

BIOLOGICAL & AGRICULTURAL ENGINEERING

College of Agricultural & Environmental Sciences

Fadi Fathallah, Ph.D., Chair of the Department; term ends June 30, 2026

Department Office

2030 Bainer Hall; 530-752-0102; Biological & Agricultural Engineering;
Faculty (<https://bae.ucdavis.edu/people/>)

Major Programs & Graduate Study

For the Bachelor of Science program, see the major in Biological Systems Engineering (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/biological-systems-engineering-bs/>); for graduate study, see also Graduate Studies (<http://gradstudies.ucdavis.edu/>).

Minor Programs

The Department of Biological & Agricultural Engineering offers two minors through the College of Agricultural & Environmental Sciences: Geographic Information Systems (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/geographic-information-systems-minor/>) and Precision Agriculture (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/precision-agriculture-minor/>).

The minor in Geographic Information Systems (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/geographic-information-systems-minor/>) is open to all majors, including those in engineering. This minor is for students interested in information processing of spatial data related to remote sensing for geographical and environmental planning and related areas.

The minor in Precision Agriculture (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/precision-agriculture-minor/>) is open to all majors, including those in engineering, and acquaints students with recent developments and their applications to agriculture, in geographic information systems, global positioning systems, and variable rate technologies.

The Department of Biological & Agricultural Engineering also administers three minors through the College of Engineering in Energy Science & Technology (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/energy-science-technology-minor/>), Energy Efficiency (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/energy-efficiency-minor/>), and Energy Policy (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/energy-policy-minor/>).

Courses

Courses are listed under Applied Biological Systems Technolog (ABT) (<https://catalog.ucdavis.edu/courses-subject-code/abt/>), Agricultural & Environmental Technolog (TAE) (<https://catalog.ucdavis.edu/courses-subject-code/tae/>) and Biological Systems Engineering (EBS) (<https://catalog.ucdavis.edu/courses-subject-code/ebs/>).

- Agricultural & Environmental Technology, Bachelor of Science (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/agricultural-environmental-technology/>)
- Biological Systems Engineering, Bachelor of Science (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/biological-systems-engineering-bs/>)
- Biological Systems Engineering, Bachelor of Science/Master of Science Integrated (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/biological-systems-engineering-bs-ms-integrated/>)
- Biological Systems Engineering, Master of Engineering (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/biological-systems-engineering-me/>)
- Biological Systems Engineering, Master of Science (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/biological-systems-engineering-ms/>)
- Biological Systems Engineering, Doctor of Engineering (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/biological-systems-engineering-phd-engineering/>)
- Biological Systems Engineering, Doctor of Philosophy (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/biological-systems-engineering-phd/>)
- Energy Efficiency, Minor (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/energy-efficiency-minor/>)
- Energy Policy, Minor (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/energy-policy-minor/>)
- Energy Science & Technology, Minor (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/energy-science-technology-minor/>)
- Geographic Information Systems, Minor (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/geographic-information-systems-minor/>)
- Precision Agriculture, Minor (<https://catalog.ucdavis.edu/departments-programs-degrees/biological-agricultural-engineering/precision-agriculture-minor/>)