

Workshop Descriptions – FLC 2023

8:30 a.m. – 9:15 a.m. Break Out Session 1

Title: University of Oklahoma – Engineering Design Challenge

Description: In this workshop, you will work together in a team to build a device to knock over a paper tower. Teams will apply the engineering design process to sketch, build, and test their device.

Who Should Attend: Anyone who enjoys an engineering challenge!

Room: Oklahoma Ballroom AB

Title: Oklahoma State University – STEM Challenge

Description: TSA members will use the engineering design process to prototype a solution to the STEM Challenge.

Who Should Attend: Anyone who enjoys an engineering challenge!

Room: Oklahoma Ballroom CD

Title: TSA Updates

Description: Tami Redus, TSA State Advisor will give important updates on the regional and state conferences, and available awards, and answer any questions from advisors.

Who Should Attend: TSA Advisors only!

Room: Oklahoma Ballroom G

Title: Outlooks, Watches, & Warnings: Are you missing the signs or are you weather aware?

Description: Before you get a driver's license you must prove that you understand and can apply the signs of the road. In Meteorology, there are plenty of signs available to help you make decisions to protect yourself. Are you waiting for the "Not a Through Road" sign before you reroute? When it comes to severe weather, there are many steps before a warning is issued to help you "reroute" before extreme weather happens. Meteorologists monitor data from mesonets, satellites, radar, and weather balloons to determine what "signs" are needed to guide you through your daily weather impacts. Tune up your weather knowledge and explore careers beyond what you see on TV.

Who Should Attend: Anyone!

Room: Oklahoma Ballroom H

Title: Telling the Story of NASA's Artemis Missions: How will we travel back to the moon?

Description: As NASA prepares to send the first woman and the first person of color to the surface of the moon in 2027, it is crucial that we begin preparing our students for this historical moment now! The activity in this hands-on inquiry-based session, stomp rockets, is designed to answer the question – How will we travel back to the Moon?

Who Should Attend: Anyone!

Room: Oklahoma Ballroom I

Title: Apply for Success: Strategies when Submitting Applications

Description: Applying for scholarships, jobs/internships, college, etc can be overwhelming. How do you make your application stand out without having your application stress you out? Jamie Hadwin, the Oklahoma coordinator for the NCWIT Aspirations in Computing awards program, leads a session to share proven strategies for building and submitting applications in a variety of settings that can give you an advantage over other applicants. With more than a decade of experience working with scholarship offices,

awards programs, and grant applications, Jamie will provide live examples and take-home worksheets that can help you feel more confident when submitting your next application.

Who Should Attend: Juniors and seniors applying for scholarships, colleges, or jobs!

Room: Oklahoma Ballroom J

Title: VEX IQ Presents Full-Volume

Description: Do you love the idea of working with a team to design, build, and code a robot? If so, come learn about the 2023-2024 VEX IQ Full Volume game challenge. This year's game is made up of pushing, spinning, and shooting fun that will challenge you each step of the way. Kym Tinsley, TSA VEX IQ coordinator will give information on the rules and regulations and tips on what you need to know to be successful at TSA State!

Who Should Attend: VEX IQ competitors and advisors

Room: University A

Title: AI, Robots, Cyber and Big Data – Manufacturing of the Future

Description: Come hear from industry specialists about the new technology of manufacturing.

Who Should Attend: Anyone

Room: University B

Title: Changing the Community

Description: Join the President and Vice President of the Missouri TSA State Officer team as they discuss ways for you to connect within your school, chapter, and other clubs with acts of kindness and small services.

Who Should Attend: Anyone!

Room: Boomer A

Title: Teachings of Teamwork

Description: Come learn how C.H.A.T.ing with your teammates can help you communicate more effectively and build connections!

Who Should Attend: Anyone!

Room: Boomer B

Title: STEM in Action!

Description: Explore STEM careers through an interactive industry panel

Who Should Attend: Anyone!

