

2021

REGIONAL TRAINING COURSE CATALOG



“Making UA Training Opportunities Available Across North America”

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(410) 269-2000
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December 2020

Dear Brothers and Sisters,

Let me begin by saying that I hope that you and your families are healthy and safe in these very difficult times. The UA Education and Training Department recognizes that not all courses can be offered in an online format; therefore, we have planned to add some of the in-person courses in the 2021 regional line-up starting at the end of March. However, depending on the situation of the pandemic, we may cancel at a moment's notice but will continue to offer as much online as we can.

Throughout the year, the UA Education and Training Department works hard in order to provide a variety of opportunities for instructors to receive advanced industry training. This year we have enhanced our efforts, resulting in our ability to continue to offer you superior training, which will benefit our workforce in the piping industry.

Similar to last year, there are a large number of courses available for every sector of our trade. You will find that, in addition to courses being offered in our local union training centers, courses are also available throughout the year online, at the UA's Great Lakes Regional Training Center at Washtenaw Community College as well as industry specific locations.

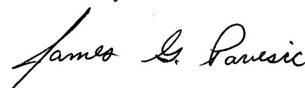
This year, we are pleased to offer a few new courses to the regional course line-up, which include: *Ammonia Train-the-Trainer with Certification*, *Ammonia Certification for UA Technicians*, and Revit courses. Also, for the first time we will offer Course 8013 *Methods in Teaching Gas Metal Arc Welding* in a **virtual** format. We will also continue to offer the professional element courses, so that your instructors can continue to work toward the Instructor Training Program certificate.

All in-person class sizes are limited in order to create a safe environment and, as always, we require a minimum number of students in attendance to warrant holding the class. Therefore, we are encouraging you to register early.

Please take the time to review the courses listed in the catalog. Additionally, we encourage you to take advantage of the online courses offered through regional training.

All in-person classes are subject to cancellation based on UA, ITF, and state guidelines regarding COVID-19. Please refer to final course confirmations before making travel arrangements. Any questions should be directed to the Registrar's Office at 410-269-2000, cathym@uanet.org, or tmassengale@uanet.org.

Faternally,



James G. Pavesic
Director of Education and Training
International Training Fund

Our Mission Statement

The mission of the UA Education and Training Department is to equip United Association locals with educational resources for developing the skills of their apprentices and journeymen. By thus facilitating the training needs of the membership, we maximize their employability and prepare them for changes in the industry. We are committed to making training opportunities available across North America, allowing members to acquire new skills and remain competitive in the industry regardless of geography. In this way, we are determined to meet the needs of the piping industry and enhance employment opportunities for our members, while remaining fiscally responsible to the beneficiaries of the fund.

"The procedures, policies, and course offerings set forth in this catalog are subject to revision from time to time. The most up-to-date available versions of the policies, procedures, and course offerings are contained in the electronic version of this document which may be accessed at uanet.org."

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ABOUT REGIONAL TRAINING

The International Training Fund provides local union instructors with the educational resources they need to complete their goals of workforce development in the piping industry, along with maintaining the highest standards of excellence for United Association apprentices and journeymen.

The International Training Fund offers a number of regional training opportunities throughout the year. These courses are offered at various local union training centers; in addition, courses are available online, at the Great Lakes Regional Training Center, and at UA headquarters in Annapolis, MD.

Course Registration

Course registration is available online at <https://uanet.org>. Select the tab, Regional Training Registration, to begin the five-step registration process.

- Step 1.** Contact your local union training coordinator in order to register.
- Step 2.** Click Begin Registration at the bottom of the page. You will then fill in all required fields that are highlighted in red.
- Step 3.** Select courses using the Click Here to Add a Class link. A window will open with a list of courses. You can scroll through the list or search by course number, title, date, location or status (open or closed).
- Step 4.** Enter any special requests that you may have. If there are none, leave this field blank.
- Step 5.** Review your information and confirm it is correct. If so, proceed to Register at the bottom of the page. You will be asked to confirm your registration by clicking OK. This will complete the registration process.

Certification Fees

All certification course fees are the responsibility of the student. Fees are due prior to the beginning of the class; upon registration for a class, due dates will be provided. Listed below are the fee rates:

Medical Gas Certification Fees:

(Payable to NITC)

Contact Renee Yount at 877-457-6482

Certification = \$116.00

Recertification = \$49.00

UA STAR® Exam Fees:

(Payable to NITC)

Contact Renee Yount at 877-457-6482

Certification = \$136.00

Recertification = \$84.00

Students must bring their own welding hood, welding jacket, and welding gloves. **These items will not be supplied.** Safety equipment and protective clothing are required for all shop classes. Safety requirements will be strictly enforced. Any student who fails to meet these safety requirements will not be permitted to participate in the activity and may be removed from class. If you are not sure of the requirements, ask your instructor.

Eye Protection

Eye protection conforming to ANSI Z87.1-1968 shall be used as primary protection. **Safety glasses are required in all shop classes and will be provided.** Prescription safety glasses with side shields must also be ANSI Z87.1-compliant. Over-glasses may be worn over prescription eyewear in lieu of prescription safety glasses.

Face Protection

Face shields shall be used as secondary protection over safety glasses when the task requires it. In addition, an arc-rated face shield and hardhat may be required for tasks where arc flash or arc blast hazards may exist in accordance with NEC 70E – 2018.

Welding Hoods

Welding hoods and head covering must meet industry standards and be approved by the faculty instructor. **You must bring a welding hood for welding classes.**

Hand Protection

Task-specific gloves appropriate for hot work or working with sharp objects **must be worn for all shop classes** and approved by the faculty instructor. Hand protection may also include dielectric gloves with leather protectors for tasks requiring shock protection as required by NEC 70E – 2018.

Foot Protection

Sturdy work boots or shoes made of leather or similarly strong materials are required to be worn in all shop classes. Sneakers or sandals are not permitted.

Protective Clothing

Sturdy long sleeve shirts and long pants are required in all shop classes. Shorts are not permitted. In addition, arc-rated protective clothing may be required for the task being performed in accordance with NEC 70E – 2018.

GRADUATION REQUIREMENTS

Listed below are the graduation requirements for the two certificate programs offered by the UA.

200-Hour Instructor Certificate Program

To receive a certificate of completion, UA instructors must successfully complete a total of 200 course hours. This includes 100 hours of professional courses and 100 hours of elective courses. In addition, students must also complete six Reflective Teaching Assignments (RTAs) in order to earn a certificate as a *Certified Instructor of Journeyworkers and Apprentices in the Plumbing and Pipe Fitting Industry*.

Professional Courses

Courses in parentheses denote former course numbers that count towards the requirement.

1001 (101).....	Planning, Teaching, and Assessing Effective Lessons: Beginner
1002 (102).....	Planning, Teaching, and Assessing Effective Lessons: Intermediate
1003 (103).....	Planning, Teaching, and Assessing Effective Lessons: Advanced
1004 (104).....	Course Planning and Problem Solving and 20-hour elective (ITP course)
1010 (510).....	Public Speaking (ITP course)

Plus Five 20-Hour Applied and Technical Courses

Note: Students may not register for the next professional course unless all requirements for the previous professional course, including the RTAs, have been completed.

Coordinator courses do not count toward the Instructor Certificate Program.

120-Hour Coordinator Certificate Program

To receive a certificate of completion, attendees will need to complete a total of 120 hours of courses, including three required courses (60 hours) out of the six needed. The title *Certified Coordinator of Journeyworkers and Apprentices in the Plumbing and Pipe Fitting Industry* will be conferred upon those who satisfactorily complete the program.

Courses in parentheses denote former course numbers that count towards the requirement.

