FALL 2019 NEWSLETTER

ABOUT THE COLLEGE OF ENGINEERING, TECHNOLOGY AND COMPUTER SCIENCE

We offer students, at any stage of their academic or professional careers, opportunities to innovate and explore – to design the future. Whether through continuing education programs or degree programs (we offer 4 master’s degrees, 14 B.S. degrees, 1 B.A. degree, and 5 A.S. degrees), we are dedicated to transforming students into leaders in their field. Most of our technology, computer science, and engineering programs are accredited by ABET, the premiere accrediting agency for engineering and technology. Visit us at pfw.edu/etcs to learn more about ETCS!

MESSAGE FROM DEAN ZOGHI

Welcome to the fall issue of the Link. We have had a great start to the new academic year, as we welcomed the incoming freshman class during orientation and new ETCS faculty and staff members as well as the rest of our ETCS colleagues (many of them returning from their summer break) at the fall
We continue to execute the ETCS strategic priorities, first identified through a deliberate planning process that was launched in the 2016-17 academic year. The college continues to develop improved processes to partner with K-12, Ivy Tech Community College, and industry; prioritizing and integrating student needs initiatives; collaborating closely with industry partners on innovation projects, TAP and IN-MaC projects; and rolling out the new Industry/Corporate Fellows program for our faculty. This past year, the college launched a first year centralized advising program as a result of our strategic plan. This, along with several other high-impact practices including a living-learning community (LLC), a LEAD peer-mentor program, an enrichment program, and a peer tutoring program, continue to grow and make a difference in enhancing student success, retention, and graduation rates. An update on some of these initiatives is provided in this newsletter. Also included is a brief description of a new camp offered this summer called “Future Girls of STEM” which is a new partnership between female faculty and students, female practitioners, and the Girl Scouts of Northern Indiana and Michiana to introduce second and third graders (“Brownies”) to STEM fields. The intent of this program is to plant the seed early on and get girls excited about various STEM majors, work with them and grow the program throughout the year, and eventually create a pipeline for outreach to ETCS/Purdue Fort Wayne and the workforce. We have also partnered with the Whitley County Economic Development Corporation (EDC) and Ivy Tech in promoting Industry 4.0 (aka IIoT) in northeast Indiana.

In the current academic year, the four ETCS departments and School of Polytechnic have been developing new strategic plans that are aligned with the ETCS and University plans. Each department has been working to identify its OKRs (objectives and key results) to execute the departmental/school priorities. Similarly, the ETCS industry advisory board has been working diligently to help advance the mission of the college by forming four different groups, each identifying OKRs of its own and measuring/reporting their progress at the end of the fall and spring semesters.

In light of above activities and achievements, it is evident that this academic year promises to be another productive year.

Respectfully,
Manoochehr Zoghi, Dean of ETCS
ETCS OUTREACH

**FIRST® LEGO® League Northern Indiana Championship**

December 14, 2019
Purdue Fort Wayne Athletic Center Fieldhouse & Walb Student Union

**Indiana Future City Regional Competition**

January 26, 2020
Walb Classic Ballroom

**Engineering Week Bridge Building Contest**

February 23, 2020
ETCS Lobby

**Sci-TEC Academy Awards Night**

April 9, 2020
Walb Classic Ballroom

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SPOTLIGHT ON STUDENT SUCCESS

HELP CORNER UPDATES

MEET OUR TUTORS:

Taha Alibhai
MET/ME 2+3: Junior

Shehrvar Azam
Electrical Engineering: Junior

Tilottoma Barua
Electrical

LIVING LEARNING COMMUNITY
The Living Learning Community has grown again and now takes up 3 floors of Building H. The resident assistants that oversee these floors are Jacob Taylor (Construction Engineering Technology: Senior) and Kyle Kirkpatrick (Mechanical Engineering: Sophomore). To start off the semester we had a great “Welcome Back” event and the students enjoyed sharing a meal with several department chairs and faculty members. The RAs have put on several events which included: “Budgeting Crash Course”, Ultimate Frisbee, Sexual Assault Awareness and a “Grow your own Slime” program. To wrap up the semester the LLC will be doing a joint program with the LEAD Mentor group.

NEW THIS SEMESTER!

The university created an online and in-person training to better equip tutors. The tutors were able to interact with students from other tutoring centers and learn how to better serve those coming for help.

