

4/14/2025

DATE



REQUIRED COURSE



ELECTIVE COURSE

TEC

DIVISION



NEW COURSE



REVISION

# Lake Land College

## Course Information Form

<b>COURSE NUMBER:</b>	WLD-071		<b>TITLE (30 Characters Max):</b>		GTAW/Aluminum					
<b>SEM CR HRS:</b>	3.0	<b>Lecture:</b>	1.0		<b>Lab:</b>	4.0	<b>ICCB Lab:</b>	4.0	<b>ECH:</b>	5.0
<b>Course Level:</b>	<input type="checkbox"/> Gen Ed / IAI <input checked="" type="checkbox"/> Career/Technical <input type="checkbox"/> Baccalaureate /Non-IAI <input type="checkbox"/> Dev Ed/ Not in Degree Audit				<b>Clinical Practicum:</b>	0.0	<b>Work-based Learning:</b>	0.0	<b>WBL ECH:</b>	0.0
<b>Course PCS &amp; CIP:</b>	12 - 48.0508		<b>IAI Code</b>		N/A			<b>Contact Hours (Minutes/Week)</b>		
<b>Repeatable (Y/N):</b>	N	<b>Pass/Fail (Y/N):</b>	N	<b>Variable Credit (Y/N):</b>	N	<b>Min:</b>		<b>Max:</b>		16 Wks 250 8 Wks 500
<b>Prerequisites:</b>	WLD-040 or WLDC-040, WLD-041 or WLDC-041 and WLD-070 or WLDC-070									
<b>Corequisites:</b>	None									
<b>Catalog Description: (40 Word Limit)</b>	This course introduces students to the gas tungsten arc welding process of aluminum.									

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work Based Learning
Gas tungsten arc welding safety	1			
Equipment set-up and operation	2	5		
Each position weld is demonstrated with butt, lap and tee joints on aluminum				
Flat position	3	10		
Horizontal position	3	15		
Vertical position	3	15		
Overhead position	3	15		
<b>TOTAL</b>	<b>15</b>	<b>60</b>	<b>0</b>	<b>0</b>

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

COURSE MATERIALS	
<b>TITLE:</b> Welding Principles and Practices	
<b>AUTHOR:</b> Edward Bohnart	
<b>PUBLISHER:</b> McGraw/Hill	
<b>VOLUME/EDITION/URL:</b> 6th Edition	
<b>COPYRIGHT DATE:</b> 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 on aluminum	13	1. Identify and demonstrate GTAW fillet and groove welds in the 1G position.
GTAW beads horizontal position on aluminum	18	1. Identify and demonstrate GTAW fillet and groove welds in the 2G position.
GTAW beads vertical position on aluminum	18	1. Identify and demonstrate GTAW fillet and groove welds in the 3G position.
GTAW beads overhead position on aluminum	18	1. Identify and demonstrate GTAW fillet and groove welds in the 4G position.
	<b>75</b>	

<b>Outcomes*</b>	<b>At the successful completion of this course, students will be able to:</b>
Course Outcome 1	Demonstrate GTAW beads in the flat position on butt, lap, and "T" welds.
Course Outcome 2	Demonstrate GTAW beads in the horizontal position on butt, lap, and "T" welds.
Course Outcome 3	Demonstrate GTAW beads in the vertical position on butt, lap, and "T" welds.
Course Outcome 4	Demonstrate GTAW beads in the overhead position on 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.*