

CAD FOR MANUFACTURING - UNDERGRADUATE CERTIFICATE

College of Applied and Technical Studies
www.kent.edu/cats

About This Program

The CAD for Manufacturing undergraduate certificate prepares students with hands-on training and instruction on a number of the most popular software tools used by industry in computer-aided drafting and design and in solid modeling. Students equipped with these certificate skills are the most sought after for employment in drafting/designing. Specific industry-used software students will learn include: AutoCAD, SolidWorks, Inventor and Creo.

Contact Information

- Program Coordinator: **Paul Dykshoorn** | pdykshoo@kent.edu | 330-308-7475
- Speak with an Advisor
- Chat with an Admissions Counselor

Program Delivery

- **Delivery:**
 - In person
 - Online
- **Location:**
 - Tuscarawas Campus

Examples of Possible Careers and Salaries*

Mechanical drafters

- -8.3% decline
- 57,500 number of jobs
- \$58,270 potential earnings

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

Admission Requirements

The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

Kent State campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, and the Twinsburg Academic Center, have open enrollment admission for students who hold a high school diploma, GED or equivalent.

Some programs may require that students meet certain requirements before progressing through the program. For programs with progression requirements, the information is shown on the Coursework tab.

For more information on admissions, contact the Regional Campuses admissions offices.

Program Requirements

Certificate Requirements

Code	Title	Credit Hours
Certificate Requirements		
AGD 11003	SOLID MODELING	3
AGD 22000	TWO-DIMENSION COMMUNICATION	3
MERT 12000	ENGINEERING DRAWING	3
MERT 12001	COMPUTER-AIDED DESIGN	3
MERT 34002	ADVANCED SOLID MODELING	3
Minimum Total Credit Hours:		15

Graduation Requirements

Minimum Certificate GPA	Minimum Overall GPA
2.000	2.000

Program Learning Outcomes

Graduates of the CAD for Manufacturing certificate will be able to:

1. Read and interpret working drawings for engineering components and systems.
2. Create formal 2D drawings with accurate dimensions and tolerances.
3. Design and draft mechanical components and assemblies using 3D modeling techniques.
4. Apply advanced parametric solid modeling and simulation features to create and analyze solid models.
5. Apply critical thinking skills in design and manufacturing problems.