



CERTIFICATE

## Certificate in Construction Technology - Welding

**Total Credit Hours:** 31

**About** Certificate in Construction Technology - Welding

The Certificate in Construction Technology Program will prepare students for the current local and global job market with entry-level skills needed for any of the following fields: carpentry; electricity; heating, ventilation, and air conditioning (HVAC); masonry; plumbing; reinforcing metal worker; and welding. All students must successfully pass four (4) core courses (technical related requirements) with a “C” or better before enrolling in one (1) of the seven (7) concentration areas.

[REQUIREMENTS FOR CERTIFICATE](#)

<b>Welding Track</b>		
<b>Major Requirements</b>		
<b>Course</b>	<b>Course Name</b>	<b>Credits</b>
AE103	Basic Blueprint Reading	3
CT100	Introduction to Construction Trades	3
CT140	Industrial Safety	3
CT196A	Fundamentals of Oxyacetylene Welding I	4
CT196B	Fundamentals of Oxyacetylene Welding II	4
CT197A	Shielded Metal Arc Welding I	5
CT197B	Shielded Metal Arc Welding II	5
CT292	Construction Practicum	3
HL135	Heartsaver First Aid CPR AED	1
MA094	Mathematics for the Trades	4
<b>Certificate Total Minimum</b>		

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[GENERAL REQUIREMENTS FOR CERTIFICATE](#)

# General Requirements for Certificates

Effective fall Semester 2003, several academic policy changes were implemented to ensure that students are adequately prepared to meet business and industry standards. All Undeclared or newly Declared Students enrolled in regularly scheduled postsecondary courses must be enrolled in or must have completed developmental coursework for Math and English or have successfully placed into post-secondary Math and English (or equivalent).

Students must fulfill the English general education requirement by the time they have enrolled in 12 credits of classes. This means that students may take only nine (9) credits before they must begin meeting the general education requirements. All declared students in Certificate programs will be required to successfully complete minimum general education course requirements. For more information, refer to the Admissions Information, General Education Policy section of this catalog.

## A. General Education Requirements

Students must demonstrate proficiency in reading, writing, understanding and speaking English as indicated by one of the following:

- Test out of the English Placement Test (or equivalent), or
- Satisfactory completion of EN097 courses and
- Test out of the Math Placement Test (or equivalent), or
- Satisfactory completion of MA098 course

\*Students in the Certificate of Construction Technology program can successfully complete their math requirements with MA094 Mathematics for the Trades in lieu of MA098 Intermediate Algebra.

B. Major Requirements. Total Major Requirements vary by program. Minimum Total Credits Required for a Certificate is 30 credits.

\* No course may be counted for both Major and General Education requirements.

\*\* Placement testing is not mandatory for admission to the College. Completion of placement testing or equivalent, however, is required for enrollment into English and mathematics courses. Therefore, students who plan to enroll full-time in a program should take the placement test to be eligible for a full load of courses.

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## [Student Learning Outcomes](#)

Upon successful completion of the Certificate in Construction Technology program, students will be able to:

1. Demonstrate basic skills needed to function as an entry-level worker in at least one construction trades concentration area in accordance with industry safety standards: carpentry; electricity; heating, ventilation, and air-conditioning (HVAC); masonry; plumbing; reinforcing metal worker; or welding.
2. Exhibit entry-level knowledge in chosen construction trades concentration area.
3. Demonstrate professionalism as related to the construction trades industry.

**Check out some of these amazing Certificate in Construction Technology - Welding courses...**

**CT197B Shielded Metal Arc Welding II**

This course builds on the content addressed in CT197A, focusing on the skills and academic competencies necessary for safe, professional and effective practice in intermediate shielded metal arc welding. This course concentrates on knowledge and skills necessary for completion of Shielded Metal Arc Welding (SMAW) open V-butt welds in all positions. Emphasis will be placed on core principles in shielded metal arc welding, including use, care, safe operations and maintenance of welding tools; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the field of welding.

[+ More Info](#) [1]

**CT197A Shielded Metal Arc Welding I**

This course focuses on the skills and academic competencies necessary for safe, professional and effective practice in basic shielded metal arc welding. Emphasis will be placed on core principles in shielded metal arc welding, including use, care, safe operations and maintenance of welding tools; the use, care and safe handling of supplies and materials; the development of an appropriate attitude as related to professional work, and the acquisition of knowledge and information essential for success in initial pursuit of a career in the field of welding.

[+ More Info](#) [2]

**CT196B Fundamentals of Oxyacetylene Welding II**

This course builds upon content of CT196A, introducing students to core principles in oxyacetylene welding, providing them with the foundational knowledge necessary for more advanced study and experiential development of skills in Construction Trades. This course reviews students' knowledge and skills as related to careers and occupations using oxyacetylene welding, safety procedures, identification of supplies, equipment and tools, setting up and disassembling equipment and working with the torch flame. The course then focuses in-depth on performing cutting procedures and on portable oxyfuel cutting machine operation.

[+ More Info](#) [3]

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**You may also be interested in these related Programs...**



[4]

[Certificate in Construction Technology - Reinforcing Metal Worker](#) [4]

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[+ More Info](#) [4]



[5]

[Associate of Science in Pre-Architectural Drafting](#) [5]

The A.S. in Pre-Architectural Drafting covers pre-architecture, building materials and properties, technical drafting, basic computer aided design and drafting (CADD), architectural computer modeling, and an introductory engineering course.

[+ More Info](#) [5]



[6]

### [Associate of Science in Civil Engineering Technology](#) [6]

The Associate of Science in Civil Engineering Technology is a course of study that prepares students to analyze construction sites, use and maintain equipment, draft plans, and write reports. Technical requirement classes are designed to provide students with fundamentals in surveying, analyzing material strength, and structural drafting and design. This course of study will provide students with an overview of technical drawing, construction management and procedures, planning, and estimating. The student learning outcomes meet the professional standards of technicians in this field.

[+ More Info](#) [6]