Washtenaw Community College Comprehensive Report

UAT 160 Implementing a Gas Distribution System (UA 5025)
Effective Term: Spring/Summer 2018

Course Cover

College: Advanced Technologies and Public Service Careers
Division: Advanced Technologies and Public Service Careers
Department: United Association Department
Discipline: United Association Training
Course Number: 160
Org Number: 28200
Full Course Title: Implementing a Gas Distribution System (UA 5025)
Transcript Title: Gas Distribution System (5025)
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Web Page
Reason for Submission: New Course
Change Information:
Rationale: new U.A. course
Proposed Start Semester: Spring/Summer 2018
Course Description: In this course, students will demonstrate the process and procedures involved in electrofusion of pipe joint connections of plastic gas distribution lines used in the installation for residential meter settings. They will perform manual fusion, hydraulic butt fusion, sidewall fusion, and line taps under pressure (hot taps). Students will take the McElroy instrument certification exam. Limited to United Association program participants.

Course Credit Hours

Variable hours: No
Credits: 1.5
The following Lecture Hour fields are not divisible by 15: Student Min ,Instructor Min
Lecture Hours: Instructor: 22.5 **Student:** 22.5
The following Lab fields are not divisible by 15: Student Min, Instructor Min
Lab: Instructor: 1.5 **Student:** 1.5
Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 24 **Student:** 24
Repeatable for Credit: NO
Grading Methods: Letter Grades
Audit
Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

General Education

Degree Attributes

Below College Level Pre-Reqs

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Describe and properly operate the McElroy fusion equipment to perform various types of electrofusion.
   Assessment 1
   Assessment Tool: Skills demonstration
   Assessment Date: Spring/Summer 2021
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Skills demonstration checklist
   Standard of success to be used for this assessment: 90% of the students will score 100%
   Who will score and analyze the data: U.A. training coordinator
   Assessment 2
   Assessment Tool: McElroy Certification Exam
   Assessment Date: Spring/Summer 2021
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Exam is scored by 3rd party provider
   Standard of success to be used for this assessment: 90% of the students will pass the certification exam
   Who will score and analyze the data: U.A. training coordinator will analyze the data

2. Demonstrate tapping and stopping pipelines under pressure and for residential meter setting installation.
   Assessment 1
   Assessment Tool: Skills demonstration
   Assessment Date: Spring/Summer 2021
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Skills demonstration checklist
   Standard of success to be used for this assessment: 90% of the students will score 100%
   Who will score and analyze the data: U.A. training coordinator

Course Objectives

1. Identify components and operation procedures used in McElroy Pipe Fusion equipment.
2. Identify all safety issues, AOC (Abnormal Operation Conditions), and malfunctions that can occur during set-up, operation, and cool down of equipment.
3. Identify pressures, melt time, soak time, and cool down time for different pipe sizes and locations.
4. Calculate pipe markings needed to complete butt fusion, sidewall fusion, and manual fusion as per code and manufacturer.
5. Recognize the safe and proper procedure and tools used to create a gas flow stoppage in a plastic gas pipeline.
6. Install a residential gas meter on a wall with the procedures of shadow testing.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Tony Esposito	*Faculty Preparer*	*Dec 01, 2017*
Department Chair/Area Director:		
Marilyn Donham	*Recommend Approval*	*Jan 03, 2018*
Dean:		
Brandon Tucker	*Recommend Approval*	*Jan 08, 2018*
Curriculum Committee Chair:		
David Wooten	*Recommend Approval*	*Apr 16, 2018*
Assessment Committee Chair:		
Michelle Garey	*Recommend Approval*	*Mar 28, 2018*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Apr 19, 2018*