Three Required Courses

9001 (705 or 90)	Apprenticeship Standard Guidelines
9002 (701, or 707, or 91)	Administration of a Jointly Managed Training Program
9003 (702 or 706)	Understanding Legal Issues and Fiduciary Responsibilities

Plus Three Coordinator Electives

1010 (510).....	Public Speaking
2100 (237).....	Adapting Apprenticeship to the 21st Century Student
2101 (372).....	Financial Literacy for Apprentices
2102 (374).....	Expanding Your Range When Recruiting
2103.....	Utilizing ITF and UA Education and Training Department Resources to Expand your Recruitment Efforts
2008 (520).....	Labor History and the UA Part One: 1800 to 1920
2009 (521).....	Labor History and the UA Part Two: 1920 to Present
2010 (522).....	Labor History I and II
3006 (373).....	Preparing for Digital Literacy
9000 (700).....	Administration of a Training Program for New Training Coordinators
9004 (703).....	Managing Financial Operations of a Training Program
9005 (704).....	Enhancing Training Through the Use of UA Applications
9006 (710 or 97)	Addressing Barriers to Apprentice Success
9007 (711).....	Veterans in Apprenticeship
9008 (712).....	Using the Multi-Craft Core Curriculum (MC3)
9009.....	Internal and External Communication for Training Directors
9100 (708).....	Apprenticeship Development Canadians
9101.....	Canadian Coordinator Program
9102.....	Canadian Welder Assessment Program
9103.....	Canadian Coordinators Union Training Innovation Program
9105.....	UA Canada Training Director/Coordinator Program
9106.....	UA Canada and CWBi Acorn Welding Program

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA) is a federal law designed to protect the privacy of education records.

The act grants students the right to:

- Inspect and review their education records
- Request a correction to those education records
- Control the disclosure of certain aspects of their education records
- File a complaint with the U.S. Department of Education

FERPA Waivers for UA Students

Every student who takes classes offered by the International Training Fund (ITF) should fill out a FERPA waiver which can be found by contacting the registrar. The FERPA waiver will grant the ITF the authority to share your transcript with your local JATC and another party of your designation. All first-time attendees to the ITP must sign a FERPA waiver and return it to the registrar via email or deliver a hard copy to ML 123 during the ITP event.

Transcripts are no longer available online. In compliance with FERPA, all requests for a transcript must be made to the registrar's office by contacting Cathy Merkel at cathym@uanet.org.

UA University at Washtenaw Community College

UA University at Washtenaw Community College (WCC) is an educational partnership between the UA and WCC to provide members with certificate and associate degree opportunities. As a benefit of the United Association/Washtenaw Community College partnership, UA instructors will receive college credit for their coursework completed at the Instructor Training Program. These credits can be used to earn an associate degree. Additional degree requirements can be completed through WCC's online classes or transferred in from other higher-learning institutions.

To earn an associate degree, instructors will need to complete the following:

- UA Apprenticeship since August 1, 2000 or the UA STAR® exam..... 45 Credits
- UA Instructor Certification 15 Credits
- General Education Requirements..... 13-31 Credits

Washtenaw Community College's Online Courses

With more than 150 online courses in the innovative College on Demand™ format, WCC offers you the general education classes that you need to finish your associate degree. Most classes are transferable to a four-year college or university.

College on Demand provides you with a complete e-learning experience. You can watch online video lectures from industry professionals and WCC's outstanding faculty when it is convenient for you and as often as you want. Interactive learning activities and online collaborative tools reinforce and apply important course concepts. You can take your test and submit all of your assignments online, saving you time and the expense of driving to campus.

Online learners do need to be independent, motivated, and self-starters. Online courses do have deadlines. Because the virtual classroom is available 24 hours a day, seven days a week, you have the flexibility of scheduling class/study time during different hours than work or family time. You can attend class anywhere you have a computer with access to high-speed internet to meet your academic goals.

The *Introduction to Online Learning* course prepares you for successful e-learning in two weeks. Key topics include navigating the virtual classroom, online library research, and test taking strategies. You will also complete the WCC's admissions process in this class. Registration is as simple as filling out a form at <https://www.wccnet.edu/academics/classes/online/forms/secure/introduction>. You can get started upon verification of your UA membership, usually within 24 to 48 hours.

Contacts

Please contact Brittany Tripp at WCC Student Services with any questions.

Brittany Tripp, Manager UA Programs

Telephone: 1-888-232-5476

Email: brtripp@wccnet.edu

Website: www.wccnet.edu/uauniversity

REGIONAL TRAINING COURSE LIST

Course #	Course Name	Date	Time	Location
1002	Planning, Teaching, and Assessing Effective Lessons: Intermediate	February 8 - March 22 April 5 - May 17	8:00a - 5:00p 8:00a - 5:00p	Online Online
1003	Planning, Teaching, and Assessing Effective Lessons: Advanced	February 8 - March 22 April 5 - May 17	8:00a - 5:00p 8:00a - 5:00p	Online Online
1004	Course Planning and Problem Solving	February 8 - March 22 April 5 - May 17	8:00a - 5:00p 8:00a - 5:00p	Online Online
1010	Public Speaking	February 8 - March 22 April 5 - May 17	8:00a - 5:00p 8:00a - 5:00p	Online Online
2095	Advanced Plan Reading	April 13 - 15 June 8 - 10	8:00a - 5:00p 8:00a - 5:00p	Ann Arbor, MI Ann Arbor, MI
2150	OSHA 510 OSHA Standards for the Construction Industry	February 8 - 12 April 26 - 30	10:00a - 4:30p 10:00a - 4:30p	Online Online
2151	OSHA 500 Trainer Course for the Construction Industry	January 18 - 22 March 1 - 5 June 7 - 11	10:00a - 4:30p 10:00a - 4:30p 10:00a - 4:30p	Online Online Online
2152	OSHA 502 Update for Construction Industry Outreach Trainers	April 5 - 8 May 17 - 20	10:00a - 4:30p 10:00a - 4:30p	Online Online
3001	Introduction to Teaching Online Using Blackboard™ LMS	February 8 - March 4 October 4 - 28	8:00a - 10:00a 8:00a - 10:00a	Online Online
3002	Online Teaching Techniques Using Blackboard™	April 6 - 22 April 5 - May 16 October 4 - November 14	6:30p - 9:00p 8:00a - 5:00p 8:00a - 5:00p	Online Online Online
3033	Robotic Total Station Layout – Trimble®	January 11 - 15 May 18 - 20	8:00a - 5:00p 8:00a - 5:00p	Online Las Vegas, NV
3034	Advanced RTS Training	April 6 - 8	8:00a - 5:00p	Chicago, IL
3090	Revit® Online Training	February 2 - April 27 September 7 - November 30	8:00a - 10:00a 8:00a - 10:00a	Online Online
3091	Revit® Online - Level 2 - Revit® Piping	February 2 - April 27 September 7 - November 30	8:00a - 10:00a 8:00a - 10:00a	Online Online
3095	Utilizing Revit® for UA Training	April 20 - 22 June 15 - 17 July 20 - 22 August 31 - September 2 September 28 - 30	8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p	Indianapolis, IN Lithia Springs, GA Earth City, MO Burlingame, CA Dorchester, MA
3110	DfMA and Modular Construction	June 29 - July 1	8:00a - 5:00p	Madison, WI
3225	SysQue® for Revit®	September 14 - 16	8:00a - 5:00p	Harmony, PA
4011	Medical Gas Instructor	*January 12 - February 11 April 19 - 23	8:00a - 4:00p 8:00a - 4:00p	Online Ann Arbor, MI
6042	SER 270 30 Series Screw and Scroll Chiller Fundamentals (Carrier Corporation)	May 18 - 21 October 19 - 22	8:00a - 5:00p 8:00a - 5:00p	Ann Arbor, MI Ann Arbor, MI
6043	SER 275 23XRV Liquid Chiller Screw Chiller Service and Operator Course (Carrier Corporation)	May 25 - 26 October 26 - 27	8:00a - 5:00p 8:00a - 5:00p	Ann Arbor, MI Ann Arbor, MI
6075	Ammonia Train-the-Trainer with Certification	April 12 - 16	8:00a - 5:00p	Fort Wayne, IN
6076	Ammonia Certification for UA Technicians	April 26 - 30	8:00a - 5:00p	Fort Wayne, IN
7001	Victaulic Vortex System Training	May 25 - 27 December 7 - 9	8:00a - 5:00p 8:00a - 5:00p	Easton, PA Hayward, CA
7002	Viking® Foam Fire Protection System Training	October 26 - 28	8:00a - 5:00p	Ann Arbor, MI
7025	Revit® for Fire Protection I	July 13 - 15	8:00a - 5:00p	St. Louis, MO
7026	Revit® for Fire Protection II	September 21 - 23	8:00a - 5:00p	Weymouth, MA
7027	Revit® for Fire Protection III	October 5 - December 21	8:00a - 5:00p	Online
7071	Developing Tests for Fire Protection Codes and Standards	January 20 - February 24	7:30p - 9:30p	Online

*See Course Descriptions and Schedule section for various dates in January and February.

