

# PROGRAM OF STUDY

## Welding Technology Associate in Science

Welding Technology is a career technical education program designed to prepare students for a variety of entry-level positions in today's welding and fabrication related industries. Course offerings range from very basic welding fundamentals to the most technically advanced. Students gain skillfulness in safety procedures, applied theory, metal fabrication, and related welding processes. Emphasis is placed on individual instruction. Instructors are AWS Certified Welding Inspectors/Educators. Welding curriculum is aligned with the American Welding Society SENSE Entry Welder Program. Students can earn welder certifications in accordance with the American Welding Society (AWS), The Los Angeles Department of Building and Safety (LADBS), and The American Society of Mechanical Engineers (ASME). Upon successful completion of the program, students are prepared to enter into the following career opportunities: welder, welding inspector, welding technician/fitter, pipe fitter/welder, and metal fabricator.

### **Student Learning Outcome:**

Demonstrate proficiency in industry recognized principles and practices as they apply to today's welding and metal fabrication industries.

### **Program Requirements:**

		<b>Units</b>
<b>Complete fifteen units from one of the four options below:</b>		
WELD 101A	Introduction to Shielded Metal Arc Welding	2.5 - 0
WELD 101B	Intermediate Shielded Metal Arc Welding	2.5 - 0
WELD 101C	Advanced Shielded Metal Arc Welding	2.5 - 0
WELD 104	Introduction to Gas Tungsten Arc Welding	2 - 0
WELD 105	Advanced Gas Tungsten Arc Welding	2 - 0
WELD 165	Pipe Welding Fundamentals	3 - 0
CWE 188	Cooperative Work Experience Education	1 - 4
<b>or</b>		
WELD 092	Introduction to Metal Fabrication	2 - 0
WELD 093	Intermediate Metal Fabrication	2 - 0
WELD 094	Advanced Metal Fabrication	2 - 0
WELD 101A	Introduction to Shielded Metal Arc Welding	2.5 - 0
WELD 104	Introduction to Gas Tungsten Arc Welding	2 - 0
WELD 105	Advanced Gas Tungsten Arc Welding	2 - 0
CWE 188	Cooperative Work Experience Education	1 - 4
<b>or</b>		
WELD 120	Industrial Welding I	5 - 0
WELD 122	Industrial Welding II	5 - 0
WELD 124	Industrial Welding III	5 - 0
<b>or</b>		
WELD 101A	Introduction to Shielded Metal Arc Welding	2.5 - 0
WELD 101B	Intermediate Shielded Metal Arc Welding	2.5 - 0
WELD 101C	Advanced Shielded Metal Arc Welding	2.5 - 0
WELD 114A	Introduction to Robotic Welding Automation	2.5 - 0
WELD 114B	Intermediate Robotic Welding Automation	2.5 - 0
WELD 114C	Advanced Robotic Welding Automation	2.5 - 0
<b>Required electives:</b>		<b>Units</b>
WELD 080	Non-Destructive Testing	3 - 0
WELD 130	Welding Metallurgy	3 - 0
WELD 132	Blueprint Reading for Welders and Fabricators	3 - 0
MFGT 090	Measurements and Computations	3 - 0
ENGL 104	Technical Reading and Writing	3 - 0
<b>or</b>		

ENGL 204	Technical Report Writing	3 - 0
<b>Recommended electives:</b>		<b>Units</b>
WELD 096	Welding Certification and License Preparation	3 - 0
<b>Total Units</b>		<b>30</b>
		PID 360