

Bachelor of Science in Agriculture

Horticulture



ABOUT THE PROGRAM

The Bachelor of Science in Agriculture Horticulture (HORT) major is for students who want to apply the latest advancements in the biological sciences to contemporary problems in the horticultural industry. This major is appropriate for students with a focus on the management of commercial greenhouses, horticultural production, breeding improved crop varieties, in vitro plant propagation or using turfgrass and other plant species to enhance urban environments. With a broad scope of career possibilities, HORT co-op students will build transferrable skills during co-op work terms contributing to their work readiness and career prospects upon graduation.

WHY CO-OP?

As a co-op student, you will gain relevant work experience, build professional networks, and develop essential transferable skills needed to succeed in the workplace, all while getting paid and earning your university degree. Guelph's co-op program is unique due to the exceptional level of support provided to students, including a job search preparatory course, a personal connection with a Co-op Coordinator to assist you during the employment process, and targeted work term reports to help you develop relevant skills.

COURSE SEQUENCING

The Horticulture program has two sample sequences that include 4-month, 8-month and 12-month options. These sequences meet the Co-operative Education and Work-Integrated Learning Canada (CEWIL) accreditation requirements.

YEAR	FALL	WINTER	SUMMER
ONE	Academic	Academic	Off
TWO	Academic	Academic	Work
THREE	Work	Academic	Off
FOUR	Academic	Work	Work
FIVE	Academic	Academic	

SAMPLE JOBS

Botany Student

Botany Summer Students work closely with the Herbarium Intern and under the supervision of the Field Botanist and Herbarium Curator to; assist with vegetation and ecological inventories, monitor for invasive species, collect and process botanical specimens and assist with preparing and delivering plant-focused educational programs. Students will be expected to summarize and report on their work and perform other herbarium and field botany duties as required.

Greenhouse Co-op Student

Assisting the Greenhouse Research Technician in performing controlled experiments on a variety of fertilizers, both conventional and organic. Products that increase production through increased nutrient use efficiency, or that reduce crop loss by promoting plant health in the face of stress events are examples of clean technologies that we are developing in order to reduce the environmental impact of agriculture.

Research Assistant

This position will grow donor plants in growth rooms and sample tissue. They will transfer and culture embryos for shoot regeneration, and subculture shoots for plantlet regeneration and transfer to soil. The assistant will also sample tissue for ploidy analysis, collect tissue samples from plantlets for molecular characterization, and record research and production data.

SAMPLE EMPLOYERS*

- Agriculture & Agri-Food Canada
- Canadian Food Inspection Agency (CFIA)
- Crop Defenders Ltd.
- Holmes Agro Limited
- Ministry of Agriculture Food and Rural Affairs
- National Research Council Canada

*Sample co-op employer list only. Employers will vary depending on recruitment needs. During a job search, students are encouraged to be actively engaged and are also supported in establishing and maintaining their own personal contacts.

SALARY INFORMATION

Students receive compensation from their employer for co-op work terms. The rate of pay will vary depending on a number of factors including the industry, the student's program of study, and work term level. For your reference, a Co-operative Education Salary Guide is available on our website, which provides hourly rates (averages and ranges) for each degree program.

SKILLS & KNOWLEDGE ACQUIRED

- Strong background in the biological sciences as they apply to the horticulture industry
- Advanced understanding of horticulture production systems obtained through hands-on experience in the field and laboratory
- Excellent oral and written communication skills