

Course Description

AMT 0509 | Composites and Capstone Project | 0.40 credits

In this course, the student will learn about composite materials. In addition, the student will demonstrate their competence to analyze, design, develop, and test Aircraft Structural Assembly and Fabrication techniques. Prerequisites: AMT0044, 0045, 0046, 0047, 0219, 0269.

Course Competencies:

Competency 1: The student will demonstrate knowledge of Composite materials and their safe handling in the field by:

- 1. Defining basic composite materials
- 2. Identifying typical composite applications
- 3. Examining the advantages and disadvantages of composite materials
- 4. Identifying the proper personal protective equipment
- 5. Demonstrating the proper storage and handling of materials
- 6. Identifying the proper disposal of materials

Competency 2: The student will demonstrate the ability to integrate knowledge from the various levels of the Structures Technician course by:

- 1. Identifying & completing an approved repair project using drawings & specifications
- 2. Identifying & completing an approved servicing project using appropriate aviation manuals
- 3. Identifying & completing an approved assembly project using drawings & specifications
- 4. Identifying & completing an approved metal project using drawings & specifications

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information