Drafting and Design Technology, AAS

MECHANICAL DRAFTING DESIGN

School of Technology

Students in the mechanical option of the drafting and design technology 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.	Term Offered	Prereq/Coreq(Co)	Options Available
1st Fall	1	PDV 101	First Year Seminar	1	F, Sp, Su		
	2	DFT 105	Technical Drafting I	4	F		
	3	DFT 112	Introduction to Design, Materials and Processes	3	F, Sp		
	4	ENG 161	College Writing	3	F, Sp, Su	ENG 161 or Placement	
	5	MTH 104	Introduction to Applied Mathematics	4	F, Sp, Su	MTH 050, MTH 050A, or Placement	
1st Spring	6	DFT 106	Technical Drafting II	4	Sp	DFT 105	
	7	DFT 258	AutoCAD	4	F, Sp		
	8	ENG 162	Technical Communication	3	F, Sp, Su	ENG 161	
	9	MTH 108	Mathematics for Technologies I	4	F, Sp, Su	MTH 104	
	10	PHY 107	Applied Physics	4	F	MTH 100, 100A or 108	
2nd Fall	11	EGR 101	Introduction to Engineering	3	F		
	12	DFT 266	3D Solid Modeling I	4	F		
	13	EGR 110	Descriptive Geometry	3	F		
	14	EGR 221	Statics and Strength of Materials	4	F	PHY 107 or PHY 155	
2nd Spring	15	ARC 262	Piping, Structural Detailing and Electromechanical Drafting	4	Sp	ARC 210 or DFT 258	
	16	DFT 208	Product Design	3	Sp	EGR 101 or DFT 112, DFT 207	
	17	DFT 267	3D Solid Modeling II	4	Sp	DFT 266	
	18	Elective	Social Science Elective	3	F, Sp, Su		Page 46 Column III
Total Program Credits				62			DDM