

A close-up, low-angle shot of a welding torch tip on the right, emitting a bright, intense blue and white flame. Numerous bright orange and yellow sparks are flying out from the torch, creating a dynamic and energetic scene. The background is dark and industrial, with some metallic surfaces visible.

2025

TRAINING COURSE CATALOG

WELDING CONCEPTS TRAINING INC

SPARK YOUR CAREER IN
WELDING

Why become a welder?

High Demand: Welders are essential in industries like construction, manufacturing, aerospace, and automotive, ensuring consistent job opportunities.

Good Pay: Welding offers competitive wages, with experienced welders earning above-average salaries, and potential for higher pay with specialization.

Job Security: With a constant need for skilled welders, the profession offers long-term job stability, especially as infrastructure projects and industries grow.

Hands-on Work: For those who enjoy working with their hands, welding offers a chance to craft, repair, and build tangible products that impact everyday life.

Variety of Industries: Welders can work in a wide range of fields, from designing intricate art pieces to constructing large-scale bridges and even aerospace projects.

Global Opportunities: Welding skills are transferable worldwide, allowing welders to work in different countries or take on international projects.

Career Advancement: Entry-level welders can advance to roles like welding supervisor, inspector, or even start their own welding business.

Creativity and Problem Solving: Welding allows for creative design in custom metalwork, while also solving complex engineering and structural problems.

Low Barrier to Entry: Many welding programs are short-term and affordable, offering an efficient path into the workforce compared to other trades.

Physical and Mental Reward: The sense of accomplishment from seeing a completed project that was built from scratch provides both mental satisfaction and physical reward.



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Office: 1825 21st Street, Detroit, MI 48216

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Web: www.wct-detroit.com

Our mission is to equip each student with the marketable skills needed to secure and advance in a welding career by providing expert instruction

This curriculum is designed to meet the industrial demands for welders and is continuously updated to meet specific needs as the trade and its professionals continue to evolve.

We offer training in the following three areas:

Welding Skills Training

Developed to teach actual welding techniques and manipulative skills in all major welding processes. Students new to welding, and those with some previous experience, will achieve a solid understanding of welding processes and the careers available to them.

Technical Training

Designed to teach the theory of welding and related subjects through short courses for technical and management personnel. This creates a better understanding and relationship among workers and managers.

Customized Field Training

Created to solve specific performance issues at your company location. Our instructors will be available to address the issues any individual technician may be experiencing and assist in correcting the problem, empowering them to excel in their role. This is beneficial both to the employer and the welder.

Shop facilities:

Lab Equipment:

The lab is equipped with eight multi-process inverter welding machines capable of producing weld in the primary welding processes, including:

- SMAW (Arc/stick)
- GMAW (Mig)
- GTAW (Tig)

Our training center is located at **1825 21st Street, Detroit, Michigan 48216**. For student comfort, our training lab includes a ventilation system to exhaust smoke and fumes and is equipped with heat and air conditioning. However, WCT courses are can be modified to bring the program to the customer's location.

Instructors



Richard Selonke

A Detroit native who brings years of welding and fabrication experience to his role.

The wealth of knowledge that he brings to the program began by learning to weld on the job in Southwest Detroit in the early 1990's, and then earning welding credentials in the United Kingdom as well as the USA, his experience is broad. Before returning to America, he spent several years working in England performing construction and marine welding. With projects ranging from the

London Cruise Terminal restoration on the River Thames, to offshore platforms in the North Sea, he can offer insight into many potential welding opportunities, as well as solutions to some challenging situations in which welders may find themselves.



Our purpose-built training center was developed to ensure we are offering a comprehensive training environment.

GMAW - Entry to Gas Metal Arc Welding

Part Time: 9 weeks / Full Time: 4 weeks

160 Clock hours

CREDENTIAL EARNED: Qualification in GMAW Fundamentals

Course Objective:

To produce quality single and multiple pass fillet welds on carbon steel plate in all positions and to produce quality groove welds on carbon steel plate in the vertical positions using short circuit transfer advancing up to spray transfer on 1/2-inch carbon steel in the horizontal position. Quality is determined through visual inspection and guided testing according to AWS requirements.

Course Content:

Our mig welding course will provide the student with a thorough understanding of welding safety, gas metal arc welding equipment setup and adjustments, metal transfer, and shielding gases. It also develops the skill necessary to make quality gas metal arc welds in all positions on mild steel of 1/16, 3/8 and 1/2-inch plate, using short circuit transfer. This course illustrates problems associated with welding situations and provides corrective information as well as basic fabrication techniques.

Testing:

To pass this course, the student is required to pass a visual inspection and a break test using 1/2 inch mild steel plate in the 2F position as specified by AWS Code D1.1 for structural steel. Higher level 3G and 4G qualifications may be earned by advanced welders.

