



CAL POLY

College of Agriculture, Food
& Environmental Sciences

GEORGE WURZEL PLANT SCIENCES BUILDING *within the Plant Sciences Complex*



1	Plant Pathology Lab.....	\$1,000,000
2	Entomology Lab.....	\$1,000,000
3	Sustainable Water Solutions Lab.....	\$1,000,000
4	Plant Physiology Lab.....	\$1,000,000
5	Classroom.....	\$1,000,000
6	Classroom.....	\$1,000,000
7	Collaboration Lab.....	\$1,000,000
7A	Conference Room.....	\$500,000
7B	Student Ideation Lab.....	\$400,000
7C	Office.....	\$100,000

8	Poly Plaza..	\$250,000
9	Automation Plaza.....	\$250,000
10	Growth Chamber Lab.....	\$750,000
10A	Sterilization Lab.....	\$250,000
11	Chemical Storage.....	\$250,000
12	Student and Faculty Lounge.....	\$200,000
13	Technician's Office.....	\$150,000
14	Wellness Room.....	\$100,000

1 :: PLANT PATHOLOGY LAB

To ensure long-term food security and improve plant health, students and faculty will study plant diseases and research:

- New diagnostic techniques.
- Efficacy of reduced risk fungicides, bactericides and nematocides.
- Disease-resistance screening in new and developing cultivars
- Resistance monitoring of economically important pathogens.

2 :: ENTOMOLOGY LAB

An advanced applied entomology lab focused on:

- Evaluating and optimizing bioinsecticides for efficacy.
- Studying life history and behavior of organisms.
- Conducting insect monitoring and phenology in a space equipped with industry-standard technology.

Prioritizing environmentally friendly pest control solutions in alignment with the California Sustainable Pest Management Roadmap.

3 :: SUSTAINABLE WATER SOLUTIONS LAB

In partnership with the BioResource and Agricultural Engineering Department, research in this lab will focus on water enrichment to improve water reuse in agriculture, with a biosafety level allowing for the study of indicator organisms for food safety, plant pathogens, and microbiome monitoring. The combination of water treatment systems, small vertical farm, microbiology equipment, and water quality instrumentation will facilitate water treatment with biological indicator testing to assess impacts on plant health.

4 :: PLANT PHYSIOLOGY LAB

Students and faculty will conduct research on crop health, including:

- Evaluating new plant varieties and cultivars.
- Researching novel herbicide efficacy.
- Monitoring herbicide resistance.
- Studying the impacts of drought and stress tolerance on crops.
- Studying mechanisms for biocontrol and integrated pest management strategies.

5 & 6 :: CLASSROOMS

Two classrooms will be integrated into the facility, providing space for routine discovery.

7 :: COLLABORATION LAB

A dedicated hub designed to facilitate students, faculty and industry to gather and collaborate. Included within are a Student Ideation Lab, an office for a dedicated technician to support all labs within the complex, and a conference room where industry and academia can come together in community.

8 :: POLY PLAZA

The George Wurzel Plant Sciences Complex will see hundreds of students, faculty and partners each day and serve as an outdoor gathering spot between labs and meetings.

9 :: AUTOMATION PLAZA

The gateway to the Automation Lab within the complex will see hundreds of students, faculty and partners each day and serve as an outdoor gathering spot between labs and meetings.

10 :: GROWTH CHAMBER LAB

The growth chamber lab will support all the research labs in the Wurzel Plant Sciences building. It will house numerous growth chambers of varying sizes allowing for controlled temperatures and atmospheres.