

W.T.E.C., Inc.

***"In-depth training by certified industry professionals
preparing workers to be industry ready welders"***

W.T.E.C., Inc.

**2016-2017
Course Catalog**

W.T.E.C., Inc.
51787 M-40 North
PO Box 278
Marcellus, MI 49067

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WEBSITE: www.aluminum-welding-school.com

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About Our Company

W.T.E.C., Inc. was born out of an industry need to find and hire knowledgeable, trained and certified welders. Fab Masters Co, Inc. (FMC) discovered "experienced welders" were lacking in the fundamental knowledge and training for consistent quality certifiable welds. We developed our own training program to train welders for the demands of AWS and Military standards. Our program was recognized by a local area education facility that asked us to make training available for them.

Description of Facilities

Our training areas are within the 100,000 + sq. ft. FMC manufacturing complex where students can view actual production welding operations. Lab training areas are located within the production area, but isolated from production traffic and operations for safety. Lecture training is located within a conference area near administration offices.

Instructors & Office Personnel

Instructors are required at a minimum to have 2 years of welding experience in type and AWS certification. Instructors must show the ability to teach, answer questions, have good communication skills, and perform all subject matter.

Office personnel are a part of the FMC staff and have shown the skills required for accounting, record keeping and information dissemination.

RONALD TROXELL-SCHOOL PRESIDENT/ADMINISTRATOR and OWNER

MIKE BUMGARNER-AWS QCI-96 CERTIFIED WELDING INSPECTOR

AWS Q5-91 CERTIFIED WELDING EDUCATOR

ANST LEVEL 2: UT, MT& PT

AWS-RI

LEVI PURINS-WELDING INSTRUCTOR

AWS QC5 CERTIFIED WELDING EDUCATOR

AWS QC1 CERTIFIED WELDING INSPECTOR

KEN KEIFER-WELDING, ROBOTIC INSTRUCTOR

ROD LITTELL-SUBSTITUTE WELDING INSTRUCTOR

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W.T.E.C., Inc. will be closed in observance of the following holidays:

New Year's Day
Easter
Memorial Day
Independence Day
Labor Day
Thanksgiving Thursday & Friday
Christmas

Training Fees

All training and certification fees are the responsibility of the student

Program Name	Program Cost	Certification Fees*
TIG Welding	\$2,550	\$400
MIG Welding	\$2,550	\$400
Robotics Welding Programming	\$3,550	N/A
MIG and TIG Welding	\$3,900	\$800
Welding Certification Testing Services at W.T.E.C., Inc.	n/a	\$400

*Only students that pass the W.T.E.C., Inc welding curriculum will be permitted to apply for certification testing.

The American Welding Society (AWS) Certified Welder Program is established to identify all elements necessary to implement a National Registry of Certified Welders. Four key elements are identified:

- (1) Welder Performance Qualification Standards criteria
- (2) Welding Procedure Specifications
- (3) Accredited Performance Qualification Test Facilities
- (4) AWS welder certification requirements

The purpose of this standard for AWS Certified Welders is to document the ability of welders to deposit sound welds and to impose controls on the documentation and maintenance of certification.

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How to enroll:

Students may request an enrollment form by calling 269-646-5315. This form can be faxed, mailed or e-mailed by request.

Fax: 269-646-2224

Email: rtroxell@fabmasters.net

W.T.E.C., Inc.

PO Box 278

Marcellus, MI 49067

Students are required to complete and submit an application form with payment in full to W.T.E.C., Inc. up to 5 working days prior to course start date.

Maximum students per class are limited to:

8 students for GTAW (TIG) and GMAW (MIG) class

8 students for GTAW (TIG) class

8 students for GMAW (MIG) class

4 students per class for Robotics Welding Programming class

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Course Descriptions

GMAW (MIG) Welding 101A, 101S

FEE: \$2,950.00

Contact Hours: 85 24 hours classroom instruction 61 hours hands-on lab

AUDIENCE:

This course is designed for individuals that are seeking the skills required for production or industrial MIG welding for aluminum or steel. Current welders can significantly advance their skill level while individuals entering the field will get the training and experience needed for entering production or industry level positions.

PREREQUISITES: None

COURSE DESCRIPTION:

In this course, the instructor will provide lecture, hands-on exercises, and printed materials to increase the participant's knowledge and skills on the procedures and processes of the GMAW machines and techniques. The participants will demonstrate basic welding skills through hands-on lab exercises and the performance of welds. Participants will set up GMAW machines and demonstrate techniques, typical weldments, and repair welds.

