Greetings,

Welcome back! I hope everyone had a fabulous winter recess with your family and friends and you are rested and ready for an exciting new year. You might have heard in the news that many colleges and universities have begun overhauling their spring semester plans as omicron surges. Here at Purdue Fort Wayne, we have resumed our work and classes in person with the stipulation of wearing masks at all times while inside any building on campus.

This edition of the Link Newsletter highlights several recent great ETCS events, activities, and recognitions. I am thrilled to report that our college’s overall enrollment is up according to the recent Spring 2022 census data. Thanks to the collective efforts of our faculty and staff colleagues and the university enrollment teams. The 17th annual Opportunity Banquet, co-sponsored by the Society of Women Engineers (SWE), was enlightening. It was attended by many students and industry partners. We are grateful to the leadership of Dr. Elizabeth Thompson, the faculty advisor, for her dedication and mentorship. She has truly created a legacy in ETCS/PFW.

I applaud Dr. Becca Essig for her well-deserved recognition, being selected as one of the influential women in Northeast Indiana. She has done an amazing job in mentoring engineering students and has been instrumental in launching the new Phi Sigma Rho sorority in ETCS.
heartfelt congratulations goes to Dr. David Cochran, the Director of the Center of Excellence in Systems Engineering, for receiving the prestigious PFW's Outstanding Research Award in recognition of his world-class scholarly accomplishments. I also want to extend a warm welcome to the new members of the ETCS family. We are fortunate to have Mr. Nicholas Gray join ETCS as the Director of Outreach Programs. Nick’s impressive background spans experiences in K-12, as Purdue Fort Wayne’s Director of TRIO Upward Bound Programs, and most recently as the Director of Dual Enrollment and K-12 Partnerships at Trine University. Another excellent addition to the Dean’s Suite is Ms. Sarah Harrison. Sarah’s writing, artistic, and social media skills along with her professional demeanor have made an immediate impact in various ways. We are delighted that Mr. Joe Smith, an alumnus of ETCS, has been promoted to the position of Associate Director of the Center of Excellence in System’s Engineering. Congratulations! Welcome aboard Nick, Sarah, and Joe!

It is my great pleasure to announce the appointment of Dr. Kim O’Connor as the new chair of the Organizational Leadership Department, effective January 1, 2022. Kim O’Connor, an associate professor of OL, has been serving as the graduate program director of the OL department for the past several years. My sincere congratulations to Kim and I look forward to her participation as an integral part of the ETCS leadership team. I also want to acknowledge the invaluable contributions of Dr. Gordon Schmidt who served as the chair of the OL department for the past 4 ½ years. He has resumed his full-time faculty status beginning this spring semester. Congratulations to Gordon and his wife Muffy for their newborn, Dimitri, who was born on January 3rd.

I would like to express my deep appreciation to all of our staff and faculty colleagues for your dedication, hard work, and for making ETCS a great place to work and a nurturing environment for our students to learn and grow. Many thanks to our industry and community partners for your continued support. I am looking forward to a productive and exciting spring semester.

With gratitude,
Manoochehr Zoghi
Dean

Fall Semester Events

Opportunity Banquet

The 17th Annual Opportunity Banquet took place on November 5th, 2021. This year’s keynote speaker was Ms. Christina Lomasney, a physicist, who co-founded Modumetal to advance the state-of-the-art and to realize
the full potential of a new class of nanolaminated metal.

There were approximately 300 in attendance, including Purdue Fort Wayne students, staff, and faculty, and representatives from 32 area industry sponsors.

The event is organized by the Purdue Fort Wayne Society of Women Engineers with strong support and collaboration from the College of ETCS.

Want to see more pictures from the Opportunity Banquet? Click on the button below!

Opportunity Banquet Photos

ETCS Game Night

On October 7th, professors and students interacted outside of the classroom at the ETCS living-learning community game night hosted in the student housing clubhouse. Professor Keith Hood taught students how to play Chinese checkers and department chairs Dr. Guoping Wang and Dr. Gary Steffen played Apples-to-Apples. Dr. Adolfo Coronado also attended along with 20 students.
In November, the Chapman Scholars had a "Dinner with the Deans" event. Six of the twelve scholars that attended this dinner were from ETCS. They got to enjoy dinner and socializing with fellow Chapman Scholars and Deans from across campus, including our own Interim Assistant Dean Adolfo Coronado.

Front Row (L to R): Taylor Stanton (Mechanical Engineering), Interim Assistant Dean Adolfo Coronado, Drew Clem (Electrical Engineering), Luke Bushur (Computer Science)
Back Row (L to R): Isaac Wendel (Mechanical Engineering), Emerson Stobbe (Electrical Engineering), and Mick Stewart (Mechanical Engineering)

Institute of Electrical and Electronic Engineering

The Student Panelist Event

Five Amazing Students shared their internships/co-op experiences to the freshman and sophomores of ETCS. They shared their tips and tricks they learned in industry, resume hacks,

USSI (Ultra Electronics Tour)

Two presenters from Ultra Electronics (USSI) in Columbia City gave a tour and presentation on the types of projects that they do.
Outreach 2021

On October 13th, the ETCS Outreach Team had their Sci-TEC Academy Kick-off Night! 30 Local students in grades 8-12 and their parents got to meet with Faculty and Staff from ETCS and explore some of the cool things the ETCS building has to offer.

On November 13th and 20th, the Outreach Team hosted the Qualifying rounds for the First Lego League competition. These middle school teams showed their teamwork skills while building some incredible robots!

Learn More about the ETCS Outreach HERE

Staffing Updates

Nicholas Gray
Director of ETCS Outreach Programs
graynw01@pfw.edu

Nicholas Gray served as the Director of Dual Enrollment and K-12 Partnerships at Trine University. Prior to that Nicholas served as the Director of two TRIO Upward Bound Programs at Purdue Fort Wayne for nine years. This past year Nicholas served as President of Indiana TRIO
representing TRIO programs across the state and served on the Educational Opportunity Association Board of Directors.

Nicholas is a First-Generation student who graduated from IPFW with a Bachelors in Secondary Education and Master’s Degree in Educational Leadership. Prior to coming to PFW Nicholas worked in Fort Wayne Community Schools as a teacher and school administrator. Nicholas is an avid sports fan, cheering on the Indiana Hoosiers and the Chicago Bears. He also loves to travel, especially to the Caribbean.

Sarah Harrison
Administrative Assistant
ETCS Dean's Office
harri247@pfw.edu

Sarah Harrison is a newer face in the Dean's Office suite. She graduated from Indiana University in 2016 with a Bachelor's in English, and again in 2018 with a Master's in Library Science. She worked as a Youth and Teen services librarian in La Porte and then in Garrett until she joined PFW at the end of September. Sarah has been training as a competitive ballroom dancer since college and can often be found practicing in the dance studio after work. She also loves spending time crafting or curled up with a good book.
Kimberly O'Connor
Department Chair
Organizational Leadership
oconnork@pfw.edu

Kimberly W. O'Connor, (B.A. Purdue University, J.D. Loyola University School of Law) is now the department chair of Organizational Leadership! She is an associate professor and attorney, licensed to practice law in Indiana. She has published multiple journal articles and book chapters in her primary research area of cyber law, including social media and the law, cybersecurity, employment law, and data privacy. She has also served as a consultant for social media-related matters in organizations and for K-12 schools, educators, students and the Indiana Department of Education.

Joseph Smith
Associate Director: Center of Excellence in System Engineering
smitjj09@pfw.edu

Joseph Smith has received both his B.S. in Computer Engineering and his M.S.E. with a concentration in Systems Engineering from Purdue Fort Wayne. During his time as a graduate student, he worked in the SE Center as a GRA. Upon graduating, he moved into a Research Associate role where he served until January 2022. His research interests include Manufacturing System Design, Health Care System Design, and the application of Systems Thinking and Continuous Improvement as a whole.

