

Program Information Report

Skilled Trades & Construction

Ironworkers Pre-Apprenticeship (CTPAIW) Certificate

Program Effective Term: Fall 2020

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		(17 credits)
WAF 110	Ironworker Pre-Apprenticeship Orientation and Safety	2
WAF 114	Ironworker Pre-Apprenticeship Introduction to Welding	3
WAF 116	Ironworker Pre-Apprenticeship Shielded Metal Arc Welding	4
WAF 117	Ironworker Pre-Apprenticeship Flux Cored Arc Welding	4
WAF 119	Ironworker Pre-Apprenticeship Rigging and Cranes	2
WAF 120	Ironworker Pre-Apprenticeship Print Reading and Contextualized Math	2
Minimum Credits Required for the Program:		17

PROGRAM CHANGE OR DISCONTINUATION FORM

Program Code: CTPAIW Program Name: Ironworkers Pre-Apprenticeship Certificate
 Division Code: ATP Department: Welding

Effective Term: Fall 2020

Directions:

1. Attach the current program listing from the WCC catalog or Web site and indicate any changes to be made.
2. Draw lines through any text that should be deleted and write in additions. Extensive narrative changes can be included on a separate sheet.
3. Check the boxes below for each type of change being proposed. Changes to courses, discontinuing a course, or adding new courses as part of the proposed program change, must be approved separately using a Master Syllabus form, but should be submitted at the same time as the program change form.

Requested Changes:

- | | |
|--|---|
| <input type="checkbox"/> Review | <input type="checkbox"/> Program admission requirements |
| <input checked="" type="checkbox"/> Remove course(s): <u>CMG 115, 145, CON 106 & 193</u> | <input type="checkbox"/> Continuing eligibility requirements |
| <input checked="" type="checkbox"/> Add course(s): <u>WAF 110, 114, 119 and 120</u> | <input type="checkbox"/> Program outcomes |
| <input type="checkbox"/> Program title (title was) | <input type="checkbox"/> Accreditation information |
| <input type="checkbox"/> Description | <input type="checkbox"/> Discontinuation (attach program discontinuation plan that includes transition of students and timetable for phasing out courses) |
| <input type="checkbox"/> Type of award | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Advisors | |
| <input type="checkbox"/> Articulation information | |

Show all changes on the attached page from the catalog.

Rationale for proposed changes or discontinuation:

To better meet the needs of the Ironworkers Pre-Apprenticeship program, the certificate is being updated moved from construction to welding

Financial/staffing/equipment/space implications:

Additional part-time instructor

List departments that have been consulted regarding their use of this program.

WAF, HVAC (CON)

Signatures:

Reviewer	Print Name	Signature	Date
Initiator	Amanda Schaffler	<i>Amanda Schaffler</i>	10-18-19
Department Chair	Cheryl Kay II	<i>Cheryl Kay II</i>	10-18-19
Division Dean/Administrator	Brandon Tuelke	<i>Brandon Tuelke</i>	10-31-19
Please submit completed form to the Office of Curriculum and Assessment (SC 257). Once reviewed by the appropriate faculty committees we will secure the signature of the VPI and President.			
Vice President for Instruction	Kimberly Hurns	<i>Kimberly Hurns</i>	2/19/2020
President	Rose B. Bellanca	<i>Rose B. Bellanca</i>	

Do not write in shaded area. Entered in: Banner _____ C&A Database 2/25/20 Log File 2/25/20 Board Approval _____

Reviewed by C&A 2/13/20 Committees

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	

Office of Curriculum & Assessment
 logged 12/14/15 sj mo
 done 10/4/16

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.
	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.																						
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.


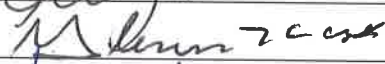
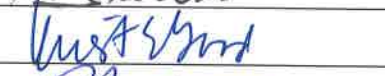


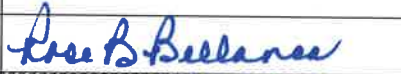
75% of students will score 70% or higher

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	