REGIONAL TRAINING COURSE LIST

<u>Course #</u>	<u>Course Name</u>	<u>Date</u>	<u>Time</u>	<u>Location</u>
8001	AWS CWI® Prep Course and Exam	March 13 - 19 April 17 - 23 May 1 - 7 June 5 - 11 July 10 - 16 September 11 - 17 October 9 - 15 November 13 - 19	8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p 8:00a - 5:00p	Albuquerque, NM Harmony, PA Ann Arbor, MI Phoenix, AZ Paducah, KY Cedar Rapids, IA Tulsa, OK Sparks, NV
8013	Methods in Teaching Gas Metal Arc Welding (GMAW)	April 26 - 30	10:00a - 5:00p	Online
9007	Veterans in Apprenticeship	February 8 - March 22	3:00p - 5:00p	Online

1002 Planning, Teaching, and Assessing Effective Lessons: Intermediate

Prerequisite: 1001 Planning, Teaching, and Assessing Effective Lessons: Beginner

Students must bring a laptop.

Tuesday evening Zoom meeting requirement.

This course builds upon 1001 and the practices which were used for teaching at the local union. Instructors will expand their skills of planning lessons by focusing on writing clear objectives. Topics such as how to present material interactively using visual supports like charts and presentations, organizing group work, and effectively run group discussions are featured. Assessment will also be discussed. Instructors will learn to utilize review sheets as a form of assessment. To prepare for Course 1002, bring the RTAs that were completed following Course 1001. Students should also bring course materials for a course that they expect to teach following Course 1002.

Reflective Teaching Assignments (RTAs)

As with Course 1001, upon returning to the local union training center, the instructor will complete the planning, teaching, and assessment skills from Course 1002 by teaching two classes and writing a short assessment, noting changes. These are required assignments and must be submitted to the online portfolio.

Course Date: February 8 - March 22

Time: 8:00a - 5:00p

Location: Online

Instructor: TBD

Course Date: April 5 - May 17

Time: 8:00a - 5:00p

Location: Online

Instructor: TBD

1003 Planning, Teaching, and Assessing Effective Lessons: Advanced

Prerequisite: 1002 Planning, Teaching, and Assessing Effective Lessons: Intermediate

Students must have completed your RTAs for 1001 & 1002 before taking this class.

Students must bring a laptop.

This course builds on the lessons and skills learned in Course 1002 and practiced in the RTAs. Participants will focus on developing reading and video guides as a way to expand their knowledge of lesson planning. Participants will also learn how to ask questions to get students involved in discussion, how to support their learning of large amounts of

information (such as codes), and how to get them to participate actively in classes. The instructor will continue to practice using technology in the classroom and designing in-depth learning assessments. As in Course 1001 and Course 1002, instructors should have specific lesson plans and assessments to use in teaching at their local union. Students should also have materials for a course they expect to teach.

Reflective Teaching Assignments (RTAs)

As with previous RTAs, when the course is completed, the instructor will be expected to demonstrate the specific skills in teaching and assessment from Course 1003 and write a short assessment, noting changes. These are required assignments and must be submitted to the online portfolio.

Course Date: February 8 - March 22

Time: 8:00a - 5:00p

Location: Online

Instructor: Billings, K

Course Date: April 5 - May 17

Time: 8:00a - 5:00p

Location: Online

Instructor: Billings, K

1004 Course Planning and Problem Solving

Prerequisite: 1003 Planning, Teaching, and Assessing Effective Lessons: Advanced

Students must bring course materials to create or redesign a course.

Students must bring a laptop.

In this course, focus is shifted from teaching individual classes to designing a whole course, starting with writing goals and then moving to effective sequencing of course materials. The design of an overall assessment plan for a course will be emphasized, including how to evaluate projects and other forms of assessment for evidence of learning. Bring course materials (syllabus, textbook, lesson plans, quizzes, exams) for a course that needs to be revised. If the local wants to develop a new course, bring materials needed to form the basis for the course. These materials are essential to the classwork in Course 1004. There are no RTAs following Course 1004.

Course Date: February 8 - March 22

Time: 8:00a - 5:00p

Location: Online

Instructor: TBD

1004 Course Planning and Problem Solving (*continued*)

Course Date: April 5 - May 17

Time: 8:00a - 5:00p

Location: Online

Instructor: TBD

1010 Public Speaking

This course is designed to help UA instructors acquire essential speaking and listening skills for the classroom. Class exercises will focus on the delivery of lecture material and conducting demonstrations. Instructors will polish organizational and delivery skills, as well as gain a heightened awareness of the relationship between a speaker and an audience. UA students are encouraged to bring materials from classes they are currently teaching as resources for class exercises. Blackboard™ LMS will be used for this course.

Course Date: February 8 - March 22

Time: 8:00a - 5:00p

Location: Online

Instructor: TBD

Course Date: April 5 - May 17

Time: 8:00a - 5:00p

Location: Online

Instructor: TBD

2095 Advanced Plan Reading

This course focuses on the process of interpreting, analyzing, and implementing troubleshooting skills to navigate construction documentation to plan, quantify, layout, and coordinate piping systems. Lessons are based on materials from the new *Advanced Plan Reading* textbook and 3D model which is a digital replica of the Great Lakes Training Center to include; full set of construction drawings, specification book, equipment submittals, 3D design models, and point cloud. Topics include: interpreting drawings, including architectural, mechanical, and structural; reviewing submittal data, job spec, and identifying common problems with drawings used in lessons to develop quizzes/assignments. The class will also focus on utilizing the latest technologies with a special emphasis on teaching proper drawing techniques using both tradition and applying techniques using new digital tools to apprentices and journey workers.

Required textbooks or resource materials: *CAD-Learning®; Advanced Plan Reading and Related Drawing (2021)*

Course Date: April 13 - 15

Time: 8:00a - 5:00p

Location: Great Lakes Regional Training Center
4800 E Huron River Dr
Ann Arbor, MI

Instructors: Raffaelli, I/Lambrecht, E

Course Date: June 8 - 10

Time: 8:00a - 5:00p

Location: Great Lakes Regional Training Center
4800 E Huron River Dr
Ann Arbor, MI

Instructor: Raffaelli, I

2150 OSHA 510 OSHA Standards for the Construction Industry

This course, the prerequisite for Course 2151 OSHA 500, covers construction safety and health principles and OSHA policies, procedures, and standards as they apply to the construction industry. Topics also include scope and application of the OSHA construction standards. Special emphasis is placed on those areas that are the most hazardous, using OSHA standards as a guide. As of September 1, 2011, all new instructors must have taken OSHA 510 prior to taking OSHA 500. This prerequisite must be met, along with the prerequisite of instructors possessing five years of safety and health experience in the construction industry.

