

If you have an eye for detail and you like working in design software, a career in computer-aided design (CAD) could be a great move for you.



Pathway Description:

This 1-year regional pathway introduces design and Computer Assisted Drafting (CAD) training using the most-recent computer software such as AutoCAD and Solidworks. Students in this program will understand the fundamentals of drafting and design of 2D and 3D designs and models. Students learn the proper sketching, computer drafting techniques and views of drawings. Courses in this pathway align with the NIMS (National Institute of Metalworking Skills) standards.

Key Competencies:

- Discover essential concepts necessary for a fundamental understanding application of technical drawing, including lettering and instrument linework techniques, orthographic projection principles, and basic multi-view drawing techniques.
- Understand standard industry practices for technical and industrial illustration.
- Interpret how edges and surfaces are represented using orthographic projection.
- Use computers to create technical drawings.
- Practice the basics of hand tools.
- Understand drawings, manual machines, and layout.
- Interpret the basic GD&T feature control frames.
- Practice teamwork, critical thinking, and problem-solving skills through hands-on experience and practical applications.
- Discover parametric solid model CAD basics.
- Use parametric solid modeling design software to develop technical drawings, including patterns of features, editing, adding dimensions, and creating simple assemblies.

Courses (HS Credits):

9G28 Fundamentals of Technical Drafting (2)
9GH3 CAD Two-Dimensional (2-D) I (2)
9GH4 Job Planning, Benchwork, and Layout (2)
9GH5 CAD 3-Dimensional (3-D) Modeling I (2)

Total College Credits: 12

Annual National Average Salary for a CAD Drafter I: \$52,000

Career Opportunities:

CAD Drafter	Mechanic Drafter
Architectural Drafter	