



**CAL POLY**

College of Agriculture, Food  
& Environmental Sciences

# BIORESOURCE AND AGRICULTURAL ENGINEERING

## DEPARTMENT

### OVERVIEW

The BioResource and Agricultural Engineering Department is dedicated to advancing the study, teaching and practice of engineering and systems management support for agriculture. From day one, students are immersed in Learn by Doing, laboratory-intensive classes designed to hone their problem-solving skills and provide them with the necessary tools and opportunities to build what they design.

### MAJORS

AGRICULTURAL SYSTEMS MANAGEMENT  
BIORESOURCE AND AGRICULTURAL ENGINEERING

### MINORS

- GEOGRAPHIC INFORMATION SYSTEMS
- WATER SCIENCE

### GRADUATE PROGRAMS

- MASTER OF SCIENCE IN AGRICULTURE WITH SPECIALIZATIONS IN: WATER ENGINEERING; IRRIGATION; OR BIORESOURCE AND AGRICULTURAL SYSTEMS

### INTERDISCIPLINARY



COLLEGE OF AGRICULTURE, FOOD  
AND ENVIRONMENTAL SCIENCES

BIORESOURCE AND  
AGRICULTURAL  
ENGINEERING



INDUSTRY

### STUDENT IMPACT

The BioResource and Agricultural Engineering Department has positively impacted me by providing a great Learn by Doing environment where I can learn from my major courses and labs, as well as activities outside of school, such as through clubs or research opportunities.

The courses in the BioResource and Agricultural Engineering Department are centered around real-world applicability and providing a breadth of knowledge in many aspects of engineering. This has allowed me to try various things and narrow down my career interests."

**MEGAN CAMPBELL**, bioresource and agricultural engineering major



The department's unique state-of-the-art laboratories allow students to work with the most current technology in expansive outdoor and indoor facilities. Graduates can manage advanced technologies, and they are eager and able to engineer solutions to the problems of resources and systems.

Graduates of Cal Poly's BioResource and Agricultural Engineering Department are in high demand. The department's reputation for producing well-educated, experienced and workplace-ready graduates is well established throughout California, the U.S. and abroad.

## DEPARTMENT HIGHLIGHTS

### ENTERPRISE AND CAPSTONE COURSES

BioResource and Agricultural Engineering is known for its capstone experience. The students team up with our Ag Systems Management students to solve real-world problems sponsored by industry. The student teams design, fabricate, and test innovative equipment that will be out in the field the next year. The projects are sponsored by specialty equipment firms, specialty crop consortiums, irrigation districts, solar and alternative energy industry, and the dairy industry.

### TRACTOR PULL

The Cal Poly Tractor Pull Team hosts the annual Poly Royal tractor pull. This event attracts high-performance trucks, tractors and spectators from throughout California. The team has two tractors, Mustang Fever and Poly Thunder, that students drive at tractor pulls at state and county fairs in California and Nevada.

### STUDENT CLUBS

The Quarter Scale Tractor Team and Precision Ag and Automation Club participate in the annual American Society of Agricultural and Biological Engineers International student design competitions. Students also compete in the National Ag Bot Challenge.



## ON THE JOB

### CAREERS

Civil engineering  
Irrigation system design  
Project management  
Specialty equipment design  
Water system management

### TOP EMPLOYERS

J.G. Boswell  
FM Global  
E. & J. Gallo Winery  
G3 Enterprises  
Granite Construction  
Preston Pipelines



## STUDENT CLUBS

Agricultural Engineering Society  
American Society of Agricultural and Biological Engineers  
Cal Poly Tractor Pull  
Student Mechanical Branch

## CONNECT

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brae.calpoly.edu

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