



76TH FOUR-STATE REGIONAL TECHNOLOGY CONFERENCE

"Rooted in the Past, Teaching for Tomorrow: Driven by Student Success."

Thursday & Friday
November 13-14, 2025
Crossland College of Technology
Pittsburg State University



W E L C O M E



For seventy-six years, the Four-State Regional Technology Conference has provided technical teachers throughout the region with unique professional development opportunities. The Four-State Regional Technology Conference is designed to present an exciting working conference where K-12 and post-secondary CTE, Technology and Engineering, and STEM teachers can actually engage in a series of targeted projects, activities, and teaching strategies that make technical education practical and fun in any classroom.

We hope that you will connect with other professionals and help us develop a beneficial network of enthusiastic and positive members who want to see technical education become the norm in classrooms across America. Make some new friends and renew old friendships while at this year's conference. We want this conference to be educational, experiential, and, most of all, fun, for all of our attendees.

The FSRTC Steering Committee has developed an excellent program for you this year with over 13 workshops and 22 technical presentations. This year we are bringing back the wildly popular Axe Throwing Activity for our social event on Thursday, which was first introduced at the 73rd Conference. We also have two universities present (Pittsburg State University and Fort Hays State University) competing in the Southwest Regional Technology and Engineering Education Collegiate Association (TEECA) competitions. Be sure to network with these upcoming professionals anticipating entering our profession. These students will be competing in various activities such as Problem-solving, Manufacturing, and Communications Technology. A detailed schedule of these events is located towards the back of this program.

Finally, please be sure to thank all of the volunteers of this event. These include those working behind the scenes (e.g., registration booth, staff of the CTC, etc.), the presenters, and the members of the Steering Committee. They all have worked tirelessly and selflessly to ensure this conference has minimal issues as well as provide you with a quality program.

Have a fantastic conference!

Dr. Trevor Maiserouille
School of Technology and Workforce Learning
PSU Crossland College of Technology

