Biological Sciences (Conservation Biology and Ecology), BS

LABSCCBS

Are you concerned about environmental challenges such as climate change and habitat destruction? In this concentration, you can combine a biological approach to ecology with a human perspective rooted in the social sciences to develop an understanding of the complex problems threatening our world and a strong background for advanced study.

Program Description

Ecology is the study of the distribution and abundance of organisms, the interactions among organisms, and the interactions between organisms and the physical environment. Conservation biology is an applied science based on ecological principles that focuses on conserving biological diversity and on restoring degraded ecosystems. Arizona State University is committed to a more sustainable world, and sharing knowledge of conservation biology and ecology through the BS program in biological sciences with a concentration in conservation biology and ecology is one critical component to help meet this global challenge.

Conservation biologists at ASU investigate the impact of humans on Earth's biodiversity and develop practical approaches to prevent the extinction of species and promote the sustainable use of biological resources. Some investigate the causes of ecosystem degradation and use ecological principles to reestablish desired conditions in a variety of ecosystems, including rivers, wetlands, grasslands, urban landscapes and forests.

This program is available as an accelerated degree program:
https://sols.asu.edu/degree-programs/accelerated-bachelor-master-science.

At a Glance

• College/School: The College of Liberal Arts and Sciences
• **Location:** Tempe campus

• **Additional Program Fee:** Yes
• **Second Language Requirement:** No
• **First Required Math Course:** MAT 251 - Calculus for Life Sciences

  or MAT 270 Calculus with Analytic Geometry I

• **Math Intensity:** Moderate

### Required Courses (Major Map)

2019 - 2020 Major Map

Major Map (Archives)

### Accelerated Program Options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's and master's degree with:

- Biology (Biology and Society), MS
- Biology, MS
- Microbiology, MS
- Molecular and Cellular Biology, MS

Acceptance to the graduate program requires a separate application. During their junior year, eligible students will be advised by their academic departments to apply.

### Admission Requirements

**General University Admission Requirements:**

All students are required to meet general university admission requirements.

[Freshman](#) | [Transfer](#) | [International](#) | [Readmission](#)

### Change of Major Requirements

A current ASU student has no additional requirements for changing majors.
Students should refer to https://changingmajors.asu.edu/request for information about how to change a major to this program.

**Transfer Options**

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use the Transfer Map search to outline a list of recommended courses to take prior to transfer.

ASU has transfer partnerships in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and help students save time and money in their college journey. Students may learn more about these programs by visiting the admission site: https://admission.asu.edu/transfer/pathway-programs.

**Global Opportunities**

**Global Experience**

With over 250 programs in more than 65 countries (ranging from one week to one year), study abroad is possible for all ASU students wishing to gain global skills and knowledge in preparation for a 21st-century career. Students earn ASU credit for completed courses, while staying on track for graduation, and may apply financial aid and scholarships toward program costs. https://mystudyabroad.asu.edu/

**Career Opportunities**

The curriculum prepares students with skills and concepts for employment and provides a solid platform for students who wish to attend graduate school. Graduates are prepared for careers with:

- governmental agencies such as the Environmental Protection Agency and state game and fish departments
- K-12 education, colleges and universities
- nongovernmental organizations such as The Nature Conservancy and Conservation International
- private companies focused on environmental resources, environmental law or environmental economics

The concentration can provide training in specific skills that might be needed in these areas:

- animal and plant physiology, identification and ecology
• behavioral ecology and population biology
• community, ecosystem and landscape ecology
• conservation of endangered species
• ecology of different habitats, including cities, lakes, rivers and grasslands
• restoration of degraded ecosystems

Career examples include but are not limited to those shown in the following list. Advanced degrees or certifications may be required for academic or clinical positions.

<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Sciences Professor</td>
<td>15.2%</td>
<td>$78,240</td>
</tr>
<tr>
<td>Climate Change Analyst</td>
<td>11.1%</td>
<td>$69,400</td>
</tr>
<tr>
<td>Environmental Protection Specialist</td>
<td>11.1%</td>
<td>$69,400</td>
</tr>
<tr>
<td>Fish and Game Warden</td>
<td>4.3%</td>
<td>$56,410</td>
</tr>
<tr>
<td>Fish and Wildlife Biologist</td>
<td>7.6%</td>
<td>$62,290</td>
</tr>
<tr>
<td>Geospatial Information Technologists</td>
<td>9.3%</td>
<td>$88,510</td>
</tr>
<tr>
<td>High School Teacher</td>
<td>7.5%</td>
<td>$59,170</td>
</tr>
<tr>
<td>Hydrogeologist</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>Park Ranger</td>
<td>6.3%</td>
<td>$61,480</td>
</tr>
<tr>
<td>Soil Conservationist</td>
<td>6.3%</td>
<td>$61,480</td>
</tr>
</tbody>
</table>

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

☀ Bright Outlook  ☀ Green Occupation

Contact Information

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