Applied Biological Sciences (Sustainable Horticulture), BS

Are you interested in growing sustainable plants, foods and herbs? Gain the experience necessary for managing greenhouses, botanical gardens or arboretums. Participate in field excursions and hands-on opportunities to learn technologies and best practices for a more sustainable world.

Program Description

The sustainable horticulture concentration within the BS program in applied biological sciences is designed for students who want theory and practical experiences in unique aspects of plant culture in an urban desert environment.

Students acquire the skills to produce, design and care for ornamental and edible plantscapes. Students interested in sustainable practices have the opportunity to specialize in vertical farming and other plant-related technologies. Students in this program contextualize knowledge through experience-based learning activities, including:

- case studies
- faculty-guided research and service-learning projects
- field trips
- greenhouse experiences
- internships

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

Required Courses (Major Map)

2022 - 2023 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 and master's degree with:

Applied Biological Sciences, MS

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

Admission Requirements

General University Admission Requirements:
All students are required to meet general university admission requirements.

First-year | Transfer | International | Readmission

Change of Major Requirements

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

Students should refer to [https://changemajor.apps.asu.edu](https://changemajor.apps.asu.edu) 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. Students may learn more about these programs by visiting the admission site: https://admission.asu.edu/transfer/MyPath2ASU.

Global Opportunities

Global Experience
Students can explore habitats and ecosystems around the world in one of several study abroad programs; opportunities include working with scientists and conducting independent research. Students can stay on track for graduation by earning ASU credit while becoming immersed in other cultures. Studying abroad builds professional skills that employers demand, such as collaboration and critical thinking. https://goglobal.asu.edu/

Career Opportunities

Horticulture is a multibillion dollar national and international enterprise that offers a diverse and exciting choice of professional careers. Graduates can pursue numerous entry-level careers in horticulture. Employment opportunities exist in private and public sectors. The general program in sustainable horticulture also prepares graduates to succeed in roles such as:

- organic urban farmer or permaculturist
- arboretum or botanical garden manager
- city horticulturist
- horticultural consultant, plant researcher or educator
- horticulture supply sales representative
- integrated pest management specialist
- interior plant specialist or plant propagator
- landscape designer or contractor
- nursery plant broker or cultivator and plant salesperson
- urban plant ecologist, forester, tree specialist or arborist

Career opportunities for urban horticulture graduates are not limited to any one geographic location; graduates can embark on careers throughout the United States, Canada, Mexico and overseas.
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>Agricultural Manager</td>
<td></td>
<td>$68,090</td>
</tr>
<tr>
<td>Agriculture Professor</td>
<td>2.1%</td>
<td>$90,340</td>
</tr>
<tr>
<td>Customs and Border Protection Officer (CBPO)</td>
<td>5.7%</td>
<td>$65,540</td>
</tr>
<tr>
<td>Soil Scientist</td>
<td>6.8%</td>
<td>$66,120</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

College of Integrative Sciences and Arts | SANCA 233
CISA@asu.edu | 480-727-1526