

Washtenaw Community College Comprehensive Report

UAT 116A Revit Add-Ons (UA 3029)

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: 116A

Org Number: 28200

Full Course Title: Revit Add-Ons (UA 3029)

Transcript Title: Revit Add-Ons (UA 3029)

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 2024

Course Description: o Description: In this course, students will review and the use of common Revit Mechanical Electrical Plumbing (MEP) add-ons including Trimble Sysque, Victaulic Tools, Stratus, M-Suite and augmented reality plugin software Augmentecture. Students will be able to build a model and produce construction documents using each software's workflow and export that model to Augmentecture to visualize it in augmented reality. Basic concepts and operation of Revit is required. 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 the set-up, installation, and application of Revit MEP add-ons Trimble Sysque, Victaulic Tools, Stratus, and M-Suite along with the Augmented Reality (AR) plug-in, Augmentecture.

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. Create a building model and produce construction documents using each software's workflow.

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. Export a building model to Augmentecture to visualize in Augmented Reality (AR).

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. Install the following Revit MEP add-ons on your laptop: Sysque, Stratus, M-Suite, Victaulic Tools.
2. Review the functions of the MEP add-ons.
3. Install and review the function of the altered reality plug-in software, Augmentecture.
4. Create system specification documentation using installed software and the engineer's specifications.
5. Convert specified material and equipment from a generic building model to system specifications utilizing available software.
6. Review and demonstrate available software associated with automatic hanger placement tools.
7. Create a bill of materials using schedules.
8. Identify and export software points for use with a total station layout system.

9. Upload a completed construction model to the Augmentecture website.
10. Demonstrate the ability to view the construction model in space on a mobile device using AR.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Tony Esposito</i>	<i>Faculty Preparer</i>	<i>Jan 26, 2024</i>
Department Chair/Area Director: <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Feb 01, 2024</i>
Dean: <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Feb 18, 2024</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>May 17, 2024</i>
Assessment Committee Chair: <i>Jessica Hale</i>	<i>Recommend Approval</i>	<i>May 20, 2024</i>
Vice President for Instruction: <i>Brandon Tucker</i>	<i>Approve</i>	<i>May 30, 2024</i>