

# Minnesota State College Southeast

## ABCT 1125: Auto Body Welding 1

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: \*.\*

Lab Hours/Week: 4

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Auto Body Welding 1 focuses on welding of thin gauge sheet metal utilized for the outer body panels of vehicles. Welding will be performed in the flat, vertical, and overhead the purpose of heating and cutting operations. (Prerequisite or concurrent: ABCT1115) (2 credits: 0 lecture/2 lab)

**B. COURSE EFFECTIVE DATES:** 02/10/2015 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. M.I.G. welding set-up and procedures for thin gauged steel
2. Oxy-fuel set-up and operation for heating and cutting
3. Vehicle protection methods for welding
4. Equipment maintenance

### D. LEARNING OUTCOMES (General)

1. Identify and perform personal welding safety procedures
2. Identify and perform vehicle protection procedures
3. Set-up and test welding equipment
4. Maintain welding equipment
5. Identify auto body weld joint types and set-up
6. Prepare weld sight and substrates for welding
7. Perform M.I.G. welding procedures flat position
8. Perform M.I.G. welding procedure in the vertical and horizontal positions
9. Perform M.I.G. welding procedures in the overhead position
10. Perform weld dressing and clean-up procedures
11. Destruction test welds
12. Identify weld defects and causes
13. Trouble shoot welding equipment and correct condition
14. Demonstrate set-up of oxy-fuel equipment and start-up procedures
15. Demonstrate oxy-fuel heating procedures
16. Demonstrate oxy-fuel cutting procedures
17. Complete all required welds and paperwork
18. Complete all quizzes and exams
19. Demonstrate professionalism

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

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted