

9/12/2023

DATE



REQUIRED COURSE



ELECTIVE COURSE

TEC DIVISION

☐ NEW COURSE☒ REVISION

# Lake Land College

## Course Information Form

COURSE NUMBER:	WEL-061		TITLE: (30 Characters Max)		Gas Tungsten Arc Welding						
SEM CR HRS:	3	Lecture:	0.5	Lab:	5	ECH:	5.5				
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	Work-based Learning:	0	WBL ECH:	0	
COURSE PCS #			IAI Code				Contact Hours (Minutes/Week)				
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:	Max:	16 Wks	275	8 Wks	550
Prerequisites:	WEL-057										
Corequisites:	None										
Catalog Description: (40 Word Limit)	This course introduces students to gas tungsten arc welding equipment and procedures. Welds are prepared in flat, horizontal and vertical positions on both ferrous and non-ferrous metals.										

List the Major Course Segments (Units)		Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Non-Clinical Internship/ SOE
1	GTAW Safety Procedures	2			
2	GTAW Equipment	1.5	2		
3	GTAW Set Up and Maintenance	1	1		
4	GTAW Beads Flat Position Ferrous Metal	0.5	10		
5	GTAW Horizontal Position Ferrous Metal	0.5	12		
6	GTAW Vertical Position Ferrous Metal	0.5	14		
7	GTAW Flat Position Non-Ferrous Metal	0.5	10		
8	GTAW Horizontal Position Non-Ferrous Metal	0.5	12		
9	GTAW Vertical Position Non-Ferrous Metal	0.5	14		
TOTAL		7.5	75	0	0

## EVALUATION

QUIZZES <input 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 type="checkbox"/>	OTHER <input type="checkbox"/>

## COURSE MATERIALS

TITLE:	Gas Tungsten Arc Welding Handbook
AUTHOR:	William H. Minnick
PUBLISHER:	Goodheart-Wilcox
VOLUME/EDITION/URL:	6th
COPYRIGHT DATE:	2013

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		<i>The student will be able to:</i>
GTAW Safety Procedures	2	Identify and follow GTAW Safety practices.
GTAW Equipment	3.5	Identify GTAW equipment and accessories.
GTAW Set Up and Maintenance	2	Identify and report GTAW equipment problems and set up GTAW equipment.
GTAW Beads Flat Position on Ferrous Metal	10.5	Identify and complete GTAW beads in the flat position on ferrous metal for butt, lap and "T" welds.
GTAW Beads Horizontal Position on Ferrous Metal	12.5	Identify and complete GTAW beads in the horizontal position on ferrous metal for butt, lap and "T" welds.
GTAW Beads Vertical Position on Ferrous Metal	14.5	Identify and complete GTAW beads in the vertical position on ferrous metal for butt, lap and "T" welds.
GTAW Beads Flat Position on Non-Ferrous Metal	10.5	Identify and complete GTAW beads in the horizontal position on non-ferrous metal for butt, lap and "T" welds.
GTAW Beads Horizontal Position on Non-Ferrous Metal	12.5	Identify and complete GTAW beads in the horizontal position on non-ferrous metal for butt, lap, and "T" welds.

GTAW Beads Vertical Position on Non-Ferrous Metal	14.5	Identify and complete GTAW beads in the vertical position on non-ferrous metal for butt, lap and "T" welds.
	82.5	

COURSE OUTCOMES*	At the successful completion of this course, students will be able to:
	Demonstrate GTAW beads in the flat position on ferrous metal for butt, lap and "T" welds.
	Demonstrate GTAW beads in the horizontal position on ferrous metal for butt, lap and "T" welds.
	Demonstrate GTAW beads in the vertical position on ferrous metal for butt, lap and "T" welds.
	Demonstrate GTAW beads in the flat, horizontal, and vertical position on non-ferrous metal for butt, lap and "T" welds.

\* Course Outcomes will be used in the Assessment Software for Outcomes Assessment. Limit to 3 - 5.