ENGINEERING TECHNOLOGY, ASSOCIATE IN SCIENCE

Program Code: ETAS
Meta-Major: STEM
Location(s): Cocoa, Palm Bay
Delivery Method(s): On-Campus, Hybrid
Previous Degree Required: HS Diploma
Eligible for Financial Aid: Yes
Additional Limited Access Application Process Required: No
Program Testing Requirements: CPT - Common Placement Test (PERT, ACCUPLACER, SAT, ACT)
Classification of Instructional Programs (CIP) Code: 15.0000
Florida Department of Education CIP Code: 1615000001

The Engineering Technology A.S. degree program has the following associated College Credit Certificates (CCCs):

- Applied Technology Specialist CCC
- Composite Fabrication and Testing CCC
- CNC Machinist Fabricator CCC
- Engineering Technology Support Specialist CCC
- Mechatronics

And this related Robotics and Simulation Technician CCC

The Engineering Technology A.S. degree prepares students for a variety of positions in Brevard County's high-tech manufacturing sector. Students learn how to apply practical engineering principles to electrical, mechanical, or robotic systems, offering a clear path to a range of in demand/high skill positions. Classroom theory is balanced with practical laboratory instruction to develop skills required to assemble, calibrate, operate, troubleshoot and repair components and systems. The program focuses on broad, transferable skills and stresses an understanding and demonstration of engineering technology and industrial applications. EFSC Engineering Technology AS degree offers three Specializations in addition to College Credit Certificates that can be completed individually or while pursuing the AS degree. Graduates of the program are eligible to enroll in EFSC's Bachelor of Applied Science in Organizational Management or Computer Information Technology. Visit the program page for more details and how to apply.

Due to safety concerns, it is highly recommended that applicants to this program are able to meet the following:

- Students should be able to lift 50+ pounds.
- Students should be able to distinguish standard wire colors.

Program Requirements

Code	Title	Credit Hours
General Education Courses		
ENC 1101	Composition 1	3
MAC 1105	College Algebra	3
Humanities Core Requirement		3
Natural Science Core Requirement		3
Social/Behavioral Science/Core-Civic Literacy Requirement		3
Major Courses		
EET 1084	Introduction to Electronics	3
ETDC 2364	SolidWorks Fundamentals	3
ETI 1420	Manufacturing Processes and Materials	3
ETI 1701	Industrial Safety	3
ETI 2110	Introduction to Quality Assurance	3
ETIC 2001	Applied Manufacturing Mechanics	3
Specialization		
Select one specialization from below:		27
Advanced Technology Specialization		
Advanced Manufacturing Specialization		
Electronics Specialization		
Total Credit Hours		**60**

Technical Electives

Courses in the specializations above may be used as technical electives as long as they are not being used to fulfill the specialization requirement. Students may take any technical elective they choose.

Code	Title	Credit Hours
CETC 1123	Microprocessor Fundamentals	4
EET 2621	Soldering Inspections and Processes	3
EETC 1611	Standard Testing and Certification	2
EETC 1612	Cabling and Wire Harness Assembly	3
EETC 2724	Schematic Capture and Modeling	3
ENC 2210	Technical Writing	3
ETD 2941	Internship	3
ETIC 2464	Advanced Composites	3
ETP 1400	Distributed Electric Power Generation and Storage	3
ETP 1401	Alternative/Renewable Energy Technologies	3
ETP 1420	Solar Thermal Technologies	3
ETPC 2410	Photovoltaic Technology	3
ETSC 1603	Fundamentals of Robotics and Simulation	3
PMTC 1203	Introduction to Machining	3
PMTC 2213	Advanced Machining 1	3
PMTC 2214	Advanced Machining 2	3

Learning Outcomes: Engineering Technology A.S.

1. Demonstrate knowledge of basic laws of electronics.
   - *Supports Core Ability: Think Critically and Solve Problems*
2. Demonstrate industrial safety, health, and environmental requirements.
   - *Supports Core Ability: Process Information*
3. Demonstrate methods of quality assurance in manufacturing.
   - *Supports Core Ability: Process Information*
4. Demonstrate modern industrial processes and materials.
   - *Supports Core Ability: Process Information*
5. Demonstrate proficiency using tools, instruments and testing devices.
   - *Supports Core Ability: Think Critically and Solve Problems*