

Master Syllabus

AVT 2122 - Ignition & Starting

Division: Science, Mathematics and Engineering

Department: Aviation Technology

Credit Hour Total: 4.0

Lecture Hrs: 1.0 **Lab Hrs:** 6.0

Date Revised: October 2012

Course Description:

This course covers magneto removal, inspection, repair and installation; internal and external magneto timing; inspection, repair and installation of powerplant wiring and ignition harnesses. One classroom, six lab hours per week.

General Education Outcomes:

- ❑ Oral Communication Competency
- ❑ Written Communication Competency
- ❑ Critical Thinking/Problem Solving Competency
- ❑ Values/Citizenship/Community Competency
- ❑ Computer Literacy Competency
- ❑ Information Literacy Competency

Course Outcomes:

Sparkplugs and ignitors

Demonstrate the ability to correctly remove, clean, inspect, test and install sparkplugs and turbine engine ignitors using manufacturer's maintenance manuals and Federal Aviation Administration directives.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Magnetos

Demonstrate the ability to remove, inspect, repair, assemble, service, and test magnetos using manufacturer's maintenance manuals and Federal Aviation Administration directives. Demonstrate knowledge of magneto theory and operation. Demonstrate knowledge of the requirements to return a serviceable magneto to service.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Magneto timing

Demonstrate the ability to correctly internally and externally time a magneto using manufacturer's maintenance manuals and Federal Aviation Administration directives. Demonstrate the ability to time the magnetos to an engine and to each other.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Ignition/starting wiring and harnesses

Demonstrate the ability to correctly remove, inspect, reinstall magneto grounding wires, low- and high-tension ignition harnesses, and powerplant electrical wiring.

Assessment Method: Locally developed exams

Performance Criteria: 70% or higher on exams

Outline:

Ignition/starting wiring and harnesses
Magnetos
Magneto timing
Sparkplugs and ignitors