Area of Study: **Science and Engineering**
Pathway: **Engineering Technology/CAD**
Type: **Advanced Certificate**
Curriculum Code: **ENT.CAD.CERT (C548E)**

(Total Program Credits: 13)

The Engineering Technology/CAD (Computer-Aided Design) Advanced Certificate curriculum provides the student with the coursework needed to be in an entry-level position where skills and knowledge of Computer-Aided Design (CAD) software is required. Contains coursework within the Engineering Technology AAS degree; a degree that gives graduates the education needed to fill technical positions in product design and development and transfers to four-year technology-related programs, including (but not limited to) the Illinois Institute of Technology, Illinois State University, Northern Illinois University and Purdue University/Calumet. These four-year programs further prepare the graduates to move into leadership roles, such as industrial supervision, machine and tool designer, technical buyers, production expediters and cost estimators.

PROGRAM LEARNING OUTCOMES:

At the successful completion of the Engineering Technology/CAD Advanced Certificate, the graduate will be able to:

- measure in inches and metric system;
- analyze a piece-part drawing to produce 2D/3D models;
- generate 3D CAD models from isometric drawings of models;
- produce detail drawings using AutoCAD, Inventor and Solidworks in 1st and 3rd Angle Projection; and
- generate assembly with bill of material drawings of model assemblies in Inventor and Solidworks.

Placement Measures MAT, RHT, and COL sequence placement will be determined by an Academic Advisor.
Contact your Academic Advisor or Transfer Specialist (if transferring), before registering for courses.
Developmental education courses do not transfer. They assist students in the path towards college credit.

Program Map for Full-Time Students

Semester 1	Category	Stackable Certificate	Stackable Degree	Next Steps
				Meet with your Academic Advisor to finalize your academic plan for graduation and register for stackable certificate/degree (option).
ENT 110 ◊ Engineering Design Graphics/CAD (4)	*Required*			
ENT 252 ◊# Introduction to Mechanical AutoCAD (3)	*Required*			
ENT 255 ◊# Autodesk Inventor Design & Rendering (3)	*Required*			
ENT 280 ◊# Solidworks Design & Rendering (3)	*Required*			Submit graduation petition by deadline (check for the specific date in catalog or syllabus.)

13 Credit hours

See ENT course descriptions (p. **Error! Bookmark not defined.**)*.*

Coordinator: Antigone Sharris, Ext. 3622; email: antigonesharris@triton.edu; Cell Phone: (773) 580-8807