

## Washtenaw Community College Comprehensive Report

### UAT 278B Teaching Wire Feed Welding

Effective Term: Spring/Summer 2025

#### Course Cover

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

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

**Department:** United Association Department (UAT Only)

**Discipline:** United Association Training

**Course Number:** 278B

**Org Number:** 28200

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

**Transcript Title:** Teaching Wire Feed Welding

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Web Page

**Reason for Submission:** Inactivation

**Change Information:**

**Consultation with all departments affected by this course is required.**

**Rationale:** U.A. Course no longer relevant: the course was combined with a new course to condense and/or update the material taught.

**Proposed Start Semester:** Winter 2025

**Course Description:** This course focuses on training the trainer and will provide the student with an understanding of how to teach the orbital wire feed welding process at the local level. Topics cover the operation, technology, equipment set-up and safety issues associated with these types of advanced welding systems. Additionally, the course includes process variables, system programmer control functions, weld parameter selection and gives the theoretical basis for weld program development. The course is structured to provide students a hands-on training approach using the AMI 227 and Liburdi Gold Track orbital wire feed welding systems. 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

No Level Required

**Requisites****Enrollment Restrictions**

Admission into the UA Instructor Training Program.

**General Education****Degree Attributes**

Below College Level Pre-Reqs

**Request Course Transfer****Proposed For:****Student Learning Outcomes**

1. Explain the concepts of operation, technology, equipment set-up and safety issues associated with advanced welding systems.

**Assessment 1**

Assessment Tool: Survey of UA Training Coordinators/ Supervisors.

Assessment Date: Spring/Summer 2012

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: Random sampling of 50% of all students who teach this topic the following year.

How the assessment will be scored: Students' training activities will be scored and evaluated on the survey questionnaire for each of the outcomes.

Standard of success to be used for this assessment: 75% of all student-instructors will score satisfactory or above on the Training Coordinator survey.

Who will score and analyze the data: The UA Program Administrator will coordinate the collection of data with the UA Training Department staff and will share results with ITP teaching faculty.

2. Demonstrate techniques for weld parameter selections and system programmer control functions.

**Assessment 1**

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Who will score and analyze the data: The UA Program Administrator will coordinate the collection of data with the UA Training Department staff and will share results with ITP teaching faculty.

3. Utilize UA and vendor supplied teaching materials to develop a basis weld program.

**Assessment 1**

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### **Course Objectives**

1. Explain the common industry applications of advanced welding systems
2. Describe the current issues associated with advanced welding systems.
3. Identify safety precautions when using orbital wire feed equipment.
4. Properly set orbital machine programmable controls for a variety of metals and sizes.
5. Demonstrate the correct techniques for preparing and joining metal tubing.
6. Reference UA and vendor supplied teaching materials in classroom lectures.

### **New Resources for Course**

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

Textbooks

Manuals

Periodicals

Software

#### **Equipment/Facilities**

Level III classroom

Other: Welding facilities

<b><u>Reviewer</u></b>	<b><u>Action</u></b>	<b><u>Date</u></b>
<b>Faculty Preparer:</b> <i>Tony Esposito</i>	<i>Faculty Preparer</i>	<i>Nov 01, 2024</i>
<b>Department Chair/Area Director:</b> <i>Marilyn Donham</i>	<i>Recommend Approval</i>	<i>Nov 04, 2024</i>
<b>Dean:</b> <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Nov 06, 2024</i>
<b>Curriculum Committee Chair:</b> <i>Randy Van Wagnen</i>	<i>Reviewed</i>	<i>Apr 15, 2025</i>
<b>Assessment Committee Chair:</b>		
<b>Vice President for Instruction:</b> <i>Brandon Tucker</i>	<i>Approve</i>	<i>Apr 15, 2025</i>

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**Discipline:** United Association Training

**Course Number:** 278B

**Org Number:** 28200

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**Transcript Title:** Teaching 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:**

**Credit hours**

**Rationale:** Adjustment of credit hours for HLC requirements

**Proposed Start Semester:** Spring/Summer 2016

**Course Description:** This course focuses on training the trainer and will provide the student with an understanding of how to teach the orbital wire feed welding process at the local level. Topics cover the operation, technology, equipment set-up and safety issues associated with these types of advanced welding systems. Additionally, the course includes process variables, system programmer control functions, weld parameter selection and gives the theoretical basis for weld program development. The course is structured to provide students a hands-on training approach using the AMI 227 and Liburdi Gold Track orbital wire feed welding systems. Limited to United Association program participants.

### Course Credit Hours

**Variable hours:** No

**Credits:** 1

**Lecture Hours:** Instructor: 15 Student: 15

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

**Lab:** Instructor: 5 Student: 5

**Clinical:** Instructor: 0 Student: 0

**Total Contact Hours:** Instructor: 20 Student: 20

**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

No Level Required

### Requisites

**Enrollment Restrictions**

Admission into the UA Instructor Training Program.

## **General Education**

### **Degree Attributes**

Below College Level Pre-Reqs

## **Request Course Transfer**

**Proposed For:**

## **Student Learning Outcomes**

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6. Reference UA and vendor supplied teaching materials in classroom lectures.

### **New Resources for Course**

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

Textbooks  
Manuals  
Periodicals  
Software

#### **Equipment/Facilities**

Level III classroom  
Other: Welding facilities

#### **Reviewer**

#### **Action**

#### **Date**

#### **Faculty Preparer:**

*Cristy Lindemann*

*Faculty Preparer*

*Jan 31, 2016*

#### **Department Chair/Area Director:**

*Marilyn Donham*

*Recommend Approval*

*Feb 09, 2016*

#### **Dean:**

*Brandon Tucker*

*Recommend Approval*

*Mar 10, 2016*

#### **Curriculum Committee Chair:**

*Kelley Gottschang*

*Recommend Approval*

*Apr 05, 2016*

#### **Assessment Committee Chair:**

#### **Vice President for Instruction:**

*Michael Nealon*

*Approve*

*Apr 06, 2016*