

PROGRAM ASSESSMENT PLANNING FORM

Program to be assessed:

Title: Ironworkers Pre-Apprenticeship Certificate
 Division: ATP Department: WAF

Program Code: CTPAIW

Type of Award: A.A. A.S. A.A.S.
 Cert. Adv. Cert. Post-Assoc. Cert. Cert. of Completion

Assessment plan:

Learning outcomes to be assessed	Assessment tool	When assessment will take place	Describe population to be assessed	Number of students to be assessed
Recognize OSHA sub standards that are followed by the Ironworker trade.	Written exam	Every three years	All students in WAF 110	All
Interpret and demonstrate the use of measurements and blueprints that apply to the Ironworker trade.	Written and practical exam	Every three years	All students in WAF 114	All
Describe and apply safe work practices and applications of rigging and cranes used in the Ironworker trade.	Written and practical exam	Every three years	All students in WAF 119	All
Recall and apply safe work practices and applications when using the Shielded Metal Arc Welding, Flux-Cored Welding, Oxy-Fuel Welding and Oxy-Fuel Cutting processes that are used in the Ironworker trade.	Written and practical exam	Every three years	All students in WAF 115, 116 and 117	All

Scoring and analysis of assessment:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric/scoring guide.

Departmentally-developed rubric using Blackboard written exam data and practical exam evaluation sheets.

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2. Indicate the standard of success to be used for this assessment.

70% of students will score 80% or higher.

3. Indicate who will score and analyze the data (data must be blind-scored).

Department faculty utilizing Blackboard.

Submitted by:

Name: Glenn Kay II Date: 12-3-19

Print/Signature

Dept. Chair: *Glenn Kay II* Date: 12-3-19

Print/Signature

Dean: *Brandon Tucker / [Signature]* Date: 12/3/2019

Print/Signature

Reviewed by C&A 1/9/20

Please return completed form to the Office of Curriculum & Assessment, SC 257.

Program Information Report

**Ironworkers Pre-Apprenticeship (CTPAIW)
Certificate**

Program Effective Term: Fall 2016

In this certificate program, students will be introduced to the necessary skills needed to be a Union Ironworker across the United States and Canada. Training includes print reading, safety and welding processes used by the Union Ironworker trades. Students who successfully complete the program will be eligible for advanced standing in the Ironworker Local Union Apprenticeship Training Program.

Continuing Eligibility Requirements:

All courses must be completed with a C or better.


Major/Area Requirements		(24 credits)
	CMG 115 Safety and Employability Skills	3
CMG 145	Construction Plan Reading for the Trade	3
CON 106	Contextualized Math for the Trades	3
CON 193	Tools, Equipment and Material Handling for the Trade	3
WAF 115	Oxy-Fuel Gas Cutting and Welding for Ironworkers	4
WAF 116	Shielded Metal Arc Welding for Ironworkers	4
WAF 117	Flux Cored Arc Welding for Ironworkers	4
Minimum Credits Required for the Program:		24

PROGRAM PROPOSAL FORM

- Preliminary Approval** – Check here when using this form for preliminary approval of a program proposal, and respond to the items in general terms.
- Final Approval** – Check here when completing this form after the Vice President for Instruction has given preliminary approval to a program proposal. For final approval, complete information must be provided for each item.

