

AUT 206 : ENGINE PERFORMANCE II

Transcript title

Engine Performance II

Credits

2

Grading mode

Standard letter grades

Total contact hours

40

Lecture hours

10

Lab hours

30

Prerequisites with concurrency

AUT 111.

Course Description

Studies diagnosis of drivability problems. Includes further study of engine analysis, ignition and fuel management systems, and super performance diagnosis. Provides the technician with a look into the causes of automotive emissions in relation to vehicles that are four years old and newer. Looks at various methods of emissions inspection/maintenance testing, the diagnosis of failed vehicles, and enhanced on-board computer systems. Also covers the testing of alternative-fuel vehicles.

Course learning outcomes

1. Demonstrate the analysis of engine performance and emissions to predict preventative engine maintenance.
2. Describe the advanced engineering of engine and powertrain systems that allow greater fuel efficiency, engine longevity and lower emissions.
3. Describe the content and proper preparation for the L1 ASE Test (Advanced Engine Performance Specialist Certification Test).
4. Communicate technical information verbally and in writing.
5. Describe and practice safety procedures while working in an automotive shop environment.

Content outline

1. Gasoline 2. Alternative Fuels 3. Vehicle Emission Standards and Testing 4. Emission Control Systems 5. Fuel Injection Components and Operation 6. Gasoline Direct-Injection Systems 7. Fuel-Injection System Diagnosis and Service 8. On-Board Diagnosis

Required materials

Required textbook and special gear, see syllabus for details.