

COMPUTER-AIDED DESIGN (CAD) TECHNOLOGY - CERTIFICATE OF ACHIEVEMENT (3205)

Division: Mathematics, Engineering Technologies and Computer Sciences
(METCS) Division

Code	Title	Credits
General Education Requirements (10 Credits)		
<i>Written & Oral Communication (6)</i>		
ENG 101	College Composition I	3
Select one of the following:		
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
<i>Quantitative/Scientific Knowledge, Skills & Reasoning (4)</i>		
MTH 100	Intro. to College Mathematics	4
Major Requirements (13 Credits)		
ENR 100	Fund. of Engineering Design	2
ENR 103	Engr. Graphics & Intro. to CAD	2
ENR 105	Applied Computer Aided Design	2
ENR 106	Intermediate Comp-Aided Design	2
ENR 205	Advanced Autocad	3
ENR 250	Computer-Aided Design Project	2
Total Credits		23

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Apply principles of engineering graphics to prepare detailed drawings using CAD software;
- Demonstrate computer literacy in use of various CAD systems; and
- Use American National Standards Institute (ANSI) protocol for sizing and tolerancing of mating parts; Apply Geometric Dimension and Tolerancing (GD&T) techniques to engineering design; and Utilize 3D solid modeling CAD systems to create mechanical components and generate assembly designs.