Dr. Aiyin Jiang was tenured and promoted to Associate Professor, Department of Construction Management
• Dr. Thobias Sando was tenured and promoted to Associate Professor
• Dr. Karthikeyan Umapathy was tenured and promoted to Associate Professor, School of Computing
TRANSFORMATIONAL LEARNING OPPORTUNITIES

The college of computing, Engineering and Construction is focused on providing our students the highest possible level of engagement, not only in their discipline, but in the region, state, nation and beyond. For this reason, the Faculty of the College offer a great number of Transformational Learning Opportunities to our students. For example:

- **Dr. Mag Malek and Mr. James Sorce** were awarded a $16,000 TLO grant to sponsor a six week study abroad program in Malaga, Spain for Honors, Construction Management, and Engineering students. Students participated in the construction of a replica of the Galveztown, a boat that played an important role in changing Florida from British to Spanish control during the Revolutionary War.

- **Dr. Mag Malek and Mr. James Sorce** took a group of UNF students to a study abroad TLO in Italy and England where students were exposed to the international construction procedures. Students were lectured by the developers and project managers of the “Shard” project (The Shard is the tallest tower built in Western Europe).

- **Dr. Karthikeyan Umapathy** and **Dr. Ching-Hua Chuan** received TLO award on the project "Web Technology Development for Community Organizations".

- **Dr. Ching-Hua Chuan** received a graduate TLO award, "Redesigning Botball: An UNF Experience in Educational Robotic".

OTHER NOTABLE ACHIEVEMENTS

- Michael Toth, **Dr. J. David Lambert**, **Dr. Patrick Welsh**, **Dr. Gerald Merckel**, and **Dr. Daniel Cox** filed their patent, “Street Light Monitoring System”, with the U. S. Patent and Trademark Office on behalf of UNF.

- **Dr. Robert Roggio** guides a team of graduate students including **Will Carle**, **Dalila Castilla**, **Doaa Gamal** and **Jeff Gouge** to develop lobbyist registration software for the City of Jacksonville. The City had estimated that it would have cost the City in excess of $100K to put such software together.