

**WELD 125 Course Outline as of Fall 2010****CATALOG INFORMATION**

Dept and Nbr: WELD 125 Title: INNERSHIELD WELDING  
 Full Title: Innershield/Flux Core Wire Welding  
 Last Reviewed: 11/20/2006

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0.50	Lecture Scheduled	0.50	8	Lecture Scheduled	4.00
Minimum	0.50	Lab Scheduled	1.50	8	Lab Scheduled	12.00
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	16.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 8.00

Total Student Learning Hours: 24.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

This course provides the latest information about and uses of flux cored wires. Topics will include A.W.S. (American Welding Society) qualification of the most commonly used wires for retrofit, re-bar, structural steel welding and fabrication. Certification testing will be available for qualified welders.

**Prerequisites/Corequisites:**

Completion of WELD 70A or equivalent.

**Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: This course provides the latest information about and uses of flux cored wires. Topics will include A.W.S. (American Welding Society) qualification of the most commonly used wires for retrofit, re-bar, structural steel welding and fabrication. Certification testing will be available for qualified welders. (Grade or P/NP)

Prerequisites/Corequisites: Completion of WELD 70A or equivalent.

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

**Outcomes and Objectives:**

Upon completion of this course, the student will be able to:

1. Demonstrate proper welding safety.
2. Set up various welding machines.
3. Recognize ferrous and non-ferrous metals.
4. Produce samples of welds using the flux cored wires covered in the course with the MIG process.

**Topics and Scope:**

- I. MIG (Metal Inert Gas) Welding
  - A. Safety
  - B. Machines
  - C. Consumables
- II. Metals
  - A. Ferrous
  - B. Non-ferrous
  - C. Compatibility
  - D. Joining processes
- III. Fabrication
  - A. Interpreting plans
  - B. Job set up
  - C. Techniques using flux cored wires
  - D. Quality Control
- IV. A.W.S. Qualification
  - A. Retrofit
  - B. Rebar
  - C. Structural Steel

## Assignment:

1. Practical welding exercises based on the weekly topic.
2. Group and individual projects producing test samples of joining process and accomplishing fabrication techniques.
3. Notebook of class notes and handouts.
4. Safety, equipment, and tool identification quiz.
5. Performance exam.

## Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving  
0 - 0%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams, Exercises and projects

Skill Demonstrations  
70 - 80%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Completion

Exams  
5 - 10%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Notebook

Other Category  
10 - 20%

## Representative Textbooks and Materials:

Instructor prepared materials.