Required textbooks or resource materials: *OSHA 510 Binder, CFR 1926*

Course Date: February 8 - 12

Time: 10:00a - 4:30p

Location: Online

Instructors: Hendrickson, J/Marable, W

Course Date: April 26 - 30

Time: 10:00a - 4:30p

Location: Online

Instructors: Young, J/Berger, J

2151 OSHA 500 Trainer Course for the Construction Industry

Prerequisite: 2150 OSHA 510 OSHA Standards for the Construction Industry

Please reference the OSHA Trainer Reauthorization Change effective January 1, 2019

Upon successful completion, this regional course authorizes UA instructors to teach the OSHA 10-hour and the OSHA 30-hour construction safety and health outreach programs at their respective locals. Special emphasis is placed on adult learning principles and training techniques to clearly identify, define, and explain construction industry hazards and acceptable corrective measures as required in the programs using 29 CFR 1926 OSHA Construction Standards as a guide. This course also covers the effective use of electronic visual aids and handouts. Each participant will receive a completion card acknowledging that they have completed the required training to be designated as an OSHA Authorized Construction Trainer in accordance with OSHA Outreach Training Program requirements. Please email a copy of your current OSHA 510 card or certificate to the registrar's office.

Required textbooks or resource materials: *OSHA 500 Binder, CFR 1926*

Course Date: January 18 - 22
Time: 10:00a - 4:30p
Location: Online
Instructors: Young, J/Walker, W

Course Date: March 1 - 5
Time: 10:00a - 4:30p
Location: Online
Instructors: Walker, W/Young, J

Course Date: June 7 - 11
Time: 10:00a - 4:30p
Location: Online
Instructors: Walker, W/Marable, W.

2152 OSHA 502 Update for Construction Industry Outreach Trainers

Prerequisite: 2151 OSHA 500 Trainer Course for the Construction Industry

Please reference the OSHA Trainer Reauthorization Change effective January 1, 2019

This course is designed for instructors who have completed OSHA 500. OSHA requires that these instructors stay current on OSHA standards, and they must take OSHA 502 every four years to maintain their status. Course participants will receive updates on topics including OSHA construction standards, policies, and regulations. Participants who success-

fully complete the course will receive a completion card acknowledging that they have completed the required training to continue as an OSHA-Authorized Construction Trainer in accordance with OSHA Outreach Training Program requirements.

2151 OSHA 500 Trainer Course for the Construction Industry Online Version - Information will be sent to student.

Required textbooks or resource materials: *OSHA 502 Binder, CFR 1926*

Course Date: April 5 - 8
Time: 10:00a - 4:30p
Location: Online
Instructors: Neiderheiser, R/Walker, W

Course Date: May 17 - 20
Time: 10:00a - 4:30p
Location: Online
Instructors: Neiderheiser, R/Hendrickson, J

3001 Introduction to Teaching Online Using Blackboard™ LMS

Students must bring a laptop.

In this introductory Blackboard™ LMS course, students will learn to effectively navigate various internet sites and gain an understanding of internet addresses (URLs). Using an assigned Blackboard LMS course site, participants will learn how to use some of the basic content areas of a Blackboard LMS course site. Various file types used on the internet also will be covered. Students will need basic computer experience and an understanding of online tools.

Course Date: February 8 - March 4
Time: 8:00a -10:00a
Location: Online
Instructors: Baxter, B/Burrall, V

Course Date: October 4 - 28
Time: 8:00a -10:00a
Location: Online
Instructors: Baxter, B/Burrall, V

3002 Online Teaching Techniques Using Blackboard™

Prerequisite: Must have completed Course 3001 or have fair to good knowledge of Blackboard™ basics.

Students must be currently enrolled in several Blackboard™ LMS courses with instructor role.

This online course builds on Blackboard™ basics previously learned in Course 3001. Students will get hands-on experience creating and managing their own Blackboard course sites. Instructions will be provided on creating effective announcements, using the discussion board, and managing Blackboard users. Students will create and take Blackboard exams and learn methods and strategies for teaching online using Blackboard. This is not a beginner's level course.

Spring session accelerated: Tuesday April 6th and will meet every Tuesday, Wednesday, and Thursday evening ending on Wednesday April 22nd. There are a total of (8) 2.5 hour class sessions. Sessions will be recorded. Each class session will meet on Zoom from 6:30 pm to 9:00 pm Eastern Time.

Course Date: April 6 - 22
Time: 6:30p - 9:00p
Location: Online
Instructors: Gaby, K/Simmons, C

Course Date: April 5 - May 16
Time: 8:00a - 5:00p
Location: Online
Instructor: Metler, A

Course Date: October 4 - November 14
Time: 8:00a - 5:00p
Location: Online
Instructor: Metler, A

3033 Robotic Total Station Layout – Trimble®

This course will focus on the Trimble® Robotic Total Station. Participants will learn about the setup, layout, and quality assurance/quality control with an emphasis on hands-on applications, using the latest equipment and software. Training will include how to verify building control points and establish building control points to other levels of a structure. Participants will learn how to load layout points from a model into the Total Station as well as the proper method to load built points back into the model. **Personal protective equipment is required. Please refer to the safety requirements.**

Course Date: January 11 - 15
Time: 8:00a - 5:00p
Location: Online
Instructors: Branch, J/Gutierrez, R

Course Date: May 18 - 20
Time: 8:00a - 5:00p
Location: Local Union 525
 750 Leigon Way
 Las Vegas, NV
Instructors: Branch, J/Gutierrez, R

3034 Advanced RTS Training

Prerequisite: Course 3033 - Robotic Total Station Layout – Trimble®, or equivalent.

This course is designed to prepare the individual for certification in Trimble® RTS layout. This instructor led advanced workshop will test and increase the knowledge and skill of UA members on robotic total station. Participants will explore troubleshooting techniques and explore best practices in QAQC. UA member will receive a Trimble® RTS Certification on the final day of class with successful completion of both a written and practical test.

Course Date: April 6 - 8
Time: 8:00a - 5:00p
Location: Local Union 130
 1400 W Washington Blvd
 Chicago, IL
Instructor: Branch, J

3090 Revit® Online Training

Online sessions meet during Central Standard Time (CST).

Explore the uses of Autodesk® Revit® software as a BIM/VDC design, collaboration, coordination, communication, and fabrication tool for the MEP construction industry. This 13-week online course will follow the Revit Core curriculum created to help UA members navigate the latest Autodesk Revit software. Students will learn how to utilize a design model for coordination and further develop it into installation drawings and fabrication spool sheets. Basic computer skills, access to a computer capable of running Revit 2020, and the ability to participate in weekly online webinar-style meetings are required for this course. Revit instructors are welcome to attend and utilize the recorded classes to help supplement your Revit training.

Required textbooks or resource materials: CAD-Learning®

3090 Revit® Online Training (continued)

Course Date: February 2 - April 27
Time: 8:00a - 10:00a
Location: Online
Instructors: Lambrecht, E/Becker, C

Course Date: September 7- November 30
Time: 8:00a - 10:00a
Location: Online
Instructors: Lambrecht, E/Becker, C

3091 Revit® Online - Level 2 - Revit® Piping

Prerequisite: 3090 Revit® Online Training

Explore the uses of Autodesk® Revit® software as a BIM/VDC design, collaboration, coordination, communication, and fabrication tool for the MEP construction industry. This 13-week online course will follow the Revit piping curriculum created to help UA members navigate the latest Autodesk Revit software. Students will learn how to utilize a design model for coordination and further develop it into installation drawings and fabrication spool sheets. Access to a computer cable of running Revit 2020, basic computer skills, and ability to participate in weekly online webinar-style meetings are required for this course, Revit instructors are welcome to attend and utilize the recorded classes to help supplement your Revit training.

