



## ENGINEERING TECHNOLOGY (A.S.)

SPECIALIZATION: QUALITY

### PROGRAM DESCRIPTION:

The Engineering Technology Associate in Science degree program prepares students for employment or provides additional training for persons employed in manufacturing and high technology industries. CF offers the Quality specialization along with a college credit certificate in Lean Six Sigma Green Belt, Computer-Aided Drafting, and Engineering Technology Support Specialist.

The 18 credit hour technical core of this degree is closely aligned with the national Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) industry certification which is endorsed by the National Association of Manufacturers' Skills Certification System. After completing this core, students will be prepared to take the MSSC assessment for the CPT Certification. Students who have already earned the MSSC-CPT will receive 15 articulated credit-hours towards the Engineering Technology degree. The Engineering Technology Associate in Science degree program is fully transferable to four year degree granting institutions.

ASSOCIATE IN SCIENCE DEGREE (A.S.)				
General Education & Engineering Technology Courses				
GENERAL EDUCATION (16 credits)	Cr.	ENGINEERING TECHNOLOGY CORE (18 credits)	Cr.	
ENC 1101 Freshman Composition Skills I	3	<b>CAD</b> ETD 2320C Computer-Aided Drafting	3	
Humanities Requirement	3	<b>ELECTRONICS</b> EET 1084 Survey of Electronics	3	
MTB 1321 Technical Mathematics	3	<b>MEASUREMENT</b> ETI 1152 Instrument Techniques & Measurement	3	
Social Sciences Requirement	3	<b>PROCESSES</b> ETI 1411 Manufacturing Processes	3	
PHY Any College Physics	4	<b>QUALITY</b> ETI 1117 Introduction to Quality Control	3	
		<b>SAFETY</b> ETI 1720C Industrial Safety	3	
Specialized Track Courses				
QUALITY (12 credits)				
ETI 1628 Developing & Coaching Self Directed Work Teams	3	ETI 1622 Concepts of Lean Six Sigma	3	
ETI 2610 Six Sigma for the Expert	3	ETI 2623 Lean Enterprise for the Expert	3	
Technical Elective Courses				
CGS 1100 Microcomputer Applications	3	EGN 1949 Co-op Work Experience	2	
EGS 1110 Engineering Graphics	3	CTS 2142 Project Management	3	
CGS 1122 Excel for Engineers	3			





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**COLLEGE CREDIT CERTIFICATES**

**LEAN SIX SIGMA GREEN BELT CERTIFICATE (12 credits)**

The college credit certificate program provides training for those who already have considerable experience in manufacturing and for individuals with a degree in engineering technology who wish to train for a career in quality control.

Course	Title	Cr.	Course	Title	Cr.
ETI 1622	Concepts of Lean Six Sigma	3	ETI 1628	Developing & Coaching Self-Directed Work Teams	3
ETI 2623	Lean Enterprise for the Expert	3	ETI 2610	Six Sigma for the Expert	3

**DRAFTING AND DESIGN CERTIFICATE (24 credits)**

This college-credit certificate program in computer-aided drafting and design is for those who wish to be trained to pursue a career in computer-aided drafting and design in the manufacturing industry. All drafting courses are taught in AutoCAD. With the exception of the beginning engineering graphics course, all the drafting and design courses are hybrid courses.

Course	Title	Cr.	Course	Title	Cr.
MTB 1321	Technical Math	3	EGS 1110	Engineering Graphics	3
ETD 2320C	Computer-Aided Drafting	3	ETD 2350C	Advanced Computer-Aided Drafting	3
ETD 2355C	Three-Dimensional Modeling	3	ETD 2801C	Pictorial Drafting	3
ETD 2461	Mechanical systems Drafting	3	ETD 2730	Industrial Drafting	3

**ENGINEERING TECHNOLOGY – SUPPORT SPECIALIST (18 credits)**

This certificate prepares students for entry level technical jobs in high technology production, manufacturing, distribution, engineering, and research and development facilities.

Course	Title	Cr.	Course	Title	Cr.
EET 1084	Survey of Electronics	3	ETI 1152	Instrument Techniques and Measurement	3
ETD 2320C	Computer-Aided Drafting	3	ETI 1117	Introduction to Quality Control	3
ETI 1411	Manufacturing Processes I	3	ETI1720C	Industrial Safety	3

