

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

ACADEMIC SENATE

ACADEMIC PROGRAMS COMMITTEE

REPORT TO

THE ACADEMIC SENATE

AP-002-234

Program Review for MS, Electrical Engineering

Academic Programs Committee

Date: 10/29/2023

**Executive Committee
Received and Forwarded**

Date: 11/15/2023

Academic Senate

**Date: 12/06/2023
First Reading**

BACKGROUND:

A self-study report on the MS in Electrical Engineering was prepared by faculty of the College of Engineering in 2019-2020. An external review team, consisting of Dr. Hamid Jafarkhani, (Professor, EECS) from UC Irvine and Dr. Mo Shiva (Professor, EE) from CSU Fullerton, conducted a review for the Electrical Engineering MS Program on October 2020. After their visit, a report was prepared and submitted in November of 2020, and after which the Department and Dean submitted responses in June 2023. The AP Committee has reviewed these responses.

RESOURCES CONSULTED:

Dr. Andrew Ketsdever, Dean, College of Engineering.
Dr. Alison Baski, Former Interim Dean, College of Engineering
Dr. Halima El Naga, Department Chair, Electrical Engineering.

DISCUSSION and RECOMMENDATION:

The external program reviewer's observations and comments about the Strengths of the Electrical Engineering, MS Program at Cal Poly Pomona were very positive. They commended that the program has a diverse student population that includes local, transfer and international students, highly qualified instructors to cover all five concentration areas and well-defined course structure. The reviewers also mentioned advising and lab resources as positive aspects of the program. The reviewed applauded the dedication of the program faculty in supervising students in the MS project and thesis.

The reviewers also mentioned several challenges facing this program. The External Program Review team mentions the challenge of available classes for graduate students as some classes gets cancelled due to low enrollment which also adversely affects the meaningfulness of the concentration structures that lack required courses. The reviewers have also identified low density of tenure track faculty and low enrollment.

The reviewers had several suggestions. To address class cancellations due to low enrollment, reviewers suggested that the minimum number of students should be reduced to 8, instead of 12. The reviewers also suggested consolidating the concentration or specialization areas to a smaller subset as all areas might not be feasible for the department to offer due to limited number of courses offered and/or course cancellations. Finally, the reviewers also suggested that the department consider changing the program name to Electrical and Computer Engineering to increase enrollment and attract more students.

The Department and Dean's office agreed in general with the comments and suggestions made by the External Review Team and the action plan for improvement is sound as well. Overall, the review of this MS program is positive, finding that this is a Program with diverse student body with qualified faculty as well as a commitment to

working with students. Areas of concern are primarily resource (course offering, tenure density) issues that all the programs on campus have.

The Academic Programs Committee commends the Electrical MS Program for their work, in their operation of the program and in the preparation to get a thorough and thoughtful detailed review highlighting pertinent issues.