Upon completion of this course, the student should be able to perform production and maintenance welding on mild steel including high volume fabrication, automotive assembly and repair, structural welding related to buildings and code welding-production on light, medium and heavy assemblies.

COURSE FEE: \$5000



SMAW - Entry to Shielded Metal Arc Welding

Part Time: 9 weeks / Full Time: 4 weeks

160 Clock hours

CREDENTIAL EARNED: Qualification in SMAW Fundamentals

Course Objective:

To be able to produce quality single/multi-pass fillet and square groove welds in all positions using E-6010, E-7018, and E-6013 electrodes.

Course Content:

This course provides the student with a thorough technical understanding of shielded metal arc welding (also known as stick or arc welding), welding safety, arc welding power sources, electrode classifications and selection. It also provides training to develop the skills necessary to make quality shielded metal arc welds in all positions on mild steel from 1/4 inch to 1/2 inch plate, single and multiple pass, using mild steel, and a variety of electrodes, with DC welding current.

Testing:

The student must pass the visual and break tests on fillet welds in the 2F (horizontal) position with (E-7018) electrodes in the horizontal. Higher level 3G and 4G qualifications may be earned by advanced welders.

Upon completion of this course, the student should be able to perform production welding, millwright and general maintenance welding.

COURSE FEE: \$5000



SMAW/GMAW Combination Welding Course

Part Time: 12 weeks / Full Time: 5 weeks

200 Clock hours

CREDENTIAL EARNED: Qualification in SMAW and GMAW Fundamentals

Course Objective:

To be able to produce quality single / multi-pass fillet and square groove welds ins all positions and joint designs, using both SMAW and GMAW welding processes.

Course Objective:

This course provides the student with a thorough understanding of arc welding, safety, power sources, electrode/wire classifications and selection. It also provides training to develop the skill necessary to make quality Shielded Metal and Gas Metal Arc Welds in all position on material from 16 gauge to 1/2-inch plate, single and multi-pass, using mild steel with DC welding current.

WELDING 103



Comprehensive career preparation.

Continued

200 Clock hours

Testing:

The student must pass the visual and break tests on fillet welds in the 2F (horizontal) position with (E-7018) electrodes in the horizontal positions, for the SMAW portion of the program.

To pass the GMAW process the student is required to pass a visual inspection and a break test using 1/2 inch mild steel plate in the 2F position.

Higher level 3G and 4G qualifications, in either or both processes, may be earned by advanced welders.

Upon completion of this course, the student should be able to perform production welding, millwright and general maintenance welding in both manufacturing and production.

COURSE FEE: \$6500



Intro to Welding - Express short course

Part time: 4 weeks / Full time: 2 week 80 Clock hours

CREDENTIAL EARNED: Qualification in SMAW or GMAW Fundamentals

Course Objective:

For anyone with an interest in welding for artwork, home projects, and for hobbyist who may want basic welding skills.

Course Options:

Shielded Metal Arc Welding (SMAW/Stick)
• Welding safety and PPE. • Welder setup and speration. • Electrode types and selection. • Practice on 16-gauge sheet metal and 1/4-inch carbon steel plate.

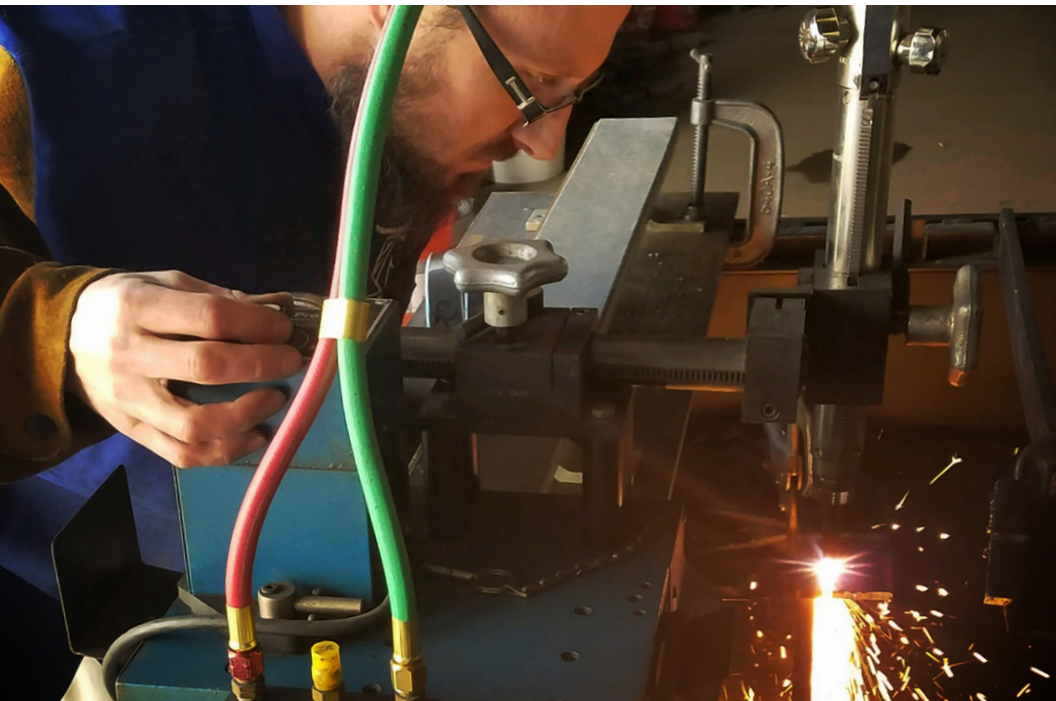
Gas Metal Arc Welding (GMAW/Mig)
• Welder setup and operation. • Wire type and diameter selection. • Shielding gas types and uses. • Practice on 16-gauge sheet metal and 3/16-inch carbon steel plate.

Testing:

To pass this course, the student must pass a visual inspection of weld quality.

Upon completion of the course, student will be able to perform basic welds suitable for sculptural and workshop projects.

COURSE FEE: \$2500



Training Methods

Our training is skills-based, continually updated to reflect the best and most current industrial practices, and uses specific performance objectives for each phase of training. A basic overview of our methods include:

- **Lecture/Discussion** with audio-visual aids to introduce key concepts.
- **Demonstration** which models appropriate techniques and safety practices.
- **Supervised individual practice** with one-to-one instructor coaching.
- **Course material** includes video-based training programs, workbooks and tests on the major welding processes.
- **Practice material** is all new material, we do not use scrap metal for welding practice and testing.

Terms of Admission

Admission requirements:

Individuals interested in enrolling in any of our programs must be 18 years of age. Students under 18 years of age must have a signed letter of consent from the individual's parent or guardian. All applicants will be granted an entrance interview to determine if the applicant has a full understanding of the training provided and the necessary abilities to succeed in the training programs.

Registration fees and tuition:

The tuition fee is for each individual discipline is \$5000, any combination of two is \$6500. We have an interest-free installment plan, payable in full before completion. Welding Concepts Training, Inc. now offers student loans through Meritize.



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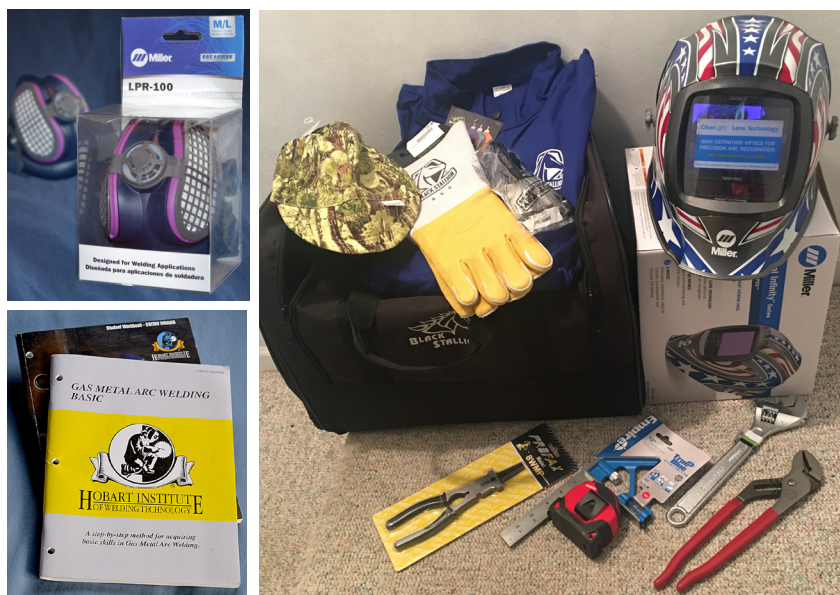
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** To ensure quality and comprehensive training development, please make your request a minimum of 30 days prior to your desired inception date of the curriculum. Costs quotations are available upon request.*

Student gear bags include a welding-quality respirator with replaceable filters, among their tools and PPE.



In association with



Preferred equipment and suppliers



**EARN AWS WELDER QUALIFICATIONS
IN AS LITTLE AS 4 WEEKS OF FULL TIME TRAINING**



**WELDER
QUALIFICATION
TESTING AVAILABLE**

SMAW GMAW GTAW



In addition to our training center in Detroit, we also conduct welding and technical training programs on-site for companies, contractors and various associations. Contact us for details and rates



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48216 21st Street, Detroit, MI 48225

- › **SMAW (Stick) - Shielded Metal Arc Welding**
- › **GMAW (Mig) - Gas Metal Arc Welding**
- › **GTAW (Tig) - Gas Tungsten Arc Welding**
- › **FCAW (Tig) - Flux Core Arc Welding**
- › **Safety - Precautions and procedures**
- › **Oxy-fuel Cutting - Manual and machine**



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