Required textbooks or resource materials: CAD-Learning®

Course Date: February 2 - April 27
Time: 8:00a - 10:00a
Location: Online
Instructors: Posey, E/Ashburn, J

Course Date: September 7 - November 30
Time: 8:00a - 10:00a
Location: Online
Instructors: Posey, E/Ashburn, J

3095 Utilizing Revit® for UA Training

Revit® is used to create an intelligent model that can be used for both system training as well as best installation practices. This course will focus on utilizing Revit as a training tool. Participants will create piping systems and projects utilizing Revit. At the end of the class each participant will add these projects to their digital tool boxes and be able to access these models through BIM 360.

Course Date: April 20 - 22
Time: 8:00a - 5:00p
Location: Local Union 440
 1521 Brookville Crossing Way
 Indianapolis, IN
Instructors: Lambrecht, E/Westfall, D

Course Date: June 15 - 17
Time: 8:00a - 5:00p
Location: Local Union 72
 1445 Trae Ln
 Lithia Springs, GA
Instructors: Posey, E/Milligan, S

Course Date: July 20 - 22
Time: 8:00a - 5:00p
Location: Local Union 562
 3755 Corporate Trail Dr
 Earth City, MO
Instructors: Becker, C/Hintz, M

Course Date: August 31 - September 2
Time: 8:00a - 5:00p
Location: Local Union 467
 1519 Rollins Rd
 Burlingame, CA
Instructors: Ashburn, J

Course Date: September 28 - 30
Time: 8:00a - 5:00p
Location: Local Union 537
 40 Enterprise St
 Dorchester, MA
Instructors: Posey, E/Becker, C

3110 DfMA and Modular Construction

In this course we will explore Design for Manufacture and Assembly (DfMA) workflows and methods as they apply to mechanical and plumbing piping installations. The goal of this training is for our UA members to learn and understand DfMA principles, while also applying them to modular assembly techniques while utilizing the latest piping fabrication tools and technologies. Hands on interaction with generative design, fabricated modular piping and equipment assemblies, as well as automated tools, will be utilized during the instruction. These tools and assemblies will be accessed by students within the UA Fabrication Freight Container provided on site. In addition, DfMA integration with Virtual Design and Construction (VDC) workflows including the production of three-dimensional models for modular construction will be discussed, including the application of Revit®, BIM 360™, Navisworks®, and STRATUS® software tools to modular fabrication.

Required textbooks or resource materials: CAD-Learning®

3110 DfMA and Modular Construction (continued)

Course Date: June 29 - July 1
Time: 8:00a - 5:00p
Location: Local Union 601
 6301 Town Center Dr,
 Madison, WI
Instructors: Russell, J/Lee, D

3225 Sysque® For Revit®

This training affords participants an opportunity to learn the basic features and functions of Trimble SysQue software. The learning objectives will provide participants with the knowledge and skills to improve their use of this application in their workplaces. The objectives are met through a number of learning topics with each focusing on a key area of the lesson plan. The mode of instruction features an instructor-led learning experience that effectively combines demonstrations with hands-on practical exercises to reinforce learning. The learning objectives include, effectively navigate the application, demonstrate the ability to effectively draw with SysQue Systems, including creating spools, placing supports, BOM options and effective methods of searching and updating managed content.

Course Date: September 14 - 16
Time: 8:00a - 5:00p
Location: Local Union 449
 230 Wise Rd
 Harmony, Pa
Instructor: TBD

4011 Medical Gas Instructor

Prerequisite: Current Medical Gas Installer and Medical Gas Brazing Certifications

Certification fees apply and are the responsibility of the student. See fee schedule.

This course covers the NFPA 2018 codes and ASSE Series 6000 standards that govern correct medical gas and medical/surgical vacuum piping system installation and testing, requirements for installer qualification, and requirements for brazing qualification in accordance with ASME Section IX. A written exam will be administered at the end of the course. UA instructors who successfully pass the course and exam will be certified by NITC as a medical gas instructor.

Required textbooks or resource materials: NFPA-99, Health Care Facilities Code, 2018 Edition; NFPA Medical Gas and Vacuum Systems Installation Handbook, 2018 Edition; ASSE Series 6000 Medical Gas Professional Qualifications Standard

Course Dates: January 12, 14, 19, 21, 26, 28
 February 2, 4, 9, 11
Time: 8:00a - 4:00p
Location: Online
Instructors: Miller, D/Redden, J

Course Date: April 19 - 23
Time: 8:00a - 4:00p
Location: Great Lakes Regional Training Center
 4800 E Huron River Dr
 Ann Arbor, MI
Instructor: Givens, L

6042 SER 270 30 Series Screw and Scroll Chiller Fundamentals (Carrier Corporation)

Students will learn to operate, maintain, troubleshoot and service Carrier's complete line of 30 series air-cooled and water-cooled chillers. Models include 30GX/HX, RA.RB, and XA.XW. This course is a must for any technician whose job it is to service the complete line of 30 series chillers. Studies include chiller refrigeration cycle, compressor theory, cooler heat transfer, and water and air-cooled condensers. Participants will also learn how to analyze performance by recording and analyzing refrigerant and water pressures and temperatures. Admittance into this course is subject to Carrier Corporation's registration policies. When registering for this course, please email cathym@uanet.org with the company you work for and if you are a Lead AP. **Personal protective equipment is required. Please refer to the safety requirements.**

Course Date: May 18 - 21
Time: 8:00a - 5:00p
Location: Great Lakes Regional Training Center
 4800 E Huron River Dr
 Ann Arbor, MI
Instructor: TBD

Course Date: October 19 - 22
Time: 8:00a - 5:00p
Location: Great Lakes Regional Training Center
 4800 E Huron River Dr
 Ann Arbor, MI
Instructor: TBD

6043 SER 275 23XRV Liquid Chiller Screw Chiller Service and Operator Course (Carrier Corporation)

This course is targeted at service technicians who operate or service 23XRV chillers. Chiller refrigeration cycle, compressor theory, drive theory, cooler heat transfer, and water-cooled condensers will be covered. Operation and function of the compressors, muffler, condenser, coolers, economizers, metering devices, oil concentrator and accessories are covered. The attendees will learn how to analyze performance by recording and analyzing refrigerant and water pressures and temperatures. Service technicians will be able to distinguish between chiller and system problems and to quickly diagnose problems using service logs. The class also covers the unit controls and how to set up and adjust the controls for optimum system performance. In addition, recommended prestart and start-up procedures, operational, and field issues will be covered. Admittance into this course is subject to Carrier Corporation's registration policies. When registering for this course, please email cathym@uanet.org with the company you work for and indicate if you are a Lead AP. **Personal protective equipment is required. Please refer to the safety requirements.**

Course Date: May 25 - 26
Time: 8:00a - 5:00p
Location: Great Lakes Regional Training Center
 4800 E Huron River Dr
 Ann Arbor, MI
Instructor: TBD

Course Date: October 26 - 27
Time: 8:00a - 5:00p
Location: Great Lakes Regional Training Center
 4800 E Huron River Dr
 Ann Arbor, MI
Instructor: TBD

6075 Ammonia Train-the-Trainer with Certification

This course is designed to help an instructor who has been asked to design and/or deliver training for students preparing for RETA's Certified Refrigeration Service Technician Exam. The course will concentrate on the material in the RETA Industrial Refrigeration Books 1, 2, and 3 (Maintenance and Related Items) as well as RETA Industrial Refrigeration Book 4, RETA Basic Electricity 1 and 2, and RETA Ammonia Refrigeration Compliance Guidelines. All RETA course books associated with the CRST certification, are included in the cost of the class.

Prior to the course, participants should have read the RETA course books associated with the CRST certification. These will be delivered approximately 2 weeks prior to the class.

