
Plan Code: 3988

This program is designed to prepare students for a variety of entry-level positions in today's construction and fabrication industries. Upon completion students will have a thorough knowledge of welding safety, theory and procedures, in accordance with the American Welding Society SENSE (Schools Excelling through National Skills Education) Entry Welder program, as well as the skill to perform a variety of welding processes. Successful completion of this degree will prepare students for the following career opportunities: welder, welding inspector, welding technician/fitter, pipe fitter/welder, and metal fabricator.

- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, vertical, and overhead positions using the SMAW (Shielded Metal Arc Welding) process.
- Demonstrate advanced level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.

Code Number	Course Title	Units
REQUIRED COURSES		
MTFAB 50	Introduction to Metalworking	4
MTFAB 204	Power Metalworking Machine Operations	4
MTFAB 260	Blueprint Reading for Metal Fabrication	3
MTFAB 270	Metallurgy	2.5
WELD 50	Introduction to Welding	3.5
WELD 211	Oxy-fuel Welding and Cutting Technology	2
WELD 212	Introduction to Shielded Metal Arc Welding	3.5
WELD 213	Introduction to Semi-Automatic Welding	3.5
WELD 214	Introduction to Gas Tungsten Arc Welding	3.5
Total Units		29.5

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M C L O N P I T O

Plan Code: 6038

This program is designed for those interested in learning basic Gas Metal Arc Welding and Flux-Core Arc Welding. Course work includes an entry-level study with an emphasis on application of fundamental welding techniques and safe industry practices. This course prepares the student s or t n entry-

BASIC ARC WELDING - CERTIFICATE OF COMPLETION

Plan Code: 6039



BASIC OXY-ACETYLENE WELDING - CERTIFICATE OF COMPLETION

This program is designed for those interested in learning basic Oxy-Acetylene Welding. Course work includes an entry level study with an emphasis on application of fundamental welding techniques and safe industry practices. This course prepares the student for an entry level position as a Oxy-Acetylene Welder. The student be required to provide all PPE safety gear (personal protective gear) required to safely perform Oxy-Acetylene welds in the lab.

Program Student Learning Outcomes

- Demonstrate entry level skills to produce quality welds in the flat and horizontal positions using the Oxy-Acetylene process.

Program Requirements

WELD 600	Welding (General)	72
WELD 661	Oxygen Acetylene Welding	54



Plan Code: 6035

This program is designed for those interested in exploring the welding and metal fabrication fields. Course work includes an entry-level study with an emphasis on the safe application of fundamental metal fabrication and welding techniques and practices. This program prepares the student for an entry-level position in the metal fabrication and/or welding industry.

- Demonstrate the basic skills to safely model, fabricate and weld a metal part.

Code Number	Course Title	Hours
REQ RED O OSES		
WELD 601	Exploring Welding	18
MTFAB 601	Exploring Metal Fabrication	18
Total Hours		36

GAS TUNGSTEN ARC
WELDING (GTAW)
- CERTIFICATE OF
ACHIEVEMENT

Plan Code: 3989

INTRODUCTION TO GAS TUNGSTEN ARC WELDING (GTAW) - CERTIFICATE OF ACHIEVEMENT

Plan Code: 3977

Program Student Learning Outcomes

Program Requirements

Code Number	Course Title	Units
REQUIRED COURSES		
Total Units		9

BASIC GAS TUNGSTEN ARC WELDING - CERTIFICATE OF COMPLETION

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This program is designed for those interested in learning basic GTAW Welding. Course work includes an entry level study with an emphasis on application of fundamental welding techniques and safe industry practices. This course prepares the student for an entry level position as a GTAW Welder. The student will be required to provide all PPE safety gear (personal protective gear) required to safely perform GTAW welds in the lab.

Program Student Learning Outcomes

- Demonstrate entry level skills to produce quality welds in the flat, horizontal, and vertical positions using the GTAW (Gas Tungsten Arc Welding) process.

Program Requirements

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WELD 600	Welding (General)	72
WELD 681	Welding (Inert Gas)	54
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Shielded Metal Arc Welding (S.I

INTRODUCTION TO SHIELDED METAL ARC WELDING (SMAW) CERTIFICATE OF ACHIEVEMENT

Plan Code: 3978

This program is designed for those interested in welding structural steel. Course work includes a comprehensive study with an emphasis on application of fundamental welding techniques and safe industry practices. Potential careers that the program prepares students for include, but are not limited to, Pipe Fitters and Steamfitters, Sheet Metal Workers, as well as Structural Iron and Steel Workers.

Prerequisite