



CAL POLY

MS in Computer Engineering

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Computer Engineering at Cal Poly then

- Started as a joint program between CS and EE
 - Coursework was split 50/50 between two home departments
 - Bachelor's Degree only
- Faculty advised Master's students through home departments
 - Breadth CPE 5xx electives developed to support Master's students
 - CPE faculty have significant experience advising Master's students

Computer Engineering at Cal Poly now

- CPE became a stand-alone department in 2021
 - Developing significant new CPE coursework
 - Establishing a strong departmental culture with the help of NSF RED
- CPE faculty still advise master's students through former home departments
 - Limits on number of CPE faculty on thesis committee
 - Limited influence/input on admissions
 - Strong student demand for a CPE-specific Master's program

Distinctive Features

- MS CPE Keeps:
 - State supported status
 - Face-to-face delivery
 - Flexibility to take courses across EE, CPE, and CSSE
- MS CPE Adds:
 - Ethics in Computer Engineering
 - Research Methods
- Culminating experience:
 - Industry-sponsored project option



Resources and Enrollment

Budget neutral

- Initially enrolling 20 students per year
 - Roughly the number of CPEs who enroll in MSEE or MSCS
 - MSEE and MSCS to reduce enrollment to keep levels constant
- Leverage existing infrastructure
 - Primarily relies on existing 4XXX-5XXX level courses in CPE, EE, and CSC
 - Uses existing lab and classroom space

All in favor?

This proposal:

- Aligns graduate education with the modern discipline,
- Supports student and workforce demand,
- Advances Cal Poly's applied computing mission.

Questions?