

# COLLEGE OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

Architecture and Environmental Design Bldg. (05), Room 212

Phone: 805.756.1321

<http://caed.calpoly.edu>

Dean: Christine Theodoropoulos

Associate Dean: Kevin Dong

Associate Dean: Mark Carbrinha

## Academic Programs

Program name	Program type
Architectural Engineering	BS, Minor, MS
Architecture	BArch, MS
City and Regional Planning	BS, MCRP, Minor
Construction Management	BS, Minor
Landscape Architecture	BLA, Minor
Real Property Development	Minor
Sustainable Environments	Minor
Transportation Planning	MRCP/MS Engineering

The five undergraduate programs share the common objective of betterment of the human physical environment through the effective application of natural and cultural systems knowledge in planning, design and construction. They are all nationally accredited by their respective external review organizations.

The masters degree programs are designed for students interested in advanced focused studies. The MS Architecture program has a research focus. The college offers the Master of City and Regional Planning (MCRP). The joint MCRP/MS Engineering with a specialization in Transportation Planning is an interdisciplinary program. It is a cooperative effort between the colleges of Engineering and Architecture and Environmental Design. The MS in Architectural Engineering is a post professional degree aimed at advanced study in structural design analysis and construction trends. It is possible to blend this degree with the BS Architectural Engineering.

The well-equipped college facilities include design laboratories, grading presentation galleries, soils laboratory, stress laboratory, wood, metal and digital fabrication facilities, project yard, instructional resource center, computer laboratories, and photo presentation laboratory. An outlying area of 12 acres known as the "Canyon" is available for experimental construction.

The location of the campus between the population centers of San Francisco and Los Angeles is ideal for community and environmental studies in a variety of contexts and scales. Course field trips to varying destinations are offered in each of the majors. Students have the opportunity to participate in national and international exchange programs and faculty led off-campus academic and co-curricular experiences. Students also regularly participate in the California State University's International Programs in Denmark and Italy.

In addition to individual faculty representation in a wide range of professional associations, departments are members of their respective educators associations: the Association of Collegiate Schools of Architecture (ACSA); the Council of Educators in Landscape Architecture (CELA); the Association of Collegiate Schools of Planning (ACSP); and the Associated Schools of Construction Management (ASCM).

Likewise, students maintain active chapters of the professional organizations of the American Institute of Architects (AIA), the American Society of Landscape Architects (ASLA), the Associated General Contractors (AGC), the Structural Engineers Association of California (SEAOC), the American Planning Association (APA), and the National Society of Architectural Engineers (NSAE), Construction Specifications Institute Student Club (CSI), the National Organization of Minority Architecture Students (NOMAS), Society of Women Engineers (SLWE).

Opportunities for interdisciplinary interaction within the college are made available through coursework, annual forums, participation in district and national student competitions, student council activities and community service projects. Students are exposed to viable economic and ecological alternatives to conventional planning, design and construction through faculty applied research in such areas as passive solar building, post-disaster community rebuilding, sustainable design and construction technologies, earthquake-resistant building systems, project delivery methodologies, and daylighting and electrical lighting integration.

The college has various enhanced computing capabilities including Geographic Information System Technology, Computer-Aided Design and Immersive Visualization (virtual reality).

Students interested in pursuing one of the five undergraduate program offerings within the college should familiarize themselves with the appropriate curriculum flow chart, available online and through the College Advising Center, Architecture and Environmental Design Bldg. (05), Room 221, and departments. Special attention is directed to the sequencing of courses and prerequisite requirements. Students who plan to transfer from a California community college should schedule classes to maximize transfer units. Current admission requirements may be found at the Cal Poly website ([www.calpoly.edu](http://www.calpoly.edu)).

As a consequence of the periodic review and accreditation requirements of its programs, the college reserves the right to keep selected student projects for its archives. These projects are returned to students at the discretion of their respective department faculty.

Additional information about the college and its programs may be found at its website, <http://caed.calpoly.edu>.

## CAED Advising Center

Ellen Notermann, Director

Bldg. (05), Room 210

Phone: 805.756.1325

<http://www.caed.calpoly.edu/content/current/caed-advising>

The College of Architecture and Environmental Design (CAED) Advising Center provides academic advising services to all students within the CAED, in conjunction with each student's departmental faculty advisor. These services include providing information relative to curriculum requirements for all majors within the college, General Education requirements, transfer and evaluation credit and articulation, academic probation advising, University, College and department policies and

procedures, change of major policies and procedures, tutoring, special academic programs, and referral of students to other campus resources.

The Advising Center processes most student-related forms including those for curriculum substitution, course withdrawal, change of major and other forms. Curriculum sheets, flowcharts, information on CAED minors, jobs, scholarships and competitions are located in the Advising Center.

## Interdisciplinary Minors

### Real Property Development Minor

Construction Management Department (186), Room A100

Phone: 805.756.1323

Scott Kelting, Minor Advisor

skelting@calpoly.edu

This minor is designed for students who are interested in the built environment, and want to expand their knowledge of how projects get initiated, move through the development process, and then how they are managed after construction.

