

# HORTICULTURE AND LANDSCAPE ARCHITECTURE

**Horticulture** is the science, business and art associated with the culture, production, preservation and processing of flowers, trees, shrubs, turfgrass, vegetables, fruits, and nuts. It also includes the proper environmental use and maintenance of plants in the landscape. Horticulture is involved with the production and processing of a significant part of the world's food supply. It provides a major source of beauty in and around homes, cities, parks, highways, golf courses and other public areas. Educational opportunities for study in horticulture cover a wide variety of plants and subjects and range from the cellular to the whole plant level. Factors such as plant nutrition, irrigation, genetics, propagation, control of flowering, and fruit and seed production are considered in their relationship to culture, production, conservation of resources, harvesting, processing and storage. Students can prepare themselves for careers in public garden management (arboreta, parks, and zoos), turf (sports and golf course management), horticulture business, small farm production, controlled environment production (ornamentals or vegetables), environment and sustainability practices, sales, and marketing, along with teaching, extension, and research experience.

**Landscape Architecture** is the study of artistic, scientific, and technical principles as they are applied to landscape planning, design, and management services. It applies artistic and scientific principles to the design, planning, and management of both natural and built environments. Landscape architects work on a wide variety of projects including garden design, residential design, community planning, urban design, parks and recreation, commercial/campus design, and sustainable site design. The design process involves creative expression that comes from an understanding of the context of site (or landscape), natural systems, cultural systems, and social dynamics. It requires one to interpret, imagine, draw, conceptualize, synthesize, and construct project ideas that transform both the landscapes and the users of those landscapes. As issues of sustainability are becoming more critical, Landscape Architects are poised to address them, as they design the interface between humankind and the urban, suburban, and natural environment.

The Department of Horticulture and Landscape Architecture offers undergraduate programs leading to the following degrees:

- BS in Horticulture
- BLA in Landscape Architecture

## The BS in Horticulture

For the BS degree in Horticulture, students can choose from seven options.

**Horticulture Business** features the opportunity to combine horticulture with the principles of running a business. A built-in requirement for a formal academic minor in a business area is included in this option.

**Horticulture Food Safety** offers classes that train students in the principles and practices of minimizing potential food safety risks in growing, handling, and processing fruits and vegetables. This option allows students to become certified in Good Agricultural Practices

(GAPs), Good Handling Practices (GHPs) and Preventive Controls for Human Foods. It also features the opportunity to become trained in Global Food Safety Initiative (GFSI) recognized food safety programs.

**Horticulture Science** emphasizes preparing students for science-based careers, including laboratory science or graduate study. This option provides training and expertise for production, maintenance and preservation of fruits, nuts, vegetables, nursery crops, flower crops, etc. Training can be general or be chosen to emphasize a particular commodity area of horticulture. Students learn plant care techniques and the role plants and landscape applications play in sustaining the environment.

**Landscape Management** emphasizes the construction and management phases of landscape development, including plants, environmental applications, and structures. Courses include basic landscape architectural design, construction technology, business, and horticulture. Students may emphasize either landscape design or business management. Students emphasizing business management may complete a minor in Management through the OSU Spears School of Business. Graduates are employed by landscape contracting companies, design-build firms, landscape maintenance companies, landscape nurseries and governmental agencies.

**Public Horticulture** focuses on the people-plant interface, particularly in urban settings. Students may choose to specialize in either garden management or urban horticulture. The program is appropriate for those interested in careers in arboreta, botanic gardens, zoos, horticultural societies, park systems, museums, habitat creation and restoration (especially disturbed areas and/or wetlands) civic garden centers, and specialty crop production in developed areas. This option can also lead to graduate study. Students have the opportunity to be involved in The Botanic Garden at OSU and the department's television show, Oklahoma Gardening.

**Turf Management** provides training for turfgrass production and for management of turfgrass in golf courses, parks, athletic fields, home landscapes, airports and along highways.

**Urban Horticulture** focuses on the production, processing and marketing of horticultural food and ornamental crops in the urban environment. It provides training for broad practices including small scale crop production, vertical farming, hydroponics, container production, greenhouse production, roof-top, and organic production. Students have the opportunity to be involved in vegetable production at the OSU Student Farm.

## The BLA in Landscape Architecture

The Bachelor of Landscape Architecture (BLA) degree focuses on professional practice. This degree is nationally accredited by the Landscape Architectural Accreditation Board (LAAB). Students will experience a strong landscape design curriculum that is supported with courses in art, construction, horticulture, ecology, environmental science, and social science. Students will gain professional practice experience through short-term or long-term internships with Landscape Architecture firms. Typical employers of landscape architects include landscape architecture firms, architectural/engineering firms and government agencies dealing with land planning, environmental and conservation applications, urban planning, and parks/recreation.

## **Minor in Horticulture**

Additional formal training in horticulture can benefit students in career areas as diverse as education, interior design, or entrepreneurship. The Horticulture minor includes 15 hours of core courses in soil science, plant biology and horticultural science, along with advanced cross-commodity applications in plant propagation. The core provides the basic prerequisites for further study. Students then select at least eight hours of controlled electives in horticulture according to their areas of interest. A total of 23 hours is required for the minor.