Applied Biological Sciences (Sustainable Horticulture), BS

You'll enjoy rigorous training in the sciences and close interaction with faculty mentors and classmates at ASU's Polytechnic campus, a living-learning arboretum. You'll find greenhouses, a community garden, lots of field excursions and 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 the unique aspects of the culture of plants in an urban desert environment. Students acquire the skills to produce, design and care for ornamental and edible plantscapes using sustainable technologies.

Students are prepared for a range of horticulture careers in the private and public sectors, including in nursery plant production, landscape design and culture as well as local food production and organic urban farming.

This major is eligible for the Western Undergraduate Exchange (WUE) 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 percent of Arizona resident tuition plus all applicable fees. See more information and eligibility requirements on the Western Undergraduate Exchange (WUE) program.

At a Glance

- College/School: College of Integrative Sciences and Arts
- Location: Polytechnic campus
- Additional Program Fee: No
- Second Language Requirement: No
- First Required Math Course: MAT 210 - Brief Calculus
- Math Intensity: Moderate
Required Courses (Major Map)

2019 - 2020 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:

Applied Biological Sciences, 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 for information about how to change the major to this program.

Transfer Options

ASU is committed to helping you thrive by offering tools that allow you to personalize your 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. Learn more about these programs by visiting the Admissions site.
Global Opportunities

PLuS Alliance
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/

Global Degree

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 sustainable horticulture concentration prepares graduates to succeed in graduate or professional schools in disciplines such as:

- aftermarket care of plants
- biology of the plants in desert cities
- care and management of trees in cities
- creation of public, community and private gardens in arid climates
- design and installation of outdoor landscapes including landscape irrigation systems
- integrated pest management
- marketing
- nursery production
- organic farming
- plant identification
- plant propagation

The general program in sustainable horticulture also prepares graduates to succeed in roles such as:

- arboretum or botanical garden manager
- city horticulturist
- city park superintendent or manager
- horticultural consultant
- horticultural plant researcher or educator
- horticulture products and supplies
• horticulture supply sales representative
• integrated pest management specialist
• interior plant specialist
• irrigation system designer or consultant
• landscape designer or contractor
• landscape services company owner or operator
• nursery plant broker and plant salesperson
• nursery production owner or manager
• organic farmer or permaculturist
• plant propagator
• urban forester, tree specialist or arborist
• urban plant ecologist

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>Agriculture Professor</td>
<td>7.5%</td>
<td>$86,140</td>
</tr>
<tr>
<td>Greenhouse Manager</td>
<td></td>
<td>$69,620</td>
</tr>
<tr>
<td>Ranch Manager</td>
<td></td>
<td>$69,620</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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