Washtenaw Community College Comprehensive Report

UAT 326 Grooving Fundamentals and Installation (UA 2180)
Effective Term: Fall 2024

Course Cover

College: Advanced Technologies and Public Service Careers
Division: Advanced Technologies and Public Service Careers
Department: United Association Department (UAT Only)
Discipline: United Association Training
Course Number: 326
Org Number: 28200
Full Course Title: Grooving Fundamentals and Installation (UA 2180)
Transcript Title: Grooving Fund & Install (2180)
Is Consultation with other department(s) required: No
Publish in the Following:
Reason for Submission: New Course
Change Information:
Rationale: New United Associated course
Proposed Start Semester: Fall 2024
Course Description: In this course, students will identify the proper fundamentals of pipe grooving and installation. Topics include the anatomy of a groove, tool setup procedures, product line, safety testing, and proper installation of grooved piping systems. Students will also be introduced to Revit software and will design a grooved piping spool project. Students will be involved in hands-on training including designing, fabricating, and pressure testing a grooved piping spool project. Limited to United Association Instructor Training program graduates.

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. Demonstrate the setup of equipment needed to roll groove pipe for various types of piping materials including changing roll sets.
   Assessment 1
   Assessment Tool: Outcome-related demonstration
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Checklist
   Standard of success to be used for this assessment: 80% of the students will score 80% or higher.
   Who will score and analyze the data: U.A. Instructors

2. Demonstrate pipe inspection procedures for various types of piping materials used in grooved piping systems.
   Assessment 1
   Assessment Tool: Outcome-related demonstration
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Checklist
   Standard of success to be used for this assessment: 80% of the students will score 80% or higher.
   Who will score and analyze the data: U.A. Instructors

3. Identify Victaulic® 100 installation procedures and design specifications, as well as critical dimensions and gaskets.
   Assessment 1
   Assessment Tool: Outcome-related written exam questions
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All
   How the assessment will be scored: Answer key
   Standard of success to be used for this assessment: 80% of the students will score 80% or higher.
   Who will score and analyze the data: U.A. Instructors

4. Create a Revit drawing of a grooved piping spool.
   Assessment 1
   Assessment Tool: Outcome-related demonstration
   Assessment Date: Fall 2024
   Assessment Cycle: Every Three Years
   Course section(s)/other population: All
   Number students to be assessed: All

How the assessment will be scored: Checklist
Standard of success to be used for this assessment: 80% of the students will score 80% or higher.
Who will score and analyze the data: U.A. Instructors

Course Objectives

1. Identify critical dimensions, installation procedures, product installation procedure specifications, and gasket using Victaulic® I-100 Field Installation Handbook.
2. Identify all critical dimensions of a groove.
3. Discuss the benefits and applications of grooved pipe connections as compared to other connection techniques.
4. Explain the proper pre-grooving pipe inspection process.
5. Demonstrate the pre-grooving pipe inspection steps.
6. Identify and analyze correct and incorrect grooves.
7. Design a piping spool drawing utilizing Revit.
8. Fabricate and install a piping spool.
9. Discuss and demonstrate the required pressure testing.
10. Review the layout and contents of the Victaulic® I-100 Field Installation Handbook.
11. Demonstrate proper use of the Victaulic® I-100 Field Installation Handbook through the identification of critical dimensions, installation procedures, product installation procedure specifications, and gaskets.
12. Review safety procedures and personal protective equipment (PPE) needed when working with grooving tools and equipment.

New Resources for Course

Course Textbooks/Resources

Textbooks

Victaulic Company. *Victaulic I-600 Field Installation Handbook* , G 08 ed. Victaulic Compnay, 2020
Victaulic Company. *Victaulic I-100 Field Installation Handbook* , G 08 ed. Victaulic Compnay, 2022
Victaulic Company. *Victaulic Operating and Maintenance Instructions Manual* , C 10 ed. Victaulic Compnay, 2021

Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Tony Esposito	*Faculty Preparer*	*Jan 30, 2024*
Department Chair/Area Director:		
Marilyn Donham	*Recommend Approval*	*Feb 01, 2024*
Dean:		
Eva Samulski	*Recommend Approval*	*Feb 18, 2024*
Curriculum Committee Chair:		
Randy Van Wagnen	*Recommend Approval*	*May 17, 2024*
Assessment Committee Chair:		
Jessica Hale	*Recommend Approval*	*May 20, 2024*
Vice President for Instruction:		
Brandon Tucker	*Approve*	*May 30, 2024*