



## WELDING PROCEDURES — HDTT 1106

### A. Course Description

- **Credits:** 2.00
- **Lecture Hours/Week:** 0.00
- **Lab Hours/Week:** 2.00
- **OJT Hours/Week:** 0
- **Prerequisites:** None
- **Corequisites:** None
- **MnTC Goals:** None

This course covers basic position welding techniques of the different welding applications used in the heavy truck repair industry. This course will cover applications of oxyacetylene welding, brazing, cutting, heating, arc welding, and wire-feed (MIG). Prerequisites: None

### B. Course Effective Dates: 3/22/98 – Present

### C. Outline of Major Content Areas

As noted on course syllabus

### D. Learning Outcomes

1. define arc blow
2. define arc welding terms
3. demonstrate cutting equipment set-up
4. demonstrate flame cutting exercises
5. demonstrate safety practices
6. describe electrode classifications
7. describe electrode uses
8. describe gas welding equipment operation
9. describe gas welding safety
10. explain a/c current
11. explain d/c current
12. identify arc welding equipment
13. identify arc welding joints
14. identify gas welding equipment
15. identify gas welding joints

16. perform welding machine set-up
17. weld [braze] flat beads
18. weld [braze] flat butt joint
19. weld [braze] flat lap joint
20. weld [braze] horizontal tee joint
21. weld [braze] vertical tee joint
22. weld e6011 flat lap
23. weld e6011 horizontal tee
24. weld e6011 overhead tee
25. weld e6011 stringer beads
26. weld e6011 verticle beads
27. weld e6011 verticle tee
28. weld e6011 weave bead pad
29. weld e7018 stringer beads
30. weld e7018 weave bead pad
31. weld flat beads w/filler rod
32. weld flat beads w/o filler rod
33. weld flat butt joint
34. weld flat inside corner joint
35. weld flat lap joint
36. weld flat outside corner joint
37. weld horizontal tee joint
38. weld verticle tee joint

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

**F. Learner Outcomes Assessment**

As noted on course syllabus

**G. Special Information**

None noted

