

SVCC CTE Program Review Template

This program review template will be used to review the following program and courses.

Program (degree and related certificates): Welding Certificates H48 H49 H46
Related program courses that are part of the data set: WLD 101 WLD 102 WLD 103 WLD 104 WLD 105 WLD 106 WLD 140

CTE Program Objectives

Prompts: 1. <i>What are the overarching objectives/goals of this program or programs?</i> 2. <i>To what extent are these objectives being achieved?</i>
Response to prompts (respond to all prompts): 1. The SVCC welding program has been specifically designed to meet the needs of the local employers, specifically the manufacturers, which make up 30% of the employment in the SVCC college district. 2. We have had graduates hired at several local industries. This last semester (Spring 2018) we started an internship program with Etnyre Corp and we are talking with Blount about the possibility of starting an internship program there as well.

CTE Program Review Analysis

Prompts: 1. List all pre-requisites for this program (e.g., courses, placement requirements). 2. List or attach all required courses (including titles) for completion of this program including institution required courses (e.g., student success, first year experience, general education requirements). 3. Provide a rationale for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.
Response to prompts (respond to all prompts): 1. H46-pre-requisites are WLD 106 or WLD 103.

Welding: H48, H49, H46

2. H46 (Robotic Welding) requires a pre-requisite of either WLD 106 (Welding Fundamentals) or WLD 103(MIG Welding) and WLD 140 (Robotic Welding). H48 (Entry Level) requires WLD 101 (Industrial MIG Welding), and H49 (Advanced Certificate) requires WLD 106 (Welding Fundamentals), WLD 101 (Industrial MIG Welding, WLD 102 (Shielded Metal Arc Welding), WLD 103 MIG Welding), WLD 104 (TIG Welding) and WLD 104 (Robotic Welding).

CTE Program Need

Prompts:

1. How strong is the occupational demand for the program?

Standard Occupational Classification (SOC) Title	Base Year Employment 2017	Year Employment 2019	Employment Change 2017-2019		Average Annual Job Opening due to			
			Number	Percent	Exits	Transfer	Growth	
Welders, Cutters, Solderers & Brazers	13,410	13,575	165	1.23	360	1,054	82	1,496

2. How has demand changed in the past five years and what is the outlook for the next five years?

The demand for welders, cutters, solderers, and brazers is expected to grow by approximately 1% as compared to the previous 5 years.

- Employment of welding, soldering, and brazing workers was expected to grow about 5 percent over the 2006-16 decade, Which was slower than the average of other occupations.

Employment of welders, cutters, solderers, and brazers is projected to grow 6 percent from 2016 to 2026, about as fast as the average for all occupations. The nation's aging infrastructure will require the expertise of welders, cutters, solderers, and brazers to help rebuild bridges, highways, and buildings. (source: U.S Bureau of Labor Statistics)

3. What is the district and/or regional need?

Regionally the average job openings growth from 2016-2026 is projected to be 67 for a total of 1537 and an average compound growth of .48. (Source: IDES Employment Projections LWA 4)

4. How are students recruited for this program?

Through job application and interview.

5. Where are students recruited from?

6. Did the review of program need result in actions or modifications? Please explain.

None

Data sources: Table 1A, Table 1B, Table 2

For local data on wages use Illinois Department of Employment Security: find at http://www.ides.illinois.gov/LMI/Pages/Occupational_Employment_Statistics.aspx
Use region #6 (NW) or by individual county.

For local data on occupational outlook use IDES: find at

Welding: H48, H49, H46

http://www.ides.illinois.gov/LMI/Pages/Employment_Projections.aspx

Use LWA #4.

National data on wages and occupational outlook can be found at the U.S. Bureau of Labor Statistics. Use this link: <http://www> occupational group and determine entry level education. Then select occupation.

Response to prompts (respond to all prompts): In your narrative, please refer to the data sets or evidence you have chosen to

CTE Program Cost Effectiveness

Prompts:

1. What are the costs associated with this program?

The costs associated with the welding program are instructional supplies, in state travel, equipment purchases, employee salaries, and employee benefits. (Table 3A)

2. How do costs compare to other programs on campus?

The cost associated with running the welding program will be higher than most programs on campus because of all the consumables welding requires.

3. How is the college paying for this program and its costs (e.g. grants, etc.)?

The college is paying for the welding program through tuition, class fees, state apportionment, and funding bonds. (Tables 3A and 3B)

4. If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.

The majority of costs are not paid for by grant funding.

5. Did the review of program cost result in any actions or modifications? Please explain.

None

Available Data Sources: Table 3A, Table 3B

Response to prompts (respond to all prompts): In your narrative, please refer to the data sets or evidence you have chosen to support your case.

CTE Program Quality

Prompts: Respond to all prompts.

