Alexandria Technical and Community College

MGEM 1611: Engine Service and Rebuild

A. COURSE DESCRIPTION

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

Prerequisites:
This course requires the following prerequisite
   MGEM 1614 - Snowmobile II (Number of Years Valid: 5)

Corequisites: None

MnTC Goals: None

Learners overhaul and repair lawn, garden, and recreational engines under shop conditions according to manufacturers' recommendations. Learners gain valuable experience in shop conditions doing complete engine overhauls on the many types of engines used. Prerequisite: MGEM1614.

B. COURSE EFFECTIVE DATES: 05/04/2018 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Describe Engine theory.
2. Identify different engine designs.
3. Identify engine diagnostic procedures.
4. Perform engine diagnostic procedures.
5. Evaluate the results of diagnostic tests.
6. Estimate the cost to repair.
7. Identify special tools needed for engine rebuild.
8. Perform engine rebuild.
9. Demonstrate safe use of tools and equipment.

D. LEARNING OUTCOMES (General)

1. Given instruction in course objectives 1-16, the learner will identify and describe engine designs.
2. Given instruction in course objectives 17-32, the learner will demonstrate safe power tool operation during rebuild.
3. Given instruction in course objectives 33-48, the learner will assemble an engine to industry standards.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted