

**Wayne Community College
Program Review – 2021-2022**

Name of Program: Welding Technology

Section 1: Program Overview

Mission/Purpose: *As part of the review cycle, programs are asked to formally evaluate their mission/purpose statement.*

The purpose of the Welding Technology Program is to prepare individuals for electrode welding and cutting processes enabling them to understand the science, technology, and applications essential for successful employment in the welding and metalworking industry.

Are you planning to revise your mission/purpose statement? If so, please provide your revised mission/purpose statement and reason for the change.

No change

Describe how the program's mission aligns with the College's vision, mission, core values, and strategic goals. Identify which Institutional Goal(s) best align with your program and explain why.

Goal 1: Increase Student Access

Goal 2: Ensure Program Excellence

Goal 3: Improve Student Success

Goal 4: Ensure Institutional Quality

Graduates from the Welding Technology Program will be prepared to begin work in many different types of welding positions. These available positions include: manufacturing and production welding, construction and maintenance welding, as well as welding that would require reading and interpretation of drawings and blue prints.

Associates, Diplomas, Certificates, and Pathways Offered: Please list all associates, diplomas, certificates, and pathways offered in the table below.

Program Type (Associate, Diploma, Certificate, or Pathway)	Program Title
Diploma	Welding Technology Diploma (D50420)
Certificate	Welding Technology Certificate (C50420WT)
Certificate	Welding Technology-MIG Welding Certificate (C50420MG)
Certificate	Welding Technology-TIG Welding Certificate (C50420TG)
Certificate	Welding Technology-Stick Welding Certificate (C50420S)

Activities to ensure program is current (2019-20; 2020-21; 2021-22 – Academic Year, Fall, Spring, Summer)

List program curriculum changes, revisions, and/or deletions.

Curriculum Changes	Date – Updated / Revised / Deleted
No curriculum changes, revisions, deletions since 2018-19 Program Review	N/A

Provide an overview of the significance of the program changes and improvements that occurred over the past three years. (What were the program's / discipline's goals and rationale for expanding and improving student learning, including new courses, program degrees, certificates, diplomas, and/or delivery methods?)

The Welding classroom and shop was enlarged and renovated in 2021

Advisory Committee: dates, summary of minutes, activities (2019-20; 2020-21; 2021-22 – Academic Year – Fall, Spring, Summer)

Summary of Advisory Committee Activities

Year	Meeting Dates	Recommendations / Activities
2019-2020	10-9-19	Tour and New Building
2020-2021	11-19-20/7-19-21	Update on New Building Process
2021-2022	11-1-21/5-4-22	Renovations/ Engineering & Manufacturing Showcase

(Ensure that Advisory Committee Meeting Minutes are filed in the IE Shared Program Folder.)

Provide narrative for analysis of trends in the field or industry (emerging needs) that contribute to maintaining program relevance. (Based on advisory committee suggestions, environmental scans, industry demands, and other sources external to the program/discipline, how well is the program/discipline responding to the current and emerging needs of the industry and/or community? What resources might your program need?)

Welders continue to be in high demand because of the diverse use of welding in many industries.

Section 2: Program Outcomes

Outcome #1: Enrollment (*unduplicated*)

Baseline: 37 # (*Average of total enrollment for the last three years – 2018-19; 2019-20; 2020-21*)

Standard: 39 ___ #

Target: 41 ___ #

Program Enrollment

Program Enrollment (unduplicated)	
Academic Year (Fall, Spring, Summer)	Enrollment
2018-2019	34
2019-2020	35
2020-2021	42

Enrollment by Ethnicity, Gender, and Age

Ethnicity & Gender	2018-2019		2019-2020		2020-2021	
	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	1	2.4%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	1	2.4%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	2	4.8%
African American, Male	5	14.7%	3	8.6%	5	11.9%
American Indian/Alaskan Native, Male	1	2.9%	1	2.9%	2	4.8%
Asian, Male	1	2.9%	0	0.0%	0	0.0%
Caucasian, Male	20	58.8%	18	51.4%	24	57.1%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	6	17.6%	10	28.6%	6	14.3%
Two or More Races, Male	1	2.9%	2	5.7%	2	4.8%
Unknown, Male	0	0.0%	1	2.9%	1	2.4%
Male Total	34	100.0%	35	100.0%	40	95.2%
Total	34	100.0%	35	100.0%	42	100.0%