1. What are the program's strengths?
2. What are the identified or potential challenges of the program?
3. What are the delivery methods of this program? (E.g., traditional format/online/hybrid/team-teaching etc.)?

Welding: H48, H49, H46

4. How does this program fit into a career pathway?
5. What innovations have been implemented or brought to this program that other colleges would want to learn about?
6. Are there dual credit opportunities? If so please list offerings and the associated high schools.
7. What work-based learning opportunities are available and integrated into the curriculum?
8. Is industry accreditation required for this program? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek.
9. Are industry-recognized credentials offered? If so, please list.
10. Is this an apprenticeship program? If so, please elaborate.
11. If applicable, please list the licensure examination pass rate.
12. What current articulation or cooperative agreements/initiatives are in place for this program?
13. Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom?
14. What is the faculty to student ratio for courses in this program? Please provide a range and average (Table 1A, row j).
15. What professional development or training is offered to adjunct and full-time faculty that may increase the quality of this program?
16. What is the status of the current technology and equipment used for this program?
17. What assessment methods are used to ensure student success?
18. How satisfied are students with their preparation for employment?
19. How is student satisfaction information collected?
20. How are employers engaged in this program? (e.g. curriculum design, review, placement, work-based learning opportunities)
21. How often does the program advisory committee meet?
22. How satisfied are employers in the preparation of the program's graduates?
23. How is employer satisfaction information collected?
24. Did the review of program quality result in any actions or modifications? Please explain.

Available Data Sources: Table 1A, Table 1B, Table 2, Table 4A, Table 4B, Table 5A, Table 5B, Table 6, program surveys, focus groups, interviews, etc.

Response to prompt (respond to all prompts). In your narrative, please refer to the data sets or evidence you have chosen to support your case.

Focused Questions from the Administrative Review Team (ART)

Question 1.

Response to question 1 (please refer to any data sets or evidence to support your case):

The program's strengths are that students can earn three separate certificates in as little as two semesters. Upon completion of the Advanced Certificate, students will have a good overall understanding of the three major welding processes used in the field (GMAW, SMAW, and

Welding: H48, H49, H46

GTAW). This helps to make them employable in a field that continues to show job growth and helps the program achieve steady and consistent enrollment.

Question 2.

Response to question 2 (please refer to any data sets or evidence to support your case):
The main challenges of the program are finding ways to keep costs down with consumables and machine maintenance and ensuring classes are taught in a consistent manner. This is difficult due to the fact classes are taught using one full time instructor and as many as six adjuncts. (Tables 1A, 1B, 3A, 3B)

Question 3.

Response to question 3 (please refer to any data sets or evidence to support your case):
The delivery method is traditional.

Question 4.

Response to question 4 (please refer to any data sets or evidence to support your case):
This program is designed to prepare students to enter the welding work force. This is done, in part, by training and enforcing identifiable employer concern areas such as safety and housekeeping, both of which can be found in OSHA standards and attendance.

Question 5.

Response to question 5 (please refer to any data sets or evidence to support your case):
I feel that the “5 musts of a good weld” work sheet, which I created, is a very good tool to teach problem solving techniques to welding students. The work sheet has students identify the 5 musts of a good weld, (machine settings, travel angle, work angle, travel speed, arc length), and list what problems occur when each is not correct. For example: SMAW welding process, Arc Length too long-causes increase in amperage, spatter, and uncontrollable puddle. As a follow up, on a written final students are given specific weld discontinuities and are asked to identify the most likely cause using the 5 musts of a good weld.

Question 6.

WLD 106 is offered as dual credit through Whiteside Area Career Center and Dixon High School.

Question 7.

We have internship opportunities with Etnyre Corporation and are working with other companies to discuss the possibility of internships with their companies as well.

Question 8.

No

Question 9.

No

Question 10.

No

Welding: H48, H49, H46

Question 11.

NA

Question 12.

NA

Question 13.

A partnership (internship) has been formed with Etnyre Corporation. The possibility of internships with other companies is being looked into.

Question 14.

The faculty to student ratio for welding classes is designed to be 10 students to 1 faculty. The five year range has a high of 9.4 to 1 and a low of 7.3 to 1 for an overall average of 8.1 to 1.

Question 15.

None currently

Question 16.

The technology used in the welding program is current with area manufacturing. Over the last 5 years we have added two robotic welders and have incorporated their use into the Advanced Certificate. Overall, the equipment used requires normal maintenance, but is in good working condition. We are in need of a new shear, which is currently being addressed.

Question 17.

Written tests were created to ensure welding students grasp key field requirements such as welding vocabulary, weld bead sequence, and general problem solving skills. Visual weld inspection is used to determine weld capability.

Question 18.

Based on feedback collected through class evaluations, the students are very satisfied with their preparation for employment.

Question 19.

Student satisfaction information is collected through class evaluations.

Question 20.

Employers are engaged in the welding program through work placement (the hiring of graduated students), and internships.

