

## Associate in Science Degree: Welding Technology

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.

### Degree and Certificate Student Learning Outcome:

Students will be able to demonstrate proficiency in industry recognized principles and practices as they apply to today's welding and metal fabrication industries.

### Program Requirements:

Units Required: 34

Complete fifteen units from two of the course blocks below

Units:

WELD-100A	Introduction to Metal Fabrication	2.5
WELD-100B	Intermediate Metal Fabrication	2.5
WELD-100C	Advanced Metal Fabrication	2.5
WELD-101A	Introduction to Shielded Metal Arc Welding	2.5
WELD-101B	Intermediate Shielded Metal Arc Welding	2.5
WELD-101C	Advanced Shielded Metal Arc Welding	2.5
WELD-111A	Introduction to Semiautomatic Welding	2.5
WELD-111B	Intermediate Semiautomatic Welding	2.5
WELD-111C	Advanced Semiautomatic Welding	2.5
WELD-112A	Introduction to Gas Tungsten Arc Welding	2.5
WELD-112B	Intermediate Gas Tungsten Arc Welding	2.5
WELD-112C	Advanced Gas Tungsten Arc Welding	2.5
WELD-114A	Introduction to Gas Tungsten Arc Welding	2.5
WELD-114B	Intermediate Gas Tungsten Arc Welding	2.5
WELD-114C	Advanced Gas Tungsten Arc Welding	2.5

OR

Complete fifteen units from the following:

WELD-113A	Introduction to Pipe Welding	4.0
WELD-113B	Pipe Layout and Fabrication	3.0
WELD-113C	Intermediate Pipe Welding	4.0
WELD-113D	Advanced Pipe Welding	4.0

Plus the following required electives:

WELD-130	Welding Metallurgy	3.0
WELD-131	Non-Destructive Testing	3.0
WELD-132	Print Reading for Welders and Fabricators	3.0
WELD-133	Welding Inspection	3.0
MFGT-090	Measurements and Computations	3.0
ENGL-104	Technical Reading and Writing	3.0
OR		
ENGL-204	Technical Report Writing	3.0
WE-186WELD	Work Experience Education Welding Technology	1.0