

# Washtenaw Community College Comprehensive Report

## UAT 272 Wire Feed Orbital Welding Effective Term: Spring/Summer 2015

### Course Cover

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

**Department:** United Association Department

**Discipline:** United Association Training

**Course Number:** 272

**Org Number:** 28200

**Full Course Title:** Wire Feed Orbital Welding

**Transcript Title:** Wire Feed Orbital Welding

**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**

**Total Contact Hours**

**Outcomes/Assessment**

**Rationale:** Change credit hours, contact hours, assessment date and text.

**Proposed Start Semester:** Fall 2015

**Course Description:** In this course, students will learn methods of teaching wire feed orbital welding. Topics include teaching wire feed orbital equipment capacity/capabilities and their accessories; installation and set-up of equipment; machine and weld head calibration; weld joint design; tack-up; weld preparation; and welding parameters. Students taking this class should already be well versed in orbital tube welding. 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**

## Request Course Transfer

Proposed For:

## Student Learning Outcomes

1. Explain to apprentices and journey-people the central concepts and skills of wire feed orbital welding.

### **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

**How the assessment will be scored:** Departmentally-developed rubric

**Standard of success to be used for this assessment:** 75% will score 11 or higher out of 16.

**Who will score and analyze the data:** UAT faculty

2. Demonstrate to apprentices and journey-people the proper maintenance and repair procedures related to wire feed orbital welding.

### **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

**How the assessment will be scored:** Departmentally-developed rubric

**Standard of success to be used for this assessment:** 75% will score 11 or higher out of 16.

**Who will score and analyze the data:** UAT faculty

3. Teach wire feed orbital welding utilizing approved industry and UA course/training materials.

### **Assessment 1**

**Assessment Tool:** Teaching demonstration

**Assessment Date:** Fall 2015

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**Standard of success to be used for this assessment:** 75% will score 11 or higher out of 16.

**Who will score and analyze the data:** UAT faculty

## Course Objectives

1. Explain the terminologies and theoretical applications for weld program selection and development.
2. Identify and describe the wire feed orbital welding process variables and system programmer control functions.
3. Demonstrate how to calculate and modify welder program worksheet to meet specifications.
4. Demonstrate installation and set-up of equipments, machine and weld head calibrations, and other wire feed orbital welding techniques.
5. Demonstrate appropriate use and knowledge of course materials.

**New Resources for Course**  
**Course Textbooks/Resources**

Textbooks  
Manuals  
Periodicals  
Software

**Equipment/Facilities**

<b><u>Reviewer</u></b>	<b><u>Action</u></b>	<b><u>Date</u></b>
<b>Faculty Preparer:</b> <i>Justin Carter</i>	<i>Faculty Preparer</i>	<i>Jul 22, 2015</i>
<b>Department Chair/Area Director:</b> <i>Scott Klapper</i>	<i>Recommend Approval</i>	<i>Jul 23, 2015</i>
<b>Dean:</b> <i>Brandon Tucker</i>	<i>Recommend Approval</i>	<i>Jul 24, 2015</i>
<b>Curriculum Committee Chair:</b> <i>Kelley Gottschang</i>	<i>Recommend Approval</i>	<i>Sep 29, 2015</i>
<b>Assessment Committee Chair:</b> <i>Michelle Garey</i>	<i>Recommend Approval</i>	<i>Sep 29, 2015</i>
<b>Vice President for Instruction:</b> <i>Michael Nealon</i>	<i>Approve</i>	<i>Oct 06, 2015</i>