History of the Four-State Regional Technology Conference

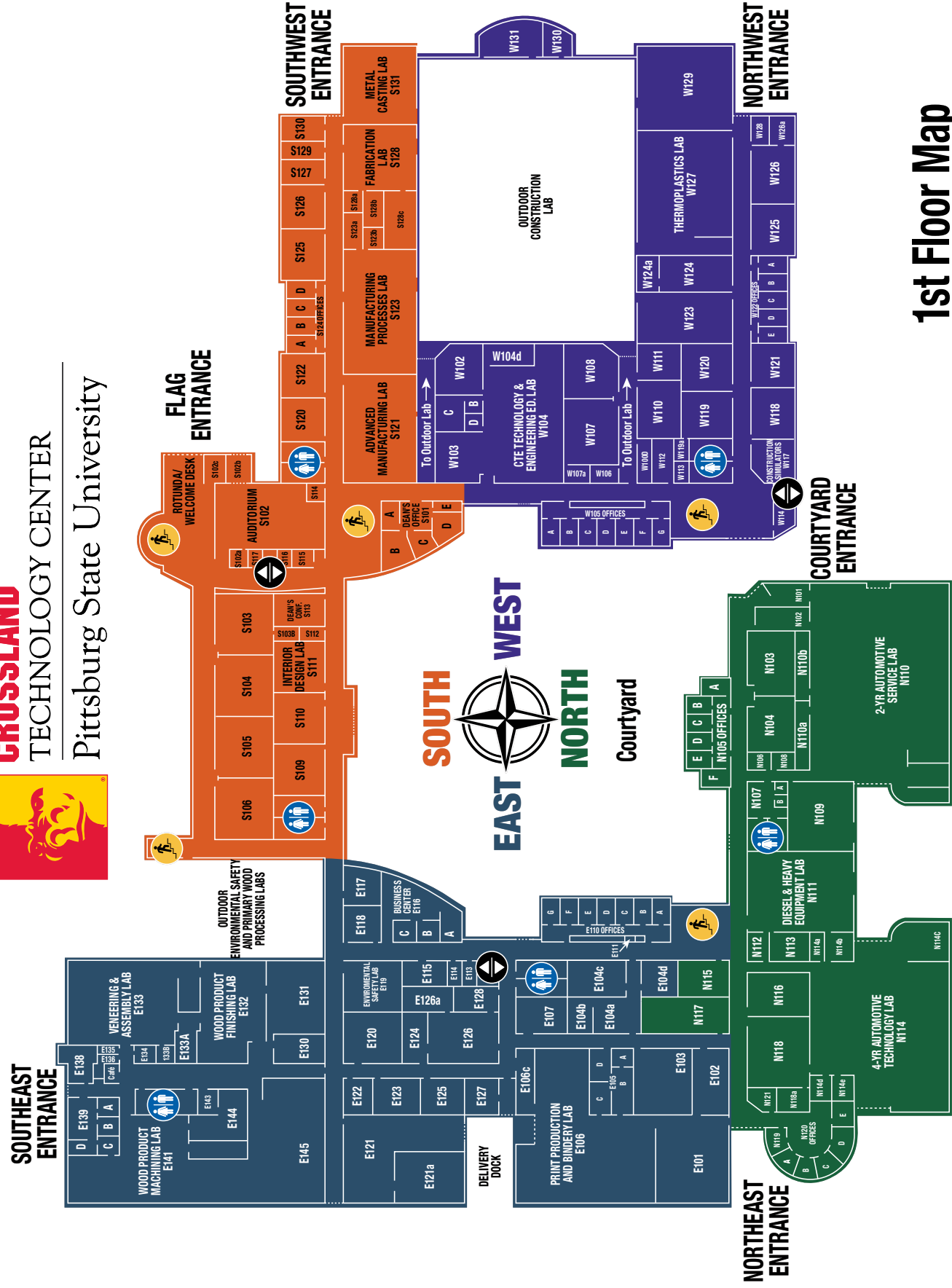
The FSRTC was first introduced as the Four-State Conference on Industrial Arts and Vocational Education in 1938 on the campus of then Kansas State Teachers College, Pittsburg, KS. After just a few short years, the conference grew from a very specialized conference to a general regional conference. The first conference consisted of five presentations which were "The Problems of the Supervisor", "Techniques for Shop Organization and Class Management", Industrial Arts for the Superintendent and Principal", and "Philosophy of Education as Applied to Industrial Arts" and finally, "Improvement of Teachers in Service". All of the sessions were two hours long. Seven vendors took part in the first conference.

The conference quickly grew from just over a dozen participants in 1937, to 287 participants after WWII in 1947, to a whopping 550 attendees in 1950. The conference recognized and added Technology Education in the mid-1980s reaching 350-400 attendees in the late 1980s. The conference has met 74 times since its first sessions. The name has not changed, however, the profession titles have changed over the years, using names like Industrial Arts, Vocational Education, Technology Education, Career & Technical Education, STEM, and Technology & Engineering Education. Although the name has changed the purpose has always remained focused on the teachers in the field, and on their professional development as educators.





