



# HCC



## ENGINEERING TECHNOLOGY ASSOCIATE IN SCIENCE DEGREE PROGRAM DESCRIPTION

The Engineering Technology (ET) Associate in Science (A.S.) degree program at Hillsborough Community College (HCC), 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)

**HCC ET DEGREE SPECIALIZATION:** Advanced Manufacturing

**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

**AUTOMATION (12 credits)**

This certificate prepares students for engineering technology support positions dealing with PLCs, automation, and control systems in high technology production, manufacturing, distribution, engineering, and research and development facilities.

**COMPUTER NUMERICAL CONTROL (CNC) MACHINIST (12 credits) - New**

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.

**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 MANUFACTURING (12 credits)**

This certificate prepares students for engineering technology support positions dealing with quality systems and their implementation in high technology production, manufacturing, distribution, engineering, and research and development facilities

**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 Hillsborough Community College ET program at:

<https://www.hccfl.edu/careers/engineering-technology.aspx>

Contact the Engineering Technology Department at (813) 253-7852





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**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 troubleshooting 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.



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