Question 21.

The program advisory committee meets on an as needed basis. In the past, we have met when new ideas or criteria are introduced for the welding program.

Welding: H48, H49, H46

Question 22.

NA

Question 23.

Employer satisfaction information is not currently collected.

Question 24.

Creating head of welding department position, use of lab assistant.

Responses to Program Challenges. Every program has challenges it must overcome. This program review process allows Sauk employees to identify those challenges and then create a plan to overcome those challenges. Please describe the program's challenges and the purposed response below. These responses will be added to the Operational Planning matrix found below.

Response to Challenges:

The main challenges of the welding program are: 1. Keeping costs down, 2. Keeping equipment in good working condition (general maintenance), 3. Ensuring consistency of taught material through all classes, and 4. General inventory of gases, metals, and consumables.

My proposed solution for keeping the costs down are to periodically check the prices of metals and stock up when prices are low. I currently order welding rod, mig wire, tig filler rod, and some machine consumables through the Lincoln Electric Educational program. The pricing through this program is considerably less than what we previously paid. I also have companies in place that donate metal to the welding department which saves the expense of purchasing this metal. I think we should continue with the Lincoln Electric Educational program, and that we should try to expand the number of companies that donate metal to the welding program. I am requesting a lab assistant for 10-12 hours per week each semester to help with inventory, machine maintenance, and general house cleaning. I am also requesting that I be named the head of the welding department. We are currently running the welding department with one full time faculty (myself), and three adjuncts. We could have up to six adjuncts teaching the night classes. This has, and does, create a confusing atmosphere for adjunct instructors, especially adjuncts new to the program. This is due in part, to the fact that adjuncts are hired based on their welding experience. Most have little to no teaching experience. While they are supplied with a class syllabus and materials for the class, they are not always sure how to stay on track with it and what all their responsibilities are. I propose that as the head of the welding department, and in exchange for payment of 4 credit hours, I take on the responsibilities of ensuring adjuncts have all necessary materials, help them with class orientations, come in 2 to 3 times each semester to check on the progress and consistency of each class, and meet with adjuncts on an as needed basis to discuss any problems or new business for the welding

Welding: H48, H49, H46

program, with a written or verbal report made to the Dean of Business, Career, and Technical Programs.

Program Bookkeeping Tasks

Task List	Description of Task	Is the task complete?
Course outlines	Please review all course outlines for the courses listed at the top of this document and send it to Curriculum Committee for approval. ALL outlines must go through Curriculum Committee even if no or few changes were made.	<input checked="" type="checkbox"/>
Catalog descriptions	Please review catalog descriptions of the program. If there are changes to the program description, please send it to the Curriculum Committee for approval.	<input checked="" type="checkbox"/>
Course descriptions	Please review course descriptions found in the catalog that are listed at the top of this document. If there are changes to the course descriptions please send them to the Curriculum Committee for approval.	<input checked="" type="checkbox"/>

Reviewer's Final Recommendation

Recommendation	Check only one	List program name (if more than one is being reviewed or make additional copies of this table for each program)
Continued with minor improvements	<input checked="" type="checkbox"/>	
Significantly modify the program	<input type="checkbox"/>	
Placed on Inactive Status	<input type="checkbox"/>	
Discontinued/Eliminated	<input type="checkbox"/>	
Other, please specify:	<input type="checkbox"/>	
Summary Rationale Please provide a brief rationale for the chosen action.	Need to name Scott Gillihan as head of welding department. Need for lab assistant. See response to program challenges.	
Intended Action Steps What are the action steps resulting from this review. Please detail the timeline and/or dates for each step.	Name Scott Gillihan head of welding department, use part time lab assistant. Time line as soon as possible.	

Welding: H48, H49, H46

Signature/Date	Program Review Team Member	
		Chair
		Member

Welding: H48, H49, H46

Program Review. Items from the program review will be entered here. *After this program review is complete and approved, transfer (paste and copy) the items below to your FY 2016 Operational Plan.*

** Use the origination code PR 2015.*

Origination Code*	Date Activity was Added to this OP (MM/DD/YYYY)	Name(s) of Individual(s) Responsible	Description/Purpose/Justification of Proposed Activity	Goal/Desired Result from Activity (measurable and under department's control)	Target Completion Date for This Activity (MM/DD/YYYY)	Actual Results from this Activity	Actual Completion Date for this Activity (MM/DD/YYYY)
Comments:							

Welding: H48, H49, H46

Program Review Committee & Administrative Review Teams Recommendations	
The following are the recommendations from the Program Review Committee and the Administrative Review Team:	
<ul style="list-style-type: none">- Investigate possible release time to support Welding program- Examine Fulton high school as possible location for future welding courses, including pipe-welding	
Signature of the Program Review Committee Chair	

President's Recommendation	
The following are the recommendations from the President:	
President's Signature/Date	