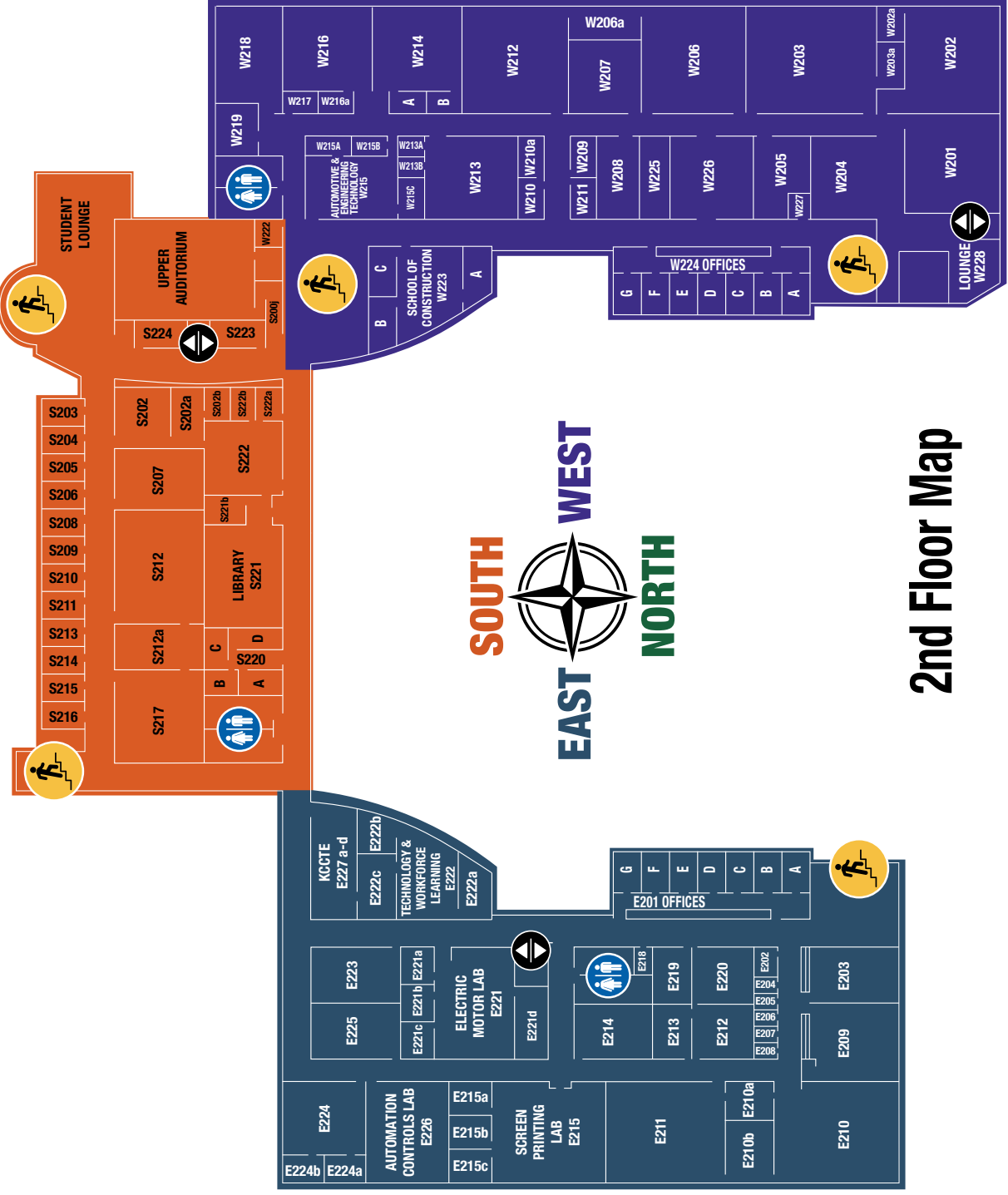
CROSSLAND
TECHNOLOGY CENTER
Pittsburg State University



1st Floor Map



CROSSLAND
TECHNOLOGY CENTER
Pittsburg State University



2nd Floor Map

CONFERENCE AT A GLANCE

Thursday, Nov. 13, 2025

Registration Table Open	8:00am - 4:00pm
Morning Presentations	10:00am - 12:00pm
Lunch	12:00pm - 2:00pm
Afternoon Presentations	2:00pm - 4:00pm
Social Event	7:00pm - 9:00pm

Friday, Nov. 14, 2025

Registration/Breakfast	8:00am - 9:00am
Session 1	9:00am - 9:50am
Session 2	10:00pm - 10:50pm
Session 3	11:00am - 11:50am
Session 4	12:00pm - 12:50pm
Lunch and Closing	1:00pm - 2:00pm
TEECA Awards Session	2:00pm - 3:00pm



Thursday Workshops - Nov. 13

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

10:00am - 12:00pm

Automotive Electrical Diagnostic Workshop

Presenter(s): Kent Aikin Room: N110

Learn step-by-step methods to diagnose automotive electrical issues using wiring diagrams, multimeters, and scan tools—covering battery, charging, starting, and sensor circuits. Through guided, hands-on exercises, participants will practice systematic troubleshooting, pinpoint common faults, and leave with repeatable test procedures they can use immediately. **Limited to the first 18 participants.**

Empower Your Classroom with Robotics and Computer Science!

