



Course Information

Course Title	Advanced Flux Cored Arc Welding
Course Prefix, Num. and Title	WLDG 2452
Division	Vocational Science: Welding Technology
Department	Welding Technology
Course Type	WECM Course
Course Catalog Description	Advanced concepts of flux cored arc welding of structural and fabricated steel products. Skill development in multi-pass fillet and V-groove welding.
Pre-Requisites	WLDG 1417
Co-Requisites	none

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	4:3:4
Lab/Other Hours	
Equated Pay Hours	5
Lab/Other Hours Breakdown: Lab Hours	4
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

Title	Signature	Date
Prepared by:		
Department Head:		
Division Chair:		
Dean/VPI:		
Approved by CIR:		

Additional Course Information

Topical Outline: Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

The use of Flux Cored Arc Welding process in various Fillet positions: 1F (Flat Fillet), 2F (Horizontal Fillet), 3F (Vertical Fillet) and 4F (Overhead Fillet); including lap-joints and butt-joints. Student will be proficient in all positions. All welds will be assessed by visual inspection.

Course Learning Outcomes:

- Perform safety inspections of equipment.
- Perform safety inspections of accessories.
- Perform multi-pass fillet welds in various positions.
- Perform V-groove welds in various positions.

Methods of Assessment:

- Periodic Written Examinations.
- Perform welds per AWS code acceptance criteria.

Required text(s), optional text(s) and/or materials to be supplied by the student:

Welding Fundamentals

Suggested Course Maximum:

20

List any specific or physical requirements beyond a typical classroom required to teach the course.

none

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

AWS Assignments 40%

Laboratory Assignments 40%

Final Exam 20%

Total 100%

Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
 - Critical Thinking
 - Communication

Empirical & Quantitative Skills

Teamwork

Social Responsibility

Personal Responsibility

WECM Course -If needed, revise the Program SCANS Matrix and Competencies Checklist