

CAD Mech Design 1

Course Description

The first in a sequence of courses that prepares individuals to develop technical knowledge and skills required to plan and prepare scale pictorial interpretations and technical documentation of engineering and design concepts. This includes instruction in the use of 2D computer aided design (CAD) software, sketching, drawing layout, geometric construction, orthographic projection, and dimensioning.

Strands

1. Students will investigate career opportunities in engineering & engineering technology.
2. Students will understand the elements of an organized approach to solving an engineering design problem.
3. Students will document the design process and communicate the results of that process using appropriate techniques.
4. Students will understand and apply mathematics, measuring conventions, and scale.
5. Students will be able to develop orthographic views of a part with correct dimensions and geometry.
6. Students will be able to understand and demonstrate the use of correct line types.
7. Students will know and follow ANSI Y14.5 dimensioning standards and apply the appropriate dimensions to drawings.
8. Students will be able to understand and use 2D computer software to create technical drawings.

