Engineering Drawing and Design
Course Credit: 1.0
Course Codes: 853500/853560
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 Architecture & Construction career cluster. Students explore the engineering design process and use a graphic language for product design, technical illustration, assembly, patent, and structural drawings. They increase their understanding of drawing techniques and the design process learned in the prerequisite course. Students use computers, calculators, and descriptive geometry and adhere to established standards to solve design problems. They work in teams to design solutions for an identified need and to produce parts on a 3D printer.

This course counts as an elective credit.

COURSE COMPETENCIES

Course competencies can be found in the Curriculum Guides section.

PREREQUISITE

Technical Drawing and Design

WORK-BASED LEARNING EXPERIENCE

Service Learning

CREDENTIAL

Students are eligible to sit for the following credential:
[Autodesk Fusion 360](#)

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

This course does not have a lab fee.

OPTIONS FOR NEXT COURSE

- [Architectural Drawing and Design](#)