Presenter(s): Mark Harrell Room: S102

Calling all High School Technology Education Certified Teachers! Discover how ITEEA, Hofstra University, and NC State are revolutionizing computer science education through an NSF-funded initiative designed for high school Technology Engineering teachers. Project EXCITE II supercharges the AP Computer Science Principles (AP-CSP) course by integrating robotics and computer control into the acclaimed “Beauty and Joy of Computing” curriculum bringing coding to life through hands-on, real-world challenges. This session will cover all the details as they relate to this grant opportunity and how you can apply! Teachers selected for the 2026–27 cohort receive an incredible support package: a full robotics classroom kit (valued at \$2800), a \$2000 honorarium, travel reimbursement, a free 1-year ITEEA membership, and 90 hours of Continuing Education Credit. Join us to reimagine CS instruction, inspire student creativity, and shape the next generation of problem-solvers and tech leaders! Participants must bring a laptop to participate in hands-on activity.

Sawmill Demonstration-Lumber Grading & Ordering

Presenter(s): Charlie Phillips Room: E145

This presentation will feature a live sawmill demonstration showcasing the transformation of logs into lumber, providing participants with an inside look at modern milling techniques. Attendees will also learn about industry standard lumber grading practices, including the criteria used to evaluate quality and value. The session highlights both the technical processes and the practical applications, making it valuable for educators, students, and professionals alike.

Sticker & Sign Success: A Design-to-Print Workshop

Presenter(s): Garrett Smawley - Roland, Nicholas Wells - Depco Room: E107

In this workshop, you’ll learn how to transform digital designs into tangible, high-quality stickers and signs. We’ll walk you through the entire design-to-print workflow using the Roland BN2-20A printer, covering everything from preparing a PDF file to producing vibrant, professional-grade graphics.

Window Vinyl Installation Training

Presenter(s): Andrea Kent Room: E103

Attendees will be provided details on materials, equipment use and installation techniques on temporary window graphics including, opaque, translucent, backlit and window perf materials.

Thursday Workshops - Nov. 13

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

10:00am - 12:00pm continued

Heavy Equipment Simulation Training for CTE Programs

Presenter(s): Aaron Panek Room: E101

Attend this workshop to learn about simulation training options for heavy equipment operators and CTE programs teaching construction trades, logistics, or transportation pathways. SIMLOG’s curricula is aligned to national safety guidelines and industry training standards for both career exploration and skill development.

Launch Your Ideas

Presenter(s): Rod Murphy & Tracy Bourne Room: S102

This trebuchet workshop offers a hands-on, educational experience that applies STEM engineering principals to a miniature trebuchet. Participants work in teams to design, construct, and test their own trebuchets to launch a projectile up to 20 feet. The project can be adapted for various ages and skill levels, from simple designs with classroom materials to complex projects using Solidworks software.

2:00pm - 4:00pm

Steam-Bending Wood Workshop

Presenter(s): Vern Morton Room: E131

An introduction to steambending, tools and procedures. Learn the what, how and why of steam-bending. Participants will have a list of materials needed to create a steam-bending system, how the system works, and how to overcome issues associated with bending wood.

Utilizing Scrap Lumber for Projects

Presenter(s): Seth O’Brien Room: W110

This session explores creative and practical ways to repurpose scrap lumber into functional and educational projects. Participants will learn strategies for maximizing material use, reducing waste, and incorporating sustainability into the classroom or workshop.

Unboxing Creativity: Packaging in the Classroom

Presenter(s): Traci Hughes Room: E106

Discover hands-on strategies for bringing packaging design into the K-12 classroom. This interactive session will demonstrate practical, low-cost projects that engage students in real-world design thinking, branding, and production workflows. Participants will leave with ready-to-use classroom activities and resources that connect packaging to creativity, technology, and career pathways.

