

# UAT 175: UTILIZING REVIT® FOR UA TRAINING (UA 3095)

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## History

1. Dec 6, 2025 by Sera Bird (sabird)

**Viewing:** UAT 175 : Utilizing Revit® for UA Training (UA 3095)

**Last approved:** 2025-12-06T08:03:14Z

**Last edit:** 2025-12-01T20:53:00Z

**Effective Term**

Winter 2026

## Rationale and proposal summary

Update UA course to reflect current technology and trends in the industry.

## Course Cover

### Full Course Title

Utilizing Revit® for UA Training (UA 3095)

### Transcript Title

Utilizing Revit UA Train 3095

### Subject Code

UAT - United Association Training

### Course Number

175

### Department

United Assoc Dept (UAT Only) (UATD)

### Banner Division

ATP

### Division/College

Adv Tech/Public Serv Careers (AT)

### Org Code

28200

## Course Description

In this course, students will create three-dimensional (3D) piping models using Autodesk Revit software. Students will create project plans and develop isometric and elevation drawings, which can be annotated and saved as two-dimensional (2D) PDFs. These models can be used for training exercises and lessons in the instructional courses at the student's local Training Centers. Limited to United Association program participants.

## Has this course been approved for online or online blended?

No

## Grading method

Standard Letter, Audit

## CIP Code

469999 - Construction Trades, Other.

## Occupational Indicator

Yes

## ACS Code

130

**Degree Attributes**

BCL - Below College Level Pre-Reqs

**Credit hours, contact hours, repeatability****Repeatable for additional credit**

No

**Course credits**

1.5

**Lecture contact hours**

22.5

**Lab contact hours**

1.5

**Total Contact Hours**

24

**Expected Total Contact Hours**

24

**Prerequisites and prerequisite skill levels****College-Level Math**

No Level Required

**College-Level Reading and Writing**

College-level Reading and Writing

**Approved Level I Prerequisite:**

Academic Reading and Writing Levels of 6

**Course Assessment Plan****Learning Outcome****Outcome**

Create piping models using Autodesk Revit software.

**Assessment #1****Assessment Tool**

Outcome-related drawing project

**Anticipated Next Assessment Year**

2025

**Anticipated Next Assessment Term**

Summer

**Assessment Cycle**

Every Three Years

**Anticipated assessment population**

All students from all sections

**How the assessment will be scored**

Rubric

**Who does the scoring?**

U. A. Instructors

**Standard of success**

80% of the students will score 80% or higher

**Assessment #2**

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**Learning Outcome**

**Outcome**

Compose mechanical drawings of a predetermined piping model to view in a 2D and 3D format.

**Assessment #1**

**Assessment Tool**

Outcome-related drawing project

**Anticipated Next Assessment Year**

2025

**Anticipated Next Assessment Term**

Summer

**Assessment Cycle**

Every Three Years

**Anticipated assessment population**

All students from all sections

**How the assessment will be scored**

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**Who does the scoring?**

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**Standard of success**

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**Assessment #2**

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**Course Objectives**

Objective(s)	
1.	Identify and demonstrate Revit software commands using computer.
2.	Create piping diagrams using the Revit modeling software.
3.	Compare and contrast the advantages and disadvantages of 2D and 3D imaging.
4.	Create isometric and elevation view models from a project plan.
5.	Create isometric and elevation view PDFs from a project plan.
6.	Develop location dimensions and scale of piping views to 2 dimensional PDF format.
7.	Create and place annotations and specifications for piping drawings.
8.	Discuss the history of construction project mechanical drawings and prints from paper to 3D computer format.

**General Education Area(s)**

**Area 1: Writing**

No

**Area 2: 2nd Writing or Communication/Speech**

No

**Area 3: Mathematics**

No

**Area 4: Natural Science**

No

**Area 5: Social and Behavioral Science**

No

**Area 6: Arts and Humanities**

No

**MTA General Education**

No

**Review**

**Is conditional approval requested?**

No

**Is this course currently conditionally approved, and you are now submitting it for full approval?**

No

Key: 8830

# **Washtenaw Community College Comprehensive Report**

## **UAT 175 Utilizing Revit® for UA Training (UA 3095)**

**Effective Term: Fall 2020**

### **Course Cover**

**Division:** Advanced Technologies and Public Service Careers

**Department:** United Association Department

**Discipline:** United Association Training

**Course Number:** 175

**Org Number:** 28200

**Full Course Title:** Utilizing Revit® for UA Training (UA 3095)

**Transcript Title:** Utilizing Revit UA Train 3095

**Is Consultation with other department(s) required:** No

**Publish in the Following:**

**Reason for Submission:** New Course

**Change Information:**

**Rationale:** New United Association Course

**Proposed Start Semester:** Fall 2020

**Course Description:** In this course, students will create 2 and 3 dimensional piping models using Autodesk Revit ® software. Students will create project plans and develop isometric and elevation drawings, which can be annotated and saved as PDFs. These models can be used for training exercises and lessons in their instructional courses at their local Training Centers. 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. Create a 3D piping model using software and appropriate commands.

#### **Assessment 1**

Assessment Tool: Drawing project

Assessment Date: Fall 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Instructor Rubric

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. Create and annotate isometric and elevation drawings.

#### **Assessment 1**

Assessment Tool: Drawing project

Assessment Date: Fall 2020

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Instructor Rubric

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 and demonstrate Revit software commands using computer.
2. Create piping diagrams using the Revit modeling software.
3. Compare and contrast the advantages and disadvantages of 2D and 3D imaging.
4. Create isometric and elevation view models from a project plan.
5. Create isometric and elevation view PDFs from a project plan.
6. Develop location dimensions and scale of piping views to 2 dimensional PDF format.
7. Create and place annotations and specifications for piping drawings.

### **New Resources for Course**

#### **Course Textbooks/Resources**

Textbooks

Manuals

Periodicals

Software

#### **Equipment/Facilities**

**Reviewer**

**Action**

**Date**

**Faculty Preparer:**

*Tony Esposito*

*Faculty Preparer*

*Apr 01, 2020*

**Department Chair/Area Director:**

<i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Apr 06, 2020</i>
<b>Dean:</b>		
<i>Jimmie Baber</i>	<i>Recommend Approval</i>	<i>Apr 13, 2020</i>
<b>Curriculum Committee Chair:</b>		
<i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Jun 09, 2020</i>
<b>Assessment Committee Chair:</b>		
<i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Jun 16, 2020</i>
<b>Vice President for Instruction:</b>		
<i>Kimberly Hurns</i>	<i>Approve</i>	<i>Jun 17, 2020</i>