

# NH Department of Education

# Bureau of Career Development

**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.

#### **PATHWAY COMPETENCIES**

Upon completion of the aeronautics pathway, students will achieve competency in six areas. Each student will demonstrate:

#### LAUNCHING INTO AVIATION

 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 historical perspective and problem-solving and innovative practices that led to the development of today's aviation and aerospace transportation system

#### EXPLORING AVIATION AND AEROSPACE

 An understanding of the critical issues affecting the aviation system and the need for regulation and civil aviation oversight.

#### INTRODUCTION TO FLIGHT

 An understanding of how aircraft are designed, categorized and constructed and gain an understanding of the forces of flight.

#### AIRCRAFT SYSTEMS AND PERFORMANCE

 An understanding of aircraft systems, instrumentation, manuals, and factors affecting aircraft performance.

#### SAFETY

 An understanding of the Federal Aviation Administration's (FAA) mission and directives to provide the safest, most efficient aerospace system in the world.

## • FLIGHT PLANNING AND NAVIGATION

 An understanding of flight planning and navigation requirements for private, commercial and unmanned aircraft systems.