



Course Schedule

Merrill Institute. Offering you the foundation for a successful career. With real world, project-focused training, taught by AWS Certified Inspectors and Educators and utilizing state-of-the-art equipment - we'll develop in you - the skill set today's employers demand.





Featured AWS Certification Programs

One of the Merrill Institute's greatest attributes is its ability offer students flexibly. Whether you are seeking full-time enrollment to earn an AWS SENSE Level 1 Certification or aim to learn a specific welding process, the Merrill Institute can accommodate by offering welding programs to meet your needs.

Full Certification Program

WLD100 AWS Level 1 SENSE Welder (GMAW, GTAW, FCAW, SMAW)

Includes all modules WLD 101 - WLD 138
522 hours

This program provides training and AWS certification in the most common welding processes such as MIG(GMAW), TIG(GTAW), Flux-Core(FCAW) and Stick(SMAW). Participants who complete the program are certified as AWS Level-I Welders. A graduate Level-I Entry Welder shall be able to perform minor external repairs to equipment and accessories in all processes, and setup and perform:

- SMAW operations making fillet and groove welds in all positions within a limited thickness range on carbon steel.
- Gas Metal Arc Welding (short circuit transfer) operations, making fillet and groove welds in all positions within a limited thickness range on carbon steel. Gas Metal Arc Welding (spray transfer) operations making fillet and groove welds in limited positions within a limited thickness range on carbon steel.
- FCAW-SS/GS operations making fillet and groove welds in all positions within a limited thickness range on carbon steel.
- GTAW operations making fillet and groove welds in all positions within a limited thickness range on carbon steel, and in limited positions within a limited thickness range of austenitic stainless steel and aluminum.

Partial Certification Programs

WLD140 AWS SMAW

Includes modules WLD 101, 102, 103, 118, 128, 138, 119, 114, 124
262 hours

This program provides training and AWS certification in Shielded Metal Arc Welding (Stick). Upon completion of this program, participants will be able to perform:

- Minor external repairs to equipment and accessories and setup and perform SMAW operations making fillet and groove welds in all positions within a limited thickness range on carbon steel.

WLD150 AWS GMAW

Includes modules WLD 101, 102, 103, 118, 128, 138, 119, 115, 125
262 hours

This program provides training and AWS certification in Gas Metal Arc Welding (MIG/MAG). Upon completion of this program, participants will be able to perform:

- Minor external repairs to equipment and accessories and setup and perform Gas Metal Arc Welding (short circuit transfer) operations, making fillet and groove welds in all positions within a limited thickness range on carbon steel. Gas Metal Arc Welding (spray transfer) operations making fillet and groove welds in limited positions within a limited thickness range on carbon steel.

WLD160 AWS FCAW

Includes modules WLD 101, 102, 103, 118, 128, 138, 119, 116, 126
262 hours

This program provides training and AWS certification in Flux-Core Arc Welding. Upon completion of this program, participants will be able to perform:

- Minor external repairs to equipment and accessories and setup and perform FCAW-SS/GS operations making fillet and groove welds in all positions within a limited thickness range on carbon steel.

WLD170 AWS GTAW

Includes modules WLD 101, 102, 103, 118, 128, 138, 119, 117, 127, 137
282 hours

This program provides training and AWS certification in Gas Tungsten Arc Welding (TIG). Upon completion of this program, participants will be able to perform:

- Minor external repairs to equipment and accessories and setup and perform GTAW operations making fillet and groove welds in all positions within a limited thickness range on carbon steel, and in limited positions within a limited thickness range of austenitic stainless steel and aluminum.

Accredited Test Facility

The Merrill Institute is an official Accredited Test Facility (ATF) certified by the American Welding Society (AWS).

Do you need certification in a specific process or metal to land your dream job? Let us certify you. Upon successful completion of our 12-week program, all graduates of the Merrill Institute have the opportunity to utilize one test at our facility, at no additional cost. After successfully completing the requirements set forth by the testing facility, you are issued a globally recognized AWS certification that will brand you as a "Nationally Certified Welder," specific to the application in which you completed testing.





Individual Modules

The individual modules below provide a brief description of what students will learn throughout the five different AWS Certification Programs.

