# Aviation Fundamentals Course No. 40410 Credit: 0.5

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| **Student name:** |  | **Graduation Date:** |  |

Pathways and CIP Codes:Aviation Production (15.0000) - Design & Production Strand; **Aviation Maintenance (47.0000) - Avionics & Airframe Strand**

Course Description: A **technical level** course that serves as an introduction to aviation fundamentals related to materials, processes, and history of Aviation.

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Click or tap here to enter text.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Describe the history and future |  |
| 1.2 | Identify and discuss primary assembles/structures and their functions |  |
| 1.3 | Describe the principles of flight |  |
| 1.4 | Interpret how the mechanical systems and the design of an airplane impact flight characteristics |  |
| 1.5 | Identify and discuss airplanes based on their configuration |  |
| 1.6 | Describe and discuss the types of materials used on an airplane |  |
| 1.7 | Identify the methods of airplane construction |  |
| 1.8 | Compare and contrast aviation manufacturing processes |  |
| 1.9 | Identify and describe the impact of corrosion on airplane |  |
| 1.10 | Interpret the purpose and importance of regulation in the aviation industry |  |
| 1.11 | Discuss the usage of statistical process control in relationship to quality concepts in the aerospace industry. |  |
| 1.12 | Discuss and describe the history of the quality movement in manufacturing |  |
| 1.13 | Employ basic lean manufacturing concepts for the aerospace industry |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

CTE Pathways Help Desk

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