

COMPUTER-AIDED DESIGN

2024-2025



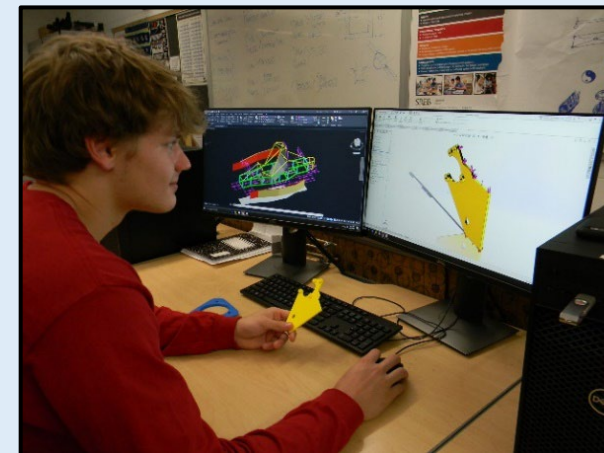
Computer-Aided Design is developed for students interested in a career in the drafting and engineering fields of mechanical and civil design. Using state-of-the-art computers and design software, students learn the drafting and engineering concepts required to generate high-quality industry standard 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)
- 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*	\$46,400	\$62,520	\$90,170	Associate's Degree	230
Mechanical Engineers*	\$62,640	\$92,360	\$134,850	Bachelor's Degree	970
Civil Engineers*	\$60,490	\$83,440	\$130,500	Bachelor's Degree	560
Industrial Engineers*	\$65,320	\$96,500	\$134,000	Bachelor's Degree	1,150
Architectural and Engineering Managers*	\$104,400	\$150,920	\$215,280	Bachelor's Degree	420

JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF SEPTEMBER 2024; VISIT OHIOMEANSJOBS.COM FOR MORE INFORMATION.

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

Instructor: Amir Horani 419.666.1120 Ext. 1406 ahorani@pentacc.org
Supervisor: Dave Stacklin 419.661.6553 dstacklin@pentacc.org

Career Services: Marshall Wolf 419.661.6372 mwolf@pentacc.org
Admissions: Tricia Hornyak 419.661.6498 thornyak@pentacc.org

EDUCATION WITH PURPOSE
CAREER TREE



TECHNICAL CAREERS

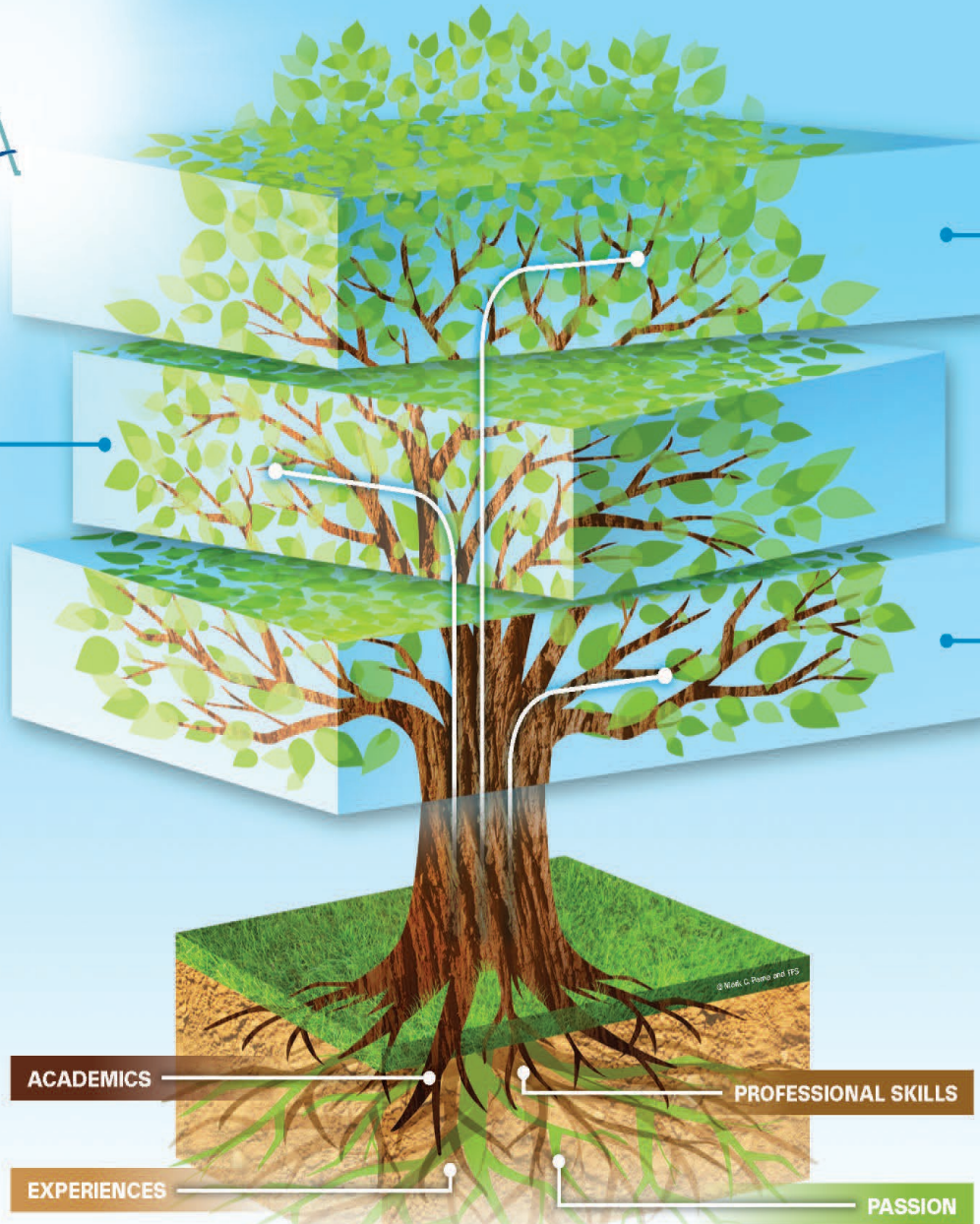
- CAD Technician
- Structural Detailer
- Surveyor
- Architectural Detailer
- Architectural Illustrator
- CAD Program Trainer
- Specification Writer
- Construction Project Manager
- Project Estimator

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



COMPUTER-AIDED DESIGN



For Career Tree® tools and materials please visit TFSresults.com and call our team at 330.840.2680.

The illustration for Career Tree® was created by TFS. All other illustrations and graphics are the property of TFS. All other trademarks and registered trademarks are the property of their respective owners.