COMPUTER AIDED DESIGN TECHNOLOGY

(AAS.CAD) ASSOCIATE IN APPLIED SCIENCE DEGREE

Computer-Aided Design (CAD) is a computer graphics based tool that allows drafters, designers and engineers to develop new products faster by automating many complex and tedious design tasks. This program will provide in-depth knowledge and experience in two- and three-dimensional design and drafting. The student will work with state-of-the-art CAD and solid modeling software and hardware. Those earning this degree will be prepared for a career as a CAD designer, mechanical designer, engineering technician or CAD technician, or Architectural drafter. Upon completion, students can also receive industry recognized certificates from Fanuc, OSHA, AutoCAD, and others.

Students planning to continue their education at Eastern Illinois University or Southern Illinois University to earn a bachelor's degree in Industrial Technology, Applied Engineering, or Architecture should consult their advisor/counselor for course requirements and substitutions.

Program requirements may change over time. Specific degree/graduation requirements are determined by a degree audit.

FIRST YEAR

First Semester		**Hours**
TEC-050	Technical Math I (Module 1)	2.0
TEC-052	Technical Math II (Module 2) *	2.0
TEC-103	Engineering Graphics	3.0
CAD-056	CAD I	2.0
CIS-160	Practical Software Application	3.0
ENG-098	Communications I	3.0
--- ---	Social Science Elective	2.0
	SEMESTER TOTALS	**17.0**

Second Semester		
TEC-054	Technical Math III *	2.0
TEC-056	Technical Math IV *	2.0
CAD-057	CAD II *	3.0
CAD-059	Special Applications of CAD * +++	3.0
CIM-060	CNC Machining * +++	3.0
--- ---	Design/Drafting Elective	3.0
	SEMESTER TOTALS	**16.0**

SECOND YEAR

First Semester		**Hours**
CAD-058	CAD Drafting Systems * +	2.0
CIM-092	Computer-Aided Manufacturing * +	3.0
CAD-060	3D Solid Modeling * +	3.0
TEC-060	Analytical Mechanic * +	4.0
HED-178	Responding to Emergencies	2.0
	Design/Drafting Elective	2.0
	SEMESTER TOTALS	**16.0**

Second Semester		
TEC-080	Strength/Materials * +++	4.0
CAD-062	Introduction to Solidworks	2.0
MET-084	Technical Mechanisms * +++	3.0
CAD-061	3D Parametric Design * +++	3.0
--- ----	Social Science Elective	3.0

	Design/Drafting Elective	2.0
	SEMESTER TOTALS	**17.0**

SUGGESTED ELECTIVES

BCT-062	Architectural Drafting II * +++	4.0
BCT-076	Architectural Design * +++	4.0
CET-081	CAD for Civil Engineering * +++	3.0
CET-082	Civil Drafting +	3.0
CIS-092	Adobe Illustrator	3.0
EET-056	Electronic Design/Fabrication	3.0
MTT-050	Intro to Machining Procedures	3.0
CIM-094	Computer Integrated Manf * +++	3.0
CIM-044	Industrial Robotics	2.0
CAD-075	Supervised Occupational Exp	3.0
TEC-043	Industrial Safety	1.0

	TOTAL PROGRAM HOURS	**66.00**

*	There are prerequisites, course requisites, or minimum placement test scores for this course.
**	Electives must be approved by the Program Coordinator
+	Course only offered fall semester
++	Course only offered spring and summer semester
+++	Course only offered spring semester
++++	Course offered in summer term only
^	SOS 050 Human Relations and PSY 271 Introduction to Psychology cannot be used as a social science elective
^^	Consult Academic Advisor for appropriate course
^^^	Course requires a 30-hour practicum experience in addition to classroom lecture hours
^^^^	ECE 120 and ECE 125 must be taken the same semester

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