

STACKABLE CREDENTIAL: PRECISION MACHINING TECHNOLOGY AND COMPUTER AIDED DRAFTING

Students who elect to follow this academic plan may complete the following Certificates of Specialization while completing the requirements for the Engineering Technology, Associate in Applied Science:

- Skilled Trades Industrial Occupations Technology
- Precision Machining Technology
- Computer Aided Drafting, Certificate of Specialization.

Students are encouraged to consult with an academic advisor to confirm course selection and ensure alignment with program requirements and graduation goals.

For additional information about the Precision Machining Technology program, please refer to the **Precision Machining Technology program's catalog page** (<https://catalog.stlcc.edu/programs/precision-machining-technology-certificate-specialization/>).

For additional information about the Computer Aided Drafting program, please refer to the **Computer Aided Drafting program's catalog page** (<https://catalog.stlcc.edu/programs/computer-aided-design-certificate-specialization/>).

Code	Title	Hours	Prerequisites	Milestones/Notes
First Year				
Fall				
GE 131	Engineering Technology Orientation	1	Reading Proficiency	Exploratory Course
EE 134	Electric Circuits	6	MTH 140 (or MTH 140S) with a minimum grade of "C" or equivalent placement test scores or department approval and Reading Proficiency	Gateway Course and Critical Course
MTH 140	Intermediate Algebra	3	Satisfactory placement and Reading Proficiency	
GE 101	Technical Computer Applications	3	Reading Proficiency	
GE 135	Blueprint Reading for Engineering Technicians	2	Reading Proficiency	Apply for graduation for Skilled Trades Industrial Occupations Technology, Certificate of Specialization.
	Credit Hours	15		
Spring				
Select one of the following:		3		
ENG 101	College Composition I (MOTR ENGL 100)		Placement score or ENG 030 or ENG 070 or EML 072 with a minimum grade of "C", or recommendation of department, and Reading Proficiency, or concurrent enrollment in RDG 079	
ENG 102	College Composition II (MOTR ENGL 200)		ENG 101 with a minimum grade of "C" and Reading Proficiency	
ME 100	Measurement, Materials and Safety	3	Departmental approval or Work Keys Applied Mathematics Level 4, or, Reading Proficiency or Work Keys Reading for Information Level 4	
ME 111	Job Planning, Benchwork & Layout	3	Reading Proficiency or departmental approval	
ME 154	Mechanical Blueprint Reading	2	Reading Proficiency or concurrent enrollment in RDG 079	
EGR 133	Introduction to AutoCAD I	2	Reading Proficiency	

XXX xxx	Social & Behavioral Sciences: Civics Requirement (https:// catalog.stlcc.edu/general-education/)	3		
	Credit Hours	16		
Second Year				
Fall				
Select one of the following:		3		
PSI 101	Physical Science (MOTR PHYS 110)		MTH 108 or MTH 140S with a minimum grade of "C", or placement into MTH 140 or higher, and Reading Proficiency	
BIO 109	Human Biology (MOTR LIFS 100)		Reading Proficiency or concurrent enrollment in RDG 079	
EGR 100	Engineering Drawing	3	Reading Proficiency or concurrent enrollment in RDG 079	Apply for graduation for Precision Machining Technology, Certificate of Specialization.
ME 120	Manual Machining I	3	ME 111 with a minimum grade of "C" or departmental approval, and Reading Proficiency	
ME 200	Manual Machining II	3	Reading Proficiency or departmental approval	
ME 212	Introduction to Computer Numerical Control (CNC) Machining	3	Reading Proficiency or departmental approval	
	Credit Hours	15		
Spring				
Select one of the following:		3		
COM 101	Oral Communication I (MOTR COMM 100)		Concurrent enrollment in ENG 070 or EML 072 or EML 073 or Reading Proficiency	
COM 107	Public Speaking (MOTR COMM 110)		Reading Proficiency	
COM 201	Interpersonal Communication (MOTR COMM 120)		Reading Proficiency	
GE 240	Product Design and Fabrication	4	ME 151 or EE 134 or EGR 100 or ME 111 with minimum grades of "C" or department approval, and Reading Proficiency	Apply for graduation for Computer Aided Design, Certificate of Specialization.
EGR 141	Introduction to AutoCAD II	2	EGR 133 with a minimum grade of "C" and Reading Proficiency	Apply for graduation for Engineering Technology, Associate in Applied Science.
Select one of the following:		4		
ME 230	Introduction to 3-D Solid Modeling for Design		EGR 100 with a minimum grade of "C" or Department approval and Reading Proficiency	
EGR 230	Introduction to Revit		Reading Proficiency	
XXX xxx	Engineering Technology Approved Elective	1		Highly Recommend GE 141
	Credit Hours	14		
	Total Credit Hours	60		