# "You Can Fly" [2 Year Pathway]

\*This Program is being proposed December 10, 2022 for activation Fall of 2023. Notification of course offering is pending.

### CTE Year 1 - Piloting 101

This introductory course is designed to prepare you for flight as a pilot. We focus on how airplanes fly, weather conditions for aviators, human factors and navigation. The course is designed to complement materials taught in math, physics, and other science related courses. Course syllabus will be updated pending approval.

### CTE Year 2 - Piloting 102

This course is a continuation of Piloting 101. The student will focus on aviation concepts that deal with advanced navigation, pilot communications with ATC and runway safety. We will examine the role of the Federal Aviation Administration as it pertains to pilot safety and certifications. Time will be spent with virtual reality trainers and flight simulators. Course syllabus will be updated pending approval

#### **CTE Endorsement**

A student qualifies for a CTE endorsement on their high school diploma after successfully completing the following criteria: 1) completion of a CTE course of study in a program area, 2) completion of academic requirements governing receipt of a standard diploma, and 3) meet all requirements for the issuance of the Certificate of Skill Attainment.

### **Aviation Pathway Learning Outcomes**

By the end of this course, WCW students will have experience in/knowledge of the following topics:

- Air Traffic Control and Pilot Communications
- Define common aviation terminology, definitions, and acronyms

- Describe the aviation industry structure, including the role of air carriers, general aviation, and corporate aviation.
- Recall basic aircraft systems, instruments, and components of a conventional airplane.
- Aviation weather, METARS and SIGMETS
- Forces of flight and the affects on the human body
- Runway safety and markings per pilot/passenger safety
- Career choices within the aviation industry.
- SoftSkills necessary for employment
- Navigation concepts through the Garmin 600/800 flight computers.

#### **Course Contents**

Aviation Safety and Oversight Careers

Classes of Aircraft Avionics

Flight Instrumentation Weight and Balance

Atmospheric Conditions Density Altitude

Forces of Flight Aircraft Stability and Control

Propulsion Airframe Systems

Documentation Navigation

#### **Certifications**

#### FAA Wings Program

ALC - 812 Easily Remembering Emergency Procedures

ALC - 572 Convinced You are Ready? Practicing Emergencies

ALC - 818 Making Confident Go/No-Go Decisions

ALC - 614 BasicMed and Aeronautical Decisions

ALC - 833 The Finer Points of IFR

ALC - ABS Prep School: Preparing for takeoff, Approach and Landing

ALC - 449 Airman Certification Standards

ALC - 214 Avoiding Loss of Control

ALC - 480 Class B Airspace VFR Operations

ALC - 80 Essential Aerodynamics: Stalls, Spins and Safety

CPR/First Aid Certification
Opt - STOP the Bleed Training

### **Supplies**

Binder, pen/pencil for written assignments.

### **Course Requirements**

The student will be expected to meet the mental conditions typical of the aviation piloting community.

- Comprehension of technical data
- Forward thinking pedagogies
- SoftSkills
- Communications

### **Course Policies**

Attendance: It is imperative that students are in class.

Tardies: Students must be in the door by the time the tardy bell rings or they shall be counted tardy.

### **Class Participation**

This is a very hands-on class. In order to get the most out of it you MUST participate. Participation will be monitored. Participation points will be reflected throughout your grade.

## **Student Expectations**

- Come to class prepared everyday
- Active Participation
- Professional behavior towards instructor and classmates
- Be ready to learn

## **Late Assignments**

A student will be marked down for late assignments without a proper excused absence. Missed repair labs can be made up either at home or an alternative assignment can be given for excused absences.

#### **Donations**

Time and expertise presentations to our program as either a pilot or aviation employee will be of great value to our students.