Course Date: April 12 - 16
Time: 8:00a - 5:00p
Location: Wagner-Meinert
 7617 Freedom Way
 Fort Wayne, IN
Instructor: Sloan, J

6076 Ammonia Certification for UA Technicians

The course will concentrate on the material in the RETA Industrial Refrigeration Books 1, 2, and 3 (Maintenance and Related Items) as well as RETA Industrial Refrigeration Book 4, RETA Basic Electricity 1 and 2, and RETA Ammonia Refrigeration Compliance Guidelines. All RETA course books associated with the CRST certification, are included in the cost of the class.

Prior to the course, participants should have read the RETA course books associated with the CRST certification. These will be delivered approximately 2 weeks prior to the class.

Course Date: April 26 - 30
Time: 8:00a - 5:00p
Location: Wagner-Meinert
 7617 Freedom Way
 Fort Wayne, IN
Instructor: TBD

7001 Victaulic Vortex System Training

The installation process and design guidelines on Vortex Systems and detailed information on how the system functions and operates, including the Vortex panel controls and functions, will be covered in this course. Course work will include putting the system in service and placing the system in maintenance mode for servicing. During this class, the participants will learn the commissioning process and perform the commissioning test. Inspection, testing, and maintenance (ITM) for Victaulic Vortex Systems will be covered and will include handouts with detailed steps in the ITM process. The participants will learn about the science behind the system, along with proper installation and testing methods. The proposed NFPA standard for hybrid systems also will be discussed. **Personal protective equipment is required. Please refer to the safety requirements.**

7001 Victaulic Vortex System Training (continued)

Course Date: May 25 - 27
Time: 8:00a - 5:00p
Location: Victaulic
 4901 Kellersville Rd
 Easton, PA
Instructor: Ivey, J

Course Date: December 7 - 9
Time: 8:00a - 5:00p
Location: Local Union 483
 2549 Barrington Ct
 Hayward, CA
Instructor: Ivey, J

7002 Viking® Foam Fire Protection System Training

This hands-on class featuring Viking® foam tank and Viking valves, is the second in a series of special hazards fire protection training. This course is intended for the special hazards and ITM instructors who want to add foam systems to their training programs. The first part of this course will cover Viking foam systems installation requirements along with proper operation and setup. The second part of the class will focus on inspection, testing and maintenance which will include troubleshooting and repair.

Course Date: October 26 - 28
Time: 8:00a - 5:00p
Location: Great Lakes Regional Training Center
 4800 E Huron River Dr
 Ann Arbor, MI
Instructor: Ivey, J

7025 Revit® for Fire Protection I

Prerequisite: Revit® MEP, Revit® Core, or equivalent.

This Revit® training will focus on the life safety systems utilized in the fire protection industry utilizing HydraCAD® for Revit. The course is designed for the instructor who is ready to bring BIM into their training program and advance today's technology to create digital fire protection systems that are part of sprinkler fitter training. This virtual installation course will include subjects such as sprinkler location and spacing, hanging and bracing, system components, and an introduction into hydraulic calculations.

Course Date: July 13 - 15
Time: 8:00a - 5:00p
Location: Local Union 268
 1544 S 3rd St
 St. Louis, MO
Instructors: Johnston, A/Rickert, R

7026 Revit® for Fire Protection II

Prerequisite: 7025 Revit® for Fire Protection I

Online sessions meet during Eastern Standard Time (EST). Recommend computer with two displays.

The course is the next step in recreating types of fire protection along with hydraulic calculations as we continue to utilize HydraCAD® for Revit® and all the tools available from this software. This course will provide more BIM integration into your current training as well as exposing current clash detection options and navigating through Navisworks®. The goal of this class is to create a better understanding of the BIM workflow and the challenges faced by the detailers in the collaboration of FPS with the other trades. This course will also explore the fabrication and stock listing ability of HydraCAD for Revit.

Course Date: September 21 - 23
Time: 8:00a - 5:00p
Location: Local Union 550
 195 Libbey Industrial Pkwy
 Weymouth, MA
Instructors: Johnston, A/Rickert, R

7027 Revit® for Fire Protection III

Prerequisite: 7026 Revit® for Fire Protection II

Online sessions meet during Central Standard Time (CST).

This course takes a deeper dive into BIM as you begin a project to virtually install a fire protection system into a medical facility. This challenging course will provide a better understanding of what it takes to create, calculate, list and complete a BIM project utilizing HydraCAD® software through the eyes of a detailer. This real case scenario will have you engaged in the details of what happens within a virtual design and construction project to better equip you as a foreman, superintendent, project manager or detailer.

Course Date: October 5 - December 21
Time: 8:00a - 5:00p
Location: Online
Instructors: Rickert, R/Johnston, A

7071 Developing Tests for Fire Protection Codes and Standards

This course is designed to apply practical application use of ExamView® software with the NFPA Fire Protection code books to create standardized questions and question banks in ExamView. These can be utilized in the Sprinkler Fitting Industry to aide Apprentices and Journeyman in staying current with the ever changing codes. Students will learn how to format the questions correctly, how to create proper distractors, how to manage the database of questions and how to integrate the questions and question banks with Blackboard™. The standards that we will be using will be NFPA 13, NFPA 14, NFPA 20, and NFPA 25. Students must be prepared to login to Blackboard on the first day and determine availability for the Zoom portion of the course.

Required textbooks or resource materials: ExamView® v11; NFPA 770

Ordering Info: Contact Jim Seasley (616) 334-4789

- ExamView® v11 (current release) = \$99/license (perpetual license for v11)
- Optional: Add-on for Internet/Web Testing Option = \$49/annually
- Special UA Bundle includes ExamView® v11 + Internet/Web Option = \$129 (Year 1 only)

Course Date: January 20 - February 24

Time: 7:30p - 9:30p

Location: Online

Instructor: Hopping, B

8001 AWS CWI® Prep Course and Exam

Prerequisite: Five years of welding experience

Certification fees apply and are the responsibility of the student. See fee schedule.

Note: Registration will be deleted if the AWS paperwork is not submitted on time.

This course will provide welding inspectors with the knowledge of welding and inspection fundamentals useful on the jobsite. It involves great responsibility and remarkable skill demonstration. The CWI® is widely recognized, both nationally and internationally. This intensive course covers information on nondestructive examination methods applicable to common welding processes and general provisions of API 1104, which includes qualification of welding procedures for welds containing filler-metal additions, design and preparation of the joint for production welding, nondestructive testing and

acceptance standards, and automatic welding with and without filler-metal additions. The student must be a high school graduate or hold an equivalency diploma and have a minimum of five (5) years of experience in the welding field.

Required textbooks or resource materials: API 1104 (21st Edition) Welding Pipelines and Related Facilities. To purchase the required text materials, call IHS Global Engineering Documents at (877) 413-5184.

Course Date: March 13 - 19

Time: 8:00a - 5:00p

Location: Local Union 412
411 Arizona SE
Albuquerque, NM

Instructors: Forni, J/Neel, C

Course Date: April 17 - 23

Time: 8:00a - 5:00p

Location: Local Union 449
230 Wise Rd
Harmony, PA

Instructors: Glavin, D/Donnell, D

Course Date: May 1 - 7

Time: 8:00a - 5:00p

Location: Great Lakes Regional Training Center
4800 E Huron River Dr
Ann Arbor, MI

Instructors: Wilson, J/Derby, R

Course Date: June 5 - June 11

Time: 8:00a - 5:00p

Location: Local Union 469
2950 W Thomas Rd
Phoenix, AZ

Instructors: Forni, J/Richardson, B

Course Date: July 10 - 16

Time: 8:00a - 5:00p

Location: Local Union 184
5820 Benton Rd
Paducah, KY

Instructors: Eden, E/Brown, N/Villanueva, P

Course Date: September 11 - 17

Time: 8:00a - 5:00p

Location: Local Union 125
5101 J St SW
Cedar Rapids, IA

Instructors: Glavin, D/Donnell, D

Course Date: October 9 - 15

Time: 8:00a - 5:00p

Location: Local Union 798
Po Box 470950
Tulsa, OK

Instructors: Eden, E/Brown, N/Villanueva, P

Course Date: November 13 - 19

Time: 8:00a - 5:00p

Location: Local Union 350
1150 Greg St
Sparks, NV

Instructors: Forni, J/Schultz, C

8013 Methods in Teaching Gas Metal Arc Welding (GMAW)

Prerequisite: Current GMAW UA Welder Certification

This course covers advanced pipe welding techniques used in applications such as welding alloy materials and process piping. The course focuses on how to teach advanced techniques of gas metal arc welding and the process variables for a variety of materials. This course provides local unions a means of preparing its members in developing the skills necessary to address the industry's welding needs. Students must bring their own welding hood, welding jacket, and welding gloves. **Personal protective equipment is required. Please refer to the safety requirements.** This course is offered in a virtual format.

