

5/6/2025

DATE



REQUIRED COURSE



ELECTIVE COURSE

TEC

DIVISION



NEW COURSE



REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	WLD-072		TITLE (30 Characters Max):		GTAW/Stainless Steel								
SEM CR HRS:	3.0	Lecture:	1.5		Lab:	3.0	ICCB Lab:	3.0	ECH:	4.5			
Course Level:	<input type="checkbox"/> Gen Ed / IAI <input type="checkbox"/> Baccalaureate /Non-IAI		<input checked="" type="checkbox"/> Career/Technical <input type="checkbox"/> Dev Ed/ Not in Degree Audit		Clinical Practicum:	0.0	Work-based Learning:	0.0	WBL ECH:	0.0			
Course PCS & CIP:	12 - 48.0508		IAI Code		N/A			Contact Hours (Minutes/Week)					
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:		Max:		16 Wks	225	8 Wks	450
Prerequisites:	WLD-040 or WLDC-040, WLD-041 or WLDC-041 and WLD-071 or WLDC-071												
Corequisites:	None												
Catalog Description: (40 Word Limit)	This course introduces students to the gas tungsten arc welding equipment and procedures tha are required for welding stainless steel.												

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work Based Learning
GTAW safety procedures, set up and maintenance	3	5		
Each position is demonstrated with butt, lap and tee joints on stainless steel:				
Flat	4	8		
Horizontal	4	9		
Vertical	5	10		
Overhead	5	10		
Perform destructive examination of welds	1.5	3		
TOTAL	22.5	45	0	0

EVALUATION							
QUIZZES	<input checked="" type="checkbox"/>	EXAMS	<input checked="" type="checkbox"/>	ORAL PRES	<input type="checkbox"/>	PAPERS	<input type="checkbox"/>
LAB WORK	<input checked="" type="checkbox"/>	PROJECTS	<input checked="" type="checkbox"/>	COMP FINAL	<input checked="" type="checkbox"/>	OTHER	<input type="checkbox"/>

COURSE MATERIALS	
TITLE:	Welding Principles and Practices
AUTHOR:	Edward Bohnart
PUBLISHER:	MCGraw/Hill
VOLUME/EDITION/URL:	6th Edition
COPYRIGHT DATE:	2024

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
GTAW safety procedures, set up and maintenance	8	1. Identify and follow GTAW Safety practices. 2. Set up and perform safety inspections of GTAW equipment and accessories.
GTAW beads flat position	12	1. Identify and demonstrate GTAW fillet and groove welds in the 1G position.
GTAW beads horizontal position	13	1. Identify and demonstrate GTAW fillet and groove welds in the 2G position.
GTAW beads vertical position	15	1. Identify and demonstrate GTAW fillet and groove welds in the 3G position.
GTAW beads, overhead position	15	1. Identify and demonstrate GTAW fillet and groove welds in the 4G position.

GTAW welder performance qualification test	4.5	1. Perform guided bend test. 2. Pass qualification test. 3. Examine cut surfaces and edges of prepared base metal parts. 4. Examine tacks, root passes, intermediate layers and completed welds.
	67.5	

Outcomes*	At the successful completion of this course, students will be able to:
Course Outcome 1	Demonstrate GTAW beads in the flat position on ferrous metal for butt, lap, and "T" welds.
Course Outcome 2	Demonstrate GTAW beads in the horizontal position on ferrous metal for butt, lap, and "T" welds.
Course Outcome 3	Demonstrate GTAW beads in the vertical position on ferrous metal for butt, lap, and "T" welds.
Course Outcome 4	Demonstrate GTAW beads in the overhead position on ferrous metal for butt, lap, and "T" welds.
Primary Laker Learning Competency	Scientific Literacy: Students apply the scientific process to real-life situations.
Secondary Laker Learning Competency	Critical Thinking: Students connect knowledge from various disciplines to formulate logical conclusions.

*Course and program outcomes will be used in the software for outcomes assessment and should include at least 1 primary and 1 secondary Laker Learning Competency. Limit to 3-5.