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