Message from the Chair

Dear friends of CEE,

Our students, faculty and staff continue to make important contributions to the field of civil engineering in academics, research and service. Our face-to-face and distance-learning programs remain on the cutting edge of engineering education; the achievements of our young alumni in diverse sectors reflect their impact. This fall semester, we will launch our Bachelor of Science in Civil Engineering degree program at the Mercer County Community College campus, expanding access for students from the college and the region.

This past May, we proudly congratulated 128 undergraduate and 94 graduate students who received their degrees at Commencement. The latest American Society for Engineering Education figures place CEE 18th in the nation for the number of undergraduate degrees awarded annually. CEE students, faculty and staff continue to advance in the three interdisciplinary research areas of intelligent transportation, environmental and infrastructure systems.

I am pleased to share with you some of the details in this summer 2017 issue of the CEE Newsletter. As always, the CEE Department welcomes your support of its programs and initiatives.

Sincerely,

Taha F. Marhaba, P.E., F.ASCE

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Students

Commencement May 16, 2017

Congratulations to the 128 undergraduate and 94 graduate students who received CEE degrees at this year’s ceremony. Pictured are some of our grads before their procession into the Prudential Center arena.
managers, contractors and attorneys.

Jerome F. Gallagher, Jr., Esq. ’80 (Chair) Norris, McLaughlin, Marcus, PA

Ted Cassera, P.E., ’72
Bowman Consulting

Anthony Castillo, P.E., ’95 ’02
SESI Consulting Engineers

David Good, P.E., ’78, ’82
Mueser Rutledge Consulting Engineers

Andre Grebenstein, LEED AP ’95, The Martin Group

Tony DeJohn, P.E., P.P.
WSP Parsons Brinckerhoff

Gareth Middleton, P.E., ’80 ’04
Tianman Construction, an AECOM Company

Rocco Palmieri, P.E., P.P., PLS ’72, ’77, Partner Engineering and Science

Maurice Rached, P.E.
Maser Consulting

Ken Sisk, P.E., ’95
Pizzarotti IBC

Joseph Stanley, P.E., P.P., ’78, ’85, Mott MacDonald

Wei Wang, P.E., ’95
Urban Tech

Michael Wright, P.E., P.P., PMP ’79 Arora and Associates, P.C.

Editors

Cynthia Gincel
Tom Jaworski
Tracey Regan
Heidi Young

Special Thanks

Strategic Communications
Office of Alumni Relations
Faculty/Staff, Students & Alumni

Scholarships
Donations

The Industrial Advisory Board (IAB) has created a scholarship fund to recognize CEE undergraduates students for their diligent preparation for professional licensure. Donating to this fund will ensure your gift reimburses testing fees to students who pass Fundamentals of Engineering exam.

2017 Scholarship Recipients

CEE Campaign
Aswina Ranasinghe
William Sanchez

CEE IAB
Joseph Angeli
Marc Coimbra
Patrick DeLong
Shaun Delaney
James Piazza

Commencement Reception and Awards Ceremony

Student Excellence awards were distributed at the CEE Department’s 7th annual Commencement Reception, attended by students, families, faculty and alumni on May 16.

Awards were presented in recognition of students for their outstanding academic performance, leadership and service to the university community.

Alumni were also recognized for their continuing contributions to the civil engineering field.

View a list of Award recipients.

Louis Berger Graduate Fellowship

Civil engineering graduate student Takudzwa Benox Mugabe, a 2017-2018 Louis Berger Fellowship recipient, is working at Louis Berger’s transportation division in Morristown.

His career experience prior to Louis Berger was in Harare, Zimbabwe, working for ProStruct Consulting Engineers, where his father is one of the directors. It was from his father that he first gained insight into the work of a civil engineer.
Takudzwa: "I am filled with great pride when I hear people discussing the Trust Towers building in Harare because my father was the principal design engineer. The excellence of the work he produced effectively became an illustration of the fulfillment one could experience pursuing a career in civil engineering. I am happy to say this co-op experience with Louis Berger constitutes my first steps in pursuing that career."

Takudzwa's assignment at Louis Berger has been vastly different than previous work because the structural design is focused almost exclusively on bridges. He is responsible for drafting reports and creating drawings from the "concept development" stage to the "final design" phase. This activity has provided lessons on clearly conveying information. Reporting is an important aspect of an engineer's work as a good design may be considered inferior if presented poorly.

Freshmen Orientation

Civil Engineering student Elizabeth (Lizzy) Sheridan serves as an administrative coordinator on the New Student Orientation (NSO) Team and assists incoming CEE freshman. Lizzy explains her interest in Civil Engineering and her passion for helping new students.

Why you are interested in engineering? "I wanted to challenge myself by doing something that could better society and show that women can do anything men can do."

Do you have an interest or passion for a particular area of the field?