Room: Sooner A

Title: From Inner Critic to Inner Coach – Taming the “Chatter” Inside Our Head

Description: We all have a voice in our head. This voice helps shape our lives, work, and relationships. When we talk to ourselves, we hope to tap into our inner coach but often find our inner critic instead. “Chatter” is the negative side of self-talk and can tank our health, sink our moods, strain our social connections, and cause us to fold under pressure. The good news is we already have the tools needed to make our inner voice work in our favor. This presentation will highlight what these are and how to use them to harness our chatter.

Who Should Attend: Anyone!

Room: Sooner B

9:30 a.m. – 10:30 a.m. General Session (ALL MEMBERS AND ADVISORS ATTEND)

10:45 am – 11:30 am Break Out Session 2

Title: University of Oklahoma – Engineering Design Challenge

Description: In this workshop, you will work together in a team to build a device to knock over a paper tower. Teams will apply the engineering design process to sketch, build, and test their device.

Who Should Attend: Anyone!

Room: Oklahoma Ballroom AB

Title: Oklahoma State University – STEM Challenge

Description: TSA members will use the engineering design process to prototype a solution to the STEM Challenge.

Who Should Attend: Anyone who enjoys an engineering challenge!

Room: Oklahoma Ballroom CD

Title: TSA Advisor - Best Practices

Description: This workshop by experienced TSA Advisor, Tara Royal will provide an overview of ideas and suggestions for building a strong and competitive TSA Chapter

Who Should Attend: Advisors only!

Room: Oklahoma Ballroom G

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Who Should Attend: Anyone!

Room: Oklahoma Ballroom H

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Who Should Attend: Anyone!

Room: Oklahoma Ballroom I

Title: Apply for Success: Strategies when Submitting Applications

Description: Applying for scholarships, jobs/internships, college, etc can be overwhelming. How do you make your application stand out without having your application stress you out? Jamie Hadwin, the Oklahoma coordinator for the NCWIT Aspirations in Computing awards program, leads a session to share proven strategies for building and submitting applications in a variety of settings that can give you an advantage over other applicants. With more than a decade of experience working with scholarship offices,

awards programs, and grant applications, Jamie will provide live examples and take-home worksheets that can help you feel more confident when submitting your next application.

Who Should Attend: Juniors and seniors applying for scholarships, colleges, or jobs!

Room: Oklahoma Ballroom J

Title: High School Droneworks Theme and Missions Reveal

Description: Join us for a sneak peek of the 2024 Droneworks HS competition and see the new theme and missions revealed. Droneworks combines real-world drone applications, coding, and challenging flights into an exciting drone competition. Droneworks is an Oklahoma TSA only event and more information is available at www.droneworksite.com.

Who Should Attend: High School TSA competitors and advisors

Room: University A

Title: AI, Robots, Cyber and Big Data – Manufacturing of the Future

Description: Come hear from industry specialists about the new technology of manufacturing.

Who Should Attend: Anyone

Room: University B

Title: The Great Networking Quest

Description: Are you looking to elevate your TSA experience? Look no further than with the Great Networking Quest! State and region officers will nurture your networking base, and cultivate your networking culture, all to launch your future leadership! Come by for a fun, informative session as we all learn to network together!

Who Should Attend: Anyone!

Room: Boomer A

Title: Teachings of Teamwork

Description: Come learn how C.H.A.T.ing with your teammates can help you communicate more effectively and build connections!

Who Should Attend: Anyone!

Room: Boomer B

Title: iCode: Empowering Future Innovators. Explore the Frontier of Science and Technology

Description: This workshop will include drone programming and flight, VEX IQ Robot operation, and processor programming using the Arduino platform.

Who Should Attend: Anyone interested in coding!

Room: Sooner A

Title: From Inner Critic to Inner Coach – Taming the “Chatter” Inside Our Head

Description: We all have a voice in our head. This voice helps shape our lives, work, and relationships. When we talk to ourselves, we hope to tap into our inner coach but often find our inner critic instead. “Chatter” is the negative side of self-talk and can tank our health, sink our moods, strain our social connections, and cause us to fold under pressure. The good news is we already have the tools needed to make our inner voice work in our favor. This presentation will highlight what these are and how to use them to harness our chatter.

