



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 of this degree is closely aligned with the national Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) industry certification. 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 and ASSOCIATE IN APPLIED SCIENCE (A.S./A.A.S.)

General Education & Engineering Technology 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.)

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			





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

SPECIALIZATIONS: ADVANCED MANUFACTURING

COLLEGE CREDIT CERTIFICATES

ENGINEERING TECHNOLOGY SUPPORT CERTIFICATE (18 credits)

This certificate focuses on broad, transferable skills and stresses understanding and demonstration of Engineering Technology and Industrial Applications.

Course Title	Cr.	Cr.	Course Title	Cr.
EET 1084 Survey of Electronics	3	EST 1352 Introduction to Man. Processes	3	
CGS 2470 Computer Aided Drafting & 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.	Course Title	Cr.
EST 1511 Motors and Control Circuits	3	EST 1700 Hydraulics and Pneumatics	3	
ETM 2315 Mechanical Devices & Systems	3	ETM 2317 Drive & Pump Systems	3	

CNC MACHINIST (12 credits)

This certificate 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.	Course Title	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	

