



COLLEGE of  
CENTRAL  
FLORIDA



## ENGINEERING TECHNOLOGY ASSOCIATE IN SCIENCE DEGREE PROGRAM DESCRIPTION

The Engineering Technology (ET) Associate in Science (A.S.) degree program at College of Central Florida (CF), prepares students for employment or provides additional training for persons employed in manufacturing and high technology industries. 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, and endorsed by the National Association of Manufacturers (NAM). 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.

### ENGINEERING TECHNOLOGY A.S. (60 Credits)

**CC ET DEGREE SPECIALIZATIONS:** Advanced Manufacturing, Electronics, Quality

#### **ET TECHNICAL CORE (18 credits)**

The ET core provides technical fundamentals for the ten specializations tracks of the ET Degree that supports many manufacturing and high technology industry sectors.

The ET technical core includes CAD, Electronics, Measurement, Manufacturing Processes, Quality and Safety.

### COLLEGE CREDIT CERTIFICATES

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

This certificate prepares students for specialized areas supporting engineering design, manufacturing processes and production, testing, and/or maintaining product quality.

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

This certificate covers the methods used in Lean and Six Sigma such as continuous flow, overall equipment effectiveness (OEE), Kaizen, process mapping, the 5S's, total productive maintenance (TPM), cellular manufacturing, the DMAIC, self-directed work teams, the kanban system, design for manufacturing, and value stream mapping. The courses in this Green Belt certificate program are part of the Quality Specialty Subplan in the A.S. degree in Engineering Technology.

#### **PNEUMATIC, HYDRAULICS AND MOTORS FOR MANUFACTURING (12 credits)**

This certificate provides a series of courses that focuses on the concepts, theories of operation, and equipment used in manufacturing and other industrial operations. The program covers the setup, operation, maintenance and trouble shooting of pneumatic, hydraulic and electromechanical components and systems, AC and DC circuit theory, circuit design and operation, circuit analysis and troubleshooting, and industrial processes and materials.

#### **MECHATRONICS (30 Credits)**

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the Engineering Technology: Maintenance Techniques, Computer Aided Drafting/Design Skills, Technical Communications, Maintenance and Operation of Various Industrial Components, Quality Control and Testing, Material Handling Protocols, and Proper Usage of Tools and Instrumentation.



For more information visit College of Central Florida ET Program at:  
<http://www.cf.edu/explore/programs/business/engineering-technology>  
Contact the Engineering Technology Department at (352) 854.2322 x 1471





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**SIMULATION & AUTOMATION (12 credits)**

This certificate supports positions dealing with automation and control systems in high tech production, manufacturing, distribution, and engineering research facilities

**MECHANICAL DESIGNER & PROGRAMMER (12 credits)**

This certificate provides training for those who are interested in 3D Mechanical Design and 2D & 3D tool path Processing, CNC Machining, individuals with a degree, or those who are working towards a degree in engineering technology.



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