

# Washtenaw Community College Comprehensive Report

## UAT 171C Robotic Total Station-Trimble (UA 3033)

Effective Term: Fall 2020

### Course Cover

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

**Department:** United Association Department

**Discipline:** United Association Training

**Course Number:** 171C

**Org Number:** 28200

**Full Course Title:** Robotic Total Station-Trimble (UA 3033)

**Transcript Title:** Robotic Total Station (3033)

**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 study the setup, layout, operation, and troubleshooting of the Trimble Robotic Total Station with an emphasis on hands-on application using the latest equipment and software. Students will be able to identify, establish, and verify Building Control Points of single and multi-level structures. Students will also recognize the methods of loading layout points as well as loading built points in a given model into the total station. 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 setup, layout and operation of the Trimble Robotic Total Station program.

#### **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: 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. Demonstrate the locating, entering, and transferring of the control points from one structure level to another using the Trimble Station unit.

#### **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: 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. Discuss the history of how building "as built" are developed and recorded.
2. Discuss the theory of the Trimble Station operation.
3. Identify software operation and menu items.
4. Recognize the control points as they apply to the Trimble system.
5. Recognize troubleshooting issues and how to correct them.
6. Transfer control points from one structure level to another.
7. Establish new control points from existing controls.
8. Transfer new points from one location to another location.
9. Review safety procedures with operation and storage of Trimble unit.

### **New Resources for Course**

#### **Course Textbooks/Resources**

Textbooks

Manuals

Periodicals

Software

#### **Equipment/Facilities**

**Reviewer**

**Action**

**Date**

<b>Faculty Preparer:</b> <i>Tony Esposito</i>	<i>Faculty Preparer</i>	<i>Apr 08, 2020</i>
<b>Department Chair/Area Director:</b> <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Apr 11, 2020</i>
<b>Dean:</b> <i>Jimmie Baber</i>	<i>Recommend Approval</i>	<i>Apr 13, 2020</i>
<b>Curriculum Committee Chair:</b> <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Apr 28, 2020</i>
<b>Assessment Committee Chair:</b> <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Jul 14, 2020</i>
<b>Vice President for Instruction:</b> <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Jul 16, 2020</i>