Web

See CSIS - Web Technology

Welding (WELD)

Contact the Trade and Industry Department for further information.
(760) 744-1150, ext. 2545
Office: T-1

Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).
• Welding Technology

Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).
• Welding Technology

Certificates of Proficiency -

Certificate of Proficiency requirements are listed in Section 6 (green pages).
• Entry-Level Gas Metal Arc/Flux Cored Arc Welding
• Entry-Level Gas Tungsten Arc Welding
• Entry-Level Shielded Metal Arc Welding

PROGRAMS OF STUDY

Entry-Level Gas Metal Arc/ Flux Cored Arc Welding

Provides the skills necessary for entry-level employment as a gas metal arc welder/flux cored arc welder.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
IT/WELD 108	Technical Mathematics	3
WELD 100	Welding I	3
WELD 120	Gas Metal Arc and Flux Cored Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		**15**

Entry-Level Gas Tungsten Arc Welding

Introdution to GTAW, GMAW, and SMAW welding process with concentration on GTAW. Basic math, print reading, and layout skills and knowllede will be taught to prepare students for entry-level employment as a GTAW welder.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
IT/WELD 108	Technical Mathematics	3
WELD 100	Welding I	3
WELD 115	Gas Tungsten Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		**15**

Entry-Level Shielded Metal Arc Welding

Provides the skills necessary for entry-level employment as a shielded metal arc welder.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
IT/WELD 108	Technical Mathematics	3
WELD 100	Welding I	3
WELD 110	Shielded Metal Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		**15**

Welding Technology

Provides training for a career in the field of welding. Following the study of basic welding processes, the student may elect to concentrate in one or more of the basic welding processes and to prepare for the industrial certification test.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
WELD 100	Welding I	3
WELD 105	Metal Cutting, Brazing, Soldering	3
WELD/ IT 108	Technical Mathematics	3
WELD 110	Shielded Metal Arc Welding	3
WELD 115	Gas Tungsten Arc Welding	3
WELD 120	Gas Metal Arc and Flux Cored Arc Welding	3
WELD 135	Print Reading for Welders	3
WELD 140	Qualification of Welders	3
WELD 145	Pipe Welding	3
WELD 150	Welding Inspection	3
WELD 160	Metal Layout for Fabrication	3
TOTAL UNITS		**33**

COURSE OFFERINGS

WELD 100 Welding I (3)
1½ hours lecture - 4½ hours laboratory
Note: *May be taken 2 times*
Transfer acceptability: CSU
Introduction to safe practices, setup, and operation of Shielded Metal Arc Welding, Gas Tungsten Arc Welding, Flux Core Arc Welding, and Gas Metal Arc Welding.

WELD 105 Metal Cutting, Brazing, Soldering (3)
1½ hours lecture - 4½ hours laboratory
Note: *May be taken 4 times*
Transfer acceptability: CSU
Cutting metals with oxyfuel, plasma, carbon, and air arc gouging. Joining metals using oxyfuel welding, brazing, and soldering.

WELD 108 Technical Mathematics (3)
3 hours lecture
Note: *Cross listed as IT 108*
Transfer acceptability: *CSU*
Methods and experience in defining and solving mathematical problems in industrial technology. Special emphasis will be given to the application of these basic processes to the solution of the unique mathematical problems encountered in the areas of architecture, automotive, drafting, machine, welding, and woodworking technology.

WELD 110 Shielded Metal Arc Welding (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in WELD 100*
Note: *May be taken 4 times*
Transfer acceptability: *CSU*
Welding steel plate in all positions using the Shielded Metal Arc Welding process.

WELD 115 Gas Tungsten Arc Welding (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: *A minimum grade of 'C' in WELD 100*
Note: *May be taken 4 times*
Transfer acceptability: *CSU*
Safe setup, operation, and maintenance of Gas Tungsten Arc Welding equipment. Welding stainless steel, carbon steel, and aluminum in the flat and horizontal positions.

To satisfy a prerequisite, the student must have earned a letter grade of A, B, C or CR in the prerequisite course, unless otherwise stated.
See Catalog addendum at http://www.palomar.edu/catalog/2011/ for updates and new program approvals.