AEROSPACE TECHNOLOGY (A.S.)

Previous Degree Required: HS Diploma
Eligible for Financial Aid: Yes
Delivery Method(s): On-Campus
Location(s): Cocoa
Limited Access: Yes
Program Testing Requirements: Assessment in Reading, Writing, and Math
Academic Community: INMC Industry/Manufacturing and Construction
Program Code: ATAS
Classification of Instructional Programs (CIP) Code: 15.0801
Florida Department of Education CIP Code: 1615080100

This program prepares students for employment as aerospace technicians who assemble, service, test, operate, and repair systems associated with both expendable and reusable space launch vehicles, payloads, related laboratories, and ground support equipment. This program also provides supplemental training for persons previously or currently employed in this industry. Instruction is designed to qualify students for examinations for certification as an aerospace technician in various skill areas. Graduates may also qualify for many applied-technology jobs such as testing, fabrication, assembly, production, repair, and manufacturing.

The Aerospace Technology A.S. degree program includes the following College Credit Certificates:

- Aerospace Technician CCC
- Structural Assembly Technician CCC

Program-Specific Admissions Information: This is a limited-access program; student must submit a separate application to the program.

Application Deadlines:

- Fall Application Deadline: July 10 (Day Program)
- Spring Application Deadline: November 1 (Night Program)

Refer to the Associate in Science (A.S.) page to find information about admission, graduation, general education and other requirements. Students will work with an advisor to determine the courses best suited to their plan of study.

Visit the program page for more information. Learn how to apply. Make an appointment. Explore your future! Ask for the Aerospace Information Package Email: CareerTechLA@easternflorida.edu.

Program of Study

Code	Title	Credit Hours
General Eduation Courses		
ENC 1101	Composition 1	3
Humanities Core Requirement		3
Mathematics Core Requirement		3
Natural Science Core Requirement		3
Social/Behavioral Science/Core-Civic Literacy Requirement		3
Major Courses		
AFR 1100	Introduction to Aerospace	3
EETC 1005	Basic Electricity/Electronics	4
EETC 2609	Electronic Fabrication and Fiber Optics	3
ETIC 1830	Materials and Processes 1	3
ETIC 1832	Materials and Processes 2	3
ETIC 1850	Aerospace Systems	4
ETIC 1852	Aerospace Test and Measurements	4
ETIC 1853	Aerospace Safety and Quality	3
ETIC 1855	Aerospace Structural Fabrication 1	3
ETIC 2411	Technical Task Analysis/Implementation	3
ETIC 2851	Applied Mechanics	4
ETIC 2856	Aerospace Structural Fabrication 2	3
ETMC 2318	Aerospace Fluid Systems	3
Support Courses		
Select one of the following:		3
ENC 2210	Technical Writing	
MAT 1033	Intermediate Algebra	
SPC 2608	Fundamentals of Speech Communication	
Technical Electives (Optional)		
ETDC 2364	SolidWorks Fundamentals	
ETDC 2368	SolidWorks Intermediate	
ETDC 2369	SolidWorks Advanced	
Total Hours:		**61**

Note: In accordance with Florida Statute and Florida Administrative Code, students must satisfy the Civic Literacy Graduation Requirement.

Course Sequence

Below is the recommended sequence for taking courses in this degree. Using this guide and meeting with your assigned advisor each term is the key to successful program completion.

Please note that course prerequisites, including required developmental math, reading, or writing, need to be completed to continue on to the more advanced course. Click on the course number to see the requirements.

The in A.S. Aerospace Technology program operates in a cohort system. There are cohorts that start in the fall and spring semesters. There are no Aerospace Major Courses during the summer semester. All major courses are in a standard 16 week semester timeline.

A student starts a cohort with the 1st Semester Course and stays with that group of students in that cohort for the entire two year A.S. Degree. Students are expected to enroll and complete their General Education A.S. requirements during the first two semesters and during any summer semesters.

Each of the program's major courses are offered in one of the cohorts each semester. The course sequencing provides a clear path for each major course. Out of cohort and out of sequence courses can be accommodated in a few exceptions and are developed and approved by the Aerospace Technology Program.

Year 1		
Term 1		**Credit Hours**
ENC 1101	Composition 1	3
Mathematics Core Course		3

AFR 1100	Introduction to Aerospace	3
ETIC 2851	Applied Mechanics	4
	Credit Hours	**13**
Term 2		
Natural Science Core Requirement		3
EETC 1005	Basic Electricity/Electronics	4
ETIC 1830	Materials and Processes 1	3
ETIC 1853	Aerospace Safety and Quality	3
	Credit Hours	**13**
Term 3		
Humanities Core Requirement		3
Social/Behavioral Science/Core-Civic Literacy Requirement		3
Support Course		3
	Credit Hours	**9**
Year 2		
Term 4		
ETIC 1850	Aerospace Systems	4
EETC 2609	Electronic Fabrication and Fiber Optics	3
ETIC 1855	Aerospace Structural Fabrication 1	3
ETIC 1832	Materials and Processes 2	3
	Credit Hours	**13**
Term 5		
ETIC 2411	Technical Task Analysis/Implementation	3
ETIC 2856	Aerospace Structural Fabrication 2	3
ETIC 1852	Aerospace Test and Measurements	4
ETMC 2318	Aerospace Fluid Systems	3
	Credit Hours	**13**
	Total Credit Hours	**61**

Learning Outcomes

1. Demonstrate electrical skills that reflect the basic understanding of electrical circuits, the ability to use basic test equipment, and the ability to fabricate electrical and fiber optic cables.
   - *Core Ability Supported: Process Information*
2. Practice shop safety, personal safety, equipment safety and proper usage of tools and equipment
   - *Core Ability Supported: Model Ethical and Civic Responsibility*
3. Fabricate a capstone project specific to aerospace utilizing technical reports, blueprints and other data sources. Troubleshooting and repair of electrical, mechanical, and fluid systems will be required. reports, blueprints and other data sources.
   - *Core Ability Supported: Think Critically and Solve Problems*
4. Demonstrate mechanical skills that reflect the ability to use hand tools, bench tools, and precision measuring equipment to fabricate projects from blueprints and technical specifications
   - *Core Ability Supported: Communicate Effectively*
5. Demonstrate the ability to work with composite materials including understanding what composite materials are and to use processes such as vacuum bagging to fabricate basic parts.
   - *Core Ability Supported: Work Cooperatively*