## ITEC 2023 Friday - October 20th Sessions

Friday 8:00-9:00am Friday 8:00-9:00am Friday 9:00 - 10:45am Friday 10:45-11:30am Friday 11:30 - 11:45am Brown Ballroom at ISU - Park in Lot G across from Turner Hall and walk to the Ballroom Vendor / Exhibit Visit Opens at the Brown Ballroom

General Session at the Brown Ballroom Brunch Buffet at the Brown Ballroom

Vendor / Exhibit Visit at the Brown Ballroom / Walk To Turner Hall ISU

### Friday 12:00 - 12:45pm - Breakout #1 Sessions

<b>Presentation Title</b>	Industrial Robot Test Drive - Limited to 24 participants
Description	In this hands-on session, you'll get to test drive 2 types of ABB robots currently used in industry: An IRB140 (six-axis articulated industrial robot with IRC5 control) and the all-new CRB15000 "GoFa" collaborative "cobot" with OmniCore control. There will also be VR and AR stations set up to explore the world of virtual robotics, made possible with RobotStudio, ABB's simulation and offline programming software which is now available for free for educators, even if you don't own a robot.
Room 160	Presented By: Jeritt Williams
Presenter's Title	Making Chips Fly - learn how to run a vertical mill - DOUBLE SESSION 90 Minutes
Description	Do you have a vertical mill (Bridgeport) in your shop that you're afraid to use? Is it sitting around collecting dust becoming just another work bench collecting tools? This session will get you over your fear of running a vertical mill. Learn not only the basics, but tips and tricks to getting square and accurate parts with great surface finish. This will be a make-and-take session with attendees making a small tool to take home <u>DOUBLE SESSION 90 Minutes will carry over to Breakout Session #2</u>
Room 166	Presented By: Troy Blunier, Brad Curry, Brock Keller, Bill Merchantz
<b>Presentation Title</b>	Teaching 3D Design for Additive Manufacturing and Slicing Software Tips
Description	Teaching Design for Additive Manufacturing (DFAM) and Slicing Software is about merging technical knowledge with creativity. It equips students with the skills to harness 3D printing's potential while navigating slicing intricacies. By combining design principles, practical experience, and real-world insights, students learn to bridge concepts and creations effectively. This approach fosters innovation, prepares them for industry challenges, and empowers them to drive additive manufacturing advancements.
Room 167	Presented By: Randy Hines
Presentation Title	IDEA Competition - Ins and Outs- Helping your students to become involved and succeed.
Description	We will be discussing how teachers and students can become involved and be prepared to be successful. Competing teachers and past students will be available to answer questions.
Room 168	Presented By: Steve Skorup and Eric Tecuanhuehue
Presenter's Title	Woodworking Make and Take Project - Limited to 10 participants
Description	Make and Take woodworking project - come and learn about basic woodworking. Each participant will make a wooden tote that may be used for outdoor planter, carry all, wine / bottle carrier, tool crate, ect. Each tote is created from a \$2 fence picket. Thank you to Prairie Builders for the donation of the cedar fence pickets.
Room 169	Presented By: WBRP David Kidd and John Baker
Presentation Title	Marketing Your Program-Are you getting Anyone's Attention - DOUBLE SESSION 90 Minutes
Description	Why should you market your program? How does 2.1 million in donations sound? The following is a list of tangibles for marketing your program that will be discussed during the presentation: program supporters, industry partners, internship opportunities, career exploration, career opportunities, technical support, field trips, government relationships, program recognition, revenue streams, leveraged celebrity recognition, student recruitment, in-kind donations, and vision casting with school administration. To see a preview of one of Mark's online marketing tools go to www.rchsit.weebly.com DOUBLE SESSION 90 Minutes will carry over to Breakout Session #2
Room 172	Presented By: Mark Smith
Presentation Title	Work-Based Learning Problems and Solutions in Technology Education
Description	In this presentation we will discuss how work-based learning is being incorporated into the technology education fields. We will discuss common problems and solutions on how to make this an integral part of your program. This session will discuss the role of the advisory boards and alternative placement methods for your students to get authentic work-based learning experience in this field.
Room 173	Presented By: Brian Rick

