

Minnesota State College Southeast

ABCT 1130: Sheet Metal Repair

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: *.*

Lab Hours/Week: 8

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course provides the student with the needed information to straighten sheet metal damage ranging from small dings to significant damage. An understanding of how metal reacts to outside forces is gained through hands on application using various tools and repair methods. Repair methods and procedures for panels damaged due to deterioration from corrosion are also presented and applied. (Prerequisite: Concurrent enrollment in ABCT1120 or instructors approval) (4 Credits: 0 lec/4 lab)

B. COURSE EFFECTIVE DATES: 04/27/1998 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Terminology
2. Metalworking tools
3. Metalworking techniques
4. Metal fabrication
5. Perform assignments
6. Capstone project

D. LEARNING OUTCOMES (General)

1. Describe related personal health and safety hazards
2. Identify personal protective equipment and precautions
3. Practice personal health and safety procedures
4. Describe vehicle protection procedures and precautions
5. Perform vehicle protection procedures
6. Identify sheet metal rough out and metal working tools
7. Identify types of metal used in vehicle construction
8. Describe sheet metal panel terminology
9. Analyze panel strengths
10. Describe sheet metal damage
11. Identify sheet metal rough out process
12. Describe panel straightness evaluation techniques
13. Rough out sheet metal damage as per tasks list
14. Practice panel straightness evaluations
15. Identify hail damage removal techniques
16. Remove hail damage as per tasks list
17. Describe sheet metal shrinking techniques
18. Perform shrinking procedures as per tasks list
19. Identify paintless dent removal techniques
20. Perform paintless dent removal as per tasks list
21. Identify causes for loss of factory corrosion protection
22. Analyze panel deterioration due to corrosion
23. Identify corrosion repair methods
24. Identify patch panel attachment methods
25. Perform assigned metal patch panel fabrications and installations
26. Perform shop/equipment maintenance and clean-up duties
27. Exhibit 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