Thursday Workshops - Nov. 13

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

2:00pm - 4:00pm continued

Adventures in Robotics Teacher Workshop

Presenter(s): Norm Philipp, Emily George, Randy Winzer Room: W218

Join us for an engaging hands-on session inspired by the “Adventures in Robotics” (AIR) teacher workshop. This workshop will provide educators with practical experience using Lego Education Spike Prime sets, introduce effective strategies for integrating robotics into the curriculum, and offer insights into fostering student creativity and problem-solving skills in STEM education. Ideal for educators looking to bring a simple solution to introduce robotics projects in their classrooms, this session will leave you equipped with the tools and confidence to inspire the next generation of innovators.

Portable Vertical Farming Units

Presenter(s): Matt Brown, Kyle Kerschen Community Green Farms
3402 Airport Circle Pittsburg, KS 66762

This session will consist of an introduction to organic farming practices, and the Community Green Farms futuristic self-contained vertical, hydroponic grow towers. The introductory information will be followed by a tour of the Community Green Farms hydroponic grow tower system to demonstrate how foods are harvested year-round, producing the equivalent of a two-acre traditional farm. The CGF hydroponic grow tower systems are designed to maximize space and sustainability, ensuring access to fresh, nutritious food year-round. With advanced monitoring systems the tour will show how a middle or high school group or class of students can easily manage and optimize the growing process, bringing agriculture directly into the classroom.

Metal Casting Workshop

Presenter(s): Quentin Holmes, Russ Rosmait Room: S125 & S131

Sparking a passion for metal manufacturing in tomorrow’s innovators. Want to take your school’s STEM programming to the next level while connecting students with real career opportunities? Bring FEF’s hands-on Metalcasting in the Classroom Program to your students! Metalcasting in the classroom gives teachers hands-on, ready-made lessons for grades 7-12 that helps them connect students to careers in metal manufacturing. The program offers educators curriculum, core content, and hands-on activities that match real-world solutions and align with essential STEM skills. Participants will learn how to produce metal castings using a table top set-up.

Plastics Circularity: Sustainability in the Plastic’s Industry

Presenter(s): Jeanne Norton, Paul Herring Room: W118 & W127

Pittsburg State University’s Plastics Engineering Technology (PET) program has been in existence for 52 years and has prepared hundreds of graduates for careers in polymer-based industry. The curriculum covers the materials, design, and processes required to supply the world with quality plastic products. Circularity-focused lectures and hands-on laboratory activities improve student understanding of their role as future professionals in the plastics industry and the role that materials selection, part and mold design, and plastics manufacturing have on creating a more sustainable world with the benefits that plastic has provided in modern society.

Thursday Social Event - Nov. 13

Location: Main Street Axe Company, 216 South Broadway Pittsburg, KS 66762

7:00pm - 9:00pm

Main Street Axe Company

216 South Broadway Pittsburg

This year our social event will be held at Main Street Axe Company. This event is limited to the first 45 attendees to register for the social event due to capacity limits. This event is paid for by the Steering Committee (excluding drinks). Snacks will be provided. Join us for a fun evening of networking, team-building, and laughter!



Friday Sessions - Nov. 14

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

9:00am - 9:50am

Basics of Programmable Logic Controls

Presenter(s): Clint Myers, Ed Moore

Room: E221

This session will introduce participants to the fundamentals of Programmable Logic Controllers (PLCs) and their role in modern automation. Attendees will learn basic concepts, common applications, and essential programming techniques for classroom or industry use. The presentation will provide a solid foundation for those new to PLCs or looking to refresh their knowledge.

Introducing the 2025 Inaugural Technology Capstone Showcase

Presenter(s): Trevor Maiserouille, Tanner Williams, Byron McKay

Room: W104

This session will highlight the launch of the 2025 inaugural Technology Capstone Showcase at Pittsburg State University. Attendees will learn about the purpose of the showcase, featured student projects, and how it connects postsecondary programs with emerging talent. The presentation will provide insights into the showcase's role in advancing innovation, collaboration, and workforce readiness.

