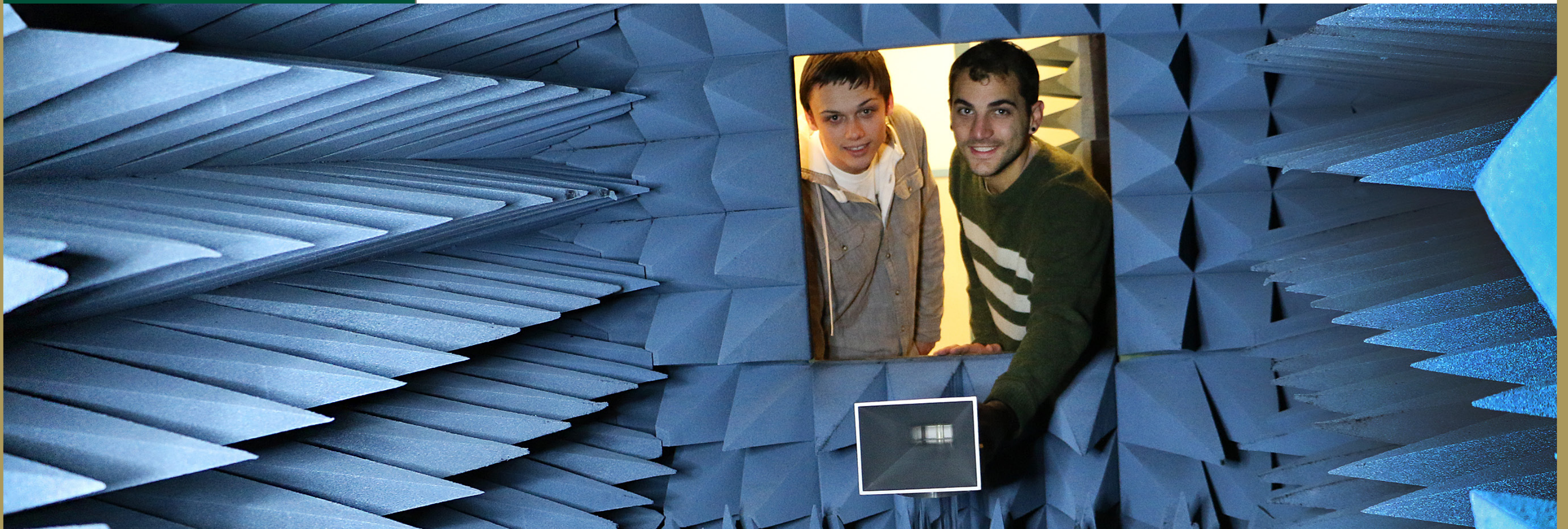


CAL POLY

Electrical Engineering
Department

STRATEGIC DIRECTIONS

Preparing the Engineer of the Future



Our Mission: To develop industry-ready talent that advances our connected world by innovating from fundamentals to advanced technologies.

STRENGTHS AND AREAS OF DISTINCTION

Consistently ranked one of the nation's top public programs, the Electrical Engineering Department has educated students for careers of service and leadership for more than 115 years.

Our Learn by Doing, project- and design-centered approach prepares students for lifelong learning, which is essential for success in a world of rapid technological change.

Core strengths:

- Power and Energy Systems
- Embedded Computing
- Communication Systems
- Integrated Circuit Design

Areas of increasing emphasis:

- Sustainable Energy Solutions
- Mobile Computing
- Mobile Communications
- Systems on a Chip

CURRICULAR INITIATIVES

- Sustainability: Provide a focus on sustainability throughout the curriculum
- Entrepreneurial Experience: Provide opportunities for innovation and product development
- Power & Energy: Provide expertise in designing the next generation intelligent power systems, from milliwatts to megawatts
- Systems on a Chip: Train future engineers in cutting-edge SoC design techniques
- Embedded Computing: Enable seamless interfaces between humans and machines to meet the future of ubiquitous computing

LEARNING ENVIRONMENTS

- Enhance Integrative Learning Environments: : Next steps in EE's system- and board-on-a-chip education include automated test systems for characterization of custom integrated circuit and field-programmable gate array designs.
- Mobile Computing & Communications: Implement data-intensive wireless systems
- Advanced Power Laboratory: Provide sustainable energy generation, microgrids, smart metering and other upgrades
- Invest in updated communication system hardware, a mobile app/hardware development center, computer-aided design tools and new test and measurement equipment.
- Embedded Computing: Lab investments will provide opportunities for students to develop embedded computing applications for growth markets, including intelligent systems, cybersecurity, Internet of Things, biomedical and other emerging challenges.

PARTNERSHIPS

- Global Engineering Communities: Build international collaborations