

Area of Interest: Construction and Skilled Trades

## Horticulture Techniques - Apprenticeship

Ontario College Certificate

Program Code: 1411X01FWO

24 Weeks

Ottawa Campus

### Our Program

#### **Become a journey person in the horticultural industry.**

This apprenticeship program is designed to provide individuals working in the industry, who want to pursue a career in horticulture, with theoretical principles and practical trade skills developed by industry to become a recognized horticultural technician. The program fulfills the on-the-job and in-school requirements of the Ministry of Labour, Training and Skills Development (MLTSD) and supports apprentices in completing their Red Seal Certificate of Qualification exam to become a Landscape Horticulturist.

Applicants to the Horticulture Techniques - Apprenticeship Ontario College Certificate program must:

- be currently employed in the trade
- be formally registered as apprentices with the Ministry of Labour, Training and Skills Development (MLTSD)
- have a valid Offer of Classroom Training from the MLTSD that includes a Ministry Client ID and approved Class Number

Eligibility is determined by the Ministry of Labour, Training and Skills Development.

If you are considering a future as a Horticultural Technician, you may work with green infrastructure on private, commercial or government properties. Opportunities exist in all parts of the industry from production and maintenance to landscape installation, retail and supply firms. Graduates may also become self-employed.

To learn more about apprenticeships, visit <http://www.ontario.ca/page/skilled-trades> for detailed information.

#### **For Registered Apprentices:**

The in-school portion of the program consists of two 12-week sessions (Basic and Advanced). Students take courses in workplace safety, plant maintenance and identification, landscape construction, quote preparation, equipment maintenance, irrigation and turf management.

#### **SUCCESS FACTORS**

This program is well-suited for students who:

- Enjoy a hands-on approach to learning about horticulture and the natural environment.
- Are self-motivated.
- Enjoy problem solving and are attentive to details and safety.

### Employment

Graduates may be employed as horticultural technicians working with green infrastructure on private, commercial or government properties. Opportunities exist in all parts of the industry from production and maintenance to landscape installation, retail and supply firms. Graduates may also become self-employed.

## Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Assist in the application of the basic principles of plant, soil and environmental sciences to complete work in horticulture and landscaping.
- Apply the basic practical horticulture skills to the production of plant materials, including herbaceous plants, woody plants, edibles and turf.
- Apply the basic principles of design and environmental sustainability to horticulture and landscaping.
- Assist in the implementation of basic maintenance procedures for plants, property, and equipment.
- Apply knowledge of plant identification, usage, and maintenance criteria to horticulture and landscaping.
- Assist with the creation of routine horticultural and landscaping plans that promote healthy ecosystems and avoid environmental damage.
- Apply the principles and practical skills of Integrated Pest Management (IPM) to indoor and outdoor plants.
- Assist in the effective planning, implementation, and conclusion of horticultural and landscaping projects.
- Apply health and safety standards and best practices to workplaces.
- Act in a professional manner, maintain professional relationships, and communicate effectively with clients, co-workers, supervisors, and others.

## Program of Study

Level: 01	Courses	Hours
ENL0562	Workplace Communications	24.0
HOR0561	Workplace Safety	24.0
HOR0563	Plant Science	48.0
HOR0564	Turf Management 1	36.0
HOR0565	Plant Identification 1	36.0
HOR0566	Plant Materials 1	30.0
HOR0567	Trade Calculations	24.0
HOR0568	Landscape Construction 1	52.0
HOR0569	Integrated Pest Management and Plant Health Care	48.0
HOR0570	Landscape Equipment Maintenance	24.0
HOR0571	First Aid and CPR Training	14.0
Level: 02	Courses	Hours
HOR0572	Plant Propagation	48.0
HOR0573	Plant Production	48.0

HOR0574	Irrigation	24.0
HOR0575	Turf Management 2	36.0
HOR0576	Plant Identification 2	36.0
HOR0577	Plant Materials 2	24.0
HOR0578	Site Layout, Grading and Surveying	36.0
HOR0579	Landscape Construction 2	84.0
HOR0580	Plan Reading and Quantity Take-Off, Quote Preparation	24.0

### **Fees for the 2023/2024 Academic Year**

Tuition Fees: \$600 per level.

Incidental Fee: \$150 per level.

Information Technology Fee: \$65.79 per level.

### **Admission Requirements for the 2024/2025 Academic Year**

#### **College Eligibility**

- Ontario Secondary School Diploma (OSSD) or equivalent; OR
- Mature Student status (19 years of age or older and without a high school diploma at the start of the program).

#### **Program Eligibility**

- Prospective students must be registered apprentices with the Ministry of Labour, Training and Skills Development and must be a member in good standing with Skilled Trades Ontario (STO).
- Eligibility is determined by the Ministry of Labour, Training and Skills Development.

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- Ontario Secondary School Diploma (OSSD) or equivalent; OR
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#### **Program Eligibility**

- Prospective students must be registered apprentices with the Ministry of Labour, Training and Skills Development and must be a member in good standing with Skilled Trades Ontario (STO).
- Eligibility is determined by the Ministry of Labour, Training and Skills Development.

### **Application Information**

#### **HORTICULTURE TECHNIQUES - APPRENTICESHIP Program Code 1411X01FWO**

Registration for Apprenticeship programs takes place through the Ministry of Labour, Training, and Skills Development.

