



Photo credit: Natalea Schager

## CONNECT WITH US

### Cal Day

Come to UC Berkeley's annual **Open House** in April for information sessions, campus tours, special talks, and more.

### Golden Bear Orientation

Join your peers in the campus-wide UC Berkeley **orientation** program for all new students.

### Events

Attend department events with students, faculty, and staff. Visit [nature.berkeley.edu](https://nature.berkeley.edu) for news and updates.

## ADVISING

The Undergraduate Advisors for all Rausser College majors are located in the Office of Instruction and Student Affairs in 260 Mulford Hall.

Visit [nature.berkeley.edu/advising/meet-rausser-advisors](https://nature.berkeley.edu/advising/meet-rausser-advisors) for detailed office hours and appointment booking links. You may email general advising questions to [pmb.ugrad@berkeley.edu](mailto:pmb.ugrad@berkeley.edu).

## HOW TO USE THIS MAP

Use this map to help plan and guide your experience at UC Berkeley, including academic, co-curricular, and discovery opportunities. Everyone's Berkeley experience is different and activities in this map are suggestions. Always consult with your advisors whenever possible for new opportunities and updates.

Visit [ue.berkeley.edu/majormaps](https://ue.berkeley.edu/majormaps) for the latest version of this major map.

**Berkeley**

**Rausser College of Natural Resources**  
260 Mulford Hall #3100  
Berkeley, CA 94720-3100  
[nature.berkeley.edu](https://nature.berkeley.edu)

# GENETICS AND PLANT BIOLOGY

Bachelor of Science

**Berkeley**  
UNIVERSITY OF CALIFORNIA

## INTRODUCTION TO THE MAJOR

The **Genetics and Plant Biology** major is a broad based program emphasizing the study of plants from the molecular and genetic to organismal levels. The lower division coursework provides students with a foundation in biological and physical sciences as preparation for advanced study at the upper division level and in their concentration. The Department of Plant and Microbial Biology provides a rich and supportive environment for learning, and coursework from the department can be used as a foundation for applications to medical school.



Photo credit: Julie Gipple

“ **GPB is technical information that's applicable to real post-grad jobs! I've learned about so much that directly translates to lab work, research, and real life.** ”

– Julia Sherman, GPB Junior

## MAJOR CONCENTRATIONS

Students in the Genetics and Plant Biology major have the opportunity to pursue one of four concentrations through their elective coursework: (1) biotechnology and bioenergy, (2) plant diversity and evolution, (3) plant genetics, genomes, or (4) bioinformatics, and plant microbe interactions.

## AMPLIFY YOUR MAJOR

- Get involved in a **student group** such as Microbial Sciences Association or **Planty Social**.
- Apply for a research position through the **SPUR** program and present at a college **poster session**.
- Fund travel for academic conferences or research with a **Rausser College Travel Grant**.
- Carry out a research project under the guidance of a faculty mentor through the **Rausser College Honors Program**.