Current Trends in Mobile Air Conditioning Systems

Presenter(s): Scott Norman

Room: N103

The seminar will cover current diagnostic trends in automotive air conditioning systems. Discussion items includes; compressor diagnosis, TXV diagnosis, diagnosis of restrictions in the refrigerant system, the future of refrigerants, and thermal management systems in high voltage vehicles.

Friday Sessions - Nov. 14

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

9:00am - 9:50am continued

Artificial Intelligence Round Table

Presenter(s): Derrel Fincher

Room: S110

This interactive round table will bring educators and industry professionals together to discuss the opportunities and challenges of artificial intelligence in education and the workplace. Participants will share perspectives, explore practical applications, and consider the ethical implications of AI integration. Join the conversation to gain insights, ask questions, and collaborate on shaping the future of AI in teaching and learning.

Bandsaw Basics and Maintenance

Presenter(s): Vern Morton

Room: E131

This presentation introduces the fundamental operation and safety practices of the bandsaw, one of the most versatile tools in the shop. Attendees will gain insights into proper setup, blade selection, and common cutting techniques to improve accuracy and efficiency. The session will also cover essential maintenance practices to extend machine life and ensure consistent performance.

Development of Arduino-Based Robot Curriculum for Electronics Engineering Technology

Presenter(s): Erik Mayer

Room: W218

This presentation covers the development of Arduino-based robot curriculum for the Electronics Engineering Technology (EET) program. The development was done in three phases. The first phase was the training in the fundamentals of the Arduino Integrated Development Environment (IDE) and receiving Arduino Certification. The second phase was the investigation into preassembled Arduino Alvik robots that could potentially be used in the introductory EET 100 course, for recruitment, and for a high school level robotics workshop. The third phase was the retrofit of previously purchased Texas Instruments robots with discontinued microcontrollers to work with Arduino hardware. In the Fall 2025 semester, it is planned to use the retrofitted robots in EET 100 and EET 344 which is the first computer architecture course which currently uses Arduino hardware.



Friday Workshops - Nov. 14

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

10:00am - 10:50am

Teaching Residential Wiring on a Budget

Presenter(s): Ed Moore, Clint Myers Room: E226

Discover practical ways to teach residential wiring without overspending by using affordable materials, tools, and instructional strategies. This session highlights creative, budget-conscious approaches that still provide students with safe, hands-on learning experiences in electrical installation.

The Awesome Advisor Blueprint: Cultivating High-Impact CTSO

Room: W104

Presenter(s): Melissa Stebbins, Trevor Maiserouille, Ruth Delange, Allsion Bockenstedt
This session will share practical strategies for building and sustaining strong, engaging Career and Technical Student Organization (CTSO) chapters. Participants will learn proven tips, creative approaches, and effective management practices to boost student involvement, leadership development, and overall chapter success. Whether new to advising or looking to refresh ideas, this session offers valuable takeaways to enhance your CTSO experience.

Safety Culture and Accountability

Presenter(s): Kevin Elliott, Cliff Morris Room: S109

This session emphasizes the importance of building a strong safety culture in technology and engineering classrooms, where students learn to value safe practices as part of their daily routine. Teachers will explore strategies to promote accountability, from clear expectations and consistent enforcement to student ownership of lab safety. The presentation provides practical tools to create a positive, proactive environment that minimizes risks and models industry standards.

The Ethics of AI in Today’s Classroom

Presenter(s): Rocky Restivo Room: S110

As AI tools like ChatGPT become common in education, teachers are left asking: What’s ethical? What’s cheating? What’s fair? This session dives into the evolving ethical landscape of AI in schools, helping educators understand how to navigate issues like plagiarism, bias, access, and responsible use. Through real classroom examples and guided discussion, attendees will gain strategies for setting clear expectations, promoting digital responsibility, and encouraging students to think critically about the technology they use. Walk away with a deeper understanding of AI’s impact on learning and how to lead these important conversations with your students.



