

WELDING FABRICATION & MANUFACTURING TECHNOLOGY

CAREER PATHS

BUILDING TRADES/FABRICATION WELDER
SHEET METAL FABRICATION WELDER
METAL LATHES OPERATOR
ORNAMENTAL METAL SCULPTOR

SALARY

\$48,940*
MEDIAN ANNUAL INCOME

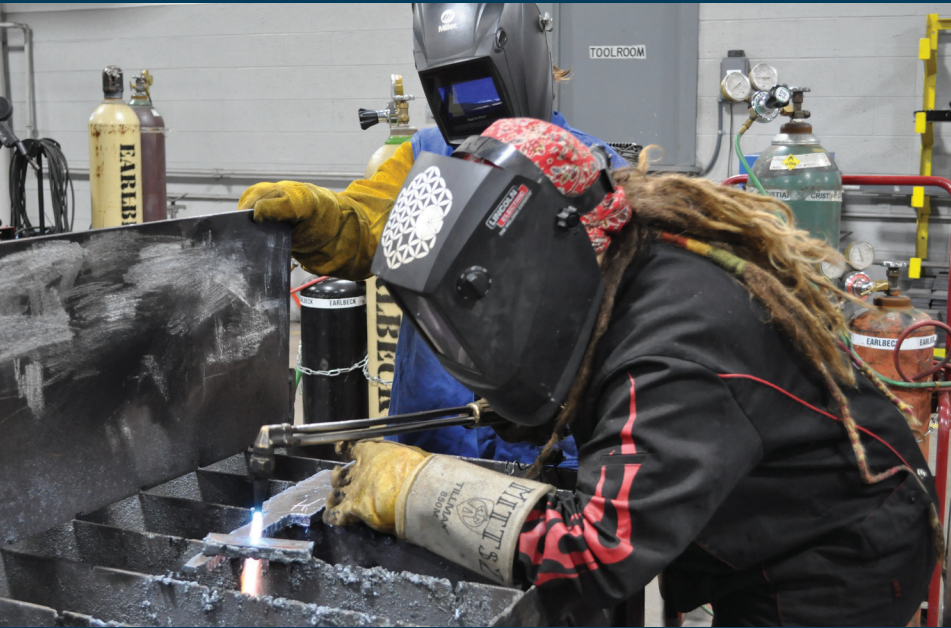
JOB GROWTH

2022-2032: 1%*



SCAN FOR YOUR FUTURE

WELDING FABRICATION & MANUFACTURING TECHNOLOGY



PROGRAM OBJECTIVE

Johnson College's two-year Associate Degree Welding Fabrication & Manufacturing Technology program will expand on our one-year welding certificate course. During the first year, students will learn about safety, hand tools, metallurgy, print reading, weld symbols, and different types of welding including Shielded Metal Arc (Stick) Gas Metal Arc (MIG), Gas Tungsten Arc (TIG), and Flux-cored Arc. Then during their second year, students will study custom fabrication, pipe welding, and fitting, basic rigging and shop drawings, piping layouts, and learn non-destructive testing methods. In addition to attaining American Welding Society certifications, our two-year program offers students the ability to test for American Society of Mechanical Engineers (ASME) pipe welding certifications.

READY. SET. WORK.

- Goal 1:** Graduates will be prepared for entry level employment in welding or fabrication.
- Goal 2:** Graduates will possess the skills necessary to correctly and safely operate machines used in the production of mechanical parts.
- Goal 3:** Graduates will possess the skills of an entry-level welder using common welding processes of various levels.

Applicants are encouraged to arrange a campus visit and a personal information session with a Recruitment Advisor. Appointments may also be made to meet with appropriate faculty and current students.

CAREER OPPORTUNITIES

Graduates will work as welders, welder/fabricators, fitters, ornamental metal sculptors, and operators of metal lathes or milling machines.

Typical employers in the welding industry include structural steel fabricators, custom metal shops, industrial contractors, shipyards, pipe and pressure vessel fabricators, and retail welding sales.

PROGRAM COURSES

CREDITS

SEMESTER 1

Blueprint Reading	2
Applied Mathematics for Welders	3
First-Year Experience	1
Shielded Metal Arc Welding I	2
Shielded Metal Arc Welding I Lab	4
Gas Metal and Flux Cored Arc Welding I	1
Gas Metal and Flux Cored Arc Welding I Lab	2

SEMESTER 2

Microcomputer I	3
English Composition I or Industry Communication	3
Gas Metal and Flux Cored Arc Welding II	1
Gas Metal and Flux Cored Arc Welding II Lab	2
Gas Tungsten Arc Welding	2
Gas Tungsten Arc Welding Lab	4

SEMESTER 3

Humanities Elective	3
Science Elective	3
Introduction to Weld Testing	1
Pipe Welding I Uphill	1
Pipe Welding I Uphill Lab	4
Fundamentals of Metal Cutting	1
Fundamentals of Metal Cutting Lab	2

SEMESTER 4

Social Science Elective	3
College Algebra and Trigonometry	3
Introduction to Fabrication	1
Introduction to Fabrication Lab	3
Pipe Welding	4
Subtractive Manufacturing	1
Subtractive Manufacturing Lab	2

MINIMUM CREDITS TO GRADUATE

62

This semester layout is based off of a fall start. Students who start in the spring will be required to attend an additional semester to complete their degree.

There may be special admission requirements for this program. Please speak with a Recruitment Advisor by calling **570-702-8856** or visit our website johnson.edu to review our requirements.