WIN \$4500 of Technology Engineering classroom resources!!!!!
See You At The SHOP TEACHER OLYMPICS at the Chateau Of Bloomington Ballroom 8pm - 11pm

# Friday 1:00 - 1:45pm - Breakout #2 Sessions

Presentation Title	RobotStudio: Virtualized Robotics - Limited to 24 participants
Description	In this hands-on session, you will learn how to get started with RobotStudio, ABB's simulation and offline programming software which is now available free for educators, even if you don't own a robot. Activities will include controlling/programming a virtual robot, bringing in user-generated CAD files to create a virtual "digital twin" work cell, and how to get the software and access to other STEM education resources from ABB.
Room 160	Presented By: Jeritt Williams
<b>Presentation Title</b>	IDEA Competition Practice for Teachers
Description	IDEA Competition Practice for Teachers - see what your students are required to do and compete against your fellow teachers. Bring your A Game.
Room 167	Presented By: Steve Skorup and Eric Tecuanhuehue
Presentation Title	Egg Crash Cars - Problem Solving
Description	Using a egg crash car problem solving project in a Drafting, and/or Engineering course to teach/reinforce: the engineering process, drawings (3D parts, assemblies, multiviews, section views, dimension with tolerances, parts lists etc.) 3D printing parts (if possible) testing, data collection, and slow motion videos, all while the students are having fun!
Room 168	Presented By: Jeff Brown
Presentation Title	Woodworking Make and Take Project - Limited to 10 participants
Description	Make and Take woodworking project - come and learn about basic woodworking. Each participant will make a wooden tote that may be used for outdoor planter, carry all, wine / bottle carrier, tool crate, ect. Each tote is created from a \$2 fence picket. Thank you to Prairie Builders for the donation of the cedar fence pickets.
Room 169	Presented By: WBRP David Kidd and John Baker
Presentation Title	Assessing Essential Skills in Technology Education
Description	In this session, you will experience first-hand how to assess the cross-sector essential employability skills in your classroom. These essential skills include teamwork, communication, problem solving, decision-making, critical thinking, adaptability, initiative, reliability, planning, and cultural competence. These skills are deemed necessary to succeed in the workplace of today and tomorrow. You may already include some or all these items in your everyday lesson planning or classroom activities but how do you determine if they are successful? Two different assessment tools will be presented, and time will be given for you to share ideas.
Room 173	Presented By: Brian Rick

