

COMPUTER-AIDED DESIGN

2018-2019

Computer-Aided Design is developed for students interested in a career in the drafting and engineering fields of mechanical, civil, and architectural 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. Additionally, this program prepares students for a wide array of post-secondary and career options through the Advanced Career Automated Materials Joining Technology curriculum. By fusing a rigorous academic core with challenging project work and advanced technology in a career pathway program of study, Advanced Career Automated Materials Joining Technology curriculum gives students a greater depth of knowledge and skills to prepare them for more options after high school. Students earn simultaneous Advanced Math credit.



Program Highlights:

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

The Program Focuses on the Following State Approved Courses:

- Plan Reading
- Architecture Design – Site and Foundation Plans
- Engineering Design
- Architecture Design – Structural and Mechanical/Electrical/Plumbing
- Advanced Career: Course 1 – Introduction to Automated Materials Joining



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 SolidWorks (3 Credit Hours)
- CAD 215: Advanced SolidWorks (3 Credit Hours)

Career Technical Credit Transfer (CT2)

- CTMET005: Computer Aided Drafting & Design (3 Credit Hours)
- CTS001: OSHA 10-Hour Safety (1 Credit Hour)
- CTCON001: Plan Reading (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)

SIMULTANEOUS CREDIT OPPORTUNITIES

- Juniors and seniors have the opportunity to earn a simultaneous Advanced Math credit after completion of the Advanced Career: Course 1 – Introduction to Automated Materials Joining

OHIO MEANS JOBS OCCUPATIONS LISTED ACCORDING TO TYPICAL SALARY

OCCUPATION TITLE	TYPICAL SALARY-BOTTOM 10%	TYPICAL SALARY-MEDIAN	TYPICAL SALARY-TOP 10%	EDUCATION LEVEL	ANNUAL JOB OPENINGS
Mechanical Drafters*	\$32,540	\$52,920	\$74,790	Associate's Degree	220
Architectural Drafters, Civil Drafters	\$33,780	\$50,110	\$74,390	Associate's Degree	260
Civil Engineering Technicians	\$34,180	\$54,750	\$77,090	Associate's Degree	190
Civil Engineers*	\$50,670	\$78,510	\$120,920	Bachelor's Degree	650
Mechanical Engineers*	\$52,650	\$76,350	\$115,350	Bachelor's Degree	1,170
Industrial Engineers*	\$54,230	\$79,550	\$120,510	Bachelor's Degree	1,100
Architectural and Engineering Managers*	\$86,720	\$126,550	\$188,310	Bachelor's Degree	500

JOB OUTLOOK COMPILED BY OHIO MEANS JOBS AS OF OCTOBER 2018; 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

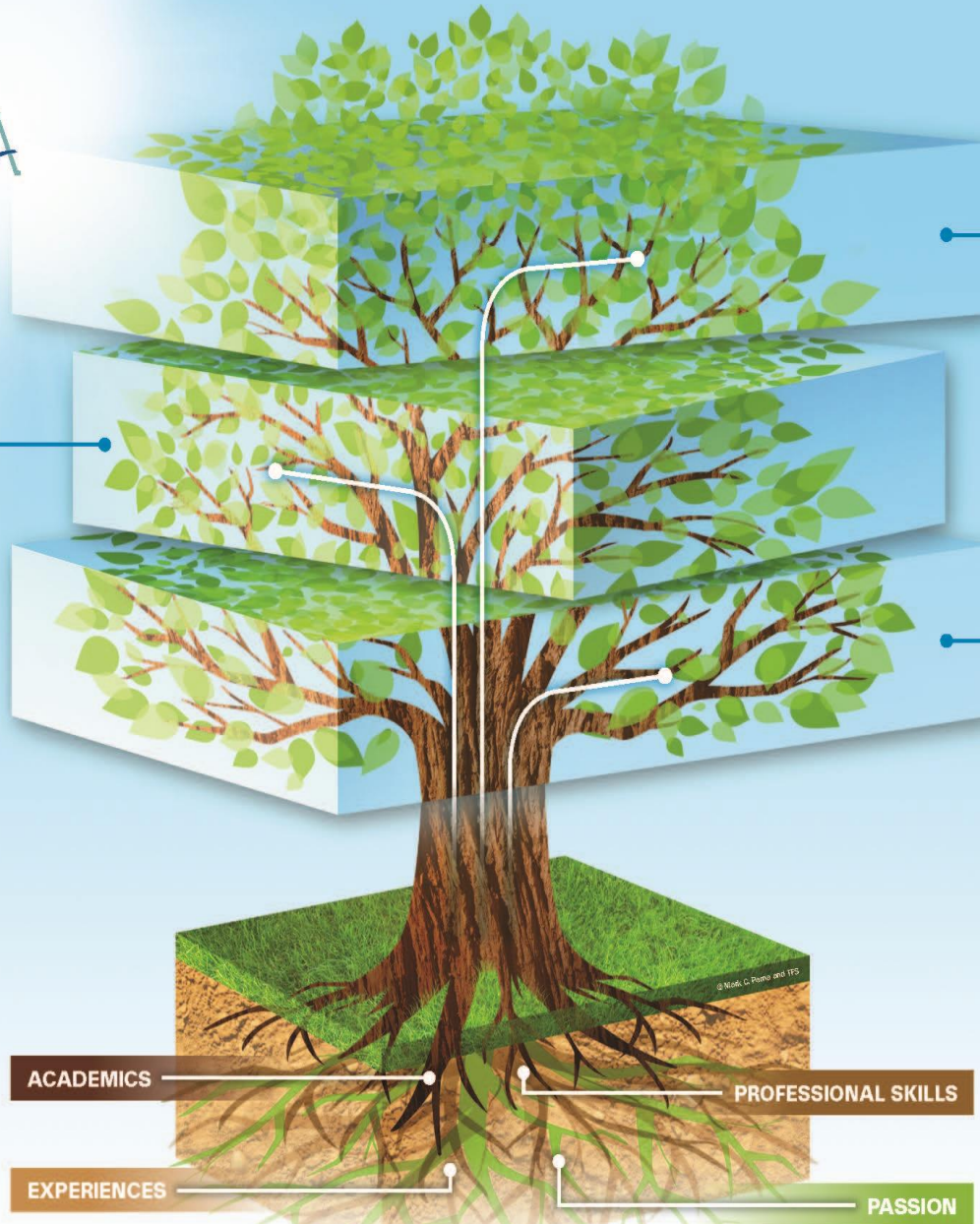
- CAD Technician
- Structural Detailer
- Surveyor
- Architectural Detailer
- Architectural Illustrator
- CAD Program Trainer
- Specification Writer
- Construction Project Manager
- Project Estimator

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



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