



This program offers excellent career opportunities for both male and female students.

### **Credits, Articulations & Prerequisites**

### Credits:

Cross credit with some academic courses (including 4<sup>th</sup> year related math, VPAA, math & science) may be available and will be reviewed on a case-by-case basis with each district's counseling department.

#### **Articulations:**

- Davenport University
- Henry Ford College
- Monroe County Community College

#### Prerequisites:

- Junior status
- Grade of C or better in Math
- Grade of C or better and instructor approval to go on to the advanced level

# **Program Description**

Engineering Drafting (using CAD) is a program designed as an introduction to computer graphics using manual drafting and Auto CAD software. Students will learn to use the computer components, terms and commands associated with the AutoCAD system. Students will work with multi-view, detail/assembly, and exploded and pictorial assembly drawings. The program will involve becoming familiar with the materials and processes of the machine trades. All students will create and print a set of working drawings which will include all required details, an assembly, and pictorial drawings.

At the advanced level, students will move on to create 3-D drawings using AutoCAD, Inventor, and SolidWorks (all software is updated regularly to stay current with industry and post-secondary partners). After becoming proficient with this software, the students are then able to continue to create 3D Max or Maya.

# **Special Features**

The students participate annually in the Michigan Industrial Technology Education Society regional and state competition.

Work-based learning opportunities available