Alexandria Technical and Community College

MGEM 1602: Basic Engine Principles II

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites:
This course requires the following prerequisite

MGEM 1601 - Basic Engine Principles I (Number of Years Valid: 5)

Corequisites: None

MnTC Goals: None

Learners study theory of electricity and magnetism. Also included are units on wiring, circuitry and troubleshooting, ignition systems, charging systems, and their application. This is a basic electricity course, which is built on throughout the program. This course also covers basic carburetion, governor operation, and fuel delivery systems. Complete overhaul and/or replacement of these components are emphasized. Prerequisite: MGEM1601.

B. COURSE EFFECTIVE DATES: 12/22/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Define electrical theory.
2. Explain methods of generating electricity.
3. Apply Ohms Law to writing.
5. Describe ignition systems.
6. Describe starting systems.
7. Describe charging systems.
8. Explain history and manufacture of fuel.
10. Explain theory of carburetors.
11. Identify types of carburetors.
12. Explain troubleshooting fuel systems.

D. LEARNING OUTCOMES (General)

1. The learner will identify different types of carbonators and their functions.
2. The learner will describe ignition systems on small engines.
3. The learner will demonstrate ability to test and identify ignition 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