LEARNING OUTCOMES:

Upon completion of this course, the participants will be able to:

- Describe the GMAW welding processes variables: voltage, wire feed speed, electrode extension
- Describe the GMAW machine controls/variables: settings, adjustments
- Identify GMAW advanced machine settings/functions.
- Identify shielding gases and the various characteristics for GMAW applications.
- Demonstrate weld quality.
- Identify common weld symbols
- Identify common discontinuities, defects, and cures for those common defects and discontinuities.

CERTIFICATE OF COMPLETION

Participants will be graded on a pass/fail basis. The participants will receive a Certificate of Completion based on a score of 70% or higher on written tests and by demonstrating the ability to perform welds using GMAW processes and machines during lab assignments. Students that pass the class will be eligible to test for AWS Certification.

American Welding Society (AWS) Certification Test (Test consists of welding 2 coupons for testing in flat or horizontal position) Testing and documentation will be provided by an independent licensed AWS inspector and may take up to 4 weeks for processing.

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GTAW (TIG) Welding 102A, 102S

FEE: \$2,950.00

CONTACT HOURS: 85 24 hours classroom instruction 61 hours hands-on lab

AUDIENCE:

This course is designed for individuals that are seeking the skills required for production or industrial TIG welding for aluminum or steel. Current welders can significantly advance their skill level while individuals entering the field will get the training and experience needed for entering production or industry level positions.

PREREQUISITES: None

COURSE DESCRIPTION:

In this course, the instructor will provide lecture, hands-on exercises, and printed materials to increase the participant's knowledge and skills on the procedures and processes of the GTAW machines and techniques. The participants will demonstrate basic welding skills through hands-on lab exercises and the performance of welds. Participants will set up GTAW machines and demonstrate techniques, typical weldments, and repair welds.

LEARNING OUTCOMES:

Upon completion of this course, the participants will be able to:

- Describe the GTAW welding processes variables: voltage, wire feed speed, electrode extension
- Describe the GTAW machine controls/variables: settings, adjustments
- Identify GTAW advanced machine settings/functions.
- Identify shielding gases and the various characteristics for GTAW applications.
- Demonstrate weld quality.
- Identify common weld symbols
- Identify common discontinuities, defects, and cures for those common defects and discontinuities.

CERTIFICATE OF COMPLETION

Participants will be graded on a pass/fail basis. The participants will receive a Certificate of Completion based on a score of 70% or higher on written tests and by demonstrating the ability to perform welds using GTAW processes and machines during lab assignments. Students that pass the class will be eligible to test for AWS Certification.

American Welding Society Certification Test (Test consists of welding 2 coupons for testing in flat or horizontal position) Testing and documentation will be provided by an independent licensed AWS inspector and may take up to 4 weeks for processing.

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MIG and TIG Welding for Aluminum 103A

FEE: \$4,700.00

CONTACT HOURS: 150 40 hours classroom instruction 110 hours hands-on lab

AUDIENCE:

This course is designed for individuals that are seeking the skills required for production or industrial MIG and TIG welding for aluminum. Current welders can significantly advance their skill level while individuals entering the field will get the training and experience needed for entering production or industry level positions.

PREREQUISITES: None

COURSE DESCRIPTION:

This program provides the opportunity for classroom supported, hands on training to assist participants in gaining the real world MIG and TIG welding skills employers demand. The instructor will provide lectures, demonstrations, and printed materials to increase the participant's knowledge and skills to safely use GMAW and GTAW machines on aluminum products.

Topics include:

- GMAW and GTAW welding process variables for aluminum: voltage, wire feed speed.
- GMAW and GTAW machine controls/variables for aluminum: settings adjustments.
- GMAW and GTAW advanced machine settings/functions.
- Identification of shielding gases and the various characteristics for GMAW and GTAW applications.
- Weld quality.
- Common weld symbols.
- Common discontinuities, defects, and cures for those common defects and discontinuities.

CERTIFICATE OF COMPLETION

Participants will be graded on a pass/fail basis. The participants will receive a Certificate of Completion based on a score of 70% or higher on written tests and by demonstrating the ability to perform welds using GMAW >AW processes and machines during lab assignments in aluminum. Students that pass the class will be eligible to test for AWS Certification.

American Welding Society Certification Test (Test consists of welding 2 coupons for testing in flat or horizontal position) Testing and documentation will be provided by an independent licensed AWS inspector and may take up to 4 weeks for processing.

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MIG and TIG Welding for Steel 103S

FEE: \$4,700.00

CONTACT HOURS: 150 40 hours classroom instruction 110 hours hands-on lab

AUDIENCE:

This course is designed for individuals that are seeking the skills required for production or industrial MIG and TIG welding for steel. Current welders can significantly advance their skill level, while individuals entering the field will get the training and experience needed for entering production or industry level positions.

PREREQUISITES: None

COURSE DESCRIPTION:

This program provides the opportunity for classroom supported, hands on training to assist participants in gaining the real world MIG and TIG welding skills employers demand.

