

# WELDING

*program information*

## WELDING DEPARTMENT

### Location:

Welding Tech Center  
970.339.6203

### Program Chair:

Paul Hasty, 970.339.6321/6203

### Advisors and Faculty:

Paul Hasty, 970.339.6321/6203  
Jeff Klein, 970.339.6203

## DEGREE AND CERTIFICATES OFFERED

### Welding Technology

(Two-Year A.A.S. Degree)

### Welding Technician Certificate

### Express Certificates

Basic Welding and Cutting

SMAW

GMAW

FCAW

Advanced Welding Processes

**Potential Opportunities:** Welding is a skill that impacts almost every industry in the world and provides a challenging, dynamic, and rewarding career. The Welding Technology Program at Aims Community College is designed to provide the skills necessary for the student to successfully enter the welding field. The most common welding and cutting processes are covered in great detail as well as other skills and knowledge required of a welder such as: printreading, layout, metallurgy, estimating, and weld inspection. Attention to detail and the desire to work steadily and patiently to achieve a high level of skill in the art of welding are prerequisites for this program.

Some of the career possibilities in welding include:

- Production Welder
- Pipe Welder and Fitter
- Repair and Maintenance Welder
- Welding Supervisor
- Automated Welding Machine Technician/Programmer
- Welding Inspection and Quality Control Technician
- Welding Equipment Sales and Repair
- Business Owner/Entrepreneur

## WELDING TECHNOLOGY

(Associate of Applied Science Degree)  
(AAS WT02)

### WELDING TECHNOLOGY DEGREE REQUIREMENTS

Completion of the Welding Technician Certificate requirements, plus the following courses:

### MATHEMATICS

Select on course.

MAT 107	Career Math	3
MAT 108	Technical Mathematics	4
MAT 112	Financial Mathematics	3

### COMMUNICATION

Select one course.

BUS 217	Business Communications & Report Writing	3
ENG 121	English Composition I	3
ENG 131	Technical Writing I	3

### ORAL COMMUNICATION OR TECHNOLOGY

Select on course.

CIS 118	Intro to PC Applications	3
COM 115	Public Speaking	3

### PHYSICAL & LIFE SCIENCES

Choose one course from any of the following prefixes: AST, BIO, CHE, ENV, GEY, MET, PHY, or SCI (min 3 credits).

### BEHAVIORAL & SOCIAL SCIENCES OR ARTS AND HUMANITIES

Choose one course from any of the following prefixes: ANT, ART, ECO, GEO, HIS, HUM, LIT, MUS, PHI, POS, PSY, SOC, THE or any foreign language course prefix, (min 3 credits).

Total General Ed Credits required: . . . . 15 min

Total Credits for A.A.S. Degree: . . . . . 60 min

## WELDING TECHNICIAN CERTIFICATE PROGRAM

(CERT WT01)

Upon completion of all 5 of the following mini certificates the student will receive the Welding Technician Certificate.

### BASIC WELDING & CUTTING

(CERT WT09)

WEL 100	Safety for Welders	1
WEL 101	Allied Cutting Processes	4
WEL 102	Oxyacetylene Joining Processes	4
<b>Total Basic Welding &amp; Cutting Certificate Credits:</b>		<b>9</b>

### SMAW (CERT WT10)

WEL 103	Basic Shielded Metal Arc Welding I	4
WEL 110	Advanced Shielded Metal Arc Welding I	4
<b>Total SMAW Certificate Credits:</b>		<b>8</b>

### GMAW (CERT WT13)

WEL 201	Gas Metal Arc Welding I	4
WEL 202	Gas Metal Arc Welding II	4
<b>Total GMAW Certificate Credits:</b>		<b>8</b>

### FCAW (CERT WT14)

WEL 203	Flux Cored Arc Welding I	4
WEL 204	Flux Cored Arc Welding II	4
<b>Total FCAW Certificate credits:</b>		<b>8</b>

## ADVANCED WELDING PROCESSES

(CERT WT12)

WEL 224	Advanced Gas Tungsten Arc Welding	4
WEL 230	Pipe Welding I	4
WEL 231	Pipe Welding II	4
<b>Total Advanced Welding Processes Certificate credits:</b>		<b>12</b>
<b>Total credits for Welding Technician Certificate:</b>		<b>45</b>

Students seeking the Welding Technology A.A.S. degree or Welding Technician certificate shall take the Accuplacer assessment test prior to beginning the program. The certificate seeking student's assessment scores should qualify them for classes at the 090 level in English, reading, and math. Degree students should qualify for college level courses. Students not meeting the assessment standards will be required to take the appropriate remedial courses in any deficient area or demonstrate proficiency through reassessment in accordance with Aims assessment policy. *Remedial courses may be taken concurrently with welding courses. Degree seeking students are required to complete all remedial coursework within the first 30 semester hours of classes.*

Students who assess below the 030 level in English and math, or the 060 level in reading will be required to reassess at the above level or higher prior to beginning the welding program. Students not able to begin the program due to low assessment scores will be referred to the Aims Continuing Education Division for advising on basic skills programs.

Students in the Welding Technician Certificate or the Welding Technology A.A.S. degree programs will also be required to complete the Work Keys Assessment. These tests are administered by the welding faculty as an integral part of the program.

### PERSONAL INTEREST COURSES

The following courses are designed to be customized to the individual student's personal interests and are not applicable to the Welding Technology A.A.S. degree or certificates:

WEL 175	Special Topics	1-6
WEL 176	Special Topics	1-6
WEL 177	Special Topics	1-6
WEL 275	Special Topics	1-6
WEL 276	Special Topics	1-6
WEL 277	Special Topics	1-6

Welding

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### WELDING TECHNOLOGY ADVISORY COMMITTEE

Dave Adler

General Air

Orvin Adolf

Harsh International

Glenn Ashley

Bollman Technical Education Center

Heidi Lanning

Eaton High School

Wade Lutz

Big R Manufacturing

Gary Magnuson

Xcel Energy

Michelle Parrott

Xcel Energy

