

Computer Aided Design (CAD)



Certificate

32-33 Semester Hours

General Education Requirements

COMM 101	Intro to Oral Communication	3 hrs.
MATH 109	College Algebra for Math & Science	4
Or		
MATH 141	Introduction to Business	4
Or		
TMAT 103	Technical Mathematics I	<u>4</u>
	TOTAL	7

Technical Requirements

CAD 101	Introduction to AutoCAD	3
CSCI 101	Intro to Computer Info Science	4
TECH 114	Introduction to Technical Graphics	<u>3</u>
	TOTAL	10

Drafting Option

CAD 110	CAD Software Applications	3
CAD 215	CAD Parametric Modeling and Design	3
CAD 233	Residential Architecture	4
CNST 101	Construction Materials & Methods	3
Or		
MFTG 110	Manufacturing Processes	3
MAIN 101	Industrial Electricity & Systems	<u>3</u>
	TOTAL	16

Geospatial Technology Option

CNST 152	Surveying and Site Planning	3
CSCI 110	Intro to Database Management Systems	3
EASC 161	Physical Geology	4
Or		
GEOG 101	World Geography	3
GIS 101	Fundamentals of GIS	3
GIS 171	Remote Sensing	<u>3</u>
	TOTAL	15-16

Construction Management Option

CAD 233	Residential Architecture	4
CNST 101	Construction Materials & Methods	3
CNST 103	Building Mechanics	3
CNST 113	Construction Documents and Quantity Takeoff	3
MAIN 101	Industrial Electricity & Systems	<u>3</u>
	TOTAL	16

Program Description

The Computer Aided Design curriculum introduces students to a broad realm of technical and architectural modeling and imaging, visualization techniques, projection principles, and concepts that typify engineering and architectural drawings as well as Geographic Information Systems (GIS) and Construction. The program also develops the ability to use CAD systems to create drawings and models that reflect a thorough understanding of the standard practices used in the chosen field. Students are guided through problem-solving activities and design projects that promote team effort and foster creativity. The certificate program requires the student to select an area of specialty from either GIS, Construction, or Drafting. Upon completion of the program, students will be able to seek entry-level employment as CAD technicians, CAD operators, engineering-architectural assistants, site and survey layout technicians, and construction project manager's assistants. All courses included in the CAD Technology Certificate are applicable to the Associate in Applied Science Degree in CAD Technology.



Note: MATH 141 is recommended for students intending to complete the Geospatial Technology Option.

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