

Minnesota State College Southeast

AUTO 1216: Auto Electric/Electronic Systems

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course teaches the principles of operation and theory of auto body electrical systems such as power windows, power seats, electronic instrument clusters, theft deterrent systems, computer controlled electronics, and passive restraint systems. (Prerequisites: AUTO1105, AUTO1106, AUTO1206, or instructor approval) (2 Credits: 2 lecture/0 lab)

B. COURSE EFFECTIVE DATES: 10/05/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Electrical Safety Procedures
2. Principles of Operation and Theory of Auto Body Electrical Systems

D. LEARNING OUTCOMES (General)

1. Describe electrical safety procedures
2. Identify electrical components
3. Complete final
4. Identify circuit controls
5. Trace electrical circuits
6. Troubleshoot electrical circuits
7. Calculate circuits using OHM's law
8. Describe voltage drop
9. Identify electrical test equipment
10. Complete mid-term exam
11. Describe lighting systems operation
12. Analyze lighting systems circuits
13. Describe analog and electronic instrumentation
14. Analyze instrumentation circuits
15. Describe electrical and electronic accessory operation
16. Analyze accessory circuits
17. Identify body computer operation
18. Identify chassis electronic control systems
19. Identify advanced lighting circuits and electronic instrumentation

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted