AMT 210 Engine Fuel and Lubrication Systems

Course Description: A course that uses FAA-approved instruction for concepts and techniques in the lubrication systems, fuel metering systems, and engine fuel systems of reciprocating and gas-turbine engines.

Prerequisites(s): AMT 100 and AMT 105 **Corequisite(s):** No corequisite

Lecture Hours: 5	Lab Hours: 5	Credit Hours: 7
Lab Fee: 250	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: □ Web	□ Hybrid	□ Classroom
Semesters Offered: □ Fall	□ Spring	□ Summer

Course Primary Text:

Title: Aircraft Powerplants	Edition: 8th
Author(s): Kroes and Wild	
Publisher: Glencoe	

Supplemental Materials:

FAA Advisory Circular 43-13-1B
Aviation Maintenance Technology Handbook – Powerplant, Volume 1 and 2, FAA-H-8083-32

Course Outcomes:

1	Students will disassemble and reassemble a reciprocating engine float carburetor and a pressure carburetor.
2	Students will trace and describe fuel and air through a reciprocating engine carburetor.
3	Students will remove and reinstall a reciprocating engine carburetor metering jet.
4	Students will identify, remove, clean, and reinstall screens in a gas-turbine fuel metering unit.
5	Students will identify and locate air bleed, main accelerating pump, economizer system, and mixture control system.
6	Students will inspect, remove, reinstall a reciprocating engine float carburetor and adjust speed and mixture of a reciprocating engine.
7	Students will identify and locate the accelerating system, economizer system, automatic mixture control, and the main discharge nozzle on a reciprocating engine pressure carburetor.
8	Students will disassemble and reassemble the by-pass valve, a stacked disc type oil filter, and an oil pump.

9	Students will identify the crankshaft sludge chambers, a restrictor in the gauge or in system, and components of a fuel flow indicating system.
10	Students will troubleshoot a fuel flow indicating system.

Course Topics:

Course booklet with FAA approved practical projects and course lectures is located in the AMT Offices at the Cincinnati State West Campus.

Methods of Evaluation/Assessment

Lab Projects/Quizzes
Lab/Class Participation
Tests

Course Keeper: Jeffrey Wright

Date Completed: July 2, 2020