The program is designed to prepare students for entry-level employment with professionals engaged in real property development. Courses include aspects of practitioners' real world experiences and knowledge of state-of-the-art practices, techniques, and challenges.

Students learn about the economic, design, environmental, and regulatory factors that influence housing, office, industrial, and commercial projects. They gain a clearer understanding of how these factors impact green development, urban sprawl, place-making, and transit oriented development.

## Sustainable Environments Minor

Landscape Architecture Department (34), Room 212

Phone: 805.756.2040

Joseph Ragsdale, Minor Advisor

jragdsal (jragdsal@calpoly.edu)@calpoly.edu (jragdsal@calpoly.edu)

This minor educates students within the University in the principles and various aspects of sustainable environmental design with global, regional and local perspectives and concepts. It provides students with the knowledge and abilities needed to integrate concerns for ecology, social equity and economics within the context of human and natural resource systems and the built environment.

## Environmental Studies Minor

Students who complete the Environmental Studies Minor, coordinated through the College of Science and Mathematics (see the College of Science and Mathematics (<http://catalog.calpoly.edu/collegesandprograms/collegeofsciencemathematics/#text>) catalog section for additional information), are able to:

- Analyze, explain, and evaluate environmental issues from both scientific/technical and social/political/economic perspectives.
- Integrate and synthesize knowledge from multiple disciplines.
- Explain and apply the methodologies and approaches that different disciplines bring to bear on complex problems.
- Work productively and effectively with students from other disciplines and with other points of view.

- Confront real issues of contemporary significance; issues that affect them and their future.
- Gain employment or pursue further study that emphasizes interdisciplinary knowledge and skills.

The College of Architecture and Environmental Design offers the following course options as a part of this minor:

- EDES 406 Sustainable Environments
- CRP 336 Introduction to Environmental Decision Making
- CRP 404 Environmental Law

## EDES Courses

### EDES 101. Introduction to Architecture and Environmental Design. 2 units

Term Typically Offered: TBD

Familiarization with the professional fields of architecture, landscape architecture, structural engineering, construction, and city planning.

Introduction to the college's programs as they relate to individual aptitudes. The design process. Visiting speakers. 2 lectures.

### EDES 123. Principles of Environmental Design. 4 units

GE Area D4

Term Typically Offered: F, W, SP

Recommended: Previous or concurrent enrollment in ARCH 131 for ARCH majors.

Introduction to the individual's and societal relation with the designed and built environment, and its impact on natural resource consumption, identity, behavior, community, and human health, safety, and general well-being. Study of the individual and role of design in community development and in making and preserving culture. Diverse perspectives including designers, engineers, governing bodies, and individual users. 2 lectures, 2 discussions. Fulfills GE D4.

### EDES 333. Professional Presentations. 4 units

Term Typically Offered: TBD

Prerequisite: Third-year standing or permission of instructor.

Skills and tools for employment acquisition or graduate school admissions. Individual resume design and production. Documentation of personal, professional and academic experience via written, oral and image based systems. Employment interview dynamics. Electronic and hardcopy portfolio production. Internet marketing. 1 lecture, 3 activities.

### EDES 350. The Global Environment. 4 units

GE Area F

Term Typically Offered: TBD

Prerequisite: Junior standing; completion of GE Area A with a grade of C- or better; and completion of GE Area B.

Interdisciplinary investigation of how human activities impact the Earth's environment on a global scale. Examination of population, resource use, climate change, and biodiversity from scientific/technical and social/economic/historical/political perspectives. Use of remote sensing maps. Sustainable solutions. 4 lectures. Crosslisted as AG/EDES/ENGR/GEORG/ISLA/SCM/UNIV 350. Fulfills GE Area F.

**EDES 406. Sustainable Environments. 4 units**

Term Typically Offered: F

Prerequisite: Fourth year or graduate standing.

Collaboration of interdisciplinary faculty and guest speakers/panelists. Introduction, illustration and analysis of concepts and principles for sustainability to be used in all aspects of environmental design. Integration and application of knowledge of human and natural systems with environmental, social and economic concerns, from a global-to-local perspective. 4 lectures.

**EDES 408. Implementing Sustainable Principles. 4 units**

Term Typically Offered: W, SP

Prerequisite: EDES 406.

A primarily project-based course, intended to aid students who wish to collaborate with the purpose of implementing sustainability principles by developing tools, process or designs, for community-based projects and proposals at various scales of planning, architecture and design of the human environment to address social, environmental and economic issues. 4 lectures.

**EDES 410. Advanced Implementation of Sustainable Principles. 4 units**

Term Typically Offered: W, SP

Prerequisite: EDES 408.

Advanced continuation of community-based projects defined and initiated in EDES 408. Ongoing projects, individual and group, address variable scales of planning, architecture, and environmental design, with required completion at the end of the course. 2 seminars and supervised work.