# Friday 2:00 - 2:45pm - Breakout #3 Sessions

Presentation Title	Engineering Challenges in Electronics - Limited to 10 participants - DOUBLE SESSION 90 Minutes
Description	In this make and take session, learn how we use Engineering Challenges in our Electronics curriculum to guide our students through the Engineering Design Process from design, to prototyping, to permanent fabrication (soldering), and troubleshooting. Experience one of our Electronics Engineering Challenges by soldering a 2 LED blinker circuit from scratch using a 555 timer, or a more advanced power supply circuit/cellphone charger that converts 120 VAC to 5 VDC <a href="DOUBLE SESSION 90 Minutes">DOUBLE SESSION 90 Minutes</a>
Room 160	Presented By: Brett Thompson
<b>Presentation Title</b>	Welders put it together - welding for the new generation - <u>DOUBLE SESSION 90 Minutes</u>
Description	This is a hands-on welding session where participants will be able to learn and practice the basics of both SMAW (stick/rod welding) and GMAW (MIG welding). Whether you are an expert welder or a novice, there will be something for everyone to take home with them. New, modern multi-process welders will be used so you can see how versatile they can be, how they will revolutionize your curriculum, and take your program to new heights <a href="DOUBLE SESSION 90 Minutes">DOUBLE SESSION 90 Minutes</a>
Room 166	Presented By: Brock Keller and Bill Merchantz
<b>Presentation Title</b>	Fusion 360: An Introduction to Top-Down, Bottom-Up, and Middle-Out Assembly Methods
Description	Fusion 360 can have a learning curve when it comes to understanding Top-Down, Bottom-Up, Middle-Out assembly methods. Many new users still have questions about the difference between bodies and components. Come to this session on Fusion 360 to get an in-depth look at how all of this works and how it can work for your students in your classroom. You will need an Autodesk Fusion 360 account for this session.
Room 167	Presented By: Corey Duzan
<b>Presentation Title</b>	Students Can Be Creative When Solving Engineering Design Solutions
Description	Creating is an integral part of engineering design because it allows individuals to test and refine their ideas and to see how they work in the real world. Engineering design applies engineering principles to create new products, systems, or processes; it involves identifying a problem or need, brainstorming potential solutions, and selecting and refining the best solution. Overall, the connection between creativity, creating, and engineering design is that they all involve generating and refining ideas to solve problems and create innovative solutions. The presenter will provide three engineering design challenges along with pictures of finished artifacts dependent upon creative solutions that can be implemented at the classroom level.
Room 168	Presented By: Chris Merrill

<b>Presentation Title</b>	Woodworking Make and Take Project - Limited to 10 participants
Description	Make and Take woodworking project - come and learn about basic woodworking. Each participant will make a wooden tote that may be used for outdoor planter, carry all, wine / bottle carrier, tool crate, ect. Each tote is created from a \$2 fence picket. Thank you to Prairie Builders for the donation of the cedar fence pickets.
<b>Room 169</b>	Presented By: WBRP David Kidd and John Baker
<b>Presentation Title</b>	Share Your TEE Experience!
Description	Calling all TEE teachers - WE NEED YOUR HELP!!!! Please come and share Your TEE Experience with a personal story. Share your path to becoming a TEE educator and what you loved about it. Recordings will be made to post on TEACH TEE social media.
Room 172	Presented By: April Zawlocki
<b>Presentation Title</b>	TEECA Teaching and Learning - Design Problems Solving
Description	TEECA Students and Sponsors
Room 173	Presented By: TEECA

## Friday 3:00 - 3:45pm - Breakout #4 Sessions

<b>Presentation Title</b>	Beads are Boring
Description	Fusion 360 has a great function that allows users to easily create tube type projects from simply drawing a line. We'll walk you through how to utilize this function and you can walk away with some plans for a rolling mechanics cart to use in your welding program. We will also discuss various welding projects to get kids excited about welding instead of whining about laying the same boring beads over and over.
Room 167	Presented By: Phil Thornton
<b>Presentation Title</b>	Sweet 3D Printing
Description	Looking for an engaging Halloween activity? The focus of this session will be making vacuum-form chocolate molds. Participants will learn the basics of vacuum forming using a 3D print as a mold. How to modify STL files for 3D printing a mold in Fusion 360 will be demonstrated. Don't have a vacuum-forming machine? Participants will also be given directions for building their own vacuum-forming machine.
Room 168	Presented By: Kyle Thomas
Presentation Title	Woodworking Make and Take Project - Limited to 10 participants
Description	Make and Take woodworking project - come and learn about basic woodworking. Each participant will make a wooden tote that may be used for outdoor planter, carry all, wine / bottle carrier, tool crate, ect. Each tote is created from a \$2 fence picket. Thank you to Prairie Builders for the donation of the cedar fence pickets.
Room 169	Presented By: David Kidd and John Baker
Presentation Title	Using Model Rocketry to Increase Student Engagement in STEM
Description	Model Rocketry is the perfect way to engage students and draw them into learning design, engineering, and teamwork skills. Students will gladly put the process of engineering into practice while building and flying model rockets.
	Learn all about the myriad of resources available to support your introduction of model rocketry into your school year curriculum or summer exploratory activities. From a single day launch all the way to a National Rocketry Competition, you can start small and build over time.
Room 172	Presented By: Jonathan Weger
Presentation Title	TEECA Challenges
Description	Technology and Engineering Education Collegiate Association Student Challenges
Room 173	Presented By: TEECA

