

# Washtenaw Community College Comprehensive Report

## UAT 278 GTAW Wire Feed 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:** 278

**Org Number:** 28200

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

**Transcript Title:** GTAW Wire Feed 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 the Gold Trac GTAW wire feed machine pipe welding process at the local level. This course introduces the operation, technology, comparison of analog and microprocessor-controlled systems, hot wire welding and equipment set-up and safety issues. Additionally, the course covers process variables, system programmer control functions, weld parameter selection and development and Dimetrics power supplies such as GT2. 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 the Gold Trac GTAW wire feed machine pipe welding process.

### **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 of the Gold Trac GTAW wire feed machine pipe welding process.

### **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 the Gold Trac GTAW wire feed machine pipe welding process utilizing approved industry and UA course/training materials.

### **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

## Course Objectives

1. Explain and demonstrate the features and methods of operating the Gold Track GTAW wire feed machine welding.
2. Describe the proper safety procedures during equipment set up and hot wire welding.
3. Identify the fundamentals of equipment technology and demonstrate how to program automatic welding machines.
4. Identify the purpose of joint configuration and explain the importance of controlling heat input to the base metal.
5. Demonstate appropriate use and knowledge of course materials.

## New Resources for Course

## Course Textbooks/Resources

Textbooks  
Manuals  
Periodicals  
Software

## Equipment/Facilities

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
<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>