

## Master Syllabus

### AVT 2138 - Engine Fuel & Fuel Metering

**Division:** Science, Mathematics and Engineering

**Department:** Aviation Technology

**Credit Hour Total:** 3.0

**Lecture Hrs:** 2.0 **Lab Hrs:** 3.0

**Date Revised:** October 2012

---

#### Course Description:

Fuel system components for turbine and reciprocating engines, carburetor adjustment and overhaul, installation and removal of carburetors, repair of fuel metering components, repair and installation of fuel system components, inspection, adjustment and servicing of engine fuel metering system components. Two classroom, three 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:

##### **Turbine engine fuel metering systems**

Demonstrate knowledge of turbine engine fuel metering systems to include the following: adjustment, removal, servicing, installation, indexing of controls, and operation.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher on exams

##### **Carburetor removal and installation**

Demonstrate an indepth knowledge of carburetor removal, inspection, repair, proper installation, and correct adjustment of engine controls.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher on exams

##### **Fuel injection systems**

Demonstrate an indepth knowledge of fuel injection systems, removal, repair, servicing, and installation, and operational checkout for proper volume and pressure.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% or higher on exams

#### Outline:

Carburetor overhaul  
Carburetor removal and installation  
Turbine engine fuel metering system components adjustment and repair  
Fuel injection metering system components  
Fuel injection system component adjustment and repair  
Engine primer systems