Ethnicity & Age Range	2018-2019		2019-2020		2020-2021	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	1	2.9%	0	0.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	1	2.9%	5	14.3%	3	7.1%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	0	0.0%	1	2.4%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	1	2.9%	6	17.1%	4	9.5%
African American, 18-24	3	8.8%	1	2.9%	3	7.1%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	1	2.4%
Asian, 18-24	1	2.9%	0	0.0%	0	0.0%
Caucasian, 18-24	14	41.2%	11	31.4%	19	45.2%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	4	11.8%	10	28.6%	4	9.5%
Two or More Races, 18-24	1	2.9%	1	2.9%	1	2.4%
Unknown, 18-24	0	0.0%	1	2.9%	1	2.4%
18-24 Total	23	67.6%	24	68.6%	29	69.0%
African American, 25-44	2	5.9%	1	2.9%	2	4.8%
American Indian/Alaskan Native, 25-44	0	0.0%	1	2.9%	1	2.4%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	4	11.8%	1	2.9%	3	7.1%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	2	5.9%	0	0.0%	2	4.8%
Two or More Races, 25-44	0	0.0%	1	2.9%	1	2.4%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	8	23.5%	4	11.4%	9	21.4%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-64	1	2.9%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	1	2.9%	1	2.9%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	2	5.9%	1	2.9%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	34	100.0%	35	100.0%	42	100.0%

Provide narrative for analysis of program enrollment. *(Is enrollment increasing or decreasing? What are possible reasons for increase/decrease? Describe any action plans to improve or increase program enrollment.)*

3-Year Average has dropped a little due to a more favorable job market and the pandemic. We were excited to see two female students in the program in 2020-2021 and hope that their success in the program encourages other females to enroll in welding. There are also opportunities to increase the number of Career and College Promise students (under the age of 18) in the program.

Identify Enrollment Action Items

Item	Action Items <i>(What actions can be taken to increase enrollment in your program?)</i>	Assessment of Action Items <i>(How will you assess the results of action items?)</i>
1	Schedule high school tours to come through shops and classrooms.	Compare numbers from previous years to see if enrollment is up.
2	Schedule high school visits to go and speak to specific classes.	Compare numbers from previous years to see if enrollment is up.

Outcome #2: Retention**Baseline:** 70.9 % (Average of last three years – 2018-19; 2019-20; 2020-21; program retention)**Standard:** 74 ___ %**Target:** 76 ___ %

Year	Program Retention Rate
2018-2019	81.0%
2019-2020	76.9%
2020-2021	54.8%

Retention by Ethnicity, Gender, and Age

Ethnicity & Gender	Fall 2018 to Summer 2019		Fall 2019 to Summer 2020		Fall 2020 to Summer 2021	
	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	0	0.0%	1	5.9%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	0	0.0%	1	5.9%
African American, Male	4	23.5%	0	0.0%	1	5.9%
American Indian/Alaskan Native, Male	1	5.9%	0	0.0%	1	5.9%
Asian, Male	0	0.0%	0	0.0%	0	0.0%
Caucasian, Male	9	52.9%	12	60.0%	9	52.9%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	3	17.6%	7	35.0%	3	17.6%
Two or More Races, Male	0	0.0%	1	5.0%	1	5.9%
Unknown, Male	0	0.0%	0	0.0%	1	5.9%
Male Total	17	100.0%	20	100.0%	16	94.1%
Total	17	100.0%	20	100.0%	17	100.0%

Ethnicity & Age Range	Fall 2018 to Summer 2019		Fall 2019 to Summer 2020		Fall 2020 to Summer 2021	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	3	15.0%	0	0.0%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	0	0.0%	3	15.0%	0	0.0%
African American, 18-24	3	17.6%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	7	41.2%	8	40.0%	9	52.9%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	1	5.9%	7	35.0%	3	17.6%
Two or More Races, 18-24	0	0.0%	1	5.0%	1	5.9%
Unknown, 18-24	0	0.0%	0	0.0%	1	5.9%
18-24 Total	11	64.7%	16	80.0%	14	82.4%
African American, 25-44	1	5.9%	0	0.0%	1	5.9%
American Indian/Alaskan Native, 25-44	0	0.0%	0	0.0%	1	5.9%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	2	11.8%	0	0.0%	1	5.9%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	2	11.8%	0	0.0%	0	0.0%
Two or More Races, 25-44	0	0.0%	0	0.0%	0	0.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	5	29.4%	0	0.0%	3	17.6%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-64	1	5.9%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	0	0.0%	1	5.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	1	5.9%	1	5.0%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	17	100.0%	20	100.0%	17	100.0%

Provide narrative for analysis of program retention data. *(Based on the data, provide a narrative of your analysis of retention. Indicate factors that may have affected your retention. State any changes you plan to make to improve retention.)*

Program retention rate is down in 2020-2021 due to the pandemic. However, with the new facility expansion for welding and the need for welders in our region, we expect program enrollment, retention, and completion to increase. However, it should be noted that the need is so great for welders in our area that once a student has basic welding skills, employers are willing to hire them without completing the diploma and this is negatively impacting both retention and completion in our program.

Identify Retention Action Items

Item	Action Items <i>(What actions can be taken to increase program retention?)</i>	Assessment of Action Items <i>(How will you assess the results of action items?)</i>
1	Help advise CCP students better	Compare numbers from previous years to see if retention increases
2	Encourage students to complete the diploma	Compare numbers from previous years to see if retention increases

Outcome #3: Completers (unduplicated) (Degree level, highest level of attainment)**Baseline:** 26 # (Average of total completers for the last three years – 2019-20; 2020-21; 2021-22)**Standard:** 28 ___ #**Target:** 30 ___ #

Number of Completers (unduplicated) – Graduation Year – Summer, Fall, Spring	
Graduation Year	Total Completers
2019-2020	24
2020-2021	30
2021-2022	25

Completers by Ethnicity, Gender, and Age

Ethnicity & Gender	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Female	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, Female	0	0.0%	0	0.0%	0	0.0%
Asian, Female	0	0.0%	0	0.0%	0	0.0%
Caucasian, Female	0	0.0%	1	3.3%	1	4.0%
Hawaiian/Other Pacific Islander, Female	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Female	0	0.0%	0	0.0%	1	4.0%
Two or More Races, Female	0	0.0%	0	0.0%	0	0.0%
Unknown, Female	0	0.0%	0	0.0%	0	0.0%
Female Total	0	0.0%	1	3.3%	2	8.0%
African American, Male	1	4.2%	2	6.7%	1	4.0%
American Indian/Alaskan Native, Male	0	0.0%	1	3.3%	0	0.0%
Asian, Male	0	0.0%	0	0.0%	0	0.0%
Caucasian, Male	13	54.2%	16	53.3%	14	56.0%
Hawaiian/Other Pacific Islander, Male	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Male	9	37.5%	8	26.7%	5	20.0%
Two or More Races, Male	1	4.2%	2	6.7%	3	12.0%
Unknown, Male	0	0.0%	0	0.0%	0	0.0%
Male Total	24	100.0%	29	96.7%	23	92.0%
Total	24	100.0%	30	100.0%	25	100.0%

