A. COURSE DESCRIPTION

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

Prerequisites:
This course requires the following prerequisite
MGEM 2636 - Marine Drive Systems (Number of Years Valid: 5)

Corequisites: None

MnTC Goals: None

This course teaches the learner about different types of ignition, charging, and starting systems, as well as wiring found on motorcycles and mopeds. The focus is on theory and application of test equipment and product knowledge using manufacturer’s service manuals. Hands-on troubleshooting of the complete electrical system on the motorcycle or moped is also stressed.

B. COURSE EFFECTIVE DATES: 06/01/2003 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Explain electrical theories.
2. Perform AC and DC circuit tests.
3. Analyze solenoids, relays, fuses and switches.
4. Perform starting system checks.
5. Perform charging system checks.
6. Perform lighting system checks.
7. Perform ignition system checks.
8. Analyze wiring diagrams.
9. Troubleshoot motorcycle electrical.

D. LEARNING OUTCOMES (General)

1. The learner will identify components and learn the theory of components.
2. The learner will successfully complete competencies on motorcycle electronics
3. The learner will demonstrate and practice troubleshooting skills.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted