January 15, 2014

Bernard Levy, Chair  
Faculty Executive Committee  
College of Engineering

RE: Proposal to Create the Minor in Electrical and Computer Engineering

After careful review of the proposal, the Undergraduate Council (UGC) supports the establishment of a minor in Electrical and Computer Engineering.

Matthew Traxler, Chair  
Davis Division Academic Senate Undergraduate Council

Enclosure: Proposal to Create the Minor in Electrical and Computer Engineering

cc: Bruno Nachtergaele, Chair, Davis Division Academic Senate  
Gina Anderson, Executive Director, Davis Division Academic Senate  
Carolyn de la Pena, interim Vice Provost, Undergraduate Education  
Enrique J. Lavernia, Dean, College of Engineering
To: Bruno Nachtergaele, Chair
    Academic Senate

    Enrique J. Lavernia, Dean
    College of Engineering

Fr: Bernard Levy, Chair
    COE Executive Committee

Re: Proposed Minor in Electrical and Computer Engineering

The College of Engineering Executive Committee met and reviewed the proposed minor for Electrical and Computer Engineering at their scheduled meeting on November 13th. All members voted in favor of approval of this proposed new minor.

Thank you.

APPROVAL RECOMMENDED.

Enrique J. Lavernia, Dean
College of Engineering
Background on the minor

There has been an increasing need for professionals in most engineering disciplines to understand the fundamentals of electronic circuits, electronic signals, semiconductor devices, applied electromagnetics, control systems, computer systems, and communication systems. The objective of this minor program is to prepare students with the necessary theoretical and practical training in one or many of the above mentioned fields. The minor program curriculum is designed to allow flexibility while ensuring a solid foundation of fundamental electrical engineering concepts. The program is expected to accommodate students of diverse backgrounds.

Requirements for enrolling in and completing the minor

Successful completion of the minor requires the following:

- The minor must be outside the department or program of the major
- Courses used to satisfy the requirements of a minor, including those completed elsewhere, must be approved by an advisor in the sponsoring department or program
- Satisfy the EE minor course requirement
- Minimum overall GPA of 2.0 for coursework completed in the minor
- A minor petition must be obtained from the College of the student’s major, and filed no later than the deadline for filing for graduation, to get a minor program notation on the student’s transcript. Transcript notation requires successful completion of the minor. Notation will appear as a minor in “Electrical Engineering”

Minor Advisor:
Prof. Zhi Ding
Prof. Xiaoguang "Leo" Liu

Course Requirement (21 units)

- Required: EEC 100 (5 units)
- At least 1 of the following combinations: (8-10 units)
  - EEC 110A and B: Analog Circuits
  - EEC 130A and B: Electromagnetics
  - EEC 140A and B: Physical Electronics
  - EEC 150A and B: Signals & Systems
  - EEC 150A and 160: Communication
  - EEC 150A and 157A: Control Systems
  - EEC 180A and B: Digital Systems
- At least two additional 100 + level EEC elective courses (minimum 8 units)
  - Includes graduate level EEC courses
  - Excludes EEC 190, 192, 196, 197, 198, 199, 298, 299, & 390
  - Design project courses are deferred grading and must be taken consecutively