

Horticulture Technology: Diploma

Faculty of Science and Horticulture	kwantlen.ca/science
School of Horticulture	kwantlen.ca/hort
Implementation Date	01-Sep-2011
Start Date(s)	September January
Admission Type	Open admission
Enrolment Type	Open enrolment
Program Type	Undergraduate
Credential Granted	Diploma
Offered At	Langley
Format	Full-time Part-time
How to Apply	www.kwantlen.ca/admission

DESCRIPTION

Kwantlen's diploma students acquire the skills, knowledge, and abilities necessary for success in horticulture. The support of employers and alumni ensures courses and programs meet the requirements of industry and the aspirations of graduates. Specialize in Greenhouse and Nursery Production, Turf Management, or Landscape Design and Installation.

The diploma programs combine theory and practices. Students use our excellent special purpose facilities to gain competence in a range of horticultural skills. These include glass greenhouses, poly houses, container nursery, turf field lab, landscape field lab, and horticulture science-focused teaching labs.

Many students enter the School of Horticulture to upgrade their skills or to facilitate a career change. Faculty and staff are supportive and sensitive to the issues faced by students who embark on a post-secondary program after a significant period away from school, college, or university.

Specializations:

The Diploma in Horticulture requires students to choose one of three specializations:

- Greenhouse and Nursery Production
- Landscape Design and Installation
- Turf Management

GREENHOUSE AND NURSERY PRODUCTION

The greenhouse and nursery sector of the horticulture industry in BC has consistently provided rewarding employment opportunities. There is always a demand for knowledgeable and skilled individuals who enjoy working with people and plants. The demand for qualified greenhouse/nursery technologists is high and job opportunities exist in BC and abroad. This program provides students with the knowledge and skills needed to work successfully in the greenhouse production of vegetable, or flower crops, or field and container production of ornamental plants. Graduates may be employed as assistant growers or growers in wholesale and retail nurseries, commercial greenhouse operations, garden centres and as technical representatives in supply companies.

LANDSCAPE DESIGN AND INSTALLATION

The Landscape specialization offers exciting opportunities for individuals seeking a career in the landscape industry. Public and private landscapes and gardens provide social, economic, and environmental benefits to our communities and have created a demand for individuals trained in landscape design, installation, and maintenance. Employment opportunities exist for supervisors and managers in residential and commercial landscaping companies, garden design firms, arboriculture companies, municipal park maintenance and management, and in horticulture materials supply companies. The opportunity for self-employment is high.

TURF MANAGEMENT

Turf management is a key component of the landscape trades, recreation, and tourism industries and a significant component of the provincial economy. Approximately 126,000 hectares of managed turfgrass exist in the province. There is steady demand for qualified turf managers. Graduates from the program have the skills necessary to achieve management level careers in turfgrass operations. Students will be involved in the ongoing development and maintenance of the golf turf and landscape turf on campus. While many graduates find employment in the golf course industry, opportunities also exist in lawn care, landscape maintenance, athletic field management, commercial sod growing, and management of cemeteries, parks, and recreational facilities. Related careers include golf course construction, equipment supply, and fertilizer and seed sales. A number of turf management graduates have established successful careers in arboriculture.

Transfer to a Degree

KWANTLEN BACHELOR OF HORTICULTURE SCIENCE

Graduates of a diploma program can pursue a Bachelor of Horticulture Science degree at Kwantlen. Students have the choice of a major in Urban Ecosystems or a major in Plant Health. Refer to the Horticulture Science degree section of the calendar for details. Students can combine their diploma education with enhanced Horticulture Science skills and earn two credentials. Students who wish to pursue this option should meet with their program coordinator to discuss some course substitutions that would facilitate transfer to the School of Horticulture degree program.

KWANTLEN BACHELOR OF BUSINESS ADMINISTRATION

A successful career progression often leads to a management role in industry. While the diploma programs include a solid foundation in business skills, Horticulture Diploma graduates are eligible to transfer into the third year of Kwantlen's Bachelor of Business Administration (in Entrepreneurial Leadership, Human Resources Management, or Marketing Management). Some additional course work in Accounting, English, Microeconomics, Statistics and Marketing is required to complete the transfer. Students can combine diploma-level education with enhanced business skill and earn two credentials (Diploma and Degree) in a 4.5 year course of study. Students who wish to pursue this option should meet with their program coordinator to discuss some course substitutions that would facilitate transfer to the School of Business degree program.

STUDENT PROFILE

Students who wish to contribute to environmental and community well-being, engage in creative activities, own and operate their own businesses, or engage in hands-on work will enjoy

horticulture. Individuals with allergies to dust, pollen or plant products, or specific chemicals should be aware of the potential impact on their health. Physical fitness and a healthy back are generally required for a successful career in these horticulture disciplines.

CAREER OPPORTUNITIES

In response to increased consumer demand for horticulture products and services, and in response to increasing consumer interest in their environment and sustainability, the horticulture industry is both growing and changing. The combination of growth and change has resulted in a shortage of qualified people for staff and management positions. School of Horticulture technology graduates are in demand for technical, supervisory and management roles in greenhouses, golf courses, landscape design, installation, and maintenance companies, garden centres, nurseries, and municipal park departments. This combination of growth and change is generating the demand for qualified people to staff and manage the numerous employment opportunities available in a vibrant and diverse horticulture industry.

PROGRAM ADMISSION REQUIREMENTS

General university admission requirements apply to this program including the undergraduate-level English Proficiency Requirement.

Students wishing to complete the program without having to undertake any preparatory courses must enter with English 12 with a grade of C+ and Mathematics 11 (Applications or Principles) with a grade of C (or equivalent). Students are encouraged to make an appointment with an Academic Advisor to plan course selections accordingly.