Who Should Attend: Anyone!

Room: Sooner B

11:35 a.m. – 1:15 p.m. Lunch on your own

1:30 p.m. – 2:15 p.m. Breakout Session 3

Title: Our Futures with Boeing Global Engagement and Opportunities in Aerospace

Description: Come take part in a fun and interactive STEM activity while learning about the aerospace industry from a system engineer/aerospace professional.

Who Should Attend: Anyone interested in Aerospace!

Room: Oklahoma Ballroom AB

Title: Oklahoma State University – STEM Challenge

Description: TSA members will use the engineering design process to prototype a solution to the STEM Challenge.

Who Should Attend: Anyone who enjoys an engineering challenge!

Room: Oklahoma Ballroom CD

Title: Registering Teams for TSA VEX

Description: Kym Tinsley will walk advisors through the process of registering for TSA VEX in order to compete at the TSA State Conference.

Who Should Attend: TSA Advisors whose students compete in VEX

Room: Oklahoma Ballroom G

Title: STEM in Action!

Description: Explore STEM careers through an interactive industry panel

Who Should Attend: Anyone!

Room: Oklahoma Ballroom H

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Who Should Attend: Anyone!

Room: Oklahoma Ballroom I

Title: Tips & Tricks for Competitive Events

Description: The 2023-2024 middle school guide has one exciting new event: Vlogging. Valerie McCauley, advisor and member of the national Competition Regulations Committee (CRC) will give valuable information about the new event plus important changes to current events.

Who Should Attend: TSA competitors serious about winning!

Room: Oklahoma Ballroom J

Title: Middle School Droneworks Theme and Missions Reveal

Description: Join us for a sneak peek of the 2024 Droneworks MS competition and see the new theme and missions revealed. Droneworks combines real-world drone applications, coding, and challenging flights into an exciting drone competition. Droneworks is an Oklahoma TSA only event and more information is available at www.droneworksite.com.

Who Should Attend: Middle School TSA competitors and advisors

Room: University A

Title: VEX VRC – Over Under

Description: Do you love the idea of working with a team to design, build, and code a robot? If so, come learn about the 2023-2024 VEX VRC “Over Under” game challenge. This year’s game is made up of scoring triballs in netted goals, completing autonomous tasks, and elevating the robot at the end of the match that will challenge you each step of the way. Candice Yochum, Tahlequah High School STEM Educator and World Class Judge will give information on the rules and regulations and tips on what you need to know to be successful at TSA State!

Who Should Attend: High School TSA competitors and advisors

Room: University B

Title: The Great Networking Quest

Description: Are you looking to elevate your TSA experience? Look no further than with the Great Networking Quest! State and region officers will nurture your networking base, and cultivate your networking culture, all to launch your future leadership! Come by for a fun, informative session as we all learn to network together!

Who Should Attend: Anyone!

Room: Boomer A

Title: Understanding the TSA Guidelines

Description: Come to this in-depth competitive event workshop led by TSA State and Regional Officers. They will help you discover your interests, and how that applies to competitive events and give valuable tips on how to get started!

Who Should Attend: Everyone!

Room: Boomer B

Title: iCode: Empowering Future Innovators. Explore the Frontier of Science and Technology

Description: This workshop will include drone programming and flight, VEX IQ Robot operation, and processor programming using the Arduino platform.

Who Should Attend: Anyone interested in coding!

Room: Sooner A

Title: Running for Office

Description: How do I campaign? How do I make a compelling speech? How do I get started? Have your burning questions about running for office answered by your officers and learn some helpful advice.

Who Should Attend: Anyone interested in running for a TSA State office!

Room: Sooner B

2:15 pm – 3:00 pm Community Service

Title: Community Service

Description: Join the TSA State and Regional Officers in giving back to your community. There will be several hands-on options such as making blankets and handmade dog toys, writing an uplifting note to friends, and putting together warming kits to help the homeless community.

Who Should Attend: Everyone!

Room: Oklahoma Ballroom