## **Washtenaw Community College Comprehensive Report**

# UAT 230 3D Computer-Aided Drafting (CAD) Effective Term: Spring/Summer 2016

#### **Course Cover**

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

**Department:** United Association Department **Discipline:** United Association Training

Course Number: 230 Org Number: 28200

**Full Course Title:** 3D Computer-Aided Drafting (CAD)

Transcript Title: 3D Computer-Aided Drafting

Is Consultation with other department(s) required: No Publish in the Following: College Catalog, Web Page

**Reason for Submission:** Course Change

Change Information:

Consultation with all departments affected by this course is required.

**Course description** 

**Credit hours** 

Outcomes/Assessment Rationale: Change credit hours.

**Proposed Start Semester:** Winter 2016

**Course Description:** In this course, students learn methods of teaching 3D Computer-Aided Drafting (CAD). Topics to be covered include the 3D CAD environment; creation of 3D piping, 3D pipefittings and other complex solids; creating surfaces; editing solids; and utilizing AutoCAD and Quickpen Pipe Designer 3D software. Limited to United Association program

participants.

#### **Course Credit Hours**

Variable hours: No

Credits: 2

Lecture Hours: Instructor: 30 Student: 30

The following Lab fields are not divisible by 15: Student Min, Instructor Min

Lab: Instructor: 10 Student: 10 Clinical: Instructor: 0 Student: 0

**Total Contact Hours: Instructor: 40 Student: 40** 

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. Explain to apprentices and journey-people the central concepts and skills of 3D computeraided drafting.

Assessment 1

**Assessment Tool:** Teaching demonstration

**Assessment Date:** Fall 2015

**Assessment Cycle:** Every Three Years Course section(s)/other population: All

**Number students to be assessed:** 75% of all students through random sampling

who teach the topic the subsequent year, minimum of 7 students

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 75 percent of students will

score 11 or higher out of 16.

Who will score and analyze the data: UAT faculty

2. Utilize approved industry and UA course/training materials to teach 3D computer-aided drafting.

Assessment 1

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## **Course Objectives**

- 1. Describe the 3D CAD environment.
- 2. Identify and explain the basic 3D concepts, working drawings, and 3D objects.
- 3. Demonstrate how to create surfaces and use solid modeling.
- 4. Demonstrate appropriate use and knowledge of course materials.

#### **New Resources for Course**

### Course Textbooks/Resources

Textbooks Manuals

Periodicals

Software

## **Equipment/Facilities**

Level III classroom

Reviewer	<u>Action</u>	<u>Date</u>
Faculty Preparer:		
Justin Carter	Faculty Preparer	Jun 15, 2015
Department Chair/Area Director:		
Scott Klapper	Recommend Approval	Jun 17, 2015
Dean:		
Brandon Tucker	Recommend Approval	Jun 18, 2015

Curriculum Committee Chair:Kelley GottschangRecommend ApprovalSep 29, 2015Assessment Committee Chair:Recommend ApprovalSep 29, 2015Michelle GareyRecommend ApprovalSep 29, 2015Vice President for Instruction:ApproveOct 06, 2015