PROGRAM REQUIREMENTS

Greenhouse and Nursery Production Specialization

Student pursuing a Diploma in Horticulture with a Greenhouse and Nursery Production specialization must complete at least 63 credits including:

YEAR 1

All of:

Fall – Semester 1

CBSY 1105	Introductory Computer Applications	3 credits
HORT 1102	Botany for Horticulture	3 credits
HORT 1116	Introductory Equipment Maintenance	2 credits
HORT 1155	Introduction to Plant Identification	3 credits
HORT 1171	Production Practices – Fall	2 credits
HORT 2472	Forest Crop Production	2 credits

Spring – Semester 2

CMNS 1140	Introduction to Professional Communication	3 credits
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HORT 1101	Pesticide Applicator/Dispenser Certification	0.5 credits
HORT 1104	Soils and Growing Media	3 credits
HORT 1217	Foundations of Plant Health	3 credits
HORT 1246	Plant ID for Production	1.5 credits
HORT 1261	Plant Propagation	3 credits
HORT 1271	Production Practices – Spring	2 credits

Summer Semester

HORT 2300	Horticultural Work Experience	2 credits
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YEAR 2

All of:

Fall – Semester 3

BUSI 1209	Business Management in Horticulture	3 credits
HORT 2371	Fall Floriculture	3 credits
HORT 2375	Production Facilities and Equipment	3 credits
HORT 2378	Production Horticulture Pests	3 credits
HORT 2473	Greenhouse Environments	3 credits

Spring – Semester 4

BUSI 1205	Supervisory Skills	3 credits
HORT 2372	Greenhouse Vegetable Production	3 credits
HORT 2463	Nursery Production	3 credits
HORT 2477	Production Horticulture Management	3 credits
HORT 2479	Spring Floriculture	3 credits

ELECTIVES

Optional:

HORT 1110	Introduction to Sustainable Horticulture	3 credits
HORT 2490	Organic Greenhouse Crop Production	3 credits

Landscape Design and Installation Specialization

Student pursuing a Diploma in Horticulture with a Landscape Design and Installation specialization must complete at least 65 credits including:

YEAR 1

All of:

Fall – Semester 1

CBSY 1105	Introductory Computer Applications	3 credits
HORT 1102	Botany for Horticulture	3 credits

HORT 1116	Introductory Equipment Maintenance	2 credits
HORT 1122	Introduction to Landscape Practices	2 credits
HORT 1155	Intro to Plant Identification	3 credits
HORT 1230	Sustainable Turf Management	3 credits

Spring – Semester 2

CMNS 1140	Introduction to Professional Communication	3 credits
HORT 1101	Pesticide Applicator/Dispenser Certification	0.5 credits
HORT 1104	Soils and Growing Media	3 credits
HORT 1217	Foundations of Plant Health	3 credits
HORT 1224	Landscape Drafting	3 credits
HORT 1240	Arboriculture I	3 credits
HORT 1255	Plant Identification II	1.5 credits

Summer Semester

HORT 2300	Horticultural Work Experience	2 credits
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YEAR 2

All of:

Fall – Semester 3

BUSI 1209	Business Management in Horticulture	3 credits
HORT 2308	Landscape Pest Management	3 credits
HORT 2320	Landscape Design I	3 credits
HORT 2334	Irrigation, Drainage and Lighting	3 credits
HORT 2355	Plant Identification 3	3 credits

Spring – Semester 4

BUSI 1205	Supervisory Skills	3 credits
HORT 2412	Landscape Estimating and Contract Administration	3 credits
HORT 2420	Landscape Design II	3 credits
HORT 2426	Landscape Construction	3 credits
HORT 2442	Arboriculture II	3 credits

ELECTIVES

Optional:

HORT 1110	Introduction to Sustainable Horticulture	3 credits
HORT 1119	Landscape and the Environment I	3 credits

Turf Management Specialization

Student pursuing a Diploma in Horticulture with a Turf Management specialization must complete 63.5 credits including:

YEAR 1

All of:

Fall – Semester 1

CBSY 1105	Introductory Computer Applications	3 credits
HORT 1102	Botany for Horticulture	3 credits
HORT 1116	Introductory Equipment Maintenance	2 credits
HORT 1134	Turf Maintenance Operations	2 credits
HORT 1155	Intro to Plant Identification	3 credits
HORT 1230	Sustainable Turf Management	3 credits

Spring – Semester 2

CMNS 1140	Business and Technical Communication	3 credits
HORT 1101	Pesticide Applicator/Dispenser Certification	0.5 credits
HORT 1104	Soils and Growing Media	3 credits
HORT 1217	Foundations of Plant Health	3 credits
HORT 1240	Arboriculture I	3 credits
HORT 1255	Plant Identification II	1.5 credits
HORT 2304	Grounds Machinery	2 credits

Summer Semester

HORT 2300	Horticultural Work Experience	2 credits
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YEAR 2

All of:

Fall – Semester 3

BUSI 1209	Business Management in Horticulture	3 credits
HORT 2330	Turfgrass and Environmental Stress	3 credits
HORT 2333	Turfgrass Pest Management	3 credits
HORT 2334	Irrigation, Drainage and Lighting	3 credits
HORT 2335	Sports Turf Management Practices	2.5 credits

Spring – Semester 4

BUSI 1205	Supervisory Skills	3 credits
HORT 2426	Landscape Construction	3 credits
HORT 2436	Golf Course Management	3 credits
HORT 2437	Golf Course Irrigation Systems: Design and Operations	3 credits
HORT 2442	Arboriculture II	3 credits

CREDENTIAL AWARDED

Upon successful completion of this program, students are eligible to receive a **Diploma in Horticulture Technology**.