Ethnicity & Age Range Table	2019-2020		2020-2021		2021-2022	
	N	%	N	%	N	%
African American, Under the age of 18	0	0.0%	1	3.3%	1	4.0%
American Indian/Alaskan Native, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Asian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Caucasian, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, Under the age of 18	1	4.2%	1	3.3%	0	0.0%
Two or More Races, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Unknown, Under the age of 18	0	0.0%	0	0.0%	0	0.0%
Under the age of 18 Total	1	4.2%	2	6.7%	1	4.0%
African American, 18-24	1	4.2%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 18-24	0	0.0%	0	0.0%	0	0.0%
Asian, 18-24	0	0.0%	0	0.0%	0	0.0%
Caucasian, 18-24	10	41.7%	15	50.0%	12	48.0%
Hawaiian/Other Pacific Islander, 18-24	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 18-24	7	29.2%	7	23.3%	5	20.0%
Two or More Races, 18-24	1	4.2%	1	3.3%	2	8.0%
Unknown, 18-24	0	0.0%	0	0.0%	0	0.0%
18-24 Total	19	79.2%	23	76.7%	19	76.0%
African American, 25-44	0	0.0%	1	3.3%	0	0.0%
American Indian/Alaskan Native, 25-44	0	0.0%	1	3.3%	0	0.0%
Asian, 25-44	0	0.0%	0	0.0%	0	0.0%
Caucasian, 25-44	2	8.3%	2	6.7%	3	12.0%
Hawaiian/Other Pacific Islander, 25-44	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 25-44	1	4.2%	0	0.0%	1	4.0%
Two or More Races, 25-44	0	0.0%	1	3.3%	1	4.0%
Unknown, 25-44	0	0.0%	0	0.0%	0	0.0%
25-44 Total	3	12.5%	5	16.7%	5	20.0%
African American, 45-64	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 45-64	0	0.0%	0	0.0%	0	0.0%
Asian, 45-64	0	0.0%	0	0.0%	0	0.0%
Caucasian, 45-64	1	4.2%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 45-64	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 45-64	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 45-64	0	0.0%	0	0.0%	0	0.0%
Unknown, 45-64	0	0.0%	0	0.0%	0	0.0%
45-64 Total	1	4.2%	0	0.0%	0	0.0%
African American, 65+	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native, 65+	0	0.0%	0	0.0%	0	0.0%
Asian, 65+	0	0.0%	0	0.0%	0	0.0%
Caucasian, 65+	0	0.0%	0	0.0%	0	0.0%
Hawaiian/Other Pacific Islander, 65+	0	0.0%	0	0.0%	0	0.0%
Hispanic/Latino, 65+	0	0.0%	0	0.0%	0	0.0%
Two or More Races, 65+	0	0.0%	0	0.0%	0	0.0%
Unknown, 65+	0	0.0%	0	0.0%	0	0.0%
65+ Total	0	0.0%	0	0.0%	0	0.0%
Total	24	100.0%	30	100.0%	25	100.0%

Provide narrative for analysis of completers. *(Based on the data, provide a narrative of your analysis of completions. Indicate factors that may have affected your completions. How might you increase the number of completers in your program?)*

Completion remains steady. Again, it should be noted that the need is so great for welders in our area that once a student has basic welding skills, employers are willing to hire them without completing the diploma and this is negatively impacting both retention and completion in our program.

Identify Completer Action Items

Item	Action Items <i>(What actions can be taken to increase student completion in your program?)</i>	Assessment of Action Items <i>(How will you assess the results of action items?)</i>
1	Communicate with students the importance of completing the diploma	Compare numbers from previous years to see if retention increases
2		

Section 3: Other Assessments

Do you use other methods of assessment to evaluate the effectiveness of your program, to include surveys, self-assessments, student licensure/certification, or third-party credentials?. If so, please explain how information collected from the(se) assessments can be used to improve the program.)

Not applicable

Planning Objectives (2019-20; 2020-21; 2021-22 – Fiscal Year, July 1-June 30)

Provide a summary of planning objectives submitted for the last three years, including the use of results of the planning objectives in the table provided.

Summary of Planning Objectives

Planning Year (Fiscal Year – July 1-June 30)	Objective(s) Submitted	Use of Results
2019-20	Tig Welder #1	Awaiting receipt. Unable to assess objective due to COVID campus shut-down, stay-at-home orders. Carry forward to the 2020-21 Plan to report assessment. 2020-21 Status Report: Objective is complete, no further action is required. 2020-21 Use of Results / Assessment: At least 80% of students in WLD 131 & 132 earned a "3" or higher on Welding PLO Rubric Outcome #1 Dimensions 1 & 2 with the new Tig Welder. The new Tig machine went into service Spring 2020 and has already made a difference with the number of students we have enrolled in WLD 131 and WLD 132.
2020-21	No planning objectives submitted.	Not applicable.
2021-22	Tig/Mig Welder	Remains outstanding at the moment. Carry forward to the 2022-23 Plan to report assessment.

What planning objectives (equipment, supplies, software, etc.) do you anticipate needing over the next three years? Justify the need.

We are definitely in need of some new updated welders and equipment in shop. The program has a nice, renovated area but have not really spent much on equipment in several years other than adding a few new Tig welders to help with other crowded classes.

What positions (faculty and/or staff) do you anticipate needing over the next three years? Justify the need.

We need another full-time Instructor. The CPM states full time faculty teach 15-22 hours. I currently teach 21-23 hours and we hire part-time instructors to teach 15-23 hours each semester. The program will not grow anymore until we could offer more classes.

