Drafting and Design Technology, AAS

COMPUTER AIDED DRAFTING & DESIGN (CADD)/COMPUTER AIDED MANUFACTURING (CAM)

School of Technology

The associate degree program provides the student drafter with computer aided drafting and design and computer aided manufacturing hands-on CADD/CAM applications using a micro stand-alone terminal workstation.

Career Opportunities

Students completing this program will be qualified to enter the workforce as a first level CADD/CAM operator. Significant hands- on experience is essential for CADD/CAM operators to eventually qualify for positions as designers, design technicians or design specialists at a computer terminal.

The following personnel will benefit from a CADD/CAM education: mechanical designers, project engineers, specialists, supervisors, detailers, casual users, vocational trainers and support personnel.

Program Learning Outcomes

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

- Develop the ability to execute quantitative design of machine products
- Identify the basic components of a CADD/CAM system (hardware and software)
- Perform an infinite number of 2-d machine tool path computations necessary to produce and advance drafting and design portfolio
- Implement the basic commands necessary to apply the operational skills needed to affect a 2-D CADD/CAM system
- 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
- Network with machine operators, engineers and customers.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Term Offered	Prereq(s)	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 085 or Placement	
	5	MTH 108	Mathematics for Technologies I	4	F, Sp, Su	MTH 052, 052A or Placement	
	6	Elective	Social Science Elective	3	F, Sp, Su		Page 49 Column III
1st Spring	7	CNC 111	Computer Numerical Control I	4	F, Sp		
	8	DFT 106	Technical Drafting II	4	Sp	DFT 105	
	9	PHY 107	Applied Physics	4	Sp	MTH 100, 100A or 108	
	10	MTH 109	Mathematics for Technologies II	4	F, Sp, Su	MTH 108 or Placement	
2nd Fall	11	CNC 112	Computer Numerical Control II	4	F, Sp	CNC 111	
	12	DFT 266	3D Solid Modeling I	4	F		
	13	EGR 221	Statics and Strength of Materials	4	F	PHY 107 or 155	
	14	DFT 258	AutoCAD	4	F, Sp		
2nd Spring	15	ARC 262	Piping, Structural Detailing and Electromechanical Drafting	4	Sp	ARC 210 or DFT 258	
	16	MTT 111	Machining I	4	F, Sp		
	17	DFT 267	3D Solid Modeling II	4	Sp	DFT 266	
	18	ENG 162	Technical Communication	3	F, Sp, Su	ENG 161	

Total Program Credits **65**