

22000 Gibraltar Road Flat Rock, MI 48134 734-782-3194 – Phone 734-782-4175 – Fax www.dctc-cte.org

This program offers excellent

career opportunities for both

male and female students.

#### SARAH SLIVNICK – INSTRUCTOR slivnicks@sgate.k12.mi.us

# Southgate – Mechanical Drafting/CAD

## **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

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.

STATEMENT OF COMPLIANCE

The Downiver Career Technical Consortium complex with all federal laws and regulations of the U.S. Department of Education. It is the policy of the Downiver Career Technical Consortium that no person on the basis of race, color, religion, national origin or ancestry, age, gender, marital status, disability or limited English proficiency shall be discriminated against or excluded from participation in any program or activity to which it is responsible or for which it receives financial assistence from the U.S. Department of Education. Furthermore, the construint will encourage participation by all of the above.