Faculty and Student Shout-Outs

CME Staff Project Approved

Three CME faculty members, Bongsu Kang, Dong Chen and Zhuming Bi, have worked with Sean Ryan, the Director of Office of Engagement of PFW, in developing multiple Indiana Economic Development Corp. (IEDC) Innovation Voucher proposals, and the most recent one proposed to NuevoPoly on “Quantification of Mechanical Properties of Various Polymer Formulations and Formula Optimization of One Selected Polymer” is expected to be approved in this December. The funded amount for this project is $50,000.
IEEE Students Making a Difference

Have you seen this old car sitting in the parking lot near the ETCS building? Here is what Tanvir Minhas, President of the PFW chapter of the Institute of Electrical and Electronic Engineering (IEEE) has to say about the project.

"The idea of an electric car came from looking at the other IEEE sections across the U.S. And of course Tesla. This project has actually been planned for about a year, however we stalled the project due to COVID. This semester was our opportunity to capitalize!

The core essence of the Electric Car Project is: take a broken down car, replace parts, create a brand new design and finally race it locally in the spring time.

Benjamin Edwards, the Vice President of the IEEE Student Chapter, had a cousin who was offering us a car for the project! What a great beginning. From there, we brainstormed the parts list, structured what type of work will be needed on the car (software, hardware etc) as well finding industry sponsors who were willing to provide financial support. Regal Rexnord (1st sponsor) had great interest in the project and has backed us graciously."

Pictured students (Left side): Benjamin Edwards, Cameron Lawless, Josiah Beck, Tanvir Minhas (Right side): Andrew Larsen, Logan Haiflich, Carlos Rodriguez, Raj Patel
Not pictured: Michael Sassman, Mike Hurtle, Jonathan Brito, Michael Mudemu
KPC Media Announces Influential Women of 2021

In September, KCP Media Group announced the 2021 Influential Women list. The list celebrates "amazing women in our communities who have overcome barriers, defied social norms, and blazed trails for future generations." Assistant Professor of Engineering, Rebecca Essig is included as one of those influential women. This is what KPC Media had to say: "In a male-dominated field, Rebecca is an outstanding educator who has worked to encourage the next generation of engineers. Her high performance in the classroom has been rewarded multiple times at the college and university levels. Outside of the classroom, she has demonstrated a strong commitment to service throughout the university and into the community. All of her service activities are centered around sharing her passion for engineering with K-12 students and increasing diversity within the engineering student body and workforce."

New Student Organization: Phi Sigma Rho

The fall semester brought a new student organization to the ETCS family! Phi Sigma Rho is a national engineering and engineering technology sorority, and PFW is proud to now have an active colony on campus. The first sorority class is composed of 10 dedicated students from across the college. In the fall, they showed their outstanding commitment by organizing and participating in a sisterhood retreat, a STEM outreach event for the Girl Scouts, an Adopt-a-Cop program with the campus police, and multiple other social and service activities on and off campus. They are excited to welcome new members into the group with their spring recruitment in January. If you are interested in supporting this amazing organization, email their Faculty Advisor, Becca Essig, at essigr@pfw.edu.
Organizational Leadership: Upcoming Books by OL Faculty

Managing by Dharma: Eternal Principles for Sustaining Profitability
By Paresh Mishra and Suresh Kalagnanam

This book combines the wisdom in ancient Hindu texts on dharma, with the modern research on management to identify a set of principles that can aid business organizations in sustaining profitability. As businesses look to act more responsibly in response to the negative impact they have had on people, societies, and the environment, researchers are highlighting the changes that businesses must incorporate,

Leaders Assemble! Leadership in the MCU
By Gordon Schmidt and Sy Islam

Leaders Assemble! Leadership in the MCU includes sound research and evidence-based advice on how to improve as a leader on topics such as leadership development, conflict management, mentorship, sensemaking, shared leadership, servant leadership, authentic leadership, and selecting your team. Examples from your favorite MCU films make these concepts come alive so you can easily see
Outstanding Research Award Recipient: David Cochran

On November 4, OAA formally recognized David Cochran as the 2019-2020 Outstanding Research Award recipient. Due to the pandemic, OAA could not host an in-person ceremony, so they rescheduled the event in his honor to this year.