The instructor will provide lectures, demonstrations, and printed materials to increase the participant's knowledge and skills to safely use GMAW and GTAW machines on steel products.

Topics include:

- GMAW and GTAW welding processes variables for steel: voltage, wire feed speed.
- GMAW and GTAW machine controls/variables for steel: settings adjustments.
- GMAW and GTAW advanced machine settings/functions.
- Identification of shielding gases and the various characteristics for GMAW and GTAW applications.
- Weld quality.
- Common weld symbols.
- Common discontinuities, defects, and cures for those common defects and discontinuities.

CERTIFICATE OF COMPLETION

Participants will be graded on a pass/fail basis. The participants will receive a Certificate of Completion based on a score of 70% or higher on written tests and by demonstrating the ability to perform welds using GMAW & GTAW processes and machines during lab assignments in steel. Students that pass the class will be eligible to test for AWS Certification.

American Welding Society Certification Test (Test consists of welding 2 coupons for testing in flat or horizontal position) Testing and documentation will be provided by an independent licensed AWS inspector and may take up to 4 weeks for processing.

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Robotic Welding Programming Training 201

FEE: \$3,550.00

CONTACT HOURS: 64 24 hours classroom instruction 40 hours hands-on lab

AUDIENCE:

This course is designed for individuals that are seeking the skills required to program Fanuc robots for production or industrial welding. Current welders or individual very familiar with computers will have an advantage but anyone comfortable and willing to learn competencies in these areas will get the training and experience needed for entering production or industry level positions.

PREREQUISITES: GMAW (MIG) Welding 101, or 2 years minimum MIG welding experience, computer literate

COURSE DESCRIPTION:

This program provides the opportunity for classroom supported, hands-on training to assist participants in gaining the real world Fanuc robotics welding skills employers demand.

The instructor will provide lectures, demonstrations and printed materials to increase the participant's knowledge and skills to safely use Fanuc welding robots.

Topics include:

- Building of actual weld test programs.
- The ability to modify, add, and delete within programs.
- The ability to set up weld/weave schedules, run multiple weld/weave schedules within one program.
- The ability to run multiple programs with-in one program.
- Setting up proper torch angles.
- Weld process variables: Voltage, wire speed, travel speeds, proper wire stick-out, crater fill, and safety.
- Machine controls/variables: Programming of I/O instructions and commands.
- The ability to zero/calibrate Fanuc robots.
- The value of maintaining TCP.
- Identifying proper shielding gases and the various characteristics for Robotic MIG applications.
- Common discontinuities, defects and cures associated with robotic welding.

CERTIFICATE OF COMPLETION

Participants will be graded on a pass/fail basis. The participants will receive a Certificate of Completion based on a score of 70% or higher on written tests and by demonstrating the ability to perform welds using GMAW Robotic processes and machines during lab assignments.

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**Required Personal Protection Equipment
For W.T.E.C., Inc. welding classes**

Equipment / Supplies Provided by Student	<i>Approximate Cost</i>
1. Safety glasses	\$5.50
2. Long sleeve shirt and pants (denim or heavy cotton, not flannel)	
3. Leather shoes/boots (no tennis shoes)	
4. Leather welding gloves	\$6.00
5. Welding Helmet w/Shades	\$100.00
6. Welder Pliers	\$18.00
 <u>OPTIONAL ITEMS:</u>	
• Welding leathers, (sleeves, sleeve/apron combo, jacket)	\$5.00 to \$15.00
• Welding cap/hat	\$10.00

Equipment / Supplies Provided by W.T.E.C., Inc.

1. Ear plugs will be available for the students
2. Welding consumables and applicable metals
3. Certified Welding Machines (various brands and models)

Rules of Student Conduct

1. Students are required to utilize personal protective equipment as specified by the instructor.
2. Students are prohibited from possessing alcohol, weapons, illegal drugs or being on the premises under the influence of alcohol or drugs.
3. Students are required to remain in designated areas.
4. Students must comply with the instructor's directions.
5. Students must comply with all safety rules.

Policy for Misconduct

Students that fail to comply with the rules or are deemed by the instructor to be unsafe or disruptive will be suspended immediately and must leave the premise immediately. All cases will be reviewed by the President to determine if the suspension will be permanent or if reentrance may be possible. Permanently suspended students will not be allowed back on the premises, will automatically fail the class and will forfeit all tuition and fees paid to the school.

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Job Placement

W.T.E.C., Inc. does not guarantee job placement nor do they offer specific placement assistance for students. Listed below are websites that can help with career development and advancement.

