HORTICULTURE, B.S.

Horticulturists work to enrich our lives by integrating and applying plant science, environmental science, molecular biology, biotechnology, genetics, physiology, and management. Specifically, horticultural science deals with the development, production, growth, distribution, and use of fruits, vegetables, greenhouse crops, ornamentals, turf, and specialty plant crops (used for flavoring and medicine). Horticultural science is one of the most diverse biological sciences one can study at a university. Not only are the biology and genetics of crop plants interesting, but the application of this knowledge is equally important in a myriad of situations. Undergraduate horticulture majors will obtain specialized training in greenhouse/field management and the production and use of fruits, vegetables, nuts, and herbaceous/woody ornamentals through the bachelor of science degree program.

In addition to obtaining a job with an undergraduate degree in horticulture, the major provides an excellent background for graduate study in the field of plant sciences. Areas of graduate study include plant breeding and plant genetics, horticulture, agronomy, plant pathology, or other related fields such as biology, environmental science, natural resource management, agroecology, and genetics.

Students with either undergraduate or graduate degrees in horticulture have a variety of career opportunities. Recent studies show that there are more jobs in agriculture in the US than there are students graduating with agricultural bachelor of science degrees to fill them. Estimates in 2015 showed that there were 57,900 job openings in agriculture and related fields and only 35,400 students graduating annually in those areas. As our world grapples with the need to contribute science-based solutions to feeding 9 billion people by 2050, students trained in the agricultural and horticultural sciences will be called on to contribute.

Horticulture graduates may find opportunities in working on developing higher yielding crops or crops that can withstand more stressful growing conditions. Others may find opportunities working on improving qualities such as flavor, appearance, texture, and postharvest shelf life for a wide range of horticultural commodities from fruits to vegetables to flowers. Sustainable production is a particular area of growth where horticultural expertise can make a contribution. Students may wish to read a recent report from the United States Department of Agriculture and Purdue University (https://www.purdue.edu/usda/employment/wp-content/uploads/2015/04/2-Page-USDA-Employ.pdf) on the subject of employment opportunities in this area.

The horticulture degree serves as excellent preparation for careers in food production, plant nurseries, community supported agriculture (CSA), public gardens, landscaping, greenhouse production, teaching, public parks, vegetable fields, golf courses, urban agriculture, extension- and community-based educational work, work in research labs, and the health sciences. In addition, many horticultural science majors go on to work in public sector jobs including city and state positions with the Department of Natural Resources, the Wisconsin Department of Agriculture, and University of Wisconsin Division of Extension. Students with degrees in horticulture also work in hospitals (horticultural therapy), aerospace (food and recycling in space labs), and zoos (managing environments for animals and visitors). Although the career opportunities are numerous, horticulture students have a common desire to work intensively with plants to improve our environment and our health.