Friday Workshops - Nov. 14

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

10:00am - 10:50am continued

Using AI for Course Development

Presenter(s): Byron McKay Room: W102

This session explores how artificial intelligence can be applied to course development, focusing on how to craft effective prompts while addressing common issues. Attendees will learn strategies for ensuring the creation of high-quality courses that are engaging and relevant. The presentation also highlights ways to navigate pitfalls and avoid potential challenges when integrating AI into the instructional design process.

Kansas CTE Updates

Presenter(s): Kevin Bronson Room: S103

Mr. Bronson will provide the latest updates on Career and Technical Education initiatives, policies, and programs across Kansas from KSDE.

11:00am- 11:50am

Grant Writing Strategies for National Science Foundation ATE Proposals

Presenter(s): Greg Kepner Room: S103

The NSF ATE program has grant funding available to support CTE 2-year technician programs and career pathways, curriculum development, faculty professional development, outreach activities and equipment. Attendees will learn about grant writing strategies, the new ATE solicitation, NSF-ATE resources, and mentoring opportunities to develop or improve CTE programs.

Designing for Social Media: Strategies for Engaging Visual Communication

Presenter(s): Rocky Restivo Room: S110

Social media design requires a unique approach to visual hierarchy, branding, and platform optimization. This session explores best practices for designing effective, engaging, and shareable social media content tailored for different platforms. Attendees will gain insights into design strategies, audience engagement, and analytics-driven decision-making to enhance their curriculum. Key takeaways include adapting designs for multiple formats (1:1, 9:16, etc.), leveraging AI-powered tools, and optimizing content for accessibility and reach. Whether you’re an educator or industry professional, this session will provide practical tools to integrate social media design into graphic communications education.

Math in Motion: Designing a Math CNC Program for High School Students

Presenter(s): Michelle Laubenstein, Ed.D Room: W102

This session highlights how high school math standards can be brought to life through CNC machining. Learn how to design a project-based curriculum that aligns math concepts with real-world applications in manufacturing. Participants will explore how free resources can be integrated into instruction, making advanced design and machining accessible to all students. The presentation will also cover practical strategies for funding a CNC program.

Friday Workshops - Nov. 14

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

11:00am- 11:50am continued

Shop Swap

Presenter(s): Trevor Maiserouille Room: W104

The “Shop Swap” professional development session (first introduced at the 75th Conference) is designed for shop class teachers to exchange practical ideas, techniques, and resources for enhancing hands-on learning in their classrooms. This collaborative environment encourages educators to share best practices, innovative projects, and solutions to common challenges, fostering creativity and improvement in technical education.

NCCER Trade and Industry Education for Secondary and Post-Secondary Teachers & Students in Kansas. Changing the Way T & I Training is Delivered and Learned.

Presenter(s): PJ Reilly Room: S109

Over the past 3 years, AGC-Build Up Kansas, has provided NCCER Curriculum & Resources FREE to 170 Kansas schools/districts/colleges for multiple levels of trade and industry education. These FREE resources include NCCER instructor training, books/on-line learning platform, eBook, testing, industry credentialing and onsite training and support. NCCER has 75 different levels of curriculum, making it a Leading option in the Trade and Industry education arena methods, and ways to engage students through hands-on learning. Practical tips and classroom-ready strategies will be shared to help educators enhance instruction and student success in this popular STEM activity.

12:00pm-12:50pm

Micro-Credentials and Technology and Engineering Education in Higher Education

Presenter(s): Susan Dumler Room: S103

This presentation examines the increasing impact of micro-credentials on the higher education landscape, particularly in the fields of Technology and Engineering Education. As the demand for specialized skills continues to rise, micro-credentials have emerged as a viable alternative or complement to traditional degrees. This session explores the evolving expectations of employers, examining whether degrees or micro-credentials carry more weight in today’s job market. Attendees will gain insight into which employers currently favor micro-credentials in the tech and engineering sectors. Through a critical analysis, the presentation will also address the implications of these trends for the future of higher education and career advancement. By the end of the session, participants will have a comprehensive understanding of the role of micro-credentials in shaping both academic pathways and professional opportunities.