PFW Students Travel to Kennedy Space Center

PFW Seniors and Chapman Scholars (Left to Right) Panashe Chakabva (OL and POLYS), Jacob Bushur (ECE), Malaika Ahmed (COAS), Althea Shoaf (HRSV and OL Minor), and Justin Geise (COAS) traveled to Kennedy Space Center on January 15, 2022 to learn about engineering, leadership, and physics concepts related to NASA’s space program. Their faculty mentors are Rebecca Essig, PhD (CME) and Kimberly O’Connor, JD (OL).
Project Spotlight: Guardian Internet of Things

Associate Professor of Computer Engineering Chao Chen is being featured on the 2020-2021 Annual Report produced by the Office of Sponsored Programs for her project: "Innovation Voucher: Guardian IoT Monitoring System."

In this project, team members worked with Guardian Machine Protection, LLC, to design, implement, and test a hardware and software prototype of the Guardian Internet of Things (IoT) remote machine monitoring system, with the goal of achieving streamlined data sampling, display and analysis.

Also involved in this project are Zesheng Chen from the Department of Computer Science and three students from different ETCS disciplines: graduate student Meghana Raghavendra (CS), Jacob Bushur (ECE), and Austin Holman (ECE). Assisting with the project allowed these students to develop practical skills, first hand industrial collaboration skills, and project management skills.

Pictured below (Left to Right): Jacob Bushur, Chao Chen, Zesheng Chen, and Austin Holman
Not Pictured: Meghana Raghavendra
Special Section: Transactions on Aerospace and Electronic Systems

Professor Zhuming Bi of the Department of Civil and Mechanical Engineering is organizing a Special Section (SS) with four international known scholars for IEEE Transactions on Aerospace and Electronic Systems (T-AES) on "Industrial Information Integration in Space Applications". The submission to SS is open from November 23 to December 31 2021. Interested colleagues may find the details of the coverage at T-AES: Special Section (SS) on Industrial Information Integration in Space Applications and submit your manuscript to IEEE Transactions on Aerospace and Electronic Systems.

ETCS Alumni Shout-Outs

John Konchar is making a name for himself in the NBA.

PFW alumnus and former PFW shooting guard John "Jitty" Konchar is currently on a two-way contract playing in the NBA for the Memphis Grizzlies and the Memphis Hustle! Konchar got both his BS in Information Technology and his MS in Organizational Leadership from the College of Engineering, Technology, and Computer Science.

Fans of this incredible alum can purchase official Jitty apparel and
learn more about him on his website: https://johnkonchar.com/

BS IT Graduate: Mark Pruden making a difference at Sweetwater
Article from Sweet tech Newsletter January 2022

When a third shift was introduced at the DC, the iPad-connected carts used to organize orders in the facility’s pick mod needed a major battery upgrade. The Client Ops team, including Client Systems Analyst Mark Pruden, was tasked with taking the carts’ battery life from eight hours to 24 hours.

Client Ops knew that no consumer products could solve their problem, so they built their own solution. Mark Pruden started by streamlining the power supply for the carts already brilliantly designed by Joe McNeely: The battery was replaced with a smaller, more powerful e-bike battery (idea courtesy of Nathan Allen) wired into a converter box that splits the power to the iPad and LED lights. Mark used his experience working with electronics to not only redesign the converter box, but also create custom parts with his own 3D printer. The new cart design was sturdier, more reliable, and exceeded their goal by more than double, with a battery life increase from 8 hours to 55 hours.

With the assistance of Lauren Schwab and Todd Baldwin, and thanks to the groundwork laid by Joe McNeely, building the new carts took two months, over 112 hours of work, and 171 steps per cart. Mark assembled 60 carts, which adds up to a staggering 10,260-point checklist that Mark filled out on an Excel spreadsheet.
Streamlined inside and out with fewer wires, reinforced cables, and a brand new battery, the new cart design is a project Mark says he’s proud of: “The big wow factor here is going from 12 hours of uptime to 55, and not one box has failed yet. This is my favorite thing I’ve ever worked on!”