Washtenaw Community College Comprehensive Report

UAT 184 Revit for Fire Protection II (UA 7026)
Effective Term: Fall 2020

Course Cover

Division: Advanced Technologies and Public Service Careers
Department: United Association Department
Discipline: United Association Training
Course Number: 184
Org Number: 28200
Full Course Title: Revit for Fire Protection II (UA 7026)
Transcript Title: Revit for Fire Protect II 7026
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog
Reason for Submission: New Course
Change Information:
Rationale: New United Association Course
Proposed Start Semester: Fall 2020
Course Description: In this course, students will further study Autodesk Revit Building Information Management (BIM) integration as well as recognize current clash detection options through Navisworks. Students will identify the BIM workflow and the challenges faced by the detailers in the collaboration of Fire Protection Systems (FPS) with other trades. Fabrication and stock listing ability of HydraCAD for Revit will also be explored. 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. Design a fire pump room, using hydraulic calculations in Navisworks.
   Assessment 1
   Assessment Tool: Skills 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. Create a material stock list by tagging and annotating system piping.
   Assessment 1
   Assessment Tool: Skills 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

3. Identify and correct system coordination clashes to maintain the hydraulic integrity of the system using predetermined faults.
   Assessment 1
   Assessment Tool: Skills 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

Course Objectives

1. Identify fire protection components, purpose, and function of fire pump room for code compliance.
2. Using BIM, create three-dimensional layout drawings of a fire pump room.
3. Locate and create connections from a fire pump room drawing to existing building piping.
4. Coordinate existing systems with new overhead equipment added to the model.
5. Change a wet system to a gridded wet system, and identify clashes and corrections to the model.
6. Discuss and complete hydraulic calculations of a restructured gridded wet sprinkler system.
7. Review all exterior piping connections from both wet and dry fire sprinkler systems to a fire pump room.
8. Tag and annotate the dry sprinkler system for material stock listing.
9. Tag and annotate the wet gridded sprinkler system for material stock listing.
10. Create a completed material stock list for dry pipe and gridded wet sprinkler systems.

11. Discuss and prepare installation drawings and sheets to accurately reflect the new material lists.

New Resources for Course

Course Textbooks/Resources

Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		
Tony Esposito	*Faculty Preparer*	*May 19, 2020*
Department Chair/Area Director:		
Marilyn Donham	*Recommend Approval*	*May 20, 2020*
Dean:		
Jimmie Baber	*Recommend Approval*	*May 27, 2020*
Curriculum Committee Chair:		
Lisa Veasey	*Recommend Approval*	*Jul 15, 2020*
Assessment Committee Chair:		
Shawn Deron	*Recommend Approval*	*Jul 21, 2020*
Vice President for Instruction:		
Kimberly Hurns	*Approve*	*Jul 28, 2020*