

# LMC Program Review Year 3 Update 2019-2020

## Instructional Unit Name: Welding Technology

### Introduction

In 2017-2018, all departments/programs completed a Comprehensive Program Review (CPR), in which goals were set for the 2017-2022 program years. Los Medanos College (College) is now in year three of a five-year review cycle. New to this program review cycle is the passage of the State's [Vision for Success](#) plan which establishes system-wide goals that can only be attained by each department contributing to college-level goals aligned with the state plan. Toward that end, the [Contra Costa Community College District Strategic Plan \(CCCD Strategic Plan\)](#) adopted by the Governing Board at its June 2019, meeting, aligns with the *Vision for Success* and plans are underway to ensure that the *Los Medanos College Educational Master Plan (LMC EMP)* also supports college and state goals. The intent is to direct College efforts toward a singular and coordinated set of goals.

The *Vision for Success* directs each college to increase degree and certificate completion and increase student transfers, improve time to completion, increase job placement in field of study, narrow achievement gaps and establishes targeted goals in five primary areas as follows:

**Goal #1** Increase by 20 percent the number of CCC students annually who acquire associates degrees, credentials, certificates, or specific skill sets that prepare them for an in-demand job.

**Goal #2** Increase by 35 percent the number of CCC students' system-wide transferring annually to a UC or CSU.

**GOAL #3** Decrease the average number of units accumulated by CCC students earning associate's degrees, from approximately 87 total units (the most recent system-wide average) to 79 total units—the average among the quintile of colleges showing the strongest performance on this measure

**GOAL #4** Increase the percent of exiting CTE students who report being employed in their field of study, from the most recent statewide average of 69 percent to an improved rate of 76 percent—the average among the quintile of colleges showing the strongest performance on this measure in the most recent administration of the CTE Outcomes Survey.

**Goal #5** Reduce equity gaps across all of the above measure through faster improvements among traditionally underrepresented groups as identified by the college.

The College can only meet its local and state goals with the contribution of each department's efforts. As noted, the intent is to direct College efforts towards a singular and coordinated set of goals to garner greater efficiencies and avoid duplication of effort.

The *Program Review Year 3 Update* includes five components with specified timeframes (not in chronological order) for draft and completion:

**Item 1. Program Update (October 1 – October 31)**

Provide an update to the department’s 2017-18 CPR

**Item 2. Setting the Vision for Success Goals 2021-22 (November 1 – November 27)**

Department/program alignment of goals, action steps, timeline, responsible party and next steps – all tied to the *Vision for Success* indicators. For ease of reference, the *Vision for Success* indicators are included in this section.

**Item 3. Assessment Date and Effectiveness (August 26 – September 30)**

Status report on the review and assessment of courses and next steps

**Item 4. Course Outline Updates (August 26 – September 30)**

Status report on the review and assessment of Course Outline of Records and next steps

**Item 5. Resource Needs (February 1 – February 28)**

Resource needs to meet goals, if any.

The table below shows a list of the above components in chronological order. The intent is to complete sections of Program Review by these dates to better assess and inform the process.

Date	Program Review Update Component
August 26 – September 30	Item 3. Assessment Date and Effectiveness Status report on the review and assessment of courses and next steps.
August 26 – September 30	Item 4. Status report on the review and assessment of Course Outline of Records and next steps.
October 1 – October 31	Item 1. Provide an update to the department’s 2017-18 CPR
November 1 – November 27	Item 2. Department/program alignment of goals, action steps, timeline, responsible party and next steps – aligned with the <i>Vision for Success</i> indicators.
February 1 – February 8	Item 5. Resource Needs

## 1. Program Update (Oct 1 – Oct 31)

1a. Provide any important changes or updates within your program since your last CPR. (New degrees, new curriculum, staffing changes, etc.)

Since the last program review in 2017/18, no new degrees or certificates have been created for the Welding Technology Dept.

