



**Drafting and Design Program** is designed to offer students the necessary technical knowledge and skills to plan and prepare scale interpretations of engineering, design and architectural projects. The program includes instruction in the precision drawing instruments; computer assisted design and drafting (CADD), sketching and illustration, interpreting specifications. In addition to technical skills, students completing this program will have critical thinking, employability, applied academic, life management, business, economic, and leadership skills required for drafting occupations. A professional portfolio helps students make a smooth transition to the workplace and/or college. Direct employment in trade and industry and/or advancement to higher level education is the main goal of the Drafting program.

### **COURSE DESCRIPTIONS:**

**Mechanical Drafting I** is a beginning drafting class involving study on geometrical construction, basic orthographic projection, pictorial representation, and basic dimensioning procedures utilizing Drafting Board and Computer Aided Drafting skills.

Prerequisite: None

9-12

**Mechanical Drafting II,III** is a an advance drafting class involving the mastering of geometrical construction, orthographic projection, pictorial representation, dimensioning procedures assembly drawings, and 2D/3D modeling utilizing Drafting Board and Computer Aided Drafting skills. Drafting III teaches the students how to prepare finished technical working drawings required for production (fasteners, drafting systems, working drawings, welding drawings, gears, cams, jigs, fixtures, architectural drawings and 2D/3D Modeling). CAD procedures for each of these subjects is examined in detail.

Prerequisite: Mechanical Drafting I

10-12

**Architecture I,II** Prepares individuals to formulate technical drawings for buildings and associate sites utilizing manual and Computer Aided Drafting (CAD) techniques. Architectural drafters prepare sketches, drawings and models with technical details using specifications and calculations provided by engineers, surveyors, architects and clients.

Prerequisite: Mechanical Drafting I

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