

## WELD 291 Fabrication Shop

**Credit Hours:** 3**Scheduled hours per week**

Lecture: .5

Lab: 2.5

Other: 0

**Catalog Course Description:**

This course is designed to introduce the student into a work environment depicting the actual day-to-day operations of a fabrication shop. The student will incorporate the skills and knowledge acquired to gain experience that is required to enter the workforce successfully.

**Prerequisites:** Welding students in their final semester before graduation**Corequisites:** None**Course learning Outcomes:**

- Teach student “hands on Skills”
- Teach students technical knowledge about working in the field of welding
- Teach students crane hand signals
- Teach student how to safely work and weld on an elevated Ariel platform (welding tower)
- Teach student how to safely work and weld in a confined space

**Topics to be studied:**

Student will learn how to read and interpret industrial blueprints, measure, cut, fit-up, aerial welding on the welding tower, confined space welding and working in the confined space simulator. Course will also include material handling, welder qualifications, procedure qualifications, NDE testing, utilization of quality control manuals customer specs, inspection, job supervision and documentation.

**Relationship of course to program outcomes:**

Students will be proficient with “hands-on” skills in all welding processes (SMAW,GTAW, FCAW, GMAW)	x
80% of all students will pass ASME welding test on plate 2G,3G and 4G positions and or 6G pipe test	
Students will be able to perform destructive testing and recognize whether it passes or fails and also the daily functions of a (CWI)	
Student will know the technology terminology used in the welding industry	x
Students will be able to demonstrate the ability to work ethically, effectively, and respectively with people of diverse backgrounds and with people who have different roles, social affiliations, and personalities.	x

Approved by Curriculum Committee

Revised 9/09

<b>This course meets the following General Education Outcome(s):</b>	
<b>Composition and Rhetoric</b> Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
<b>Science &amp; Technology</b> Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	x
<b>Mathematics &amp; Quantitative Skills</b> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	x
<b>Society, Diversity, &amp; Connections</b> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
<b>Human Inquiry &amp; the Past</b> Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
<b>The Arts &amp; Creativity</b> Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
<b>5/3/2016</b>	

*\*Place an X by all the general education competencies met in this course.*

**Special projects or requirements of the course:**

**Additional information:**

None

**Prepared by: Joseph F. Hunt**

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