Program Name:	<u>Ironworkers Pre- Apprenticeship</u>		Program Code: <u>CTPAIW</u> CIP Code: <u>46.0401</u>
Division and Department:	<u>CON/ Math Science Engineering</u>		
Type of Award:	<input type="checkbox"/> AA <input type="checkbox"/> AS <input type="checkbox"/> AAS <input checked="" type="checkbox"/> Cert. <input type="checkbox"/> Adv. Cert. <input type="checkbox"/> Post-Assoc. Cert. <input type="checkbox"/> Cert. of Comp.		
Effective Term/Year:	<u>FALL 2016</u>		
Initiator:	<u>Glenn Kay and Cristy Lindemann</u>		
Program Features Program's purpose and its goals. Criteria for entry into the program, along with projected enrollment figures. Connection to other WCC programs, as well as accrediting agencies or professional organizations. Special features of the program.	This program will prepare students for entry and success in the registered Ironworker Apprenticeship program. Students who successfully complete the certificate will be eligible for advanced standing in the Ironworkers Apprenticeship training program. Students will need to test at college readiness; 6 in reading and writing and 2 in math, before enrolling. 20 -25 students the first year with growth expected over the next 5 years being driven by industry need. Construction Technology and Welding and Fabrication will be working with the International Ironworkers and Local 25. Each student that passes will receive an OSHA 10 card for construction and AWS certifications. Classes will be structured to cover tools, materials and processes used by structural, ornamental, rebar and welding ironworkers, and will focus on the tools and material processes that an Ironworker uses in the construction industry.		
Need Need for the program with evidence to support the stated need.	According to the Bureau of Labor and Statistics: Employment of ironworkers is projected to grow 22 percent from 2012 to 2022, much faster than the average for all occupations. The need to rehabilitate, maintain and replace an increasing number of older roads and bridges is expected to drive employment growth, as will the ongoing construction of large projects, such as high-rise buildings. Job opportunities should be best in metropolitan areas, where most large construction projects take place. Forecast for the Metro Detroit areas include: International bridge, M-1 Rail, the arena district, and new academic buildings at the University of Michigan in Ann Arbor, Michigan State University in Lansing, Wayne State in Detroit, Ford and GM Plant rehabilitation as well as continued effort on road and bridge construction.		
Program Outcomes/Assessment State the knowledge to be gained, skills to be learned, and attitudes to be developed by students in the program. Include assessment methods that will be used to determine the effectiveness of the program.	<u>Outcomes</u>	<u>Assessment method</u>	
	1. Interpret OSHA sub standards that will be followed by an Ironworker. 2. Read and interpret English measurements. 3. Use project Prints to determine dimensions. 4. Describe and demonstrate Oxy-Fuel, Welding and Cutting, Flux Cored Arc, and Shielded Metal Arc welding processes.	1. Written exam 2. Written and practical exam 3. Written and practical exam 4. Written and practical exam	

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Curriculum List the courses in the program as they should appear in the catalog. List minimum credits required. Include any notes that should appear below the course list.	CMG 115 - 3 Credits Safety and Employability Skills CON 106- 3 Credits Contextualized Math for the Trade CMG 145- 3 Credits Print reading for the Trade CON 193 – 3 Credits Tools equipment and Material Handling WAF 115 – 4 Credits Oxy Fuel Gas Cutting and Welding for Ironworkers WAF 116– 4 Credits Shielded Metal Arc Welding For Ironworkers WAF 117- 4 Credits Flux Cored Arc Welding for Ironworkers 																							
Budget Specify program costs in the following areas, per academic year:	<table border="1"> <thead> <tr> <th></th> <th>START-UP COSTS</th> <th>ONGOING COSTS</th> </tr> </thead> <tbody> <tr> <td>Faculty</td> <td>\$ 10,000.00</td> <td>\$ 20,000.00</td> </tr> <tr> <td>Training/Travel</td> <td>5,000 .00</td> <td>2000.00</td> </tr> <tr> <td>Materials/Resources</td> <td>18,000.00</td> <td>10000.00</td> </tr> <tr> <td>Facilities/Equipment</td> <td>13,000.00</td> <td>5000.00</td> </tr> <tr> <td>Other</td> <td>3000.00</td> <td>1000.00</td> </tr> <tr> <td>TOTALS:</td> <td>\$ 49,000.00</td> <td>\$ 38,000.00.</td> </tr> </tbody> </table>				START-UP COSTS	ONGOING COSTS	Faculty	\$ 10,000.00	\$ 20,000.00	Training/Travel	5,000 .00	2000.00	Materials/Resources	18,000.00	10000.00	Facilities/Equipment	13,000.00	5000.00	Other	3000.00	1000.00	TOTALS:	\$ 49,000.00	\$ 38,000.00.
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Program Description for Catalog and Web site	In this certificate program, students will be introduced to the necessary skills needed to be a Union Ironworker across the United States and Canada. Training includes print reading, safety and welding processes used by the Union Ironworker trades. Students who successfully complete the program will be eligible for advanced standing in the Ironworker Local Union Apprenticeship Training Program.																							
Program Information	Accreditation/Licensure – OTI – OSHA 10; AWS Advisors – Glenn Kay, Cristy Lindemann Advisory Committee – Edward Abbott and Kevin McDonald, other IWI and Local 25 members Admission requirements – college level Articulation agreements - TBD Continuing eligibility requirements – C or better																							

Assessment plan:

Program outcomes to be assessed	Assessment tool	When assessment will take place	Courses/other populations	Number students to be assessed
Interpret OSHA sub standards that will be followed by an Ironworker.	Written exam	Every three years	All students in CMG 115	ALL
Read and interpret English measurements.	Written and practical exam	Every three years	All students in CON 106	ALL
Use project Prints to determine dimensions.	Written and practical exam	Every three years	All students in CMG 145	ALL
Describe and demonstrate Oxy-Fuel, Welding and Cutting, Flux Cored Arc, and Shielded Metal Arc welding processes.	Written and practical exam	Every three years	All students in WAF 117	ALL

Scoring and analysis plan:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally-developed rubric, external evaluation, other). Attach the rubric.

The written exam will be scored using an answer key. The practical exam will be scored using a departmental developed rubric.

2. Indicate the standard of success to be used for this assessment.


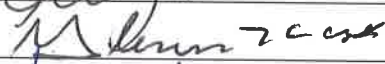
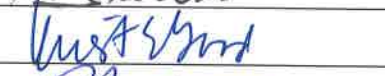


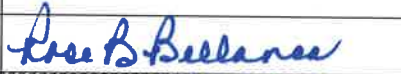
75% of students will score 70% or higher

3. Indicate who will score and analyze the data.

Departmental faculty

4. Explain how and when the assessment results will be used for program improvement.

Program and classes will be reevaluated every three years by departmental faculty, using program and course assessment requirements. Student exams and lab portfolio data will be assessed, input from industry partners, to determine if course and program changes are required.

REVIEWER	PRINT NAME	SIGNATURE	DATE
Department Chair Construction	Cristy Lindemann		2.16.16
Department Chair Welding	Glenn Kay		2.16.16
Dean MSE	Kristin Good		2.16.16
Dean ATP	Brandon Tucker		2/11/16
Vice President for Instruction <input type="checkbox"/> Approved for Development <input type="checkbox"/> Final Approval	Michael Nealon		4/6/16
President	Rose Bellanca		4/6/16
Board Approval			4/26/16

Cost Break Down Information

	Start Up Costs	On Going Costs	Reason
Faculty Construction	\$ 10,000.00	\$ 20,000.00	Part Time Faculty costs for construction running each class once first year, twice a year after
Faculty Welding			
Training/Travel	\$ 5,000 .00	\$ 2000.00	Training required from Iron workers for existing course information Travel to local and international yearly 50% each department
Materials/Resources Construction	\$ 7,000.00	\$ 3,000.00	Material Costs for Construction including steel columns beams and various rigging materials, Safety gear, and computer programs
Materials/Resources Welding	\$ 11,000.00		
Facilities/Equipment/Construction	\$ 8,000.00	\$ 2500.00	Equipment for construction include Rigging equipment, machine rental, Tools and safety equipment
Facilities/Equipment/Welding	\$ 5,000.00		
Other	\$ 3000.00	\$ 1000.00	Books, drawings, updated certifications and licenses required for staff and students 50% each
Grand Total	\$ 49,000.00	\$ 38,000.00	