WLD 101 **Welding Occupational Orientation**

Builds the foundation for basic day-to-day welding operations. Module covers time card preparation, report generation and record keeping processes, as well as teaching students to follow verbal and written instructions to complete projects.

Prerequisites: None

Module Hours: 4.0

WLD 102 **Welding Safety & Health**

Explores the proper use and inspection of personal protection equipment and demonstrates proper safety practices in the work area. Introduction to the uses of ventilation equipment, hot zone operations, confined work space settings, precautionary labeling and MSDS info. Covers the proper use and inspection of equipment used for each welding and thermal cutting process.

Prerequisites: None

Module Hours: 8.0

WLD 103 **Welding Drawings & Symbols**

Teaches students to read, write and understand welding symbols. Students will interpret basic elements of sketches, weld symbols and fabricate parts from drawings.

Prerequisites: None

Module Hours: 60.0

WLD 118 **Thermal Cutting I**

Introduction to manual and mechanized oxyfuel gas cutting. Covers safety inspections, external repairs of equipment and accessories. Includes cutting of various types on carbon steel, all set by AWS SENSE standards.

Prerequisites: WLD 101, WLD 102

Module Hours: 30.0

WLD 128 **Thermal Cutting II**

Introduction to manual plasma arc cutting and cutting on various materials. Exploration of safety inspections and external repairs of PAC equipment.

Prerequisites: WLD 101, WLD 102

Module Hours: 20.0

WLD 138 **Thermal Cutting III**

Introduction to manual air carbon arc cutting. Students will perform safety inspections and minor external repairs to CAC-A equipment and setup and operate various CAC-A techniques using various materials.

Prerequisites: WLD 101, WLD 102

Module Hours: 20.0

WLD 114 **SMAW Process I**

Introduction to shielded metal arc welding, where inspection, repairs, setups, and operations of SMAW will be performed set by AWS SENSE standards.

Co-Requisites: WLD 101, WLD 102, WLD 103, WLD 118, WLD 128, WLD 138
(Full program completion only)

Module Hours: 20.0

WLD 124 **SMAW Process II**

Exploration of more advanced concepts and procedures of understanding and implementing SMAW. **Prerequisites:** WLD 114

Module Hours: 60.0

WLD 115 **GMAW Process I**

Introduction to gas metal arc welding and its various procedures and concepts from inspections to performing operations on carbon steel set by AWS SENSE standards.

Pre/Co-Requisites: WLD 101, WLD 102, WLD 103, WLD 118, WLD 128, WLD 138
(Full program completion only)

Module Hours: 20.0

WLD 125 **GMAW Process II**

Advanced module of gas metal arc welding that teaches students additional concepts and procedures. Includes lab time and instruction.

Prerequisite: WLD 115

Module Hours: 60.0

WLD 116 **FCAW-GS SS Process I**

Introduction to flux core arc welding process. Students will learn safety and repairs of FCAW equipment and perform various welds involved with FCAW.

Pre/Co-Requisites: WLD 101, WLD 102, WLD 103, WLD 118, WLD 128, WLD 138
(Full program completion only)

Module Hours: 20.0

WLD 126 **FCAW-GS SS Process II**

Advanced module of flux core arc welding. Additional operations and welding positions will be introduced set by AWS SENSE.

Prerequisite: WLD 116

Module Hours: 60.0

WLD 117 **GTAW-CS Process I**

Introduction to gas tungsten arc welding technique. Safety, setup, and operations of GTAW performed on carbon steel.

Pre/Co-Requisites: WLD 101, WLD 102, WLD 103, WLD 118, WLD 128, WLD 138
(Full program completion only)

Module Hours: 30.0

WLD 127 **GTAW-SS Process I**

Introduction to gas tungsten arc welding technique. Safety, setup, and operations of GTAW performed on carbon steel.

Pre/Co-Requisites: WLD 101, WLD 102, WLD 103, WLD 118, WLD 128, WLD 138
(Full program completion only)

Module Hours: 30.0

WLD 137 **GTAW-AL Process I**

Introduction to gas tungsten arc welding technique. Safety, setup, and operations of GTAW performed on carbon steel.