# GENETICS AND PLANT BIOLOGY

Bachelor of Science

DESIGN YOUR JOURNEY



	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
Explore your major	<p>Meet with your <b>college advisor</b> to discuss your academic plans.</p> <p>Review <b>major</b> and <b>college requirements</b>.</p> <p>Talk to the college's <b>peer advisors</b> about life in the major.</p>	<p>Complete lower division prerequisites and <b>declare the major</b>.</p> <p>Complement your major with a <b>certificate, course thread, or summer minor</b>.</p> <p>Review college guidelines for study abroad.</p>	<p>Focus elective courses on a <b>concentration</b>.</p> <p>Explore approved electives from outside departments for a more interdisciplinary experience, or build an emphasis by taking interrelated classes.</p> <p>Ask your college advisor about the <b>Rausser College Honors program</b>.</p>	<p>Do a degree check to ensure you are on track to graduate.</p> <p>Complete any “bucket list” courses.</p> <p>Finish remaining major, college, and campus requirements.</p>
Connect and build community	<p>Take advantage of the college's <b>Student Resource Center</b>.</p> <p>Join a <b>student group</b> such as Microbial Sciences Association or <b>Planty Social</b>.</p> <p>Get 1:1 mentoring from graduate students with <b>Berkeley Connect</b>.</p>	<p>Start attending <b>events</b> in the college.</p> <p>Get to know professors and graduate student instructors during their office hours.</p> <p>Connect with a community of biology students in the <b>Biology Scholars Program</b>.</p>	<p>Help other students as a Rausser College <b>Peer Advisor</b>.</p> <p>Become a <b>Golden Bear Orientation Leader</b> and welcome new students to UC Berkeley.</p> <p>Seek mentorship from your professors, faculty, and graduate student instructors.</p>	<p>Join a professional association related to your interests.</p> <p>Connect with <b>alumni groups</b> and build your <b>network</b> as you prepare to graduate.</p>
Discover your passions	<p>Discover new interests in a <b>Freshman Seminar</b> or student-run <b>DeCal course</b>.</p> <p>Apply for a research position through <b>SPUR</b>.</p> <p>Visit the <b>Office of Undergraduate Research and Scholarships</b>.</p> <p>Learn about <b>research opportunities</b> for Rausser College students.</p>	<p>Enroll in a <b>Sophomore Seminar, Big Ideas Course or Discovery Course</b>.</p> <p>Assist faculty in their research through <b>URAP</b>.</p> <p>Check out research by your peers at a <b>college poster session</b>.</p>	<p>Apply for a <b>Rausser College Travel Grant</b> to fund travel for academic conferences or research.</p> <p>Find research and funding opportunities in the <b>OURS database, SPUR, or URAP</b>.</p> <p>Consider applying to the <b>NSF Research Experience for Undergraduates</b>.</p>	<p>Teach your own <b>DeCal course</b>.</p> <p>Undertake an optional honors thesis or independent study</p> <p>Present your research at a <b>poster session</b> or submit it to the Berkeley Scientific Journal.</p> <p>Keep pursuing your interests through a <b>fellowship</b> or gap year after graduation.</p>
Engage locally and globally	<p>Attend the <b>Calapalooza</b> student activities fair and get involved with a student organization.</p> <p>Find service opportunities through the <b>Public Service Center</b>.</p> <p>Explore study, internship, and research abroad options with <b>Berkeley Study Abroad</b>.</p>	<p>Contribute to a community organization with an <b>American Cultures Engaged Scholarship course</b>.</p> <p>Experience life at another UC or college on a <b>visitor and exchange program</b>.</p> <p>Check out the <b>Moorea program</b> for fieldwork opportunities abroad.</p>	<p>Look into the Career Center's list of <b>health volunteer opportunities</b>.</p> <p>Explore science and policy in Washington DC with <b>UCDC or Cal in the Capital</b>.</p>	<p>Explore service opportunities after graduation, such as <b>Peace Corps, Teach for America, or U.S. Department of State</b>.</p> <p>Attend a conference such as the <b>Clinton Global Initiative: University Conference</b>. Look into travel grants from the college and ASUC.</p>
Reflect and plan your future	<p>Visit <b>Berkeley Career Engagement</b> and the <b>Career Counseling Library</b>.</p> <p><b>Develop a plan</b> for getting career ready.</p> <p>Sign up for <b>Handshake</b> and <b>CareerMail</b>.</p> <p>Check out the <b>Genetics and Plant Biology Career Snapshot</b>.</p>	<p>Take advantage of <b>career and pre-health advising</b> for Rausser College students.</p> <p>Explore <b>career fields</b> through the <b>Career Connections Series</b> or a <b>winter externship</b>.</p> <p>Learn about <b>graduate and professional school</b>. See <b>Step-by-Step</b> for planning help.</p> <p>Plan <b>internships</b> and attend <b>internship fairs</b>.</p>	<p>Conduct <b>informational interviews</b>.</p> <p>Discuss graduate school options with advisors and professors.</p> <p>Update your resume and <b>LinkedIn</b> profile.</p> <p>Attend <b>career and graduate school fairs</b> such as the STEM Career &amp; Internship Fair.</p>	<p>Utilize <b>job board tools</b> in your job search.</p> <p>Ask professors and graduate student instructors for recommendation letters.</p> <p>Attend <b>Employer Info Sessions</b> and <b>On-Campus Recruiting</b>.</p> <p>Apply to jobs, graduate school, and other opportunities.</p>

## WHAT CAN I DO WITH MY MAJOR?

### Jobs and Employers

Analyst, Cornerstone Research  
Lab Tech, Foriphyte  
Research Asst., LBNL  
Res. Assoc., Innovative Genomics Inst.

### Graduate Programs

Biochemistry, PhD  
Horticultural Science, Masters  
Molecular Biology, PhD  
Plant Biology, PhD  
Soil Science & Agronomy, Masters

Examples gathered from the **First Destination Survey** of recent Berkeley graduates.