



2025 CTE Summer Swap Academy

*hosted by Maize Career Academy
facilitated by Kansas Center for CTE*



Mastering Woodshop Safety, Management, and Project Design

Developed for: Industrial Arts/Shop Instructors

This comprehensive session equips participants with both theoretical knowledge and practical experience to confidently manage a woodshop and tackle complex woodworking projects. Designed for woodworking educators, enthusiasts, and shop managers, the program emphasizes safe, efficient, and effective practices for running a woodshop.

What You'll Gain:

Participants will acquire in-depth expertise and hands-on skills in the following areas:

- **Prioritizing Safety:** A thorough review of shop safety protocols, including personal protective equipment (PPE), machine-specific safety measures, and emergency response procedures.
- **Tool and Machine Proficiency:** Master the safe operation and maintenance of essential woodworking machines such as the bandsaw, table saw, radial arm saw, miter saw, jointer, planer, router, drill press, and wide belt sander.
- **Blueprint Creation and Design:** Learn to create professional-quality blueprints using advanced software, interpret technical drawings, and transform designs into functional projects.
- **Precision in Measurement and Layout:** Techniques to achieve precise measurements and layouts, ensuring accuracy in every project.
- **Shop Management and Organization:** Establish and maintain an efficient workspace with best practices for shop rules, workflow management, and organization.
- **Laser Engraving Integration:** Discover the creative potential of laser engraving and its applications in woodworking.
- **Hands-On Project Creation:** Apply your knowledge to design and build a personal woodworking project, utilizing a variety of tools, machines, and techniques.

Focus on Project-Based Learning

Participants will create a small woodworking project as part of the session.

What to Bring:

- Z87-approved safety glasses
- Tape measure
- Several #2 pencils
- Closed-toe shoes

Additional Information:

- **Supplies:** All project materials will be provided.
- **Resource Swap:** Engage with a shared digital resource library through Google Classroom, where participants can access and contribute valuable tools and materials.



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About the Presenters

Tyrel Coker

Tyrel Coker is a highly experienced industrial arts educator with 18 years of teaching under his belt. Throughout his career, he has taught nearly every subject in the field, showcasing his broad expertise and adaptability. Outside the classroom, Tyrel has remodeled numerous houses and regularly takes on cabinetry and construction projects, combining craftsmanship with real-world problem-solving skills.

Currently, Tyrel teaches Woods I, Woods II, Advanced Woods, Drafting/CAD, and Advanced Drafting/CAD. His classes integrate cutting-edge techniques such as laser engraving, cutting, and CNC routing, preparing students for success in the evolving industrial arts landscape. Tyrel's commitment to teaching and his practical experience make him a highly regarded professional in his field.

Brandon Ball

Brandon Ball has been inspiring students at Maize High School for five years as a woodworking educator. With a background in hands-on trades, including summers spent in plumbing and roofing, Brandon infuses his classes with practical insights and a passion for craftsmanship. His focus extends beyond technical skills, as he strives to build meaningful relationships with students and nurture their confidence and abilities.

In addition to teaching, Brandon coaches the Maize High School wrestling and track teams, instilling values of teamwork, discipline, and perseverance. His dedication to education and athletics highlights his genuine desire to guide and empower the next generation.