

ITEC 2019 Friday - November 8th Sessions

Friday 8:00-9:00am Registration at the Marriott
Friday 9:00-10:45am General Session at the Marriott
Friday 10:45-11:30am Brunch at the Marriott
Friday 11:30-12:00pm Travel To Tuner Hall ISU - Please carpool

Friday 12:00-12:30pm - Exhibitors Break and IDEA Business Meeting Turner Hall

Friday 12:30 - 1:30pm - Breakout #1 Sessions

Presentation Title	Woodturning – what is it, what's it worth?
Description	Woodturning, what can be gained/learned from the craft, followed by a hand's on demonstration. Also, learn more about the American Association of Woodturners (AAW) affiliated clubs throughout Illinois.
Room 120	Presented By: Mark Toon
Presenter's Title	Stihl Experience: Stihl Company Technical Service – Double Block (limit to 20 participants)
Description	A update of the operation and maintenance of the STIHL line of small engines and Lawn care equipment for both the professional and the homeowner. Lecture on the new applications and maintenance of STIHL engines and tools and troubleshooting problems that come along after hard use of the product.
Room 132	Presented by: Andrew Guetler
Presentation Title	VEX V5 with coding studio
Description	Demonstrate a clawbot built with the new V5 hardware and the coding studio.
Room 160B	Presented By: Michael DeWees
Presentation Title	Micro Drone Design Using Fusion 360 – Double Block
Description	This presentation will get you started in the basic construction of a micro drone frame that you can 3D print and use to create a fun drone project for your class.
Room 167	Presented By: Chuck Bales
Presentation Title	Becoming a Teacher: What's It Really Like?
Description	This is a roundtable session for High School students who are thinking about pursuing a career in Technology and Engineering Education. They will have an opportunity to talk to and question students in the ISU TEE program, ISU faculty, and TEE classroom teachers. Information will be provided about scholarships and future job opportunities.
Room 168	Presented By: Matt Zawlocki
Presentation Title	The Process of all things Epoxy (limited to 9 participants)
Description	The ever popular River Table craze took over instagram by storm in 2017–2018 leaving everyone wanting one. However You don't have to be into slabs and rivers to learn the art of epoxy. Learn the endless possibilities to add the medium of epoxy into your art, woodworking or diy craft design process. I'll explain some of fun uses for the epoxy from tables to wall art. I'll touch on how to choose the right type, mixtures, the different brands, selection of colored powders to add into your piece, application techniques and process along with some simple tricks I've learned the hard way. They'll also be a hands on demo for you to make and take with you. You'll enjoy this class so much you'll be wanting to add epoxy to all the things you've had on your DIY to do list.
Room 169	Presented By: Dan Kelley
Presentation Title	Today's Education for the Careers of Tomorrow
Description	Today's kindergarten class will graduate in 2032. Considering the exponential growth of technology, what will their world be like? What jobs will they be doing? What skills will they need to be successful? This presentation will address these questions and provide insight and resources for preparing our students for their future.
Room 173	Presented By: Brad Christensen
Presenter's Title	Autodesk Certified User Certification Testing Lab
Description	Reserved testing lab to take your choice of AutoCAD, Inventor, Revit, or Fusion 360 certification. Please register an account with Certiport at www.certiport.com and come ready with your username and password to test. Certification exams take approximately 50 minutes.
Room 210	Presented By: Justin Barker
Presentation Title	TEECA Challenges
Description	Technology and Engineering Education Collegiate Association Student Challenges
Room 172	Presented By: TEECA

Friday 1:30 - 2:30pm - Breakout #2 Sessions

Presentation Title	Woodturning – what is it, what's it worth? (limited to 9 participants) – REPEAT
Description	Woodturning, what can be gained/learned from the craft, followed by a hand's on demonstration. Also, learn more about the American Association of Woodturners (AAW) affiliated clubs throughout Illinois.
Room 120	Presented By: Mark Toon

Presentation Title	Onshape CAD
Description	Onshape CAD is a full-featured, industry-aligned, parametric modeling software (similar to Inventor, SolidWorks, NX, etc) that runs 100% in-the-cloud, meaning you can do powerful CAD work in a web browser or even a mobile app! No software installs or IT/ admin intervention needed! Onshape's powerful CAD functionality is FREE to educational users. It's fast and easy to get started. Join us for a hands-on session, where we will preview the features and functionality of the software and share a case study of how we have successfully used Onshape to explore additive manufacturing concepts in our classes who had little or no prior CAD experience.
Room 160B	Presented By: Jeritt Williams

