

## 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

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### 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