

## Academic Program Review Committee

**Program: Engineering**

**Date Reviewed: 10/19/17**

**Resubmittal Date:**

Please use these notes along with the comments from APRC members and your dean when revising this document.

**General Comments:** Comprehensive review

1. Overview of the Program	Comments
a) Provide a brief narrative description of the current program, including the program’s mission statement and the students it serves.	<ul style="list-style-type: none"> <li>• As this section represents an “executive summary” for the program, emphasize program highlights and accomplishments (e.g., course articulation with SUs; faculty professional development at Cal Tech)</li> <li>• Introduce program’s key needs and recommendations in this section (e.g., hire a full-time instructor who can teach both Mathematics and Engineering)</li> </ul>
b) Describe the degrees and/or certificates offered by the program.	<ul style="list-style-type: none"> <li>•</li> </ul>
c) Explain how the program fulfills the college’s mission and aligns with the strategic initiatives. (see Appendix A)	<ul style="list-style-type: none"> <li>• P. 4 – Strategic Initiative #2 (<i>Student Success and Support</i>) - add statement about ASEM as a resource for students who do not qualify for MESA (per Arturo H.)</li> <li>• P. 4 – Strategic Initiative #3 (<i>Collaboration</i>) – perhaps add statement referring reader to previous section which discusses how the program collaborates with other campus programs/services to provide support for students (e.g., MESA, SRC)</li> </ul>
d) Discuss the status of recommendations from your previous program review.	<ul style="list-style-type: none"> <li>• Clearly identify the status as “Completed,” “On Hold,” “In Progress,” “Abandoned,” etc.</li> </ul>

<b>2. Analysis of Research Data (include data provided by Institutional Research &amp; Planning)</b>	
<b>Provide and <u>analyze</u> the following statistics/data</b>	<b>Comments</b>
a) Head count of students in the program	<ul style="list-style-type: none"> <li>• Acknowledge the Fall 2016 drop in enrollment for ENGR 9 as an anomaly (as the document acknowledges the Fall 2016 fill rate accordingly on p. 9)</li> </ul>
b) Course grade distribution	<ul style="list-style-type: none"> <li>•</li> </ul>
c) Success rates (Discuss your program's rates in light of the college's success rate standard. Set a standard for your program.)	<ul style="list-style-type: none"> <li>• Add note that success rate data were not disaggregated due to the small sample size.</li> </ul>
d) Retention rates	<ul style="list-style-type: none"> <li>• Add note that retention rate data were not disaggregated due to the small sample size.</li> </ul>
e) A comparison of success and retention rates in face-to-face classes with distance education classes	<ul style="list-style-type: none"> <li>•</li> </ul>
f) Enrollment statistics with section and seat counts and fill rates	<ul style="list-style-type: none"> <li>•</li> </ul>
g) Scheduling of courses (day vs. night, days offered, and sequence)	<ul style="list-style-type: none"> <li>•</li> </ul>
h) Improvement rates (if applicable)	<ul style="list-style-type: none"> <li>•</li> </ul>
i) Additional data compiled by faculty	<ul style="list-style-type: none"> <li>•</li> </ul>
j) List any related recommendations.	<ul style="list-style-type: none"> <li>• P. 11, Recommendation #1 – perhaps “Monitor and track enrollment in ENGR 1, and increase the number of section offerings in accordance with enrollment trends.”</li> <li>• P. 11, Recommendation #2 – Increase student awareness of requirements met by Engineering course offerings through program participation in Student Welcome Day, College Night, etc.</li> </ul>

3. Curriculum Review	Comments
a) Provide the curriculum course review timeline to ensure all courses are reviewed at least once every 6 years.	<ul style="list-style-type: none"> <li>• Insert the course review timeline using the 2017 template</li> </ul>
b) Explain any course additions to current course offerings.	<ul style="list-style-type: none"> <li>• Explicitly state the importance of offering a full-scale program to remain competitive.</li> <li>• P. 13, line 5 – “... an Electric Circuits course <i>is</i> in the process of reactivation.”</li> </ul>
c) Explain any course deletions and inactivations from current course offerings.	<ul style="list-style-type: none"> <li>•</li> </ul>
d) Describe the courses and number of sections offered in distance education. (Distance education includes hybrid courses.)	<ul style="list-style-type: none"> <li>•</li> </ul>
e) Discuss how well the courses, degrees, or certificates are meeting students’ transfer or career training needs:	<ul style="list-style-type: none"> <li>•</li> </ul>
1. Have all courses that are required for your program’s degrees and certificates been offered during the last two years? If not, has the program established a course offering cycle?	<ul style="list-style-type: none"> <li>•</li> </ul>
2. Are there any concerns regarding program courses and their articulation?	<ul style="list-style-type: none"> <li>•</li> </ul>
3. How many students earn degrees and/or certificates in your program? Do students take licensure exams? If so, what is the pass rate? If few students receive degrees or certificates or if few students pass the licensure exam, should the program’s criteria or courses be re-examined? Set an attainable, measurable goal	<ul style="list-style-type: none"> <li>•</li> </ul>
f) List any related recommendations.	<ul style="list-style-type: none"> <li>•</li> </ul>