Presentation Title	Golf Course Sustainability
Description	Cog Hill Golf and Country Club is a 4-course facility, operating on over 1,000 acres of land. Since 2017, we have been working to develop and effectively implement a sustainability program both on and off the golf course. Going beyond the turf best management practices performed sustainably on the golf side, our first and most tangible project off-course is our culinary farm, 'Fairway Farms & Apiary'. The farm boasts 24 raised beds, occupying over 4500 sqft of growing space, producing heirloom vegetables, herbs, and edible flowers all delivered to the club's kitchen daily. The farm was built on an overgrown abandoned lot-turned-green space that once held the overflow parking of spectators for the Western Open and BMW Championship. Mixed in with the raised farm beds you'll find pollinator gardens, a solar greenhouse where we start all crops from seed, native prairie restoration efforts, a 12-hive apiary producing over 100 lbs of wildflower honey each season, and a composting facility that has diverted over 7,000+ lbs of food waste from the landfill in 2.5 years. Outside of the farm to table program, we have been diligently working towards promoting biological diversity on the property with things like pollinator protected forage and habitat sites, bat houses, and naturalized pond water management practices. A major push in our sustainability efforts at Cog Hill is trying our best to involve local schools, organizations, and businesses as much as possible. A unique partnership we developed this past season is with Lockport Township High School's STEM class. LTHS STEM students built Cog Hill 60 bluebird and bat houses to use in our wildlife conservation efforts on the property. With sustainability boasting a plethora of macro topics to pursue, weighing our property's needs and resources is the priority in designating future projects. There is much on the horizon for the future of sustainability efforts with an endless amount of work to be done, particularly in the golf course industry.
Room 168	Presented By: Angelica Carmen

Presentation Title	The Process of all things Epoxy (limited to 9 participants) – REPEAT
Description	The ever popular River Table craze took over instagram by storm in 2017-2018 leaving everyone wanting one. However You don't have to be into slabs and rivers to learn the art of epoxy. Learn the endless possibilities to add the medium of epoxy into your art, woodworking or diy craft design process. I'll explain some of fun uses for the epoxy from tables to wall art. I'll touch on how to choose the right type, mixtures, the different brands, selection of colored powders to add into your piece, application techniques and process along with some simple tricks I've learned the hard way. They'll also be a hands on demo for you to make and take with you. You'll enjoy this class so much you'll be wanting to add epoxy to all the things you've had on your DIY to do list.
Room 169	Presented By: Dan Kelley

Presentation Title	Including the Math and Science in Technology and Engineering
Description	Most students enter our classes not being able to do the most basic math functions (like read a tape measure) or understand basic scientific processes and facts. That is because academic classes usually teach the "what/where/when" and CTE courses teach the "how and the why." It is easy for CTE teachers, however, to skip over the academic content on our way to completion of the project. In this workshop we will design, build, and test model boats and gather data so we can "do the math" to predict performance of the real boat.
Room 173	Presented By: Brad Christensen

Presentation Title	Inventor 101 Top-Down VS Bottom-Top Design Process
Description	Everything you need to know to teach your students of Autodesk Inventor on the first day instruction. This project will help simplify the rest of the year of teaching Autodesk Inventor. This session will explain how a teacher is in the role of detective; when teaching the complex software. This is a hands-on session with participants working along with the presenter during the presentation.
Room 210	Presented By: Don Whitman and Corey Duzan

Presentation Title	TEECA Challenges
Description	Technology and Engineering Education Collegiate Association Student Challenges
Room 172	Presented By: TEECA

