

## Washtenaw Community College Comprehensive Report

### UAT 168 Introduction to REVIT (UA 3025) Effective Term: Fall 2020

#### Course Cover

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

**Department:** United Association Department

**Discipline:** United Association Training

**Course Number:** 168

**Org Number:** 28200

**Full Course Title:** Introduction to REVIT (UA 3025)

**Transcript Title:** Introduction to REVIT 3025

**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 be introduced to the Autodesk Revit Mechanical, Electrical, Plumbing (MEP) software as a design, collaboration, coordination, communication and fabrication tool for the construction industry. Students will learn how to utilize a 3-D model to coordinate installation drawings and fabrication spool sheets. In addition, students will discuss the advantages of implementing Revit software training at the local Training Center. 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. Use modeling and documentation tools in Revit software.

### **Assessment 1**

Assessment Tool: Demonstration

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: Skills 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 the advantages of current Autodesk Revit integral software over standard AutoCAD software.

### **Assessment 1**

Assessment Tool: Presentation

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: 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

3. Present jobsite workflow diagrams that can be obtained from a Revit model along with third-party adaptation software.

### **Assessment 1**

Assessment Tool: Presentation

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: 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

## **Course Objectives**

1. Navigate the Revit workspace utilizing ribbons and tabs.
2. Demonstrate the use of the properties panel and the project browser for modeling plumbing and mechanical systems.
3. Describe the history and methods of obtaining jobsite mechanical drawings.
4. Discuss the advantages of Autodesk Revit and the Building Information Modeling (BIM) process.
5. Identify the current technology available with Autodesk Revit software that is not available in the AutoCAD software.
6. Discuss the best practices for implementing Autodesk Revit at the student's local Training Center.
7. Discuss the Revit model and the jobsite workflow capabilities.
8. Discuss and demonstrate available third-party software that can assist with Revit operation.

9. Compare and contrast the costs of Revit software and workflow models as well as its savings and return on investment (ROI).

### New Resources for Course

#### Course Textbooks/Resources

Textbooks  
Manuals  
Periodicals  
Software

#### Equipment/Facilities

| <u>Reviewer</u>   | <u>Action</u>             | <u>Date</u>         |
|---|---------------------------|---------------------|
| <b>Faculty Preparer:</b><br><i>Tony Esposito</i>                | <i>Faculty Preparer</i>   | <i>Jun 02, 2020</i> |
| <b>Department Chair/Area Director:</b><br><i>Marilyn Donham</i> | <i>Recommend Approval</i> | <i>Jun 05, 2020</i> |
| <b>Dean:</b><br><i>Jimmie Baber</i>                             | <i>Recommend Approval</i> | <i>Jun 10, 2020</i> |
| <b>Curriculum Committee Chair:</b><br><i>Lisa Veasey</i>        | <i>Recommend Approval</i> | <i>Oct 16, 2020</i> |
| <b>Assessment Committee Chair:</b><br><i>Shawn Deron</i>        | <i>Recommend Approval</i> | <i>Oct 20, 2020</i> |
| <b>Vice President for Instruction:</b><br><i>Kimberly Hurns</i> | <i>Approve</i>            | <i>Oct 22, 2020</i> |