

ROCHESTER COMMON COURSE OUTLINE

Course discipline/number/title: AMT 2752: Engine Performance Lab

CATALOG DESCRIPTION Α.

- 1. Credits: 7
- 2. Hours/Week: 14
- 3. Prerequisites (Course discipline/number): None
- 4. Other requirements: Course is designed to be taken concurrently with AMT 2750
- 5. MnTC Goals (if any): NA
- Β. COURSE DESCRIPTION: This course is a hands-on lab and includes diagnosing, servicing and correcting problems with automotive fuel injection systems, electronic systems, and mechanical conditions related to engine performance and also the operating principles of automotive computers, sensors, and control devices. Scan tools for diagnostics are used extensively in this course.

C. DATE LAST REVISED (Month, year): February, 2022

D. **OUTLINE OF MAJOR CONTENT AREAS:**

- 1. Fuel Systems
- 2. Fuel injection
- 3. Electronic Engine Controls
- 4. Turbochargers
- 5. Module networking

Ε. LEARNING OUTCOMES (GENERAL): The student will be able to:

- 1. Diagnose engine performance problems.
- 2. Repair engine performance problems.
- Diagnose and test computer controls. 3.
- 4. Test Sensors.
- 5. Clean injectors.

F. LEARNING OUTCOMES (MNTC): NA

- G. **METHODS FOR EVALUATION OF STUDENT LEARNING:** Methods may include but are not limited to:
 - 1. Shop/Lab projects
 - 2. Lab worksheets/Assignments
 - 3. Individual and Team projects
- Н. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s): Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

Ι. SPECIAL INFORMATION (if any): None