Friday 2:30 - 3:00pm - Exhibitors Beak

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

Presentation Title	Electrical Wiring Principals
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Description	Electrical Wiring Principles covers techniques for working with cable, conduit, boxes, switches, and outlets. The identification and use of conductors (wires) utilized in a single phase electrical circuit will be taught to install switches and outlets. Basic single phase circuitry recognition of physical parts will also be explained.
Room 120	Presented By: John Mackinson
Presentation Title	Paper Air Rockets
Description	Help your students soar through the engineering design process as they fly from brainstorming to the launch of their paper air rockets. This hands-on session will provide teachers with a fun and motivating project to help students build on their sketching, designing, and building skills. You will go through the entire project from start to finish during the session. We will finish the session with teachers launching their paper rockets into the sky! All necessary documents, CAD files, video instructions, and kit information will be shared with participants.
Room 132	Presented By: Dale West
Presentation Title	Biomimicry and STEM
Description	This session investigates what Biomimicry is and how it is used to an advantage by mankind and nature. Come and take a look at how we can use design, invention, and innovation towards investigating Biomimicry in the STEM classroom to create various fishing lures.
Room 160B	Presented By: Corey Duzan
Presentation Title	Introduction to Autodesk Revit
Description	This will be an interactive session where participants follow along with the presenter to design a basic 3D model of a shed in Revit. Setting up a drawing, modeling floors, walls, windows, doors, roof, and creating a sheet for plotting will all be covered. Helpful hints and tricks will be shared along the way as well as a Q&A at the conclusion of the presentation.
Room 167	Presented By: Alex Hurst
Presentation Title	DIY Digital Circuit Boards
Description	Participants will learn how to create professional looking printed circuit boards by utilizing a laser cutter and free-to-use software.
Room 168	Presented By: Robb Barton
Presentation Title	The Process of all things Epoxy (limited to 9 participants) – REPEAT
Description	The ever popular River Table craze took over instagram by storm in 2017–2018 leaving everyone wanting one. However You don't have to be into slabs and rivers to learn the art of epoxy. Learn the endless possibilities to add the medium of epoxy into your art, woodworking or diy craft design process. I'll explain some of fun uses for the epoxy from tables to wall art. I'll touch on how to choose the right type, mixtures, the different brands, selection of colored powders to add into your piece, application techniques and process along with some simple tricks I've learned the hard way. They'll also be a hands on demo for you to make and take with you. You'll enjoy this class so much you'll be wanting to add epoxy to all the things you've had on your DIY to do list.
Room 169	Presented By: Dan Kelley
Presentation Title	The Leadership Secrets of Santa Claus
Description	Santa Claus is one of the greatest leaders of all time. He has already shared many tools with us. You can use Santa's tools to help you hone your leadership skills in order to become a better leader/educator. Santa's tools can also be incorporated into your classroom. If you love Santa Claus, you will love him more after attending this session.
Room 173	Presented By: Cindy Stover
Presentation Title	3DS Max in the Design Curriculum
Description	Using 3DS Max as a parametric modeling and animation software. How it can be incorporated into various STEM courses such as architecture, engineering, animation, game design, interior design and robotics.
Room 210	Presented By: Jeff Brown
Presentation Title	TEECA Challenges
Description	Technology and Engineering Education Collegiate Association Student Challenges
Room 172	Presented By: TEECA

KEG GROVE Factory Tour and Dinner - 1st Bus leaves the Marriott @ 4:45pm - 2nd bus @ 5:30pm

Reception at Marriott - 2nd Floor Suite - 8:00pm - 10:00pm

Saturday 8:00am - 9:00am Light Breakfast and Refreshments - Turner Hall

Saturday 9:00am - 10:00am - Breakout #1 Sessions

Presentation Title	Small Engines 101
Description	Teaching small engines doesn't have to be difficult or crazy if you have a system and plan. This session will introduce the "lab sheet" technique to teaching small engines, including participants disassembling a small engine and identifying some of the key aspects necessary to be an expert. All small engines should start on the first or second pull. Don't believe me? Then come find out what you have been missing out on and how to make this a class that you enjoy teaching instead of dreading! Please dress appropriately as you may get a little dirty!
Room 120	Presented By: William Merchantz

Presentation Title	VEX V5: Programming in Competition Mode!
Description	Demonstrate how to use VEX V5 to be used in competition mode.
Room 160B	Presented By: Gary Cotie

Presentation Title	Escape Room Activities for your classroom
Description	Learn how to create Technology / STEM escape problems using low-cost products. Escape room problems are fun and exciting activities students enjoy solving as teams. The activities can be adapted for any curriculum or classroom environment. Participants will create an escape problem, an escape lockable device, and solve a multi-level escape challenge. 2 -hour block of time needed.
Room 167	Presented By: Don Whitman

Presentation Title	One Laser Cut Catapult = Weeks of Engineering Possibilities
Description	This breakout session will focus on how you can use a low cost laser cut catapult for many different lessons in your engineering classroom. By using a thingiverse found laser cut catapult, your students can learn about measurement, reverse engineering, data collection, material selection, and product improvement. During this session we will share student examples, inventor files, and lessons for the catapult. While in the breakout, you will have an opportunity to test out one of the lessons.
Room 168	Presented By: Cindy Curtis

Presentation Title	TEECA Challenges and Awards
Description	Technology and Engineering Education Collegiate Association Student Challenges and Awards
Room 172	Presented By: TEECA

Saturday 10:00am - 11:00am - Breakout #2 Sessions

Presentation Title	Urban Wood Network and sustainability uses of wood for your lab
Description	How can a woods teacher use a locally sourced, sustainable lumber, and Illinois Urban Wood resources inside and outside your classroom?
Room 160B	Presented By: Steve Skorup

Presentation Title	Inlay Techniques with a CNC Router
Description	This hands-on session will cover tips and tricks for creating intricate inlays with a CNC router. There will be focus on Vector software and the Shopbot router, but the techniques that will be demonstrated can be applied to any machine.
Room 168	Presented By: Matt Zawlocki

Presentation Title	TEECA Challenges and Awards
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Saturday 11:00am - 12:00pm - TEAI Board Meeting Room 168