Friday Workshops - Nov. 14

Location: Crossland Technology Center, 909 East Ford Pittsburg, KS 66762

12:00pm-12:50pm continued

Formal Self-Evaluation Tools for Deeper Learning

Presenter(s): Zach Pixler, Dr. Betsy Crawford Room: S109

Educators encourage students to reflect on their own work to identify strengths and areas for growth—but how effective is self-reflection in improving learning outcomes? In this session, we will introduce a formal self-evaluation tool for students and share evidence of its measurable impact. Participants will also gain practical strategies to help students take greater ownership of their learning.

AWIEF: The Woodworking Teacher’s Connection to Industry. All the resources you need

Presenter(s): Jordan Backs Room: E120

The Architectural Woodworking Institute’s Educational Foundation strongly supports the woodworking teacher with curriculum, credentialing and scholarships for their students. This presentation will provide woodworking teachers with resources for their classroom, lab and students. Come find out what you’ve been missing.

Empowering the Future: Inside ITEEA’s Vision for Tech Ed & STEM Education

Presenter(s): Mark Harrell Room: W102

Discover how the International Technology and Engineering Educators Association (ITEEA) is shaping the future of education through innovation, design, and STEM. This presentation explores ITEEA’s mission to advance technological and engineering capabilities for all learners by supporting educators with leadership, professional development, and cutting-edge classroom resources. Learn how ITEEA fosters problem-based learning, promotes technological literacy, and builds a global community of forward-thinking educators.

CO2 Dragster Design for the Classroom and Competition

Presenter(s): Paul Wollenburg, Danny Pruett Room: W104

Learn the basics about teaching, designing and building CO2 dragsters in your classroom and for TSA competition. This session will dive into the fundamentals and advanced techniques of teaching dragster design in the classroom. Participants will explore project setup, design principles, testing methods, and ways to engage students through hands-on learning. Practical tips and classroom-ready strategies will be shared to help educators enhance instruction and student success in this popular STEM activity.

SAVE THE DATE

STEERING COMMITTEE

The **77th** Four-State Regional Technology Conference!
Crossland Technology Center | **November 12-13, 2026**
Pittsburg State University | Pittsburg, Kansas

Be sure to join us for our 77th anniversary of the Four-State Regional Technology Conference. Mark your calendars and plan to share this momentous occasion with us all in supporting classroom teachers through professional development opportunities. Help us in maintaining the focus of FSRTC.

Focuses include:

- Providing plausible solutions to problems teachers face in their schools and classrooms.
- Allow teachers to share ideas on teaching methods, new materials, tools and machines used in their classrooms.
- Improve the status and perception of CTE, Technology & Engineering Education in public schools and beyond.
- Improve teachers sense of pride, enthusiasm and self-confidence in the profession.
- Provide personal and professional growth for those who participate.
- Provide a connection between vendors and the classroom through displays and presentations.

2025 Steering Committee Members:

Dr. Andrew Klenke

Dr. Byron McKay

Dr. Trevor Maiseroulle

Eric Deneault

Zach Pixler

Kaci Dorton

Melissa Stebbins

Rod Murphy

Preston Frazier

Andrea Kent

Rocky Restivo

Greg Murray

Dr. Don Colegrove

Erin Rivero

Pittsburg State University

Pittsburg State University

Pittsburg State University

Fort Hays State University

Fort Hays State University

Franklin Technology Center

Commerce Public Schools

Depco LLC

Pitsco Education

Pittsburg State University

Pittsburg State University

Pittsburg State University

Pittsburg State University

Pittsburg State University

Want to have a voice in what happens at the conference?

Consider joining the Steering Committee.

Time commitment is minimal and is open to everyone.

All meetings are through Zoom.

If interested, please contact:

Dr. Andrew Klenke (aklenke@pittstate.edu) or

Dr. Trevor Maiseroulle (trevor.maiseroulle@pittstate.edu)