



Aviation Maintenance Curriculum

Mathematics Syllabus

Summary: This course will assist students in reviewing basic mathematics concepts such as whole numbers, ratios, and percentages which maintenance technician routinely use in their work. Students will also revise their understanding of algebra, geometry and trigonometry the basics of which technicians need to properly maintain an aircraft.

Course Number: FAA-ACS-AM-IH-MAT

ACS Reference: Mathematics (AM.I.F)

Topics Covered:

1. Basic Math
2. Algebra
3. Trigonometry

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Mathematics Outline

Module 1: Basic Math

- Lesson 1.1 – Whole Numbers
- Lesson 1.2 – Fractions and Mixed Numbers
- Lesson 1.3 – The Decimal Number System
- Lesson 1.4 – Ratios and Proportions
- Lesson 1.5 – Percentages
- Lesson 1.6 – Positive Numbers, Negative Numbers, and Powers
- Lesson 1.7 – Functions of Number Charts and Scientific notation

Module 2: Advanced Math

- Lesson 2.1 - Algebra
- Lesson 2.2 – Computing Area of Two-Dimensional Solids
- Lesson 2.3 – Computing Volume of Three-Dimensional Solids
- Lesson 2.4 – Computing Surface Area of Three-Dimensional Solids
- Lesson 2.5 – Trigonometric Functions
- Lesson 2.6 – Measurement Systems and the Binary Number System

Each lesson contains the following:

- Video lecture
- Multiple readings with interactive animations
- Assigned readings in the applicable FAA 8083 Chapter
- Activities
- Summary Points and Key Terms

Each Module contains the following:

- Summary Points and Key Terms
- Module quiz
- Module Critical Thinking Activity

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