# AMT General III Course No. 40433 Credit: 0.5

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

Pathways and CIP Codes:Aviation Maintenance and Operations (47.0607) – Maintenance & Avionics Strand

Course Description:

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.

**Prerequisites:** AMT General II (40432)

## Benchmark 1: Identify materials and hardware used in aviation.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Identify materials commonly used in aircraft and their general application. |  |
| 1.2 | Identify heat treatment and metal working processes. |  |
| 1.3 | Identify forces placed on aircraft materials (e.g., tension, compression, torsion, bending, strain, and shear). |  |
| 1.4 | Identify hardware commonly used in aircraft (e.g., bolts, nuts, screws, pins, washers, turnlock fasteners, cables, cable fittings, and rigid line couplings). |  |
| 1.5 | Describe identification markings on materials and hardware. |  |

## Benchmark 2: Identify, select and apply precision measuring to aviation components.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Identify measuring tools, including calipers, micrometers, and gauges. |  |
| 2.2 | Identify calibration and tool accuracy requirements. |  |
| 2.3 | Describe aircraft inspection methods and tools for materials, hardware, and processes. |  |

## Benchmark 3: Identify, select and apply nondestructive testing processes that are relative to aviation.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Define Nondestructive Testing (NDT) procedures and methods. |  |

## Benchmark 4: Identify aircraft inspection programs (e.g. progressive, 100-hour, annual, and other FAA-approved inspections).

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 4.1 | Describe aircraft inspection programs (e.g., progressive, 100-hour, annual, and other FAA-approved inspections). |  |

## Benchmark 5: Inspect, Identify, Remove, and Treat aircraft corrosion.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 5.1 | Explain corrosion theory and causation. |  |
| 5.2 | Identify types and effects of corrosion. |  |
| 5.3 | Identify corrosion-prone areas in aircraft. |  |
| 5.4 | Identify corrosion preventition, identification, inspecifion, and maintenance procedures. |  |
| 5.6 | Identify corrosion removal and treatment procedures. |  |
| 5.7 | Identify corrosion preventive compounds (CPC) (e.g., waxy sealants, thin-film dielectrics). |  |
| 5.8 | Describe selection of optimal CPC and frequency of treatment. |  |

## Benchmark 6: Identify and select cleaning materials and perform aircraft cleaning.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 6.1 | Explain aircraft cleaning procedures. |  |
| 6.2 | Describe use of high-pressure application equipment (e.g., fogging). |  |
| 6.3 | Define improper use of cleaners on aluminum or composite materials. |  |

## Benchmark 7: Identify the requirements for aircraft registration markings and placecards.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 7.1 | Identify regulatory requirements for replacing identification, registration markings, and placards. |  |

## Benchmark 8: Identify, fabricate, and inspect aircraft fluid lines (flexible and rigid) and assemblies.

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 8.1 | Identify tubing and hose materials, applications, sizes, and fittings. |  |
| 8.2 | Describe rigid & Flexible line fabrication, installation, and inspection techniques/practices. |  |
| 8.3 | Explain importance of using a torque wrench and torque seal when securing fluid hose and line fittings. |  |

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

Instructor Signature:

For more information, contact:

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