

Major Course Requirements

A minimum of 86 hours (30-38 upper-division hours)

► **Required Core Courses (57 hours):**

BIOL 121+122+123	Biological Foundations I, II, III	5+5+5
BIOL 221+222	Intro to Research Methods I, II	2+2
BIOL 412	Research in Biology	2
CNTC 201	Principles of Conservation Tech	3
CNTC 240	Introduction to GIS	2
CNTC 301	Applications of Conservation Tech	2
CNTC 301L	Applied Conservation Tech Lab	2
CNTC 340	Intermediate GIS	2
CNTC 490	Conservation Tech Capstone	1
CNTC 494	Internship	4
DTSC 101	Introduction to Data Science	4
DTSC 320	Machine Learning	3
DTSC 323L	Statistical Methods in Data Sci Lab	1
ENVR 360+360L	Conservation Biology (+Lab)	4
INFS 115	Introduction to Programming	4
SCIE 290	Sophomore Seminar	1
STAT 322	Statistical Methods	3

► **Required Core Electives (14-16 hours):**

At least four classes from the following list:

BIOL 233	Ecology	4
BIOL 323	Vertebrate Biology	4
BIOL 325	Flowering Plants	3
BIOL 331	Marine Biology	4
BIOL 338	Field Biology	3
ENVR 361+361L	Energy & Climate Change (+Lab)	4
ENVR 362+362L	Pollution & Environ. Quality (+Lab)	4
MATH 131	Calculus I	4

► **Required Cognate Courses (15 hours):**

CHEM 111+12+13+L	General Chemistry I, II, III+Lab	5+5+5
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Student Learning Outcomes

Students can:

- Understand what conservation technology is, how it can be used to address big environmental issues, and how it translates into professional employment
- Gain hands-on experience using different conservation technologies in the field and laboratory and will develop in-demand skills
- Gain insight into how conservation technologies are being developed by the environmental and conservation world itself, and will be on the cutting edge of technology development and application
- Understand and use conservation technology to address key PUC management and sustainability issues

Occupational Information

What can I do with this major?

Jobs in Environmental, Conservation, and Sustainability fields, including for-profit, nonprofit, academic, and government.

Additional Education Required?

No, but will prepare students for advanced training in Conservation Technology if they desire to continue their education.

Job Outlook

In an emerging field, Students will be immediately competitive in the job market after completion of this Major.

General Education Requirements

To view general education requirements for this major, please refer to page A-01, Summary of General Education Requirements: B.S. Degree.

How to Construct Your Own Program

1. Consult with your academic advisor.
2. Consider your aptitudes, interests, and available courses.
3. Schedule major courses and cognates first.
4. Fill the rest of your schedule with G.E. requirements.
5. For the freshman year include College English I and II and Religion courses. Also include Basic Algebra I+II unless waived by previous work.

What the Degree Includes

- A total of 180 quarter hours including:
1. A minimum of 60 upper division hours.
 2. General Education requirements.
 3. Major requirements.
 4. Minimum 2.0 GPA, overall and major.

For More Information

Visit our website: puc.edu/academics/departments/biology

email: biology@puc.edu

Sample Four-Year Program

This sample curriculum shows you how a program may be constructed, emphasizing the science components. Your program may differ, but be sure to consult your advisor.

First Year	F	W	S
Biological Foundations I,II,III*	5	5	5
Intro GIS	2	-	-
Religion Courses	3	3	-
College English I, II	4	4	-
Intro to Statistics	-	-	4
Intro to Programming	-	-	4
Excercise Science Activity	1	-	-
General Education/Electives	-	3	2
	15	15	15
Second Year	F	W	S
Principles of Con Tech + Lab	3	-	-
General Chemistry I,II,III*	5	5	5
Intro to Data Science	4	-	-
Introduction to Research Methods I,II	2	2	-
General Educaiton/Electives	1	8	10
	15	15	15
Third Year	F	W	S
Conservation Biology+Lab	4	-	-
Intermediate GIS	-	-	2
Applications of Conservation Tech	-	2	-
Applied Conservation Tech Lab	-	-	2
Statistical Methods	-	3	-
Statistical Methods in Data Sci Lab	-	1	-
General Education/Electives	11	9	11
	15	15	15
Fourth Year	F	W	S
Biology Research*	-	4	-
Machine Learning	-	3	-
Conservation Tech Internship*	4	-	-
Conservation Tech Capstone	-	-	1
General Education/Electives	11	8	14
	15	15	15

* Biological Foundations or General Chemistry should be taken during the first two years, but only in the same year by students who are well prepared, highly motivated and disciplined. If taking more chemistry than biology electives, General Chemistry should be taken first and Biological Foundations later.

** Needed only if High School chemistry is weak.

*** See the front of this sheet for a list of Environmental Studies electives.