Required textbooks or resource materials: *Welding Practices and Procedures for the Pipe Trades (ATP) (F/16)*

Course Date: April 26 - 30

Time: 10:00a - 5:00p

Location: Online

Instructors: Caron, A/Forni, J/Lavoie, D

Course Date: February 8 - March 22

Time: 3:00p - 5:00p (PST)

Location: Online

Instructor: Ellis, S

9007 Veterans in Apprenticeship

This course will include an explanation of the value that U.S. military veterans bring to the UA apprenticeship programs. Students will receive an overview of the Veterans in Piping® (VIP) program, which includes the interview process, curriculum, VIP graduate's placement procedures, VIP Task Force objectives, and the VIP website. In addition, there will be an explanation of the structure of the Veterans' Administration (VA) and the Department of Defense (DOD). Participants will learn about Montgomery and post 9/11 GI Bill benefits, including their role in assisting VIP graduates and other veterans claiming these benefits throughout the apprenticeship program. Participants also will become familiar with the DD214 form, and what a Military Occupational Specialty (MOS) means. The program will also provide valuable insight into the signs, symptoms, and treatment of post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI), and will provide resources in regards to what you should do if you suspect an apprentice, who is a veteran, is suffering from one of these conditions. All training directors/coordinators receiving VIP graduates into their programs or have veterans in their programs should take this course. This course will be on Tuesdays and Thursdays.

Note: You must bring the required material to class. If you do not have this material, the following items are available for purchase through the UA/IPT Bookstore or as indicated.

Course #	Description	Required Material
2095	Advanced Plan Reading.....	CADLearning®; Advanced Plan Reading and Related Drawing (2021)
2150	OSHA 510 OSHA Standards for the Construction Industry...	OSHA 510 Binder, CFR 1926
2151	OSHA 500 Trainer Course for the Construction Industry.....	OSHA 500 Binder, CFR 1926
2152	OSHA 502 Update for Construction Industry Outreach Trainers	OSHA 502 Binder, CFR 1926
3090	Revit® Online Training.....	CADLearning®
3091	Revit® Online - Level 2 - Revit® Piping.....	CADLearning®
3110	DfMA and Modular Construction	CADLearning®
4011	Medical Gas Instructor.....	NFPA-99, Health Care Facilities Code, 2018 Edition; NFPA Medical Gas and Vacuum Systems Installation Handbook, 2018 Edition; ASSE Series 6000 Medical Gas Professional Qualifications Standard
7071	Developing Tests for Fire Protection Codes and Standards...	ExamView® v11; NFPA 770
8001	AWS CWI® Prep Course and Exam.....	API 1104 (21st Edition) Welding Pipelines and Related Facilities. <i>(To purchase the required text materials, call IHS Global Engineering Documents at (877) 413-5184.)</i>
8013	Methods in Teaching Gas Metal Arc Welding (GMAW)	Welding Practices and Procedures for the Pipe Trades (ATP) (F/16)

Notes: *OSHA material is not sold directly to students. It is sent to the course location and the instructor distributes it along with a purchase order that is filled out by students and returned to the instructor who forwards the purchase order to the International Pipe Trades Bookstore.

Purchase Material for all Regional Training Courses at:

International Pipe Trades Joint Training Committee (Bookstore)

687-B Commerce Drive

Upper Marlboro, MD 20774

Telephone: 301-218-1241

Fax: 301-218-8961

E-Mail: iptbookstore@uanet.org

Shop online: shop.iptbookstore.com

A minimum of 80 professional development hours (PDHs) must be earned (training received or instruction delivered) during the nine-year certification period, and 20 of the 80 PDHs must be earned in the final three-year period of your nine-year certification period.

Instructors who want to substitute teaching hours for the required PDHs shall submit documentation of the hours of training performed. Such documentation shall include a complete syllabus of subjects taught, a copy of the certificates of attendance or completion issued, the number of students attending, the dates of the training provided, and documentation that the training was a formal offering and not personal coaching, tutoring, or individual instruction delivered to meet job requirements.

A maximum of 80 PDHs are allowed for any one course.

Credit for a particular course may only be granted once in a nine-year period. For example: a single 40-hour course taught any number of times can only be used to fulfill 40 hours of the 80 hours required for recertification without examination.

Trainers who want to substitute teaching hours for the required PDHs shall submit documentation of the hours of training performed. Such documentation shall include a complete syllabus of subjects taught, a copy of the certificates of attendance or completion issued, the number of students attending, the dates of the training provided, and documentation that the training was a formal offering and not personal coaching, tutoring, or individual instruction delivered to meet job requirements. For more information please visit <http://www.aws.org>.

UA Courses Acceptable for Use as PDHs:

Endorsements

You can take an endorsement exam to recertify during the six months prior to your expiration date. Passing one of these exams meets the requirements for recertification. Endorsements require passing a two-hour exam on one of the following:

Endorsements Eligible for Nine-Year Recertification Credit:

AWS D1.1 Structural Steel	ASME Section IX, B31.1 and B31.3
AWS D1.2 Structural Aluminum	Boiler and Pressure Vessel
AWS D1.5 Bridges	ASME Section VIII, Div. 1 and Section IX
AWS D15.1 Railroad	Boiler and Pressure Vessel
AWS D17.1 Aerospace	Structural Drawing Reading
API 1104 Pipelines	

Or 80 Hours in the Following:

Arc Welding Practical Fundamentals and Theory	Authorized Testing Representative Refresher
Applied Metallurgy	Authorized Testing Representative
Piping Codes for Industrial Work	OSHA 500
Orbital Tube Welding	Certified Wire Feed Machine Orbital Welding
Oxy-Fuel Cutting and Welding	Orbital Wire Feed Remote Video Welding Systems
Advanced Orbital Welding	AWS CWI® Preview
Teaching Orbital Welding	Quality Control Management
Machine Cutting, Severing, and Beveling	Principles of Arc Welding Processes, Welder and Weld
ASME Section B31.1 Code	Process Qualification, and Metallurgy NPE through
Methods in Teaching Downhill Welding	Ohio State University (OSU)
Teaching Shielded Metal Arc Welding (SMAW)	Weld Metallurgy, Defects, and Discontinuities for
Innovative Welding Techniques	Process
Emerging Welding Technologies	AWS CWI® Preview
Teaching Gas Tungsten Arc Welding (GTAW)	Piping Materials through Ohio State University (OSU)
Radiographic Film Interpretation	NDE for Process Piping through Ohio State University
ASME Section IX Welding Code	(OSU)
Advanced Gas Tungsten Arc Welding (GTAW)	Principles of Welding Processes and Welding Design,
TIG® Wire Feed Welding Process	Ohio State University (OSU)
Advanced Shielding Metal Arc Welding (SMAW)	Principles of Welding Design, Ohio State University
Advanced Gas Metal Arc Welding (GMAW)	(OSU)

Prerequisites to Registering



The United Association (UA), in association with the Electrical Power Research Institute (EPRI), established the Industrial Rigging Examination/Certification Program. A major emphasis of the program is the UA's commitment to continually improve the methods of training and qualifying its members.

