

## Welding Technology – Entry Level Welder

CERTIFICATE OF ACHIEVEMENT (CoA)

REQUIRED CREDITS: 30

DEGREE CODE: WELDENT-CT

### 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 (3 CREDITS)

#### COMMUNICATIONS (3-5 credits)

ENG 100 or 101 or 107 or 113

### SPECIAL PROGRAM REQUIREMENTS (27 CREDITS)

ALS 101	College Success	3
MATH 116	Technical Mathematics	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

Computation included in MATH 116

Human Relations included in ALS 101

### FULL-TIME STUDENT DEGREE PLAN

*Plan can be modified to fit the needs of part-time students by adding more semesters.*

<b>FIRST SEMESTER</b>	<b>Credits</b>
ALS 101 College Success	3
MT 102 Fundamentals of Electricity	4
<b>TOTAL CREDITS</b> .....	<b>7</b>
<b>SECOND SEMESTER</b>	<b>Credits</b>
Complete Communications (see courses this page)	3-5
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>8-10</b>
<b>THIRD SEMESTER</b>	<b>Credits</b>
MATH 116 Technical Mathematics	3
WELD 133B SMAW (Stick)	4
WELD 135B GMAW (Mig)	2
<b>TOTAL CREDITS</b> .....	<b>9</b>
<b>FOURTH SEMESTER</b>	<b>Credits</b>
WELD 134B GTAW (Tig)	4
WELD 137B FCAW (Flux Core)	2
<b>TOTAL CREDITS</b> .....	<b>6</b>
<b>DEGREE PLAN TOTAL CREDITS</b> .....	<b>30-32</b>

- 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.

