

# Welding Technology - Entry Level Welder

CERTIFICATE OF ACHIEVEMENT (CA)

REQUIRED CREDITS: 30

DEGREE CODE: WELDENT-CT

## IMPORTANT

Important information about the educational debt, earnings, and completion rates of students who attended this program are located at [www.csn.edu/gainful-employment](http://www.csn.edu/gainful-employment).

## DESCRIPTION

The Certificate of Achievement – AWS Entry Level Welder emphasis provides students with the skills and knowledge necessary for successful entry level employment in welding and related metal working industries.

Extensive classroom and laboratory instruction focuses on the most widely used welding processes in industry including SMAW (Stick), GMAW (Mig), FCAW (Flux core) and GTAW (Tig). Additionally, students will receive instruction in Oxy/Fuel, Plasma and Carbon Arc-Air cutting processes and blueprint reading and interpretation.

Upon completion of the Certificate of Achievement requirements, students may certify as AWS Entry Level Welders.

## STUDENT LEARNING OUTCOMES

- Demonstrate proper safety practices during welding operations.
- Read and interpret blueprints.
- Cut and prepare parts from blueprints and drawings.
- Set-up, maintain and perform minor repairs to welding and associated equipment.
- Perform satisfactory welds in all positions.

**PLEASE NOTE** - The courses listed below may require a prerequisite or corequisite. Read course descriptions before registering for classes. All MATH and ENG courses numbered 01-99 must be completed before reaching 30 total college-level credits. No course under 100-level counts toward degree completion.

## GENERAL EDUCATION REQUIREMENTS (6 CREDITS)

### MATHEMATICS (3 credits)

MATH 104B or MATH 116 or above (except 122, 123)

### COMMUNICATIONS (3-5 credits)

BUS 108; COM 101, 102, 115, 215; ENG 100, 101, 102, 107, 113, 114, 205; JOUR 102; THTR 105

## SPECIAL PROGRAM REQUIREMENTS (24 CREDITS)

### CORE REQUIREMENTS (24 credits)

|           |  |   |
|-----------|--|---|
| ALS 101   | College Success  | 3 |
| MT 102B   | Fundamentals of Electricity                            | 4 |
| WELD 131B | Blueprint Reading, Layout, and Sketching               | 3 |
| WELD 132B | Oxy/Fuel, Plasma and Carbon Arc-Air Cutting Operations | 2 |
| WELD 133B | SMAW (Stick)   | 4 |
| WELD 134B | GTAW (Tig)   | 4 |
| WELD 135B | GMAW (Mig)   | 2 |
| WELD 137B | FCAW (Flux Core)                                       | 2 |

### Digital Literacy Option (0-3 credits)

|        |                                     |   |
|--------|-------------------------------------|---|
| IS100B | Core Computing Competency           | 0 |
| IS101  | Introduction to Information Systems | 3 |

Computation included in MATH 104B or MATH 116 or above (except 122, 123)

Human Relations included in ALS 101

## FULL-TIME STUDENT DEGREE PLAN

*Add more semesters to modify this plan to fit part-time student needs.*

### FIRST SEMESTER

|                                    |          |
|------------------------------------|----------|
| ALS 101 College Success            | Credits  |
| MT 102 Fundamentals of Electricity | 3        |
|                                    | 4        |
| <b>TOTAL CREDITS</b> .....         | <b>7</b> |

### SECOND SEMESTER

|  |          |
|--|----------|
| Complete Mathematics (see courses this page - Recommended MATH 104B) | Credits  |
|  | 3        |
| WELD 131B Blueprint Reading, Layout and Sketching                    | 3        |
| WELD 132B Oxy/Fuel, Plasma and Carbon Arc-Air Cutting Operations     | 2        |
| <b>TOTAL CREDITS</b> .....   | <b>8</b> |

### THIRD SEMESTER

|  |             |
|--|-------------|
| Complete Communications (see courses this page - Recommended: COM 115) | Credits     |
|  | 3-5         |
| WELD 133B SMAW (Stick)   | 4           |
| WELD 135B GMAW (Mig)   | 2           |
| <b>TOTAL CREDITS</b> .....   | <b>9-11</b> |

### FOURTH SEMESTER

|                            |            |
|----------------------------|------------|
| IS 100B or IS 101          | Credits    |
|                            | 0-3        |
| WELD 134B GTAW (Tig)       | 4          |
| WELD 137B FCAW (Flux Core) | 2          |
| <b>TOTAL CREDITS</b> ..... | <b>6-9</b> |

**DEGREE PLAN TOTAL CREDITS**.....**30-33**

- NOTE**
- Course numbers with the “B” suffix may be non-transferable for a NSHE baccalaureate degree.
  - Course numbers with the “H” suffix are designated Honors-level courses and can be used to fulfill equivalent general education requirements. For more information visit [www.csn.edu/honors](http://www.csn.edu/honors).
  - In no case, may one course be used to meet more than one requirement except for the Values and Diversity general education requirement (only AA, AS, and AB degrees) which may be used to fulfill the corresponding general education or emphasis requirement.
  - Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.