No new curriculum changes have been done since the last program review. However, we are preparing a new course called Metal Fabrication Technologies (FabTech WELD-007) where students will learn to use hand and power tools to build small projects. This course will assist with teaching the students how to make things outside of welding. Welders do more than just weld, they rivet, cut, drill, tap, bend things, layout parts, and operate a variety of tools to repair or fabricate things. Our program is doing well teaching them how to weld, but they need much more experience with related fabrication/manufacturing technology. The COOR has been submitted and approved and the course is listed in the LMC Catalog. We plan to offer this course in the summer of 2020. Tooling purchases are still in progress for this course as well as lab improvements, project development, and paperwork to implement this course.

The only staffing change has been the hiring of our Saturday instructor Frank Murphy in January 2018.

1b. Please address the following enrollment data provided for your program.

1.b.1. What are the enrollment trends over the past 3 years, beginning with Fall 2017? (Please address census enrollment, census fill rate, and productivity (Ftes/Ftef))

The census enrollment illustrates an upward trend. From a count of 204 students in Fall 2017 to 268 in Fall 2019.

The fill rate has increased 4.2%, from 15% in 2017 to 19.2% in 2019.

The productivity has increased 4.9 from 12.4 to 17.3.

1.b.2. What does the data suggest in terms of future needs/directions?

Nothing that I can think of. The enrollment fluctuates up and down over time as well as our productivity. The program is just about at maximum capacity in offering courses that students can take. Presently, we have courses in the mornings, afternoons, evenings, and Saturdays. The trend upwards is just an illustration that confirms the high demand in industry for welders. Students know that and want to become one.

1c. Provide a brief update of your program's goals as listed in your (CPR) 2017- 2018. Given these goals, please provide a brief update on: (a) Goals completed since their submission in 2018, and the impact of that completion on program effectiveness; (b) Goals abandoned with an explanation of why they were abandoned and (c) Goals still in progress or modified to be achieved by 2021-2022. Please include action steps, timeline, and responsible parties.

Goals	Completed/ Abandoned/ In Progress/ Modified	Impact/ Explain/ Action Steps	Timeline/ Responsible Parties
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<b>Goal 1: Start a new course: Metal Fabrication Technologies, WELD-007</b>	In progress, nearing completion.	Tooling purchases nearly complete, creating new projects and curriculum. Course has been submitted to State and is now listed in LMC catalog. Plan to start offering it this summer.	Summer 2020. Joe Meyer
<b>Goal 2: Continue to Offer and Build the Best Welding Program in the Bay Area.</b>	Always In Progress	We are continuously improving our program in both our theory and lab offerings. We strive to use the latest equipment technology and techniques to improve student learning. Our lab has seen many upgrades from lighting & electrical, to storage of metal for student use. We maintain backup tooling for many of our processes to avoid any downtimes and our industry partners have been generous in material donations.	On-going. Joe Meyer
<b>Goal 3: Find more internship opportunities for our students who want summer employment.</b>	In Progress	This has been going well as demand is so high in industry for any workers that many companies have now sufficed for part-time workers where as in the past they would only hire full-time. We have been able to place many of our students desiring employment in part-time positions thus helping employer's demands while allowing the student to complete their LMC education.	On-going. Joe Meyer, Dann Gesink.

**For CTE programs only:**

1c. Community and Labor Market Needs (Link Ed Code [78016](#), Title 5, [51022](#))

There is a huge demand for workers who know how to weld. Every union I know of has apprenticeship hiring's, every fabrication shop I communicate with is overwhelmed with work. Almost every day an employer calls me desiring our students. There is presently a 10 year backlog of major projects in the Bay Area that involves welding. The demand I see today is the best I have ever seen it in my lifetime!

Now, to refer to the EMSI October 2019 Q3 data provided by the program review committee which only accounts for a small portion of the occupations that our students enter, it shows job details for Reinforcing iron workers and welders/cutters/solderers. Keep in mind that maybe 25% of our students fall into these two categories. Nothing is given about structural iron welders, sheetmetal workers, pipefitters, pipe welders, steamfitters, boilermakers, and many other CIP categories that 75% of our students enter.

EMSI data illustrates only an 8.9% upward change in jobs in our region showing a total of 2,612. (I believe that this number is significantly higher based off of my communication with industry.)

It shows the median hourly earnings of \$23.15 per hour.

