Academics

Plant biologists love the science of plants! When you major in plant biology, you will learn about plants at every level—molecular, cellular, organismal, physiological, ecological and as systems. You can choose an emphasis of Biotechnology or Ecology and Management and tailor your coursework to align with your talents and interests. Outside of the classroom you can gain analytical, technical and organizational skills by working with a researcher. You can also gain public speaking, leadership and time management skills by assisting teaching faculty in the classroom, laboratory or greenhouse.

At the core of the plant biology major are courses in agronomy, biological sciences, biochemistry, chemistry and mathematics. As you progress through the major, you will enroll in courses covering areas like water and climate, geospatial information sciences, plant identification, plant- animal-organismal interactions, ecology and management, applied plant biology and plant and food system management.

Experience

In the College of Arts and Sciences, we know experience is valuable and goes beyond the classroom. We strive to help you connect your academics with research, internships, education abroad, service learning and leadership experiences. Take advantage of opportunities in plant biology such as:

- Researching new DNA technologies to identify fungi
- Interning as a plant pathology intern with Pioneer Hi-Bred
- Studying abroad in Peru
- Engaging with peers by joining the horticulture club
- Volunteering with the Nebraska Statewide Arboretum

Opportunities

A degree in plant biology will prepare you for a wide range of careers including plant breeding, genetic engineering, plant research, field biology and more. Internships are key components of your academic experience. They allow you to explore different areas of plant biology, make connections with future employers, and experience professional work environments. Here are examples of recent graduates’ internships and employment:

- Pioneer Sales Associate Intern / THEISEN SEED LLC
- Research Assistant in Computational Biology / UNL DEPT. OF STATISTICS
- Research Assistant / UNL HORTICULTURE
- Soybean Breeding & Genetics Research Intern / UNL
- UCARE Project Intern / GRASSLAND ECOLOGY
- Education Coordinator / SAGE-SUSTAINABLE AGRICULTURE EDUCATION
- Technician/Research / USDA
PLANT BIOLOGY

**FIRST SEMESTER**
- MATH 106: Calculus I (CDR F) - 5
- CHEM 109: General Chemistry I (ACE 4) - 4
- LIFE 120: Fundamentals of Biology I (CDR B) - 3
- LIFE 120L: Fundamentals of Biology I Lab (CDR BL) - 1
- Language Requirement - 201 Level (CDR E) - 3
- **Total Hours** - 16

**SECOND SEMESTER**
- BIOS 109: General Botany - 4
- LIFE 121: Fundamentals of Biology II (CDR F) - 3
- LIFE 121L: Fundamentals of Biology II Lab - 1
- CHEM 110: General Chemistry II - 4
- Language Requirement - 202 Level (CDR E) - 3
- **Total Hours** - 15

**THIRD SEMESTER**
- CHEM 251: Organic Chemistry I - 3
- CHEM 253: Organic Chemistry I Lab - 1
- BIOS 206: General Genetics - 4
- ACE 1: Written Texts/Research & Knowledge Skills - 3
- ACE 5: Humanities - 3
- **Total Hours** - 14

**FOURTH SEMESTER**
- BIOS 207: Ecology and Evolution - 4
- AGRO 153: Soil Resources - 4
- STAT 218: Introduction to Statistics (ACE 3) - 3
- CDR A: Written Communication - 3
- ACE 8: Ethics/Civics/Stewardship - 3
- **Total Hours** - 17

**FIFTH SEMESTER**
- BIOC 321: Elements of Biochemistry - 3
- BIOC 321L: Laboratory for Elements of Biochemistry - 1
- ACE 2: Communication Skills - 3
- Plant Biology Option/Area of Focus - 4
- **Total Hours** - 14

**SIXTH SEMESTER**
- Research Experience - 1
- AGRO 325: Introductory Plant Physiology - 4
- CDR C: Humanities - 3
- Plant Biology Option/Area of Focus - 3
- Elective/Minor/Secondary Major/Pre-Professional - 4
- **Total Hours** - 15

**SEVENTH SEMESTER**
- ACE 6: Social Sciences (ECON Recommended) - 3
- Plant Biology Option/Area of Focus (ACE 10) - 3
- Plant Biology Option/Area of Focus - 3
- ACE 9: Global Awareness & Human Diversity - 3
- CDR D: Social Sciences - 3
- **Total Hours** - 15

**EIGHTH SEMESTER**
- Plant Biology Option/Area of Focus - 3
- Plant Biology Option/Area of Focus - 3
- Plant Biology Option/Area of Focus - 3
- Career Experience in Plant Biology - 1
- ACE 7: Fine Arts - 3
- Elective/Minor/Secondary Major/Pre-Professional - 1
- **Total Hours** - 14

**DISCLAIMER:** This document represents a sample 4-year plan for degree completion with a major of interest in the College of Arts and Sciences. Actual course selection and sequence may vary and should be discussed individually with an Academic Advisor at the college and department level.