

Minnesota State College Southeast

INDS 1632: Oxy-Fuel Welding Fundamentals

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Oxy-Fuel Welding Fundamentals is designed for students with no prior experience in Oxy-Fuel welding techniques. Hands on training will include the proper care and handling of Oxy-Fuel welding equipment, proper set up and starting, proper shutdown techniques, as well as Fusion welding, Braze welding, silver soldering, and the proper interpretation of welding symbols and welding alloys. Throughout the course real life welding situations will challenge the student along the way to welding proficiency. (Prerequisite: None) (3 credits: 2 lecture/1 lab)

B. COURSE EFFECTIVE DATES: 10/11/1999 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Demonstrate safety procedures around equipment
2. Perform proper set up
3. Perform proper shut down
4. Demonstrate proficiency in oxy-fuel cutting
5. Demonstrate proficiency in oxy-fuel welding
6. Demonstrate proficiency in oxy-fuel brazing
7. Demonstrate proficiency in oxy-fuel soldering
8. Identify basic joint designs
9. Identify welding positions
10. List welding inspection techniques
11. Identify weld defect types
12. Describe various filler metal applications
13. Evaluate oxy-fuel welding flame adjustments
14. Troubleshoot oxy-fuel welding problems

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted