

Applied Biological Sciences (Natural Resource Ecology), BS

LSABSNRBS

Do you have [a passion for wildlife](#), exploring nature, and seeing how our world's natural resources and [lands can be managed sustainably](#)? Gain an excellent foundation in science that enables you to build expertise for a career in conservation and restoration of biodiversity and habitats.

Program description

The concentration in natural resource ecology in the BS program in applied biological sciences provides students with a comprehensive understanding of how to effectively and sustainably manage natural resources in various ecosystems.

Students gain knowledge about essential elements of natural systems, including soils, water, and the associated plant and wildlife communities. Students also learn to measure and assess plant and animal populations through a variety of field techniques and computer tools, including geographic information systems and remote sensing. Skills and techniques are applied to case studies in the classroom and laboratory projects.

Students in this program contextualize knowledge through experience-based learning activities, including:

- faculty-guided research and service-learning projects
- field trips
- internships
- laboratories and field experiences

This major is eligible for the Western Undergraduate Exchange program at the following location: Polytechnic campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150% of Arizona resident tuition plus all applicable fees. Students should click the link for more information and eligibility requirements of [the WUE program](#).

At a glance

- **College/School:** [College of Integrative Sciences and Arts](#)
- **Location:** [Polytechnic](#) 
- **Second language requirement:** No
- **First required math course:** MAT 251 - Calculus for Life Sciences
- **Math intensity:** Moderate 

Required courses (Major Map)

[2024 - 2025 Major Map](#)

[Major Map \(Archives\)](#)

Concurrent program options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

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 plus master's degree](#) with:

[Applied Biological Sciences, MS](#)

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master's during the junior year of their bachelor's degree program. Interested students can learn about eligibility requirements and [how to apply](#).

Admission requirements

General university admission requirements:

All students are required to meet general university admission requirements.

[First-year](#) | [Transfer](#) | [International](#) | [Readmission](#)

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about [ASU tuition and financial aid](#) options to find out which will work best for them.

Change of Major Requirements

A current ASU student has no additional requirements for changing majors.

Students should visit the [Change of Major form](#) 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 [MyPath2ASU®](#) 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 they help students save time and money in their college journey.

Global opportunities

Global experience

The natural world is complex and diverse, providing different resources from one biome to the next. It's not only natural resources that are varied across the globe --- their uses vary as well. Students who participate in [Global Education programs](#) gain a deeper understanding of global resources, how different cultures use the resources and how best to communicate sustainable use to a diverse audience.

Career opportunities

Career opportunities include employment with public agencies and private consulting firms, as well as positions such as:

- environmental consultant
- environmental researcher and educator
- natural resource manager
- park manager
- watershed manager
- wildlife biologist or ecologist

Example job titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience and geographical location may affect pay scales. Some jobs also may require advanced degrees, certifications or state-specific licensure.

| Career | *Growth | *Median salary |
|---|----------------|-----------------------|
| <u>Environmental Analyst</u> | 4.1% | \$64,460 |
| <u>Environmental Protection Specialist</u> ☀ | 6.1% | \$76,480 |
| <u>Environmental Restoration Planner</u> ☀ | 6.1% | \$76,480 |
| <u>Environmental Sciences Professor</u> | 4.2% | \$83,040 |
| <u>Farm Manager</u> | 4.1% | \$64,460 |
| <u>Fish and Game Warden</u> | | \$59,500 |
| <u>Fish and Wildlife Biologist</u> | 3.0% | \$67,430 |
| <u>Forestry Technician</u> | 0.6% | \$41,520 |
| <u>Park Ranger</u> | 4.1% | \$64,460 |
| <u>Soil Scientist</u> ☀ | 4.7% | \$65,730 |

* 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

Contact information

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