

# Minnesota State College Southeast

## INDS 1640: Small Engine Basics

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Small engine basics present the basic engine fundamentals common to all small engine designs. Topics covered include internal combustion systems, engine electrical systems, governor on systems, troubleshooting, failure analysis, and engine application and selection. Overall, system operation theory will be reinforced with engine component and system examples. (Prerequisite: None) (3 credits: 2 lecture/1 lab)

**B. COURSE EFFECTIVE DATES:** 09/13/2000 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. Describe and identify internal combustion engines
2. Perform and describe safety and tools
3. Diagnose engine operation
4. Test and diagnose compression system
5. Test and service fuel systems
6. Describe and diagnose governor systems
7. Complete midterm exam
8. Diagnose and test electrical system
9. Test and service cooling and lubrication system
10. Diagnose and service multiple cylinder engines
11. Test and perform troubleshooting procedures
12. Diagnose engine failure
13. Identify and describe engine application and selection
14. Complete final exam

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted