



ENGAGE • EMPOWER • ENRICH

Department of Teaching and Learning
Career and Technical Education
Course Information

Technology of Robotic Design

Course Credit: 1.0

Course Code: 803000 / 898460

Grades: 8 - 11

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 an introductory course in the Manufacturing career cluster. Students engage in the study of computers and microprocessors and their applications to manufacturing, transportation, and communication systems. Topics include computer equipment and operating systems, robotics, programming, control systems, and social/cultural impact of these technologies. Problem-solving activities challenge students to design, program, and interface devices with computer systems. Learning activities include robotics, computer-aided design, computer-aided manufacturing and design, and control of electromechanical devices.

This course counts as an elective credit.

COURSE COMPETENCIES

[Course competencies can be found in the Curriculum Guides section.](#)

PREREQUISITE

None

WORK-BASED LEARNING EXPERIENCE

[Mentorship](#) (Grades 9, 10, or 11)



ENGAGE • EMPOWER • ENRICH

CREDENTIAL

Students are eligible to sit for the following credentials:

None

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

\$10.00

OPTIONS FOR NEXT COURSE

- [Manufacturing Systems I](#)