L.E.A.D. PEER MENTOR GROUP

The L.E.A.D. peer mentor group has connected with hundreds of new and returning ETCS students at events this semester, which include: the welcome back cookout, industry mixers, small-group gatherings, and mid-term de-stress events! There are more events to come that will allow CS students, faculty, and staff to continue building a welcoming family atmosphere.
The next event will be attending a Purdue Fort Wayne men’s basketball game at the Coliseum on Wednesday, December 4th at 7 pm.

ETCS UPDATES

Exciting News!
Our undergraduate engineering programs: civil, computer, electrical and mechanical -recently received a rank of 38th nationally at institutions where a doctorate is not offered.

-U. S. News & World Report

EXPANDING THE COLLEGE

Plans have been rendered for an Advance Manufacturing and Industrial Technology Building on the Purdue Fort Wayne campus. This will provide much need space for our School of Polytechnic and to expand in the areas of advanced manufacturing, materials, and technology innovation. There will also be collaborative spaces for work with industry partners. The proposed building will provide approximately 70,000 square feet of space at a cost of about $45 million.

SPOTLIGHT ON ETCS FACULTY & STAFF

WELCOME OUR NEW FACULTY AND STAFF MEMBERS!
Jahan Bayat, Assistant Professor - Polytechnic

Jack Li, Assistant Professor - Polytechnic

Stephanie Van Dellen, Visiting Assistant Professor Organizational Leadership

Dr. Mohammedreza Hajiarbabi, Visiting Assistant Professor Computer Science

Tu Ryan Nguyen, Assistant Professor - Computer Science

Bin Chen, Associate Professor - Electrical & Computer Engineering

John Fitch, Systems Engineering Research Associate

Ashley Blauvelt, ETCS Student Success Advisor

Ranesha Smith, ETCS Student Success Advisor
A cross-disciplinary faculty team came together to collaborate with General Motors (GM) to propose a solution for a process-improvement initiative at the Fort Wayne Assembly plant. The goal was to identify a cost-effective, highly-efficient, and safe solution for transporting trucks from the end of the assembly line to alignment stations using autonomous technology. Focusing on Autonomous
Guided Vehicles (AGVs), the team created a conceptual design for an AGV system that included customized sensors, power charging workstations, system-level controllers, attachments and a navigation system. The faculty team presented a white paper to GM’s Plant Manager and other senior management and engineers, discussed the feasibility of the proposed solution, and learned more about GM’s process for implementing process improvements. Many opportunities exist for process improvement at the plant and a strong business case, particularly related to labor savings, must be made before ideas move forward. GM is assessing this proposed solution and also identifying other areas for collaboration on these types of projects.

The faculty team included Zhuming Bi, Ph.D. (Mechanical Engineering), Zesheng Chen, Ph.D. (Computer Science), Behin Elahi, Ph.D. (Industrial Engineering Technology), Jennifer Hunter, M.S. (Organizational Leadership), Venkata Inkulluko, Ph.D. (Computer Science), Amal Khalifa, Ph.D. (Computer Science), Michael Kirchner, Ph.D. (Organizational Leadership).

**FACULTY KUDOS**

**Don Mueller**, Associate Professor of Mechanical Engineering, was selected as the 2019 ASEE IL-IN Section Teacher of the Year.

**Dong Chen**, Professor of Civil Engineering, received the 2018-2019 Purdue Fort Wayne Outstanding Teaching Award.

**Zhuming Bi**, Professor of Mechanical Engineering, received the IEEE Region 4 Outstanding Professional Award for 2018.

**Paresh Mishra** was promoted to Associate Professor of Organizational Leadership.

**Todor Cooklev**, Harris Professor of Wireless Communications and Applied Research and Director of Purdue University Fort Wayne Center for Wireless Technology, was inducted into the 2018 Purdue Innovator Hall of Fame.
Female faculty led the first ever “Future Girls of STEM” summer camp, hosting 24 eight and nine year old girls on campus for a week of STEM-related activities. Partnering with the Girl Scouts, ETCS faculty collaborated with industry partners (General Motors, City of Fort Wayne Utilities, and Indiana Department of Transportation) to help girls learn about the ways STEM impacts their lives.

Hands-on activities focused on construction and civil engineering, 3D printing, robotics, water testing, cybersecurity, and leadership. Each day, PFW engineering
students joined the camp, serving as role models and sharing their stories and projects related to STEM. Teaching girls about STEM early increases their interest in STEM-related careers, belief in their abilities related to STEM, thus increasing the likelihood of choosing a path in one of our disciplines.

Our mailing address is:
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