For further information, contact:

Ministry of Labour, Training, and Skills Development  
347 Preston Street 3rd Floor, Suite 310  
Ottawa, ON K1S 3H8

<https://www.ontario.ca/page/start-apprenticeship>

Telephone: 613-731-7100

Toll-free: 1-877-221-1220

### **Additional Information**

Landscape Ontario offers support and help with registration. Contact <mailto:info@horticulturetechnician.ca> or Sally Harvey at 1-800-265-5656 ext. 315 or <mailto:sharvey@landscapeontario.com>.

### **Contact Information**

#### **Program Coordinator(s)**

- Steve Neumann, <mailto:neumans@algonquincollege.com>, 613-727-4723, ext. 7034
- Tommy Wingreen, <mailto:wingret@algonquincollege.com>, 613-727-4723, ext. 7138

### **Course Descriptions**

#### **ENL0562 Workplace Communications**

Students describe and demonstrate the oral and written communication skills required to function effectively as part of a crew/team in the workplace using traditional and current technology.

Prerequisite(s): none

Corerequisite(s):none

#### **HOR0561 Workplace Safety**

Students describe and demonstrate safe workplace practices, including dealing with on-site conditions, emergencies and hazards, according to pertinent federal and provincial safety legislation and municipal legal requirements.

Prerequisite(s): none

Corerequisite(s):none

#### **HOR0563 Plant Science**

Students describe plant biology, soil structure and quality, plant-media relationships, nutrient composition and the relationship to plant performance in its environment.

Prerequisite(s): none

Corerequisite(s):none

#### **HOR0564 Turf Management 1**

Students describe and demonstrate turf grass mowing and fertilizing practices, including monitoring turf grass quality, plant health care, and Integrated Pest Management (IPM) techniques, according to federal, provincial and municipal legal requirements.

Prerequisite(s): none

Corerequisite(s):none

#### **HOR0565 Plant Identification 1**

Students identify 80 ornamental landscape plants (See Ontario 2009 Plant List), using the required

nomenclature, stating the cultural requirements for each and identifying pests and diseases as they relate to plant selection.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0566 Plant Materials 1**

Students describe grounds maintenance practices and procedures, including basic installation and transplanting processes for nursery stock, such as annuals, woody and herbaceous plants, according to respective federal, provincial, and municipal legal requirements.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0567 Trade Calculations**

Students identify, explain and demonstrate calculations used in the horticulture industry, including the use of standard measuring devices.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0568 Landscape Construction 1**

Students describe and demonstrate the handling and installation of precast landscape paving, wall units and landscape timber wall components, according to pertinent safety legislation and safe workplace practices, municipal standards and codes.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0569 Integrated Pest Management and Plant Health Care**

Students identify and describe management of pests and disorders of plant material (turf, trees, interior plants, greenhouse plants, perennials/annuals), utilizing plant health care and integrated pest management principles.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0570 Landscape Equipment Maintenance**

Students describe and demonstrate basic scheduled, preventative and ongoing maintenance procedures for powered horticultural equipment, according to respective federal, provincial and municipal legal requirements.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0571 First Aid and CPR Training**

Students describe the application of first aid and CPR techniques for emergencies in the workplace. This unit comprises the standard First Aid certification requirements.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0572 Plant Propagation**

Students describe and demonstrate plant propagation by sexual and asexual methods.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0573 Plant Production**

Students describe plant production from growing, potting/lining out to sale/installation on site, according to respective federal, provincial and municipal legal requirements.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0574 Irrigation**

Students describe water quality, plant water requirements and local conservation standards, water stewardship principles, basic irrigation systems and procedures, according to federal, provincial and municipal legal requirements.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0575 Turf Management 2**

Students describe turf grass establishment and cultivation practices, including monitoring turf grass quality, plant health care, Integrated Pest Management (IPM) techniques used in landscape construction (Softscape Installation) and grounds/golf course maintenance operations, according to respective federal provincial and municipal legal requirements.

Prerequisite(s): HOR0565  
Corerequisite(s):none

### **HOR0576 Plant Identification 2**

Students identify and describe 120 ornamental landscape plants (See Ontario 2009 Plant List) using the required nomenclature, stating the cultural requirements for each and understanding pest and disease as they relate to plant selection.

Prerequisite(s): HOR0565  
Corerequisite(s):none

### **HOR0577 Plant Materials 2**

Students describe and demonstrate field digging and transplanting techniques, including transporting, aftercare and pruning techniques for nursery stock such as annuals, woody and herbaceous plants, according to respective federal provincial and municipal legal requirements.

Prerequisite(s): HOR0566  
Corerequisite(s):none

### **HOR0578 Site Layout, Grading and Surveying**

Students describe an environmentally-sensitive site layout and drainage, including the placement and use of grading control devices, measuring devices and surveying equipment.

Prerequisite(s): none  
Corerequisite(s):none

### **HOR0579 Landscape Construction 2**

Students describe and demonstrate the handling and installation of precast landscape paving, wall units and landscape timber wall components, according to pertinent safety legislation and safe

workplace practices, municipal standards and codes.

Prerequisite(s): HOR0568

Corerequisite(s):none

**HOR0580 Plan Reading and Quantity Take-Off, Quote Preparation**

Students read and interpret plans, verify plan accuracy and determine equipment, materials and labour requirements to prepare a quote.

Prerequisite(s): none

Corerequisite(s):none