

# AEROSPACE TECHNOLOGY CORE (BTC)

## Basic Technical Certificate

### Career-Technical Program

#### Interest Areas:

#### Manufacturing and Trades

This program prepares students for entry-level employment in the aerospace manufacturing industry. The curriculum provides students with the skills necessary to become a fabrication assistant. These courses also prepare students for entry into more advanced training in the manufacturing skills of composite fabrication, computer numerical control (CNC) mill operation and nondestructive testing. Coursework includes safety requirements, blueprint reading, introduction to composite materials, and an introduction to CNC mill basics. Students will participate in a blended learning environment. Courses are delivered in an online delivery format. Prospective students should have solid math skills and demonstrate mechanical aptitude. Computer and keyboarding skills are recommended.

The Aerospace program features many short-term certificates. These certificates are made up of clusters of related courses that can prepare students for specific work-related job skills in the aerospace industry. Students achieve this stand-alone certificate before continuing into either the Aerospace Composite Fabrication Basic Technical Certificate program or the CNC Mill Operation Basic Technical.

Certificate taken simultaneously.

Program Website ([https://www.nic.edu/programs/viewprogram.aspx?program\\_id=97](https://www.nic.edu/programs/viewprogram.aspx?program_id=97))

## Program Requirements

Code	Title	Credits
AERO-110	Safety/OSHA	1
AERO-111	Blueprint Reading	2
AERO-120	Introduction to Composites	3
AERO-150	Computer Numerical Control (CNC) Mill Basics	2
Total Credits		8

### Course Key



GEM



WCHE



AAS



Milestone

Institutionally  
Designated

Gateway

## Program Outcomes

Upon completion of the program, students will be able to:

- Demonstrate knowledge of personal and aircraft safety standards related to shop layout, equipment use, and the handling and storage of materials.

- Operate tools and equipment safely.
- Read and accurately interpret aircraft blueprints.
- Define and utilize composite terminology.
- Use a computer to word process and access the internet.
- Demonstrate basic computation and communication skills when performing the job functions required of an aerospace composite technician.