

## Welding Technology—AAS

The program includes hands-on application of shielded metal arc welding (SMAW), gas tungsten arc welding (GTAW), and gas metal arc welding (GMAW) processes, in all positions, using pipe, plate and structural shapes. The welding training you will receive through this program can prepare you to work in a wide range of areas, such as shipbuilding, aerospace technology, automobile manufacturing, or working on the pipeline. Welding is also used to connect beams and structures in buildings, for bridges, and much more. This means the potential opportunities for where you can find employment are even greater than you might have thought.

There are over 100 kinds of welding methods and your training can introduce you to the most commonly used, such as arc welding, TIG, MIG, and soldering and brazing by a certified welding inspector. You will be shown how to perform various techniques, such as flat, horizontal, overhead, and vertical welding. You could also learn the difference between manual, semi-automated, and automated welding. Students can be certified in these areas of welding by the American Welding Society (AWS) and The National Center for Construction Education and Research (NCCER). The requirements for this program enable the individual to earn several welding certifications.

The Associate of Applied Science degree in Welding Technology is designed to prepare the individual for a career as a welding technician in the fabrication, construction and manufacturing industries.

# ASSOCIATE OF APPLIED SCIENCE WELDING TECHNOLOGY

#### **Total Program = 60 Credit Hours**

The fourth digit in the course number indicates the number of credit hours.

#### **UNIVERSITY REQUIREMENT—1 OR 3 HOURS**

University—1 HOUR or 3 HOURS			Department
UNIV	1001	Principles of Academic Success I	University
UNIV	1003	Principles of Academic Success III	University
The 3-hour credit course is required for students who must take at least one			
remedial course. Students who are not required to take a remedial course may			
take the 3-hour credit course. In both situations, the courses (1-hour or 3-hour)			
count toward electives.			

#### **GENERAL EDUCATION CORE—15 HOURS**

English—6 H	DURS	Department
ENG 1003	B Freshman English I	English
ENG 1013	B Freshman English II	English
Math/Compu	iter—6 HOURS	Department
MATH 1013	B Technical Mathematics (or higher)	Mathematics
CIS 1503	Microcomputer Applications I	Comp Info Sys
Psychology/S Choose one b	Department	
PSY 2013	3 Introduction to Psychology or	Psychology





SOC	2213	Principles of Sociology or	Sociology
HIST	2763	The United States to 1876 or	History
HIST	2773	The United States since 1876	History

### WELDING TECHNOLOGY CORE—42 HOURS

Requirements—42 HOURS			Department
WELD	1003	Shielded Metal Arc Welding	Welding Technology
WELD	1103	Gas Metal Arc Welding	Welding Technology
WELD	1203	Gas Tungsten Arc Welding	Welding Technology
WELD	1303	Metal Fabrication	Welding Technology
WELD	1013	Visual Inspection (new course)	Welding Technology
WELD	2013	Advanced Visual Inspection (new course)	Welding Technology
WELD	2023	Fluxcore (new course)	Welding Technology
WELD	2003	Advanced Shielded Metal Arc Welding	Welding Technology
WELD	2203	Advanced Gas Tungsten Arc Welding	Welding Technology
WELD	2113	Pipe Welding	Welding Technology
WELD	2303	Advanced Metal Fabrication	Welding Technology
WELD	2103	Advanced Gas Metal Arc Welding	Welding Technology
WELD	2123	Technical Blueprint Reading	Welding Technology
CMT	2113	Industrial Environment	Computerized Mach

### **TECHNICAL RELATED ELECTIVES—3 HOURS**





## Welding Technology—TC

The Technical Certificate in Welding Technology prepares the individual to obtain marketable welding skills and the opportunity to earn various welder certifications as defined by the American Welding Society. Courses completed in this program may be applied toward the Associate of Applied Science degree in Welding Technology.

# TECHNICAL CERTIFICATE WELDING TECHNOLOGY

#### **Total Program = 33 Credit Hours**

The fourth digit in the course number indicates the number of credit hours.

Requirements—6 HOURS			Department
COM ENG	1003 1003	Career Communications or Freshman English I	Career Communications
MATH	1013	Technical Mathematics (or higher)	Mathematics
Welding Technology Core—21 HOURS			Department
WELD	1003	Shielded Metal Arc Welding	Welding Technology
WELD	1103	Gas Metal Arc Welding	Welding Technology
WELD	1203	Gas Tungsten Arc Welding	Welding Technology
WELD	1303	Metal Fabrication	Welding Technology
WELD	1013	Visual Inspection	Welding Technology
WELD	2123	Technical Blue Print Reading	Welding Technology
CMT	2113	Industrial Environment	Computerized Mach
Advanced Welding Technology Core—6 HOURS Department			Department
Choose	e two fron	n below:	
WELD	2003	Advanced Shielded Metal Arc Welding	Welding Technology
WELD	2103	Advanced Gas Metal Arc Welding	Welding Technology
WELD	2113	Pipe Welding	Welding Technology
WELD	2203	Advanced Gas Tungsten Welding	Welding Technology





## Welding Technology—CP

The Certificate of Proficiency in Welding Technology prepares the student for entry-level employment as a structural welder. Courses completed in this program may be applied toward the Technical Certificate and the Associate of Applied Science degree in Welding Technology.

# CERTIFICATE OF PROFICIENCY WELDING TECHNOLOGY

#### **Total Program = 12 Credit Hours**

The fourth digit in the course number indicates the number of credit hours.

Requirements—12 HOURS			Department
Choose	any of th	ne following courses:	
WELD	1003	Shielded Metal Arc Welding	Welding Technology
WELD	1103	Gas Metal Arc Welding	Welding Technology
WELD	1203	Gas Tungsten Arc Welding	Welding Technology
WELD	2123	Technical Blueprint Reading	Welding Technology

