ENGAGE • EMPOWER • ENRICH

Department of Teaching and Learning
Career and Technical Education
Course Information

Cybersecurity in Manufacturing
Course Credit: 1.0
Course Code: 894102
Grades: 10 - 12

Counselors are available to assist parents and students with course selections. Families may arrange to meet with counselors by contacting the school's counseling department.

COURSE DESCRIPTION

This is a concentration course in the Manufacturing career cluster. This course will emphasize manufacturing systems, safety, materials, production, business concepts, and the manufacturing process. Students will learn the principles of cybersecurity, explore emerging technologies, and examine threats and protective measures. Students will participate in enterprise team activities to create products that demonstrate elements of business and manufacturing while demonstrating cybersecurity concepts and policies, including risk management.

This course counts as an elective credit.

COURSE COMPETENCIES

Course competencies can be found in the Curriculum Guides section.

PREREQUISITE

Introduction to Cybersecurity

WORK-BASED LEARNING EXPERIENCE

Service Learning

CREDENTIAL

Students are eligible to sit for the following credential:

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Workplace Readiness Skills

CAREER AND TECHNICAL STUDENT ORGANIZATION (CTSO)

Technology Student Association (TSA) provides the application and integration of science, technology, engineering, and mathematics (STEM) concepts through co-curricular instruction, leadership development, competitive events and related programs.

BENEFITS OF CAREER AND TECHNICAL STUDENT ORGANIZATIONS INCLUDE:

- Provides a hand-on approach to learning
- Refines career objectives through realistic experiences
- Promotes awareness of new career opportunities
- Develops skills and responsibilities for being a role model and mentor
- Cultivates social development and awareness
- Develops a sense of community and volunteerism
- Develops an appreciation and understanding for cultural diversity
- Improves communication and decision-making skills
- Provides for personal development
- Develops interpersonal and leadership skills
- Develops responsibility and self-confidence
- Provides opportunities for recognition

LAB FEE

There is no lab fee for this course.

OPTIONS FOR NEXT COURSE

- Advanced Cybersecurity in Manufacturing

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