Pre/Co-Requisites: WLD 101, WLD 102, WLD 103, WLD 118, WLD 128, WLD 138
(Full program completion only)

Module Hours: 40.0

WLD 119 **Welding Inspection & Testing**

Exploration of various welding processes are demonstrated for inspection and testing. Examining cut surfaces and edges or metal parts and various welds. The module also gives preparation for the AWS CWI seminar and exam offered by the AWS.

Prerequisites: none

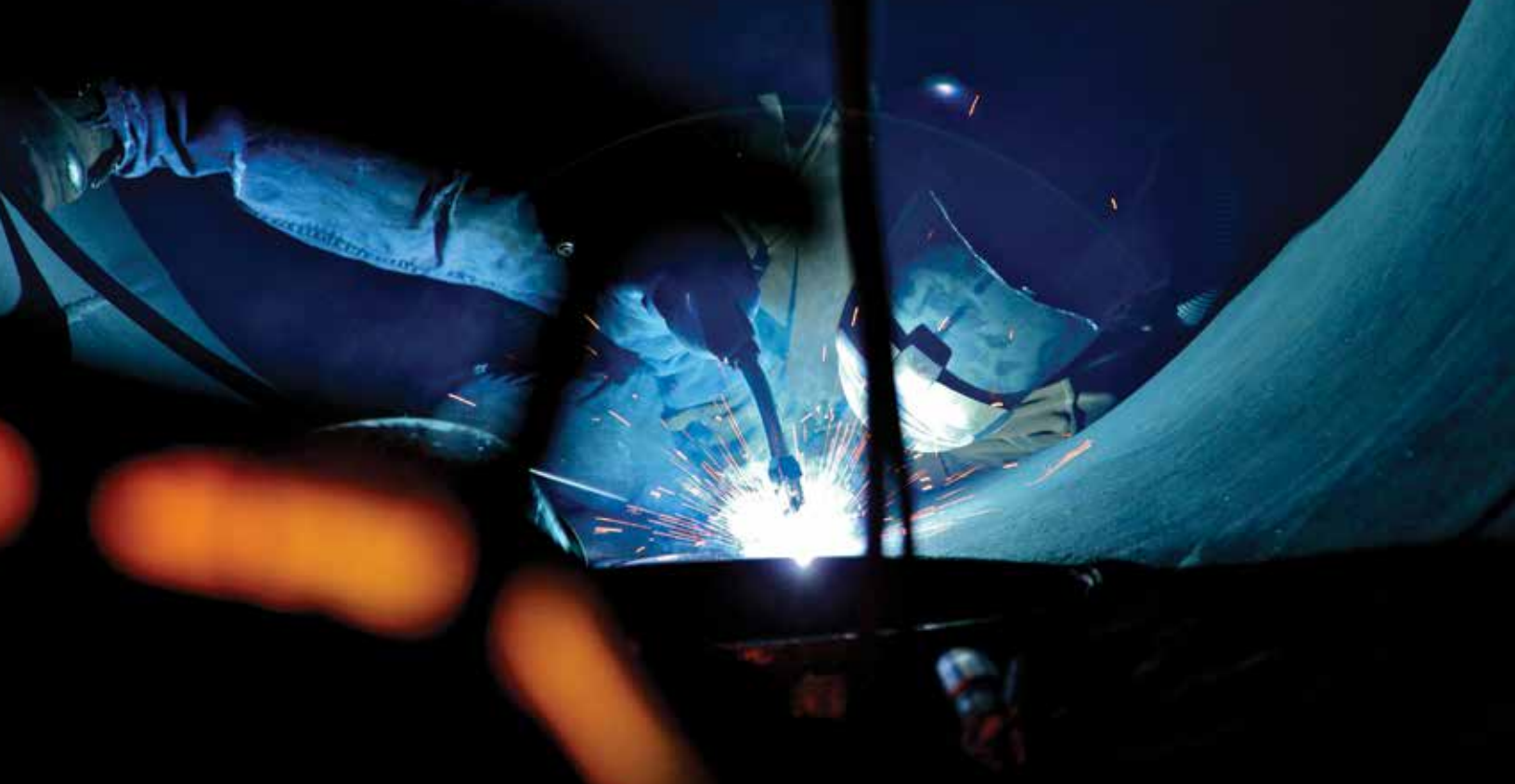
Module Hours: 40.0

For more information, please contact



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