Michigan Works	http://www.michigan.gov/jobs
Michigan Career Builder	http://www.micareerbuilder.com
Yahoo! Hot Jobs	http://www.hotjobs.com
Monster Job Search	http://www.monster.com
Welding Jobs.org	http://weldingjobs.org

Refund Policy

Students are liable for all costs associated with each program for which they are registered for within five (5) days prior to the beginning of each course. The tuition and fees paid by the applicant shall be refunded if the applicant is rejected by the school before enrollment or for any reason, the program is cancelled due to low enrollment. An application fee of not more than \$25.00 may be retained by the school if the applicant is denied. All tuition and fees paid by the applicant shall be refunded if requested within 3 business days after signing a contract with the school. All refunds shall be returned within 30 days. Once the 3 business days have elapsed the following policies will be followed: All tuition and fees paid by the enrollee shall be refunded if requested within five (5) business days prior to the course. Refunds will not be available if the request is within four (4) business days of the program start date or student drops the class after the start of a class.

THIS IS NOT A CREDIT GRANTING PROGRAM, NOR DOES W.T.E.C., Inc ACCEPT CREDIT FROM OTHER INSTITUTIONS OR PROGRAMS.

Class Schedules

GTAW (TIG) and GMAW (MIG) classes start every two months. Robotic Welder Programming classes start every two months. Call W.T.E.C. for exact dates and times. W.T.E.C., Inc. may reschedule class dates due to low enrollment, weather, loss of power, etc.

Attendance Policies

If a student should miss more than 10% of the total instruction time (contact hours) due to tardiness or absences the student will not be eligible to receive a certificate of completion for the class. There will not be any time for "make-up" work nor is there supplemental instruction for missed class time. Students are expected to be on-time and

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to attend every class. Students that might not qualify for a certificate of completion may still attend and participate in the remaining classes and labs.

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STUDENT ENROLLMENT APPLICATION / CONTRACT

Course Name _____

Course Number _____ Cost _____

Course Start Date _____
(Must be 18 years of age or older to enroll in this program)

Student Name _____

Address _____

City _____ State _____ Zip Code _____

Phone Number _____ Cell Phone _____

Email _____

Emergency Information:

Emergency Contact _____

Relationship _____

Address _____

City _____ State _____ ZipCode _____

Phone Number _____

Refund Policy

Students are liable for all costs associated with each program for which they are registered for within five (5) days prior to the beginning of each course. The tuition and fees paid by the applicant shall be refunded if the applicant is rejected by the school before enrollment or for any reason, the program is cancelled due to low enrollment. An application fee of not more than \$25.00 may be retained by the school if the applicant is denied. All tuition and fees paid by the applicant shall be refunded if requested within 3 business days after signing a contract with the school. All refunds shall be returned within 30 days. Once the 3 business days have elapsed the following policies will be followed: All tuition and fees paid by the enrollee shall be refunded if requested within five (5) business days prior to the course. Refunds will not be available if the request is within four (4) business days of the program start date or student drops the class after the start of a class.

The student agrees to adhere to student conduct, and policy of misconduct applies.

Student Signature _____ Date _____

School Administrator _____ Date _____

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W. T. E. C., I n c.
51787 M-40 North, PO Box 278 Marcellus, MI 49067 269-646-5315
Fax: 269-646-2224 Email: rtroxell@fabmasters.net

In compliance to Michigan Senate Bill 706,

Sec 1. W.T.E.C., Inc does not sell goods or services that are produced by students enrolled at W.T.E.C, Inc.

Sec 2a. W.T.E.C., Inc is a proprietary school licensed by the State of Michigan, under the authority and incompliance to the Department of Energy, Labor, and Economic Growth (DELEG).

Sec 2b. W.T.E.C., Inc has a bond of surety with Western Surety Company, 101 S. Phillips Ave, Sioux Fall, South Dakota 57104 , to provide indemnification to students if W.T.E.C., Inc fails to complete a course due to the closing of the school.

Sec 2c. The content forthwith (meaning, this is what you are reading) is W.T.E.C., Inc's written policy that violations of this act may be filed by students at W.T.E.C., Inc, with the DELEG. The DELEG address is:

Michigan Department of Energy, Labor, & Economic Growth
Proprietary School Unit
Victor Office Center
201 N. Washington Square, 2nd Floor
Lansing, MI 48913

A copy of this policy will be included in the students' course material. Additional copies are available from the school administrator.

Grievance Policy

W.T.E.C., Inc provides the tools and the environment students need to succeed. It will be up to the student to take ownership and provide the commitment and drive to take advantage of this opportunity. If for some reason a student feels that W.T.E.C., Inc. or the instructor is not living up to their commitment to deliver industry level training in an industrial environment, it is the students' responsibility to bring it to the attention of the school administrator. If one does not get a response, he or she may contact the school President, Ronald Troxell. If the issue is still unresolved, the student may file a complaint with the State of Michigan at www.michiganps.net