

# Program Review & Planning (PRP)

### PART 1: BASIC PROGRAM INFORMATION

Program Review is a self-study of your discipline. It is about documenting the plans you have for improving student success in your program and sharing that information with the college community. Through the review of and reflection on key program elements, program review and planning identifies program strengths as well as strategies necessary to improve the academic discipline, program, or service to support student success. With that in mind, please answer the following questions:

Discipline Name:	Engineering
Department Name:	Physics & Engineering
Division Name:	Math, Natural Health, and Computer Sciences

#### Please list all participants in this Program Review:

Name	Position
Daniel Finkenthal	Professor/Chair

Number of Full Time faculty	1	Number of Part Time Faculty	1
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#### Please list the Classified positions (and their FTE) that support this discipline:

One 20% Academic Department Assistance and One 50% Lab Technician

## What additional hourly staff support this discipline and/or department:

None

#### Discipline mission statement (click here for information on how to create a mission statement):

The Department has not developed an agreed on mission statement for this discipline. This will be a goal for the coming year. Previous PRP's presented the following:

The mission of Engineering Program is to prepare students for transfer in various Engineering and related fields of study at four-year-universities by educating them in fundamental concepts, knowledge, critical thinking, and hands-on skills using industry standard equipment and laboratory techniques and skills of engineering.

List any new degrees and certificates offered within this discipline since your last comprehensive review:

Discipline Level Data: https://sharepoint2.palomar.edu/sites/IRPA/SitePages/PRP%20Summary%20Source.aspx

#### PART 2: PROGRAM REFLECTION

#### 1. Program Analysis:

#### Reflect upon and provide an analysis of your summary data.

Overall the program performance has been pretty flat over the years but was a bit upward in 2016. Enrollments increased from 111 to 113 (1% gain) while WSCH improved from 272 to 312 (15% gain) and WSCH/FTEF increased from 408 to 469 (also a 15% gain). Fill rate in 2016 increased from 94% to 99%. Part-Time/Total FTEF has been a stagnant 10% for the last five years.

On the upside, the Success Rate in 2016 was 75%. This is likely due to the preparation/filtering students receive in the prerequisite Majors Physics classes which only have a 34% success rate.

Enrollments and WSCH seem low for a District our size and the absence of any competing programs at Mira Costa. The high 99% Fill Rate but low 10% Part-Time/Total FTEF indicate the program has great potential to grow.

#### 2. Standards:

ACCJC requires that colleges establish institutional and program level standards in the area of course success rates. These standards represent the lowest success rate (% A, B, C, or Credit) deemed acceptable by the College. In other words, if you were to notice a drop below the rate, you would seek further information to examine why the drop occurred and strategies to address the rate.

**Discipline Level Course Success Rate:** 

- A. The College's institutional standard for course success rate is 70%.
- B. Review your discipline's course success rates over the past five years.
- C. Identify the minimum acceptable course success rate for your discipline. When setting this rate, consider the level of curriculum (e.g., basic skills, AA, Transfer) and other factors that influence success

Standard for Discipline Course Success Rate:	70
Why?	

We believe the College's institutional standard is applicable to our program as a whole.

#### 3. Program Update:

#### Describe your proudest moments or achievements related to student success and outcomes.

Our proudest achievements continue to be the reported success of our transfer students upon matriculation, graduation, and career success.

A major success for us in 2016 was to establish Summer and Winter Institutes in conjunction with the Computer Sciences department. This has had a noticeable impact on both enrollments and student success, especially for female students.

I am also happy to have recruited several highly qualified new part time faculty and provided a professionally rewarding and nurturing environment for them. This includes the **first ever** female engineering instructor Palomar, and that this already having a positive impact on the attitudes and success of our students.

#### 4. Program Improvement:

What areas or activities are you working on this year to improve your program? Please respond to new data as well as feedback from last year's program review.

We are recruiting and hiring highly qualified part time instructors from industry and providing a positive environment to assist in their growth as teachers.

We are reviewing the existing curriculum and assessing laboratory equipment and practices. Unfortunately there is no written curriculum for most of the lab classes since the primary instructor has been teaching labs from memory. Existing facilities and equipment are not adequate to fulfill the COR of the Engineering Materials lab class.

#### 5. Unanticipated Factors:

Have there been any unanticipated factors that have affected the progress of your previous plan?

#### 6. SLOACs:

Describe your course and program SLO activities this past year. How have you used the results of your assessments to improve your courses and programs? Refer to the SLO/PRP report – <u>https://outcomes.palomar.edu:8443/tracdat/</u>

Hector Garcia-Villa has been designated department facilitator. Compliance with SLO being stated on all department syllabi has been achieved. However, most class SLOs have not been assessed within the last three years. This will be a priority for the coming year.

## PART 3: PROGRAM GOALS

1. Progress on Previous Year's Goals: Please list discipline goals from the previous year's reviews and provide an update by placing an "X" the appropriate status box .

Goal	Completed	Ongoing	No longer a goal
A new building for Physics & Engineering			Х
Create Engineering Coordinator Position			Х
Update and modernize the lab equipment		х	
Restart SI/LA program	х		

2. New Discipline Goals: Please list all discipline goals for this three-year planning cycle (including those continued from previous planning cycle):

 Goal #1

 Program or discipline goal
 Develop written lab curriculum that meets CORs

#### ANNUAL PROGRAM REVIEW AND PLANNING

Strategies for implementation	Identify faculty and required resources	
Timeline for implementation	Spring 2019	
Outcome(s) expected (qualitative/quantitative)	Program growth	
Goal #2		
Program or discipline goal	Form partnership with new CSUSM Engineering program and develop guided pathways	
Strategies for implementation	Attend planning meetings, identify courses Design, construct, and equip modern electronics laboratory in NS building	
Timeline for implementation	Spring 2019	
Outcome(s) expected (qualitative/quantitative)	Increase enrollments and success in majors courses	
Goal #3		
Program or discipline goal	Launch Engineering Technician Certificate Program	
Strategies for implementation	Secure resources	
Timeline for implementation	Fall 2018	
Outcome(s) expected (qualitative/quantitative)	Increased enrollments	

## PART 4: FEEDBACK AND FOLLOW-UP

This section is for confirming completion and providing feedback.

Confirmation of Completion by Department Chair	
Department Chair	Daniel Finkenthal
Date	February 11th, 2018

\*Please email your Dean to inform them that the PRP has been completed and is ready for their review

Reviewed by Dean	
Reviewer(s)	
Date	
1. Strengths and successes of the discipline as evidenced by the data and analysis:	
2. Areas of Concern, if any:	
3. Recommen	dations for improvement:

## \*Please email your VP to inform them that the PRP has been completed and is ready for their review

Reviewed by Vice President		
Reviewer(s)	Jack S. Kahn. Ph.D.	
Date	2/15/2018	
1. Strengths and successes of the discipline as evidenced by the data and analysis:		
2. 3.	Excellent use of data in the narrative and logical conclusions. Goals are well stated and make sense given the state of the discipline. Overall good description of the program. Looking forward to new partnerships in industry and higher education.	
2. Areas of Co	oncern, if any:	
-	See deans comments Thank you for information on SLOS- these need to be cleaned up this semester.	
3. Recommendations for improvement:		