"I'm interested in working for city government to improve the daily lives of people."

Describe your responsibilities as a freshman coordinator:

"I work to resolve any issues that come up, helping students schedule their orientation date, advising them what to bring and what they may need to succeed at NJIT. I let them know the name of their advisor, where to go if they get sick, etc. Many times, parents of incoming students like to hear a student's perspective on the school. I find my position very rewarding, because I help to alleviate any concerns that parents or students may have about NJIT. I hope that the entire NSO experience helps them to become better equipped for college."

What experience are you gaining to help you with your career?

"My work as administrative coordinator has helped me gain people skills, working with students and parents, which has taught me how to work in an office setting. I've also included people with many different skills and ideas. These skills would benefit me when talking to contractors as well as coworkers."

Research

360 Pipe Inspections

Under the supervision of Professor Jay Meegoda, Jitendra Kewalramani (NJIT master's student) and Akila Saravanam (West Windsor Plainsboro High School North student) began work on an innovative approach to conduct visual inspections of culverts. Culverts are drainage systems that carry water away from roads after rains. A defect in a culvert that results in flooding can threaten lives and property, while causing major damage and disruption when communities are cut off and habitats are swamped.

The students have developed a cost-effective approach to study defects in these embedded structures. They have modified a remote controlled crawler to travel through culverts while taking 360-degree videos of the insides of the pipes. Watch the crawler in 360 action.

Where are they now?

Read alumni updates

* '87 Anthony Del Vescovo
* '90 Mark Katarniak
* '91 Gregory Kelly
* '91 Rajendra Navaulkar
* '93 Keri Tyerman
* '94 Scott Bleeker
* '95 Himanshu Bhatia
* '11 Melissa Salasino
* '12 Muhammad Elgammal
* '13 Michael Thomas

Faculty Promotions

Where are they now?

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* '11 Melissa Salasino
* '12 Muhammad Elgammal
* '13 Michael Thomas
Ice Cream Man Cometh
It's a sweet treat, but for Joe Marazzo '80 it's so much more and has been since he was a child. Indeed, ice cream not only represents a family legacy for the NJIT civil engineering alum, but also the means by which he paid his way through college.

Marazzo owns and operates Delicious Ice Cream, a company established in 1955 by his father, Al, who sold ice cream seven days a week from April to October to supplement his income as a pipe-boom and heavy-truck operator with the City of New York's Water Department. He was the ice cream man in Marazzo's Staten Island neighborhood and drove a 1950 Chevy ice cream truck outfitted with a refrigeration unit...

More

Outreach

When Forest Creatures Have a Problem, They Call an Engineer
Dreamed up by a team of civil engineering and digital design students at NJIT, the project-leading fox makes her debut in the recently published "Roxy the Fox and the Tree Truss Bridge."

The book is designed to show students from kindergarten through the third grade what an engineer does. In it, Roxy assembles a design-and-build crew to construct a bridge that will get her mates - bears, squirrels, beavers and deer - to the delicious berries on the other side of a stream.

Published by Xlibris and available for purchase, a percentage of the proceeds from book sales will be donated to the STEM program in Newark public schools.

Read an interview with the students, Gabrielle Grompone '17, writing coordinator and Joseph Vitale '19, production coordinator.

Faculty

Robert John Craig's Legacy - The National ASCE Conrete Canoe Competition
In June, students from across the nation participated in the American Society of Civil Engineers (ASCE) 30th annual National Concrete Canoe Competition in Golden, Colo. The idea for the national competition was presented to ASCE by Robert John Craig, an NJIT civil engineering professor, since concrete canoe construction incorporated his passions - the outdoors, canoeing, competition, civil engineering, problem solving, and teaching. After taking student teams to regional concrete canoe tournaments, he wanted more.

Professor Craig, who also served as the ASCE New Jersey section president and vice chairman of the National Committee for Student Services, among other roles, pushed the Society in 1985 to organize a national concrete canoe championship. In 1987, he led an ASCE committee to do just that.

The first National Concrete Canoe Competition, with sponsorship from Master Builders, was planned for 1988 at

Faculty Promotions
Congratulations to CEE faculty on their recent promotions!

Rongfang Liu
Associate Professor to Professor

Wen Zhang
Assistant Professor to Associate Professor
The first National Concrete Canoe Competition, with sponsorship from Master Builders, was planned for 1988 at Michigan State University. Tragically, John passed away from a rare brain tumor just months before the inaugural event he had worked so hard to establish. He was just 44 years old.

ASCE established the R. John Craig Award in his honor, given at each national competition to the winning team in the coed sprint race. Members of the Craig family honored John’s lifetime of work, teaching, and innovation at this year's national competition.

This article was compiled from an ASCE June 16 news article: Engineer's Vision for Concrete Canoe Now 30 Years Strong