

COMPUTER-AIDED DESIGN

2022-2023



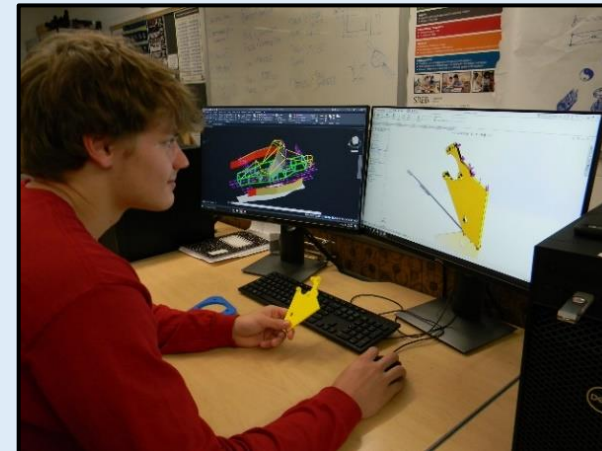
Computer-Aided Design is developed for students interested in a career in the drafting and engineering fields of mechanical and civil design. Using state-of-the-art computers and design software, students learn the drafting and engineering concepts required to generate high-quality industry standard 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* | \$37,660 | \$59,330 | \$78,600 | Associate's Degree | 230 |
| Mechanical Engineers* | \$57,370 | \$78,950 | \$127,110 | Bachelor's Degree | 970 |
| Civil Engineers* | \$59,630 | \$79,100 | \$126,460 | Bachelor's Degree | 560 |
| Industrial Engineers* | \$60,260 | \$79,550 | \$127,110 | Bachelor's Degree | 1,150 |
| Architectural and Engineering Managers* | \$97,690 | \$131,260 | \$206,380 | Bachelor's Degree | 420 |

JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF SEPTEMBER 2022; VISIT OHIOMEANSJOBS.COM FOR MORE INFORMATION.

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

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EDUCATION WITH PURPOSE

CAREER TREE



TECHNICAL CAREERS

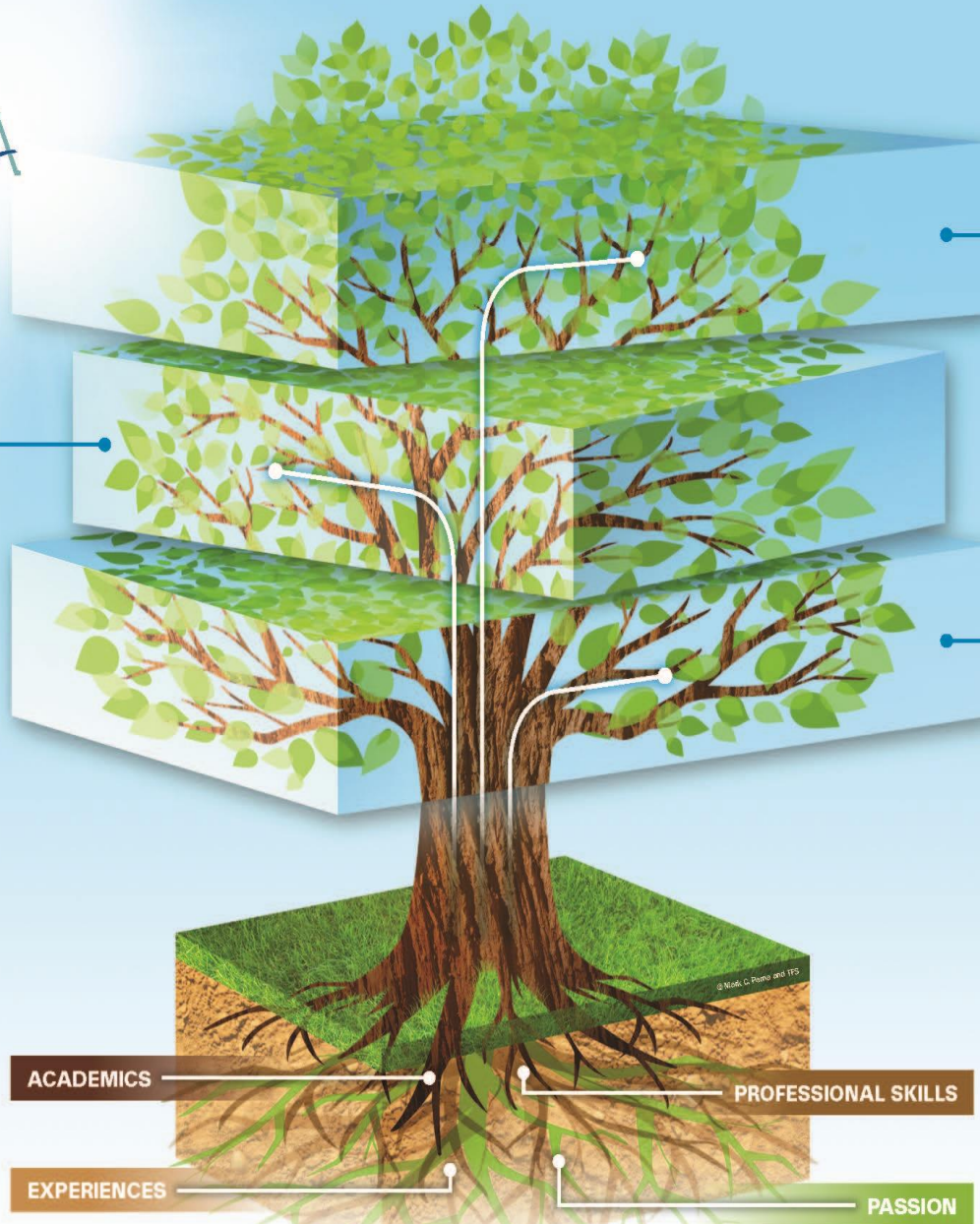
- CAD Technician
- Structural Detailer
- Surveyor
- Architectural Detailer
- Architectural Illustrator
- CAD Program Trainer
- Specification Writer
- Construction Project Manager
- Project Estimator

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



ACADEMICS

PROFESSIONAL SKILLS

EXPERIENCES

PASSION

COMPUTER-AIDED DESIGN



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