

# WELDING TECHNOLOGY - LEVEL ONE CERTIFICATE (HIGH SCHOOL ONLY)

College of the Mainland (COM) is excited to launch a new Dual Enrollment Welding Technology, designed to give high school students an early start on a high-demand, high-wage career path. This innovative partnership between COM and our local school districts reflects our shared commitment to preparing students for success in both college and the workforce.

The proposed Level I Certificate in Welding Technology provides students with the fundamental technical skills required for entry-level employment in welding and metal fabrication industries. The program emphasizes hands-on training, safety practices, and core welding processes used across multiple industrial sectors. The certificate is designed as a stackable credential that can lead to advanced certificates and an Associate of Applied Science degree in Welding Technology.

This certificate includes the most fundamental welding skills required by industry and commonly used in Level I certificates across Texas community colleges. The selected courses ensure students graduate with competencies in three critical areas.

This sequence of courses ensures students graduate with:

## Core Welding Skills

- Stick welding (SMAW)
- MIG welding (GMAW)
- Oxy-Fuel welding and cutting
- Gas Tungsten Welding

## Fabrication Skills

- Layout
- Measurement
- Fit-up

## Industry Readiness

- Basic welding techniques
- Safety training

This certificate prepares graduates for entry-level employment opportunities as welder helpers, welders, fabrication shop technicians, and maintenance welders.

## Full-Time Student Schedule

Course	Title	Semester Credit Hours
<b>Semester #1</b>		
WLDG 1428	Introduction to Shielded Metal Arc Welding (SMAW)	4
WLDG 1434	Introduction to Gas Tungsten Arc (GTAW) Welding	4
<b>Semester Credit Hours</b>		<b>8</b>

<b>Semester #2</b>		
WLDG 1430	Introduction to Gas Metal Arc (GMAW) Welding	4
WLDG 1425	Introduction to Oxy-Fuel Welding and Cutting	4
<b>Semester Credit Hours</b>		<b>8</b>
<b>Total Semester Credit Hours</b>		<b>16</b>