

# Drafting and Design Technology, AAS

## MECHANICAL DRAFTING DESIGN

### School of Technology

#### Program Description

Students in the Drafting and Design Technology, AAS - "Mechanical Drafting Design" program learn to translate the ideas, rough sketches, specifications and calculations of engineers into working drawings for production and assembly.

#### Career Opportunities

Recent graduates of this program have accepted jobs with the following titles: drafter, detailer, drafting technician, drafting technician trainee and CADD first-level entry position.

#### Program Learning Outcomes

Upon successfully completing this program, students will be able to:

- Analyze and translate problems by presenting them visually.
- Develop the ability to execute quantitative design of machines and products.
- Identify the basic components of a CADD system.
- Perform an infinite number of 2-D design math computations necessary to produce drafting design.
- Implement the basic commands necessary to operate 2-D CADD and 3-D solid modeling systems.
- Apply concepts from physics, engineering, mechanics, mathematics, and drafting and apply them to the synthesis of durable mechanical machines and products.
- Communicate effectively and appropriately record and report information significant to the job.
- Perform an infinite number of two- and three-dimensional drawings using a stand-alone mini-computer.
- Network with machine operators, designers, engineers and customers.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Prereq/Coreq(Co)	Options Available
1st Fall	1	PDV 101	First Year Seminar	1		
	2	DFT 105	Technical Drafting I	4		
	3	DFT 112	Introduction to Design, Materials, and Processing	3		
	4	ENG 161	College Writing	3	ENG 085 or Placement	
	5	MTH 104	Introduction to Applied Mathematics	4	MTH 050 or Placement	
1st Spring	6	DFT 106	Technical Drafting II	4	DFT 105	
	7	DFT 258	AutoCAD	4		
	8	ENG 162	Technical Communication	3	ENG 161	
	9	MTH 108	Mathematics for Technologies I	4	MTH 104 ("C" or better) or Placement	
	10	Elective	Social Science Elective	3		Page 47 Column III
2nd Fall	11	EGR 101	Introduction to Engineering	3	Co: MTH 104 or MTH 157	
	12	DFT 266	3D Solid Modeling I	4		
	13	EGR 110	Descriptive Geometry	3		
	14	EGR 221	Statics and Strength of Materials	4	EGR 101 or Permission of Instructor	
2nd Spring	15	ARC 262	Piping, Structural Detailing and Electromechanical Drafting	4	ARC 210 or DFT 258	
	16	DFT 208	Product Design	3	EGR 101 or DFT 112	
	17	DFT 267	3D Solid Modeling II	4	DFT 266	
	18	PHY 107	Applied Physics	4	MTH 100 or MTH 108	

Minimum Program Credits

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DDM