Washtenaw Community College Comprehensive Report

UAT 153 Robotic Station Layout Topcon (UA 3031)
Effective Term: Spring/Summer 2018

Course Cover

Division: Advanced Technologies and Public Service Careers
Department: United Association Department
Discipline: United Association Training
Course Number: 153
Org Number: 28200
Full Course Title: Robotic Station Layout Topcon (UA 3031)
Transcript Title: Robotic Stn Layout Topcon 3031
Is Consultation with other department(s) required: No
Publish in the Following: College Catalog , Web Page
Reason for Submission: New Course
Change Information:
Rationale: United Association New Course proposal
Proposed Start Semester: Spring/Summer 2018
Course Description: In this course, students will be exposed to the effective operation of a robotic station layout (RSL) as it applies to the construction jobsite. Students will discuss the technological advantages of the RSL system and compare and contrast the system to standard blueprints. Students will review available models of robotic station systems and software and incorporate their selection into a training plan. 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. Identify the operation of the robotic station layout, its related hardware, and export layout files from individual controllers.
   ### Assessment 1
   Assessment Tool: Written exam
   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: Answer key
   Standard of success to be used for this assessment: 90% of the students will score 100%
   Who will score and analyze the data: U.A. training coordinator

2. Recognize Bill of Materials (BOM) workflow and compare and contrast the need for robotic layout station as it pertains to trades and construction methods.
   ### 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: U.A. training coordinator

Course Objectives
1. Identify the operation of a robotic station, including the software and hardware needed for usage.
2. Compare and contrast standard practices with Building Information Modeling (BIM) workflow hardware.
3. Participate in Trimble, Lecia, Topcon, software and hardware hands-on demonstration.
4. Compare and contrast different models with a question and answer session with manufacturers of choice.
5. Compare and contrast Robotic Station layout and its software needed at student's individual training center as per trade.
6. Develop lesson plan and class syllabus that incorporates the robotic station layout for students' home training facility.

New Resources for Course

Course Textbooks/Resources
Textbooks
Manuals
Periodicals
Software

Equipment/Facilities

Reviewer	Action	Date
Faculty Preparer:		

| *Tony Esposito* | *Faculty Preparer* | *Jan 12, 2018* |

Department Chair/Area Director:

| *Marilyn Donham* | *Recommend Approval* | *Jan 26, 2018* |

Dean:

| *Brandon Tucker* | *Recommend Approval* | *Feb 15, 2018* |

Curriculum Committee Chair:

| *David Wooten* | *Recommend Approval* | *Apr 16, 2018* |

Assessment Committee Chair:

| *Michelle Garey* | *Recommend Approval* | *Mar 28, 2018* |

Vice President for Instruction:

| *Kimberly Hurns* | *Approve* | *Apr 19, 2018* |