



COMPUTER AIDED DRAFTING TECHNICIAN

CERTIFICATE

Curriculum Requirements: 22 Credits

START HERE

1

1ST 7 Week, Fall Semester (6 Credits)

CAD 102 AutoCAD I	3		<input type="checkbox"/>
CAD 115 Mechanical Drafting Standards and Procedures	3		<input type="checkbox"/>
Total Credits		6	

2

2ND 7 Week, Fall Semester (5 Credits)

	Credits	Milestone	Completed
CAD 107 SolidWorks I	3		<input type="checkbox"/>
CAD 210 AutoCAD II	3		<input type="checkbox"/>
Total Credits		6	

3

1ST 7 Week, Spring Semester (5 Credits)

	Credits	Milestone	Completed
CAD 204 SolidWorks II	3		<input type="checkbox"/>
ADM 101 Product Design and Rapid Prototyping	2		<input type="checkbox"/>
Total Credits		5	

4

2ND 7 Week, Spring Semester (5 Credits)

	Credits	Milestone	Completed
CAD 112 Manufacturing Processes and Materials	2		<input type="checkbox"/>
CAD 214 Geometric Dimension & Tolerancing (GD&T)	3		<input type="checkbox"/>
Total Credits		5	

YOU'VE FINISHED!



Program Milestones

Program milestone courses should be taken in the term and order noted.

General Advising Notes

This certificate is designed to be completed in one year.

Program Description

This certificate will provide students the opportunity to develop high-level drafting skills utilizing computer-aided drafting (CAD) software to create technical drawings, sketches, designs, and notes from mechanical engineers and factory operators that meet the American Society of Mechanical Engineers (ASME), American National Standards Institute (ANSI), and International Standards Institute (ISO) standards. Students will learn about the materials and techniques necessary to design and produce prototypes using additive manufacturing and become certified in industry standard software, including AutoCAD and Solidworks.

Program Learning Outcomes

Upon successful completion of in Computer Aided Design Technician, graduates will be able to:

- Create technical drawings, manufacturing schematics, and 2D and 3D digital models of mechanical equipment designs, using measurements, specifications, and additional data in accordance with ASME Y14.5-2018.
- Collect initial drawings, calculations, and design ideas from engineers, and combine all relevant data into coherent and complete initial design models for review and modifications to ensure deliverables include all relevant design details.
- Analyze design documents and plans to verify dimensions and materials
- Demonstrate proficiency with AutoCAD, SolidWorks, and rapid prototyping software.
- Develop schematics and models of individual components and assemblies.
- Annotate and verify all numerical designations and specifications in technical drawings and schematics, using both CAD programs and manual calculations when necessary.
- Create 3D models using the Additive Manufacturing processes and machinery.

Career Opportunities

Students develop drafting and design skills that can be applied in fields including architectural, civil, mechanical, and construction design. Graduates may work as entry drafters, engineering designers, or in support of engineers or architects using AutoCAD and SolidWorks software to prepare technical drawings and plans. Students are prepared to take AutoCAD and Solidworks certificate exams during their certificate program.

*Articulation agreements exist between York County Community College and various colleges and universities.
Please work with your advisor for information regarding these agreements.*

DISCLAIMER

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