

# Welding Technology

## Welding Technology Certificate of Achievement

The Welding Technology program is a Certificate of Achievement program designed to prepare students for a career in welding. Program performance standards for certification will be in accordance with those set forth by the National Center for Construction and Research (NCCER), the American Welding Society (AWS), and the American Society of Mechanical Engineers (ASME). Career opportunities for certified welders exist in oil production and maintenance, agriculture, fabrication, manufacturing and construction. Laboratory work is completed in a modern and well equipped welding shop.

### Program student learning outcomes:

1. Students will perform SMAW using the flat, horizontal, uphill, and overhead positions.
2. Students will perform both GMAW and FCAW using the flat, horizontal, and overhead positions.
3. Students will perform pipe welding using both SMAW and GMAW process.
4. Students will understand AWS WPS, welding terminology, drawings, and symbols used in the welding industry.
5. Students will understand the importance of work and tool safety.
6. Students will perform Oxy-Fuel torch cutting and gouging.

### For Gainful Employment information please visit:

<https://westhillscollge.com/coalinga/degrees-and-certificates/gainful-employment/>

### Career and employment information may be obtained through:

- O\*Net, [www.onetonline.org](http://www.onetonline.org)
- Labor Market, California Employment Development Department, [www.labormarketinfo.edd.ca.gov](http://www.labormarketinfo.edd.ca.gov)

| <i>Course #</i>                           | <i>Title</i>  | <i>Units</i> |
|---|---|--------------|
| <b>Required Core Courses (18.5 Units)</b> |   |              |
| IMT 060 . . . .                           | Industrial Core . . . . .                               | 3            |
| WT 070 . . . .                            | Introduction to Metal Cutting and Preparation . . . . . | 2.5          |
| WT 071 . . . .                            | Beginning SMAW . . . . .                                | 3            |
| WT 072 . . . .                            | Advanced SMAW . . . . .                                 | 3            |
| WT 073 . . . .                            | Introduction to Metallurgy and Weld Symbols . . . . .   | 1.5          |
| WT 074 . . . .                            | GMAW and FCAW: Plate . . . . .                          | 3            |
| WT 075 . . . .                            | SMAW Pipe Welding . . . . .                             | 2            |
| WT 076 . . . .                            | Welding Certification Preparation . . . . .             | 0.5          |
|   | <b>Total . . . . .</b>                                  | <b>18.5</b>  |