Course discipline/number/title: AMT 2750: Engine Performance Theory

A. **CATALOG DESCRIPTION**
1. **Credits: 4**
2. **Hours/Week: 4**
3. **Prerequisites (Course discipline/number):** None
4. **Other requirements:** None
5. **MnTC Goals (if any):** NA

B. **COURSE DESCRIPTION:** This course covers a study of the theory and principles of operation of automotive fuel injection systems, electrical systems, and mechanical conditions related to engine performance and also the operating principles of automotive computers, sensors, and control devices. Extensive use of scan tools for diagnosis.

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

D. **OUTLINE OF MAJOR CONTENT AREAS:**
1. Electronic Engine Controls
2. Fuel Injection
3. Electronic Sensors
4. Forced Induction
5. Module networking

E. **LEARNING OUTCOMES (GENERAL):** The student will be able to:
1. Test and diagnose electronic engine controls.
2. Evaluate electronic sensors.
3. Distinguish the difference between computer inputs and computer outputs.
4. Identify types of injection systems.
5. Understand manufacturer differences in engine management.
6. Explain and understand different types of forced induction.

F. **LEARNING OUTCOMES (MNTC):** NA

G. **METHODS FOR EVALUATION OF STUDENT LEARNING:** Method may include but are not limited to:
1. Worksheets
2. Tests

H. **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.

I. **SPECIAL INFORMATION (if any):** None