



**Title:** Aeronautics/Aviation/Aerospace Science and Technology, General.

**CIP#:** 49.0101

**Definition:** A program that focuses on the general study of aviation and the aviation industry, including in-flight and ground support operations. Includes instruction in the technical, business, and general aspects of air transportation systems.

**Potential pathway focuses beyond general aeronautics:**

Airline pilot – private or commercial

Commercial drone pilot

Aviation mechanic

Airport operations and management

Air traffic controller

Airfield operations specialist

Aeronautical engineer

**COMMON COMPETENCIES**

Upon completion of their selected pathway program, all NH CTE students will:

- Use correct terminology, vocabulary and appropriate language to communicate effectively in the workplace
- Select and safely use appropriate tools, supplies, and equipment for a specific task or set of tasks.
- Employ effective time and project management strategies to complete work efficiently and proficiently.
- Apply math concepts, including measurement, operations, and higher mathematics to relevant applications and specific tasks.
- Demonstrate awareness strategies to safely work in a variety of workspaces and locations.
- Explore careers within the cluster to include developing individual career documents.

## PATHWAY COMPETENCIES

Upon completion of the aeronautics pathway, students will achieve competency in six areas.

Each student will demonstrate:

- An understanding of the historical perspective and problem-solving and innovative practices that led to the development of today's aviation and aerospace transportation system. **[LAUNCHING INTO AVIATION]**
- An understanding of the critical issues affecting the aviation system and the need for regulation and civil aviation oversight. **[EXPLORING AVIATION AND AEROSPACE]**
- An understanding of how aircraft are designed, categorized and constructed and gain an understanding of the forces of flight. **[INTRODUCTION TO FLIGHT]**
- An understanding of aircraft systems, instrumentation, manuals, and factors affecting aircraft performance. **[AIRCRAFT SYSTEMS AND PERFORMANCE]**
- An understanding of the Federal Aviation Administration's (FAA) mission and directives to provide the safest, most efficient aerospace system in the world. **[SAFETY]**
- An understanding of flight planning and navigation requirements for private, commercial and unmanned aircraft systems. **[FLIGHT PLANNING AND NAVIGATION]**