Biological Sciences (Conservation Biology and Ecology), BS

The conservation biology and ecology concentration provides a foundation in biology and ecological theory. You'll develop a strong background for advanced study in ecology --- essential for understanding environmental challenges, including climate change and habitat destruction. By exploring social sciences, you'll gain an interdisciplinary understanding of complex problems threatening our world.

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 has made a commitment toward a more sustainable world, and knowledge of conservation biology and ecology, gained 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 within a range of ecosystems, including rivers, wetlands, grasslands, urban landscapes and forests.

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

At a Glance

- **College/School:** 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)

2018 - 2019 Major Map  
Major Map (Archives)

### Accelerated Degrees

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  
- 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://students.asu.edu/changingmajors](https://students.asu.edu/changingmajors) for information about how to change a major to this program.
## Transfer Agreements

ASU has partnered with colleges and universities in Arizona, California, Illinois and Washington to provide transfer curriculum pathways. Students should select their current institution to see if there is a partnership agreement between the institution and ASU for this degree program. Students who do not see their state or institution listed should check back as ASU is always working on creating new partnerships.

### Transfer from a Maricopa Community College in Arizona

Select a college

- Chandler-Gilbert Community College
- Estrella Mountain Community College
- GateWay Community College
- Glendale Community College
- Mesa Community College
- Paradise Valley Community College
- Phoenix College
- Rio Salado College
- Scottsdale Community College
- South Mountain Community College

### Transfer from an Arizona Community College

Select a college

- Arizona Western College
- Central Arizona College
- Cochise College
- Coconino Community College
- Dine College
- Eastern Arizona College
- Gila Community College
- Mohave Community College
- Northland Pioneer College
- Pima Community College
- Tohono O'odham Community College
- Yavapai College

### Transfer from another state

Select a state

- California
- Illinois
- Washington
- Another state

## 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/](https://mystudyabroad.asu.edu/).

**Career Opportunities**

The curriculum prepares students for employment and provides a solid platform for students who wish to attend graduate school. The skills and concepts are preparation 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>Bioinformatics Scientist</td>
<td>8.0%</td>
<td>$76,690</td>
</tr>
<tr>
<td>Biological Sciences Professor</td>
<td>15.2%</td>
<td>$78,240</td>
</tr>
<tr>
<td>Clinical Trial Manager</td>
<td>9.9%</td>
<td>$118,970</td>
</tr>
<tr>
<td>Environmental Protection Specialist</td>
<td>11.1%</td>
<td>$69,400</td>
</tr>
</tbody>
</table>

* indicates a professional certification.
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Growth</th>
<th>Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Manager</td>
<td>6.3%</td>
<td>$61,480</td>
</tr>
<tr>
<td>Fish and Wildlife Biologist 🌿</td>
<td>7.6%</td>
<td>$62,290</td>
</tr>
<tr>
<td>Forester</td>
<td>5.0%</td>
<td>$60,120</td>
</tr>
<tr>
<td>Forestry Professor</td>
<td>7.8%</td>
<td>$87,420</td>
</tr>
<tr>
<td>Health Sciences Manager 🌿 🌿</td>
<td>9.9%</td>
<td>$118,970</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>Life Scientist</td>
<td>9.2%</td>
<td>$74,540</td>
</tr>
<tr>
<td>Molecular Biologist</td>
<td>8.0%</td>
<td>$76,690</td>
</tr>
<tr>
<td>Museum Exhibit Designer 🌞</td>
<td>12.4%</td>
<td>$40,670</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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