A. COURSE DESCRIPTION

   Credits: 3
   Lecture Hours/Week: 2
   Lab Hours/Week: 1
   OJT Hours/Week: *

   Prerequisites:
   This course requires the following prerequisite
   MGEM 1621 - Intro to Powersports Electrical Systems (Number of Years Valid: 5)

   Corequisites: None

   MnTC Goals: None

   This course will introduce the student to basic carburetors, fuel pumps and EFI systems used on various
   powersports equipment. The focus is on component identification and the function of the component in the
   system. This course also covers the current fuel recommendations and emissions for today's modern
   powersports equipment. Prerequisite: MGEM1621.

B. COURSE EFFECTIVE DATES: 06/06/2018 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

   1. Name the basic carburetor components.
   2. Explain types of fuels.
   3. Describe carburetor circuits.
   4. Explain enrichment systems.
   5. Inspect parts for wear.
   6. Identify types of fuel pumps
   7. Name the basic EFI components
   8. Describe the function of EFI components
   9. Perform EFI tests using software
   10. Evaluate personal working time management.

D. LEARNING OUTCOMES (General)

   1. The learner will understand carburetor theory, parts, and fuels for various powersports equipment.
   2. The learner will be able to identify various fuel pumps, fuel filters, and understand current emissions
      standards.
   3. The learner will understand fuel injection theory, components, and be able to identify various fuel
      injection systems.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

   None

F. LEARNER OUTCOMES ASSESSMENT

   As noted on course syllabus
G. SPECIAL INFORMATION

None noted