



ENGINEERING TECHNOLOGY (A.S. /A.A.S.)

SPECIALIZATIONS: ADVANCED MANUFACTURING

PROGRAM DESCRIPTION:

The Engineering Technology Associate in Science/Applied Science degree programs prepares students for employment or provides additional training for persons employed in manufacturing and high technology industries. Florida State College at Jacksonville offers the Advanced Manufacturing specialization along with three college credit certificates: Engineering Technology Support, Mechanical Design and Fabrication and Pneumatics, Hydraulics and Motors for Manufacturing. The 18 credit hour technical core is aligned with the Manufacturing Skills Standard Council's (MSSC) skills standards. *After completing this core students will be prepared to take the Manufacturing Skills Standards Council (MSSC) assessments for the Certified Production Technician (CPT) certification.* The Engineering Technology Associate in Science degree program is fully transferable to four year degree granting institutions.

ASSOCIATE IN SCIENCE and ASSOCIATE IN APPLIED SCIENCE (A.S./A.A.S) DEGREES

GENERAL EDUCATION and ENGINEERING TECHNOLOGY CORE COURSES

GENERAL EDUCATION (15 credits)		Cr.	ENGINEERING TECHNOLOGY CORE (18 credits)		Cr.
English Composition I		3	CAD	CGS 2470 Computer Aided Drafting and Design	3
Humanities		3	ELECTRONICS	EET 1084 Survey of Electronics	3
Mathematics		3	MEASUREMENT	EST 1520 Basic of Instrumentation	3
Communications (Category B)		3	PROCESSES	EST 1352 Intro to Man. Processes	3
Social and Behavioral Science		3	QUALITY	ETI 2622 Intro to Lean Manufacturing	3
			SAFETY	BCN 2732 OSHA Safety	3
Specialized Track Courses					
ADVANCED MANUFACTURING (27 Cr.)					Cr.
EST 1542	Introduction to Programmable Logic Controllers	3	EST 1511	Motors and Controls	3
EST 1603	Robotics, Mechanics, & Control	3	EST 1540	Industrial Applications	3
EST 1535	Automated Process Control	3	EST 1632	Computer Integrated Manufacturing	3
EST 1531	Human Machine Interface	3	EST 1700	Hydraulics and Pneumatics	3
EST 1943	Internship	3			
Technical Elective Courses					
PMT 2254	CNC Programming II	3	PMT 1102	Introduction to Welding	3
PMT 2261	CAD/CAM I	3	MAN 2125	Supervision and Performance Improvement	3
PMT 2262	CAD/CAM II	3	EET 1140	Industrial Electronics	3
PMT 2205	Measuring Devices and ISO Inspections	3	EDT 1100	Engineering Drawing 3	3
EST 1941	Internship	1	CET 1630	Fiber, Voice and Data Cabling	3
EST 2527	Electromechanical Components and Mechanism	3			





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COLLEGE CREDIT CERTIFICATES

ENGINEERING TECHNOLOGY SUPPORT CERTIFICATE (18 credits)

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Engineering Technology and Industrial Applications: production materials and processes, quality, computer aided drafting, electronics, mechanics, instrumentation and safety.

Course Title		Cr.			Cr.
EET 1084	Survey of Electronics	3	EST 1352	Introduction to Man. Processes	3
CGS 2470	Computer Aided Drafting and Design	3	EST 1520	Basic of Instrumentation	3
ETI 2622	Intro to Lean Manufacturing	3	BCN 2732	OSHA Safety	3

ADVANCED MANUFACTURING (12 credits)

This certificate prepares students for engineering technology support positions dealing with facilities operations and maintenance in high technology production, manufacturing, distribution, engineering, and research and development facilities.

Course Title		Cr.			Cr.
EST 1511	Motors and Control Circuits	3	EST 1700	Hydraulics and Pneumatics	3
ETM 2315	Mechanical Devices and Systems	3	ETM 2317	Drive and Pump Systems	3

CNC MACHINIST (12 credits)

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Engineering Technology: Basic and Advanced Machining and Basic CNC programming.

Course Title		Cr.			Cr.
PMT 1202	Intro to Machining	3	PMT 2213	Advanced Machining I	3
PMT 2214	Advanced Machining II	3	PMT 2250	CNC Programming I	3