1d. Advisory Board Update and Analysis (CTE related only) Include dates of Advisory Board meetings in 2018-2019, and those completed or planned in 2019-2020.

The purpose of our Advisory Board is to receive recommendations and advice in regards to the improvements and changes to be made in the Welding program. We discuss updates to the program, equipment and material needs, changes in the job market, and different trends in our industry. To maintain our high level of quality training, the board helps us to stay connected to what is happening in the field and continue to meet industry needs.

Our Advisory Board is made up of a LMC Welding Technology Department lead, faculty, an active student from our program, an alumni graduate of our program, as well as a variety of industry partners with different expertises. Partners include local Weld shop owners, manufacturing company owners/management, both working & retired QC inspectors, manufacturing production engineer, and a welding technician.

Date of last meeting was January 23, 2019 and the minutes were sent to the Office of Instruction. The next Welding Technology Advisory board meeting will be on January 22, 2020.

## 2. Setting Vision for Success Goals for 2021-22 (Nov 1—Nov 27)

The *Vision for Success* directs each college to increase degree and certificate completion and increase student transfers, improve time to completion, increase job placement in field of study, narrow achievement gaps and establishes targeted goals in five primary areas. The College can only meet its local and state goals with the contribution of each department's efforts. As noted, the intent is to direct College efforts towards a singular and coordinated set of goals to garner greater efficiencies and avoid duplication of effort.

2a. The following table lists the *Vision for Success* indicators that we must align to as a college and as a district. Please look at your program data (Tableau) for each of the following *Vision for Success* indicators. Please address all indicators that are relevant to your program, set your program goal, indicate the action steps, timeline and responsible parties to achieve program goals.

Vision for Success Indicators and ACCJC Indicator	Program Set Goals for 2021-2022	Action Steps	Timeline	Responsible Parties	Notes
<b>Course Success</b>	Our overall is 65.5%, the recommended goal is 75.4.	Increase course success	2020-2022	Joe Meyer Dann Gesink	
<b>Degrees ( AA, AS, ADT)</b>	In 2018-2019 we had 9 A.S. completions. Goal was 2.4.				
<b>Certificates of Achievement</b>	In 2018 – 2019 we had 7 C of A				

	completions. Goal was 3.6				
<b>Unit Reduction</b>					
<b>CTE Jobs</b>	Data shows an 11% increase to 2383 in 2024.				

2b. The Vision for Success Goal 5—Equity. The College has identified three disproportionately impacted (DI) populations: African-American, economically disadvantage students (low income), and foster youth students. The College’s goal is to reduce the equity achievement gap on course success for disproportionately impacted (DI) student populations. Please look at your program data (Tableau) for each of the following DI population. Please pick one or more DI populations that are relevant to your program, set your program goal, indicate the action steps, timeline and responsible parties to achieve program goals.

Course Success by DI Population	Program Set Goals for 2021-2022	Action Steps	Timeline	Responsible Parties	Notes
<b>African American</b>					
<b>Low Income</b>	35%	Currently we have a 28% success rate for low income African Americans. We will try to increase that to 35% by incorporating changes to our textbook requirements from 4 to 3 so it would be easier for them to purchase the textbooks. In a way this would increase the ZTC in our program.	By the end of 2022 it shall be completed.	Joe Meyer	
<b>Foster Youth</b>					

### 3. Assessment Update and Effectiveness (August 26-Sept 30)

a. Please review the data provided on assessment status of courses in your discipline in Cycle 2 (2017/18-2020/21), if there were any courses that were not assessed in Cohorts 1 and 2, please (a) list them, (b) explain why they were not assessed, (b) when are you going to assess them, and (c) who is going to assess them.

Course	Reason course was not assessed	When course will be assessed	Faculty Responsible for Course Assessment
<b>COURSE 001</b>	All courses were assessed as required	All assessments are up-to-date.	Joe Meyer/Dann Gesink
<b>COURSE 002</b>			

- b. Discuss the results of any outcomes assessments (e.g. CSLO) performed this year. What changes, if any, are planned to improve student success?

