# **COMPUTER-AIDED DESIGN**

2023-2024



Computer-Aided Design is developed for students interested in a career in the drafting and engineering fields of mechanical and civil design. Using state-of-the-art computers and design software, students learn the drafting and engineering concepts required to generate high-quality industry standard drawings. Computer-Aided Design is part of the Advanced Manufacturing Academy. Senior students have the opportunity to engage in advanced-elective course work in any of the manufacturing areas: Computer-Aided Design, Precision Machining, Robotics & Automation, and Welding. This opportunity provides students with a more diverse skill-set to enter a career in manufacturing.

## **Program Highlights:**

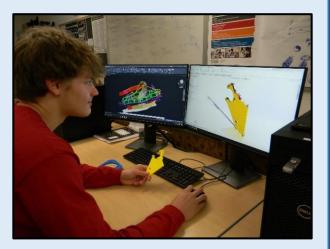
- Visualize and construct 3D models and prototypes for mechanical designs
- Find creative solutions to complex engineering challenges
- Use the same advanced software and modern equipment as professional engineers

## The Program Focuses on the Following State Approved Courses:

- Engineering Design
- Principles of Manufacturing

## Engineering Logic

• Engineering Design (Engineering Principles)



## **COST-FREE COLLEGE CREDIT OPPORTUNITIES**

# **College Credit Plus through Owens Community College**

- CAD 117: Introduction to Board & CAD Drafting (3 Credit Hours)
- CAD 210: Introduction to 3D Modeling-CAD 1A (3 Credit Hours)
- CAD 215: Advanced 3D Modeling-CAD 2A (3 Credit Hours)

#### **Career Technical Assurance Guides (CTAGs)**

- CTS001: OSHA 10-Hour Safety (1 Credit Hour)
- CTEGT001: Introduction to Engineering (1 Credit Hour)
- CTEGT002: Engineering Graphics (3 Credit Hours)

### INDUSTRY-RECOGNIZED CREDENTIALS (POINT VALUES)

- AutoCAD User (4 Points)
- Autodesk Inventor Certified User Certification (4 Points)
- Certified Solid Works Associate (CSWA) (4 Points)
- Ohio Driver's License (1 Point)

OHIO MEANS JOBS OCCUPATIONS LISTED ACCORDING TO TYPICAL SALARY					
OCCUPATION TITLE	TYPICAL SALARY- BOTTOM 10%	TYPICAL SALARY- MEDIAN	TYPICAL SALARY- TOP 10%	TYPICAL EDUCATION	ANNUAL JOB OPENINGS
Mechanical Engineering Technologists & Technicians*	\$40,870	\$59,910	\$84,430	Associate's Degree	230
Mechanical Engineers*	\$59,960	\$80,080	\$130,420	Bachelor's Degree	970
Civil Engineers*	\$60,450	\$81,070	\$127,710	Bachelor's Degree	560
Industrial Engineers*	\$61,050	\$87,120	\$129,160	Bachelor's Degree	1,150
Architectural and Engineering Managers*	\$102,260	\$139,630	\$203,430	Bachelor's Degree	420

JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF SEPTEMBER 2023; VISIT OHIOMEANSJOBS.COM FOR MORE INFORMATION.

\*Denotes an In-Demand Occupation in the State of Ohio

Career Services: Marshall Wolf 419.661.6372 <a href="mailto:mwolf@pentacc.org">mwolf@pentacc.org</a>
Admissions: Tricia Hornyak 419.661.6498 <a href="mailto:thornyak@pentacc.org">thornyak@pentacc.org</a>



# TECHNICAL CAREERS -

- CAD Technician
- Structural Detailer
- Surveyor
- Architectural Detailer
- Architectural Illustrator
- CAD Program Trainer
- Specification Writer
- Construction Project Manager
- Project Estimator

# PROFESSIONAL CAREERS

- Architect
- Structural Engineer
- Mechanical Engineer
- Civil Engineer
- Chemical Engineer
- Biomedical Engineer
- Industrial Engineer
- Industrial Product Designer
- Landscape Architect
- Interior Designer
- Teacher
- Urban Planner

# ENTRY-LEVEL CAREERS

- Manufacturing Sales Representative
- Draftsman
- CAD Technician
- Revit Technician
- 3D Modeler
- Interior Design Assistant
- Electrical Draftsman
- Construction & Building Inspector
- Architectural Project Assistant
- Mold Designer



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