It is with this commitment in mind that members registering to take the UA/EPRI Industrial Rigging Certification Examination Course 5011 must have completed the 40-hour UA training course on Industrial Rigging Technology. This course, 5010 Industrial Rigging Technologies, will ensure that individuals are trained in the planning and precautions required when lifting materials and equipment; proper and safe rigging of loads; proper applications

of slings and rigging hardware; advantages and disadvantages of each piece of rigging gear; uses of rigging hardware; determination/calculations of rigging loads and equipment; proper maintenance of rigging equipment, and rigging personal protective equipment.

Only those individuals who have completed Course 5010 Industrial Rigging Technologies are eligible to take the UA/EPRI Industrial Rigging Certification Examination Course. The certification examination consists of a multiple choice written examination and a hands-on performance examination developed under the strict requirements of the EPRI-Standard Task Evaluation Program. A score of 80% or above must be achieved on the written examination. During the performance examination, individuals must plan and execute a critical lift utilizing a complicated piping assembly and perform a load inversion and load transfer. All elements of the hands-on performance examination must be completed satisfactorily to pass.

The implementation of these changes to the UA/EPRI Industrial Rigging Certification Program is a continuation of the United Association's commitment to ensure that the best trained and qualified personnel are available for all future rigging requirements in the construction industry.

Level I - The Written Test

To pre-qualify for Level I certification, individuals must have attended and completed an approved UA or IBEW instrumentation class, or the individual must hold a Level II certification and have a minimum of five years of instrumentation calibration experience.

Once pre-qualified, those seeking certification must sit for a written test. This closed-book, open-note exam is comprised of 200 questions covering the various aspects of instrumentation, electrical and mechanical theory, and instrument calibration. A three-and-a-half (3.5) hour time period is allowed for completion of this exam. There is no "grandfathering." Anyone requesting to certify is required to take the test.

The UA has developed an online version of the exam which is now available through ASSE. This method will allow a journeyworker to instantly receive feedback with their results for the exam. The same prerequisites apply to this exam and the content will be identical to the written version.

Level II - The Practical Test

Once an individual has successfully completed the written certification test, he or she is eligible to take the Level II - practical exam. The practical exam is a hands-on proficiency test. Students will be required to perform various calibrations on an assortment of different instruments using the test and calibration equipment provided. This portion of the exam is performed on a one-on-one basis with a test administrator. The test administrator will be observing and validating the process that is used to ensure that the procedures are performed according to recognized industry standards. There is no "grandfathering."

Practical Test Format

This test may contain two types of steps: discussion (D) or performance (P). Discussion steps are administered to the examinee simply by asking them the appropriate questions written in the exercise. Performance steps are administered by having the examinee actually perform the steps using the necessary tools and equipment.

The evaluation is a pass/fail test. The calibration equipment and instrumentation listed below will be provided for the test. The examinee will be expected to select the appropriate test equipment from the test equipment listed when performing a calibration on the transmitters and field equipment during the exam. This exam is strictly an evaluation of the calibration process and does not cover the mounting or installation of the devices.

Calibration Equipment:

- Transmation PneuXal IV - Process Calibrator
- Fluke 700P06 - Pressure Module
- Transcat 23232E - DC Power Supply
- Fluke 744 - Process Calibrator
- Fluke 87 - Digital Multimeter
- Altek 334A - Milliamp Calibrator
- Rosemount (HART) Communicator

Transmitters and Field Devices:

- Rosemount 1151 - Differential Pressure Transmitter (Smart and Analog)
- Asco Pressure Switch
- Rosemount I/P (current to pressure) Transducer
- Rosemount 3051 - Differential (Gauge) Pressure Transmitter
- Rosemount 3144P - Temperature Transmitter

Additional information for UA Instrumentation Certification is available on <http://uanet.org>.

Facility

The Great Lakes Regional Training Center (GLRTC) is a 15,000 square-foot facility with classrooms, labs, and equipment used in all aspects of United Association (UA) training. The GLRTC is an essential component of the training program and includes state-of-the-art welding labs with the latest in technology such as training on microturbines. The classrooms provide a flexible environment that can accommodate everything from computer-based learning to the latest equipment and technology that UA members are likely to find on jobsites all across North America.



What We Do

- Answer any questions about Regional Training Center services
- Assists students in web-based classes using Blackboard™
- Help instructors develop online classes
- Facilitate student participation in WCC courses
- Provides academic advising for WCC associate degrees
- Evaluates transfer credits from other academic institutions
- Facilitates various onsite training courses throughout the year

Washtenaw Community College (WCC) is in partnership with the UA to provide associate degree and certificate programs for its members.

All UA apprentices registered with WCC receive 45 college credits upon completion of their apprenticeship in plumbing, pipefitting, sprinkler fitting, or HVACR. These credits can be applied towards an associate degree in industrial training, construction supervision, or journeyworker general studies.

Washtenaw Community College hosts the annual UA Instructor Training Program every August. During this week-long program, approximately 2,000 selected UA instructors take a variety of college level courses to become certified UA apprentice instructors. These courses are also applicable towards an associate degree in industrial training.

Washtenaw Community College is accredited by the Higher Learning Commission of the North Central Association.

Staff

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Dean, Apprenticeships and
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Technical Director

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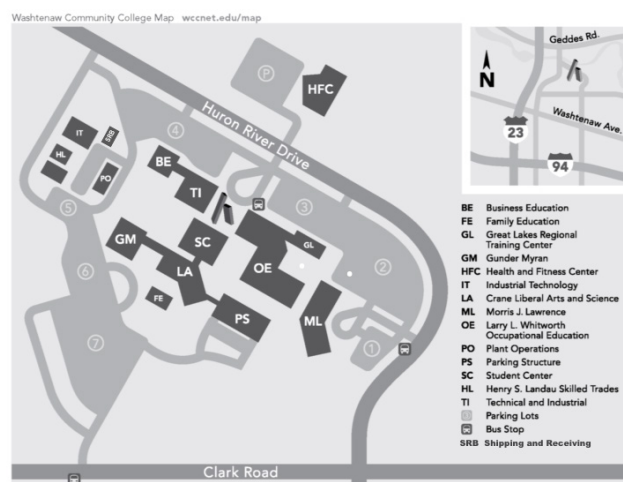
Logistics Director

Address

UA Great Lakes Regional Training Center

4800 East Huron River Drive
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(734) 973-3300

Washtenaw Community College Campus Map



CONTACT INFORMATION

WEB RESOURCES

To get the IP address for the websites listed below, go to:

[American Society of Sanitary Engineers \(ASSE\)](#)
[Destination Ann Arbor](#)
[Blackboard™ Help Page](#)
[Blackboard™ Login](#)
[Local Union Training Directory Lookup](#)
[JATC Bookstore](#)
[Occupational Safety & Health Administration \(OSHA\)](#)
[National Inspection Testing Certification](#)
[UA Course Registration](#)

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ONLINE LEARNING RESOURCES

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 Telephone: (410) 269-2000, ext. 5063

INTERNATIONAL PIPE TRADES
JOINT TRAINING COMMITTEE (BOOKSTORE)

Dianne Lash, Manager
 Email: iptbookstore@uanet.org
 Telephone: (301) 218-1241
 Fax: (301) 218-8961

WCC UA BLACKBOARD™ HELP DESK SUPPORT

Telephone: (734) 477-8908
 24/7 Voice Line Help: 1-800-218-4341

WASHTENAW COMMUNITY COLLEGE

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Questions? Contact us at
uaenrollment@wccnet.edu or 888-232-5476



Washtenaw
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Facility access Inquiries: Associate V.P. of Facilities, Development & Operations, PO 112, 734-677-5322

If you have a disability and require accommodation to participate in this event, contact Learning Support Services at 734-973-3342 to request accommodations at least 72 hours in advance.

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