

## Washtenaw Community College Comprehensive Report

### UAT 116 Advanced Revit (UA 3026) Effective Term: Spring/Summer 2025

#### 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:** 116  
**Org Number:** 28200  
**Full Course Title:** Advanced Revit (UA 3026)  
**Transcript Title:** Advanced Revit (3026)  
**Is Consultation with other department(s) required:** No  
**Publish in the Following:** College Catalog , Time Schedule , Web Page  
**Reason for Submission:** Course Change  
**Change Information:**  
     **Course description**  
     **Outcomes/Assessment**  
     **Objectives/Evaluation**

**Rationale:** Course adjustments to reflect current market trends and technology in the industry.

**Proposed Start Semester:** Spring/Summer 2025

**Course Description:** In this course, students will utilize the current Autodesk Revit software and explore the advanced uses of Autodesk Revit Mechanical, Electrical, and Plumbing (MEP) as a complete design-to-fabrication Virtual Design and Construction/Building Information Modeling (VDC/BIM) tool for the pipe trades. This hands-on course will introduce them to advanced methods of pipe routing. In addition, students will learn how a coordinated model is processed into installation shop drawings, spool maps, and fabrication spool sheets. 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. Demonstrate mastery of Revit design-to-fabrication workflow software and spool drawing.

#### **Assessment 1**

Assessment Tool: Outcome-related skills demonstration

Assessment Date: Spring/Summer 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Observational 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. Present a lesson plan for teaching Revit at the student's local Training Center.

#### **Assessment 1**

Assessment Tool: Outcome-related teaching presentation

Assessment Date: Spring/Summer 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 80% of students will score 80% or higher.

Who will score and analyze the data: U.A. Instructors

### **Course Objectives**

1. Build customer schedules to extract data and materials from the model provided.
2. Create custom Revit families to place and load into the model.
3. Transform a generic Revit model into a buildable fabrication level model.
4. Customize a provided Revit template to use at students' individual local Training Centers.
5. Enter the created design into the Fabrication Tool software.
6. Create piping spool sheets.
7. Access web-based resources for classroom instruction.
8. Discuss Revit/BIM Workflow.
9. Present a lesson activity using UA resources with peer review.

### **New Resources for Course**

### **Course Textbooks/Resources**

Textbooks

Manuals

Periodicals

Software

### **Equipment/Facilities**

<b><u>Reviewer</u></b>	<b><u>Action</u></b>	<b><u>Date</u></b>
<b>Faculty Preparer:</b> <i>Tony Esposito</i>	<i>Faculty Preparer</i>	<i>Jan 22, 2025</i>
<b>Department Chair/Area Director:</b> <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Jan 28, 2025</i>
<b>Dean:</b> <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Jan 28, 2025</i>
<b>Curriculum Committee Chair:</b> <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Apr 24, 2025</i>
<b>Assessment Committee Chair:</b> <i>Jessica Hale</i>	<i>Recommend Approval</i>	<i>Apr 26, 2025</i>
<b>Vice President for Instruction:</b> <i>Brandon Tucker</i>	<i>Approve</i>	<i>Apr 28, 2025</i>

## Washtenaw Community College Comprehensive Report

### UAT 116 Advanced Revit (UA 3026) Effective Term: Spring/Summer 2018

#### Course Cover

**Division:** Advanced Technologies and Public Service Careers  
**Department:** United Association Department  
**Discipline:** United Association Training  
**Course Number:** 116  
**Org Number:** 28200  
**Full Course Title:** Advanced Revit (UA 3026)  
**Transcript Title:** Advanced Revit (3026)  
**Is Consultation with other department(s) required:** No  
**Publish in the Following:** College Catalog , Time Schedule , Web Page  
**Reason for Submission:** New Course  
**Change Information:**  
**Rationale:** New course  
**Proposed Start Semester:** Spring/Summer 2018

**Course Description:** In this course, students will utilize the latest Autodesk Revit software and explore the advanced uses of Autodesk Revit MEP as a complete design-to-fabrication VDC/BIM (Virtual Design Construction/Building Information Modeling) tool for the pipe trades. This hands-on course will introduce them to advanced methods of pipe routing. In addition, students will learn how a coordinated model is processed into installation shop drawings, spool maps, and fabrication spool sheets. 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**  
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**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. Use REVIT design-to-fabrication workflow software and spool drawing.

**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: UA training coordinator

2. Create lesson plan to teach REVIT training in their local training center.

**Assessment 1**

Assessment Tool: Teaching 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: Departmentally-developed rubric  
 Standard of success to be used for this assessment: 90% of students will score 100%  
 Who will score and analyze the data: UA training coordinator

**Course Objectives**

1. Build customer schedules to extract data and materials from the model provided.
2. Create custom REVIT families to place in the model.
3. Transform a generic REVIT model into a buildable fabrication level model.
4. Alter visibility and graphics settings to create custom views and sheets.
5. Demonstrate annotation tags to correlate information between the model geometry and schedules.
6. Customize a provided REVIT template to use at students' individual local training centers.
7. Produce custom share parametric relationships in the design model.

**New Resources for Course**

**Course Textbooks/Resources**

Textbooks  
 Manuals  
 Periodicals  
 Software

**Equipment/Facilities**

**Reviewer**

**Action**

**Date**

**Faculty Preparer:**

*Tony Esposito*

*Faculty Preparer*

*Nov 16, 2017*

**Department Chair/Area Director:**

<i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Nov 17, 2017</i>
<b>Dean:</b>		
<i>Brandon Tucker</i>	<i>Recommend Approval</i>	<i>Dec 27, 2017</i>
<b>Curriculum Committee Chair:</b>		
<i>David Wooten</i>	<i>Recommend Approval</i>	<i>Apr 16, 2018</i>
<b>Assessment Committee Chair:</b>		
<i>Michelle Garey</i>	<i>Recommend Approval</i>	<i>Mar 28, 2018</i>
<b>Vice President for Instruction:</b>		
<i>Kimberly Hurns</i>	<i>Approve</i>	<i>Apr 19, 2018</i>