4. Assessment and Student and Program Learning Outcomes (SLOs & PLOs)	Comments
a) Provide a copy of your alignment grid, which shows how course, program, and institutional learning outcomes are aligned.	<ul style="list-style-type: none"> <li>• Insert updated alignment grids</li> </ul>

b) Provide a timeline for course and program level SLO assessments.	•
c) State the percent of course and program SLO statements that have been assessed.	•
d) Summarize the SLO and PLO assessment results over the past four years and describe how those results led to improved student learning. Analyze and describe those changes. Provide specific examples.	•
e) Describe how you have improved your SLO process and engaged in dialogue about assessment results.	•
f) Discuss any findings from SLO/PLO assessments that help to justify recommendations.	•
g) List any related recommendations.	• Consider whether or not the program would like to advance any of the instructor suggestions from learning assessment (e.g., from p. 21) as program recommendations.
<b>5. Analysis of Student Feedback</b>	<b>Comments</b>
a) Describe the results of relevant surveys in each of the following areas:	
i. Student Support	•
ii. Curriculum	•
iii. Facilities, Equipment, and Technology	•
iv. Program Objectives	•
b) Discuss the implications of the survey results for the program.	•
c) Discuss the results of other relevant surveys.	•
d) List any related recommendations.	•

6. Facilities and Equipment	Comments
a) Describe and assess the existing program facilities and equipment.	•
b) Explain the immediate (1-2 years) needs related to facilities and equipment. Provide a cost estimate for each need and explain how it will help the program better meet its goals.	•
c) Explain the long-range (2-4+ years) needs related to facilities and equipment. Provide a cost estimate for each need and explain how it will help the program better meet its goals.	•
d) List any related recommendations.	<ul style="list-style-type: none"> <li>• P. 26, Recommendation #1 – “Purchase the equipment necessary to support instruction in ENGR 17 (Electric Circuits), based on the faculty decision regarding course design (e.g., lab component).”</li> <li>• P. 26, Recommendation #2 – “Consult with the Division of Industry and Technology to assess the viability of sharing any equipment to support courses planned for future reactivation or development.”</li> <li>• P. 26, Recommendation #3 (?) – “Research local full-scale Engineering programs to assess and estimate the cost of any equipment and/or facilities-related needs (e.g., lab space) to accommodate future curriculum.”</li> </ul>

7. Technology and Software	Comments
a) Describe and assess the adequacy and currency of the technology and software used by the program.	•
b) Explain the immediate (1-2 years) needs related to technology and software. Provide a cost estimate for each need and explain how it will help the program better meet its goals.	•
c) Explain the long-range (2-4+ years) needs related to technology and software. Provide a cost estimate for each need and explain how it will help the program better meet its goals	•

<p>d) List any related recommendations.</p>	<ul style="list-style-type: none"> <li>• Recommendation #1 (?) – “Purchase the technology and/or software necessary to support instruction in ENGR 17 (Electric Circuits), based on the faculty decision regarding course design.”</li> <li>• Recommendation #2 (?) – “Estimate costs and develop a cycle for purchasing and updating technology/software associated with courses planned for future reactivation or development.”</li> </ul>
<b>8. Staffing</b>	<b>Comments</b>
<p>a) Describe the program’s current staffing, including faculty, administration, and classified staff.</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>b) Explain and justify the program’s staffing needs in the immediate (1-2 years) and long-term (2-4+ years). Provide cost estimates and explain how the position/s will help the program better meet its goals.</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>c) List any related recommendations.</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>9. Future Direction and Vision</b>	<b>Comments</b>
<p>a) Describe relevant changes within the academic field/industry. How will these changes impact the program in the next four years?</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>b) Explain the direction and vision of the program and how you plan to achieve it.</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<p>c) List any related recommendations.</p>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>10. Prioritized Recommendations</b>	<b>Comments</b>
<p>a) Provide a single, prioritized list of recommendations and needs for your program/department (drawn from your recommendations in sections 2-8). Include cost estimates and list the college strategic initiative that supports each recommendation (see Appendix A). Use the following chart format to organize your recommendations.</p>	<ul style="list-style-type: none"> <li>• Add cost estimates</li> <li>• Consult within the program to finalize the prioritization</li> <li>• Per Dean Sims, add a recommendation to seek identification as a CTE program</li> </ul>
<p>b) Explain why the list is prioritized in this way.</p>	<ul style="list-style-type: none"> <li>•</li> </ul>