

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 fifth digit in the course number indicates the number of credit hours.

UNIVERSITY REQUIREMENT—1 OR 3 HOURS

University—1 HOUR or 3 HOURS

UNIV 10001 Principles of Academic Success I

UNIV 10003 Principles of Academic Success III

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 HOURS

ENGL 10103 Freshman English I

ENGL 10203 Freshman English II **or**

ENGL 20203 Technical Writing & Communication

Math/Computer—6 HOURS

MATH 10103 Technical Mathematics (or higher)

CPSI 10003 Microcomputer Applications I

Psychology/Sociology/History—3 HOURS

Choose one below:

PSYC 11003 Introduction to Psychology **or**

SOCI 10103 Principles of Sociology **or**

HIST	21103	The United States to 1876 or
HIST	21203	The United States since 1876

WELDING TECHNOLOGY CORE—42 HOURS

Requirements—42 HOURS

WELD	11103	Visual Inspection
WELD	12173	Gas Metal Arc Welding
WELD	13003	Metal Fabrication
WELD	14073	Shielded Metal Arc Welding
WELD	15103	Pipe Welding
WELD	19033	Gas Tungsten Arc Welding
WELD	21103	Advanced Visual Inspection
WELD	20203	Advanced Metal Fabrication
WELD	21073	Technical Blueprint Reading
WELD	21303	Advanced Gas Metal Arc Welding
WELD	22003	Advanced Gas Tungsten Arc Welding
WELD	22853	Advanced Shielded Metal Arc Welding
WELD	24073	Fluxcore
MSTE	21103	Industrial Environment

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 fifth digit in the course number indicates the number of credit hours.

Requirements—6 HOURS

COMM	12053	Career Communications or
ENGL	10103	Freshman English I
MATH	10103	Technical Mathematics (or higher)

Welding Technology Core—21 HOURS

WELD	11103	Visual Inspection
WELD	12173	Gas Metal Arc Welding
WELD	13003	Metal Fabrication
WELD	14073	Shielded Metal Arc Welding
WELD	19033	Gas Tungsten Arc Welding
WELD	21073	Technical Blue Print Reading
MSTE	21103	Industrial Environment

Advanced Welding Technology Core—6 HOURS

Choose two from below:

- WELD 15103 Pipe Welding
- WELD 21303 Advanced Gas Metal Arc Welding
- WELD 22003 Advanced Gas Tungsten Welding
- WELD 22853 Advanced Shielded Metal Arc Welding

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 fifth digit in the course number indicates the number of credit hours.

Requirements—12 HOURS

Choose any of the following courses:

- WELD 12173 Gas Metal Arc Welding
- WELD 14073 Shielded Metal Arc Welding
- WELD 19033 Gas Tungsten Arc Welding
- WELD 21073 Technical Blueprint Reading