

Washtenaw Community College Comprehensive Report

UAT 155 Precision Weld Preparation and Field Machining of Pipe (UA 5024) Effective Term: Spring/Summer 2018

Course Cover

Division: Advanced Technologies and Public Service Careers
Department: United Association Department
Discipline: United Association Training
Course Number: 155
Org Number: 28200
Full Course Title: Precision Weld Preparation and Field Machining of Pipe (UA 5024)
Transcript Title: Prec Weld Prep & Machine (5024)
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 UAT course
Proposed Start Semester: Spring/Summer 2018
Course Description: In this course, students will adapt their existing pipefitting weld preparation practices with the growing demands of heavy industrial work safety practices when using precision weld preparation equipment. Students will gain hands-on experience using Tri Tool and E.H. Wachs heavy wall machining equipment with emphasis placed on operation and safety. 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. Identify and operate specific applications and correct equipment for weld preparation requirements.

Assessment 1

Assessment Tool: Skills demonstration

Assessment Date: Spring/Summer 2018

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

2. Apply mathematical calculations and basic machining principles to successful pipe weld preparation. (I.D. mount, mount sever, counterbore, and J-prep)

Assessment 1

Assessment Tool: Skills demonstration

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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. Compare and contrast the types of weld joint preparation commonly used in the field today as well as prior to 2000.
2. Review trade math as it applies to pipe joint preparation.
3. Review safety procedures involved in safe practice set-up, operation, environmental awareness, and transportation of pipe machining equipment using the STAR method.
4. Correctly select necessary and appropriate machine components required for operation of E.H. Wachs and Tri Tool I.D. and O.D. equipment.
5. Operate equipment using basic machining principles, and identify necessary "needs and speeds" to achieve safe and proper weld preparation.
6. Demonstrate proper maintenance procedures to ensure machines are in safe operating conditions.

New Resources for Course**Course Textbooks/Resources**

Textbooks

Manuals

Periodicals

Software

Equipment/Facilities**Reviewer****Faculty Preparer:**

Tony Esposito

Action

Faculty Preparer

Date

Nov 16, 2017

Department Chair/Area Director:

Marilyn Donham *Recommend Approval* Nov 17, 2017

Dean:

Brandon Tucker *Recommend Approval* Dec 27, 2017

Curriculum Committee Chair:

David Wooten *Recommend Approval* Apr 25, 2018

Assessment Committee Chair:

Michelle Garey *Recommend Approval* Apr 25, 2018

Vice President for Instruction:

Kimberly Hurns *Approve* Apr 27, 2018