# Friday 3:45 - 6:30pm - Chocolatier / Little Beaver Brewery Tour -

#### TWO BUSES AVAILABLE!!!!

Bus loading from Turner Hall Parking Lot 3:45-4:00pm

Tour The Chocolatier Of Bloomington - Coupon Card available Visit Little Beaver Brewery - Drink Ticket available

6:45 - 8:00pm - IDEA Business Meeting / Member Dinner @ Turner Hall Room 172

6:45 - 8:00pm - Check In at The Chateau Of Bloomington and Dinner On Your Own - Explore The Many Local Restaurants -

# 8:00 - 11:00pm - Reception / Shop Teacher Olympics @ The Chateau Of Bloomington Ballroom

Bring the event card that is in your conference folder for a chance to WIN \$4500 in TEE Resources

#### Saturday 8:00am - 9:00am Breakfast Buffet Chateau Of Bloomington Main Lobby - Open To All ITEC Registered Participants -

## ITEC 2023 Saturday - October 21st Sessions

#### Saturday 9:00am - 9:45am - Breakout Sessions

<b>Presentation Title</b>	FISHING WITH FUSION - <u>Double Session 90 Minutes</u>
Description	Make and Take fishing lures and Fusion 360 overview.
Ballroom	Presented By: Corey Duzan
<b>Presentation Title</b>	Wrap it up: Adding packaging to your projects
Description	If life is like a box of chocolates, then after the chocolates get made you gotta make the box. In this session you will be making the packaging for your projects. Packaging options like cardboard box, ziploc bags and tags, or the ultimate in thermoformed blister packs will be discussed. Samples will be available of each type and participants will be able to make their own blister card packaging using thermoforming. Come make a "Nutty Professor" keychain and the blister card packaging to "ship it" in.
Breakout Room #1	Presented By: Brad Curry
<b>Presentation Title</b>	Engineering Design on a \$2.50 Budget!!! - <u>Double Session 90 Minutes</u>
Description	Make and Take \$2.50 projects and how they can be used to learn Autodesk Inventor Pro. Many Technology and Engineering classroom resources will be given away.
Breakout Room #2	Presented By: Don Whitman

#### Saturday 10:00am - 10:45am - Breakout Sessions

<b>Presentation Title</b>	Technology Education Cross-Curriculum Illuminated Display Project
Description	This session will demonstrate how several areas of Technology Education courses can work on a problem-solving project. The Illuminated Display. Your Engineering or Technical CAD students will design it, the Production course students (Metals or Woods) will manufacture it, and Electricity/Electronics students will add the lighting. Other CTE subjects that can be incorporated include robotics/automation, accounting, entrepreneurship, marketing, and social media. Another great benefit of this project is the final project will be used by the "customer" for years, and it is a great promotion for your Technology Education department.
Breakout Room #1	Presented By: Jeff Brown, Chris Davis & Will Salek

#### Saturday 11:00am - 11:45am Closing Session

### ISBE College & Career Pathway Endorsements and PaCE

#### Presented By: Chris Komer and Joe Sieczkowski

Come learn more about the current legislation that requires school districts who do not opt out to have College & Career Pathway Endorsements as well as a grades 6th through 12th Postsecondary & Career Expectations Framework in place over the next few years. You'll learn the details of CUSD 300's approach to fulfilling these requirements and enhancing our students' CTE experiences. The session will be a good fit for most areas of Technology & Engineering Education.

#### Also:

IDEA Contest Information Shop Teacher Olympics Awards and Drawings Feedback / Evaluations / CPDUs Free Door Prizes

> See You Next Year! Save The Date ITEC 2024

October 18-19 2024

2024 is going to be even crazier than '23!