From my assessments done in 2019, a few changes will be implemented. In our theory courses we plan to give more quizzes to encourage students to keep up with the course work and thus learn the material. We plan to do more group projects to allow students to work together to solve a problem. Lastly, inspire students to ask more questions or see the instructor during office hours whenever they need help.

#### 4. Course Outline of Record Updates (August 26 – Sept 30)

Please review the data provided on the status of COORs in your discipline. (Note: These data do not reflect courses submitted after May 2019. For each COOR that has *not* been updated since May 2019, please indicate the faculty member responsible for submitting the updated COOR to the Curriculum Committee by **November 1, 2019**.)

Course	Faculty Responsible for COOR Update
COURSE 001	All Coors are up-to-date.
COURSE 002	
COURSE 003	

#### Impact of Resource Allocation

If you have received funding via the Resource Allocation Process, you will be asked by the Office of Business Services how the resource helped you in achieving your program goals.

## 5. Resource Needs (Feb 1 – Feb 28)

Resource needs to meet goals, if any. If there are no requests, this section may be skipped.

<b>Faculty/Staff Resource Request</b>			
Department/Unit Goal - Reference #		Strategic Goal and/or Objective - Reference #	
Welding Technology		Hiring another Part Time Instructor	
Department/Unit Name		Position Name/Classification	FTE
Welding Technology		Adjunct Welding Instructor	
Position Type	Funding Duration	Funding Source	Est. Salary & Benefits
<input checked="" type="checkbox"/> Faculty R/T <input type="checkbox"/> Classified <input type="checkbox"/> Manager <input type="checkbox"/> Student	<input checked="" type="checkbox"/> On-going/Permanent <input type="checkbox"/> One-time	<input checked="" type="checkbox"/> Operations (Fund 11) <input type="checkbox"/> Other <input type="text"/>	
Justification:			
<p>When new remodeled Appliance lab is complete, Welding may move its new Metals Fabrication Technology Course-Weld-007 into the space to use during the Fall and Spring semesters. After that occurs, it may become necessary to have another welding instructor to teach courses that current faculty cannot due to load issues.</p>			

<b>Operating Resource Request</b>		
Department/Unit Goal - Reference #		Strategic Goal and/or Objective - Reference #
Welding Technology		Additional Tooling for Appliance Lab use
Department/Unit Name		Resource Type
Welding Technology		<input checked="" type="checkbox"/> Equipment <input type="checkbox"/> IT Hardware/Software <input checked="" type="checkbox"/> Supplies <input type="checkbox"/> Facility Improvement <input type="checkbox"/> Service/Contract <input type="checkbox"/> Other
General Description		Est. Expense
<p>If Weld-007 Metals Fabrication Technology uses the remodeled Appliance lab, new additional tooling will be needed to operate the course outside of the Welding lab. These include pedestal grinders, metal shear, possible electrical connections, cord reels, air reels, grinding booth(s), curtains, lockers, etc.</p>		\$65,000
Justification:		



To operate the course in another lab outside the welding lab, the new lab must be outfitted with tooling which is required for the course. The new remodel may not include all the electrical and air needs nor will it include tooling to operate the course. Most of this new tooling are large, fixed items which cannot be wheeled about or moved after installation.

<b>Professional Development Resource Request</b>	
Department/Unit Goal - Reference #	Strategic Goal and/or Objective - Reference #
Welding Technology	Attend Fabtech Exhibition and Conference
Department/Unit Name	Resource Type
Welding Technology	<input checked="" type="checkbox"/> Conference/Meeting <input type="checkbox"/> Materials/Supplies <input type="checkbox"/> Online Learning <input type="checkbox"/> IT Hardware/Software <input type="checkbox"/> Other
General Description	Est. Expense
Instructors to attend the International Fabtech Conference & Exhibition to see and learn about the latest technology in welding and fabricating.	\$4000
Justification:	
Every few years the Welding Faculty desires to attend North America’s largest metal forming, fabricating, welding and finishing event heads to the Las Vegas Convention Center Nov. 18-20, 2020. FABTECH provides a convenient ‘one-stop shop’ venue where you can meet with world-class suppliers, see the latest industry products and developments, and find the tools to improve productivity, increase profits and discover new solutions to all of your metal forming, fabricating, welding and finishing needs.	