

Horticulture Technologist Diploma



Description

The Olds College Horticulture Technologist Diploma Program prepares its graduates to apply their knowledge and skills in protected and field culture of horticulture crops and landscape design, construction and maintenance.

Intake Year Fall 2020.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

1. Apply a working knowledge of current horticulture industry safety standards and practices.
2. Demonstrate an awareness of horticulture industry sectors.
3. Communicate to influence business and regulatory decisions within the horticulture sector.
4. Manage production of horticulture crops in response to selected market demands.
5. Perform selected calculations for efficient and profitable horticulture practices.
6. Identify plant species and recognize specific plant requirements.
7. Integrate appropriate cultural practices.
8. Evaluate selected growing media.
9. Appraise water management needs and applications.
10. Integrate appropriate technologies into current horticulture practices.
11. Apply the principles of integrated pest management.
12. Recognize the ecological, economic, and social implications of horticulture decisions and processes.
13. Manage various tasks, opportunities, and problems using a comprehensive problem solving strategy.
14. Demonstrate ethical and appropriate behaviour that contributes to the achievement of personal goals and business objectives.

Requirements:

TERM 1

			Course Credits
			(Total Credits:12)
HRT	1000	Discovering Plants (1-2-0 hrs)	3
The student explores the plant world through the lenses of systems and classification, gaining an understanding of overall plant growth and response to the surrounding environment.			
HRT	1900	Horticulture Field Studies I (0-3-0 hrs)	3
Students engage in faculty-supported exploration of selected aspects of the horticulture industry during a one-month term of on campus immersion.			
HRT	1100	Managing Soils (1-2-0 hrs)	3
Learners analyze, problem solve, and manage soils and soilless media for production and landscape applications.			
COM	1020	Workplace Communication (3-0-0 hrs)	3
In this course students develop writing and presentation skills. Students will apply rules of grammar, spelling, punctuation and mechanics in the development of letters, email and short reports as well as other documents relevant to their industry. Students will demonstrate strategies and techniques for creating informative and persuasive presentations.			

TERM 2

Course Credits
(Total Credits:15)

HRT	1400	Managing Pests I (1-2-0 hrs)	3
		Students investigate weeds, insects, and diseases of plants and propose management solutions within ecological systems.	
HRT	1500	Managing Landscapes (0-3-0 hrs)	3
		The learner gains experience in managing landscape sites through acquisition and implementation of design principles, cultural practices of plant material, and advancing the sustainability of landscape environments to industry standards.	
HRT	1700	Producing Horticulture Crops (1-2-0 hrs)	3
		Learners research and assess food and ornamental field crop production markets, locations, materials, and processes to achieve a sustainable enterprise.	
HRT	1800	Plants in the Landscape (1-2-0 hrs)	3
		The student will practice skills that will enable them to identify and explain the ecological, cultural, morphological and architectural characteristics of a wider range of plant material used in the landscape. Plant response to specific environments will be taken in account.	
		Pre-requisite : HRT - 1000 :	
HRT	2400	Propagating Plants (0-3-0 hrs)	3
		Learners propagate plant material using a variety of methods and technologies including tissue culture.	
TERM 3			
			Course Credits (Total Credits:3)
HRT	1950	Horticulture Field Studies II (0-3-0 hrs)	3
		Students engage in faculty-supported exploration of selected aspects of the horticulture industry during a two-month term of industry employment.	
TERM 4			
			Course Credits (Total Credits:3)
HRT	2900	Horticulture Field Studies III (0-3-0 hrs)	3
		Students engage in faculty-supported exploration of selected aspects of the horticulture industry during a two-month term of industry employment.	
		Pre-requisite : HRT - 1950 :	
TERM 5			
			Course Credits (Total Credits:3)
ARB	1200	Pruning Trees for Structure and Health (0-3-0 hrs)	3
		Learners discover the principles and practices of pruning trees by utilizing tools and techniques required to influence plant architecture.	
ELECTIVE: Course from the Term 5 Approved Electives list below.			
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Term 5 Approved Electives			
A competitive entry process may apply to the Horticulture elective selection.			
			(Total Credits:6)

HRT	2250	Digital Graphics for Landscape Design (0-3-0 hrs)	3
		An introductory course in computer-assisted design (CAD) graphic skills, used in the landscape industry. The learner will develop basic graphics landscape presentation and construction drawings. Learners will operate software to prepare two-dimensional (Dynamics) and three-dimensional (SketchUp Pro) drawings.	
HRT	2100	An Entrepreneurial Approach to Processing (0-3-0 hrs)	3
		Students create sustainable value-added products and opportunities within horticulture.	
HRT	2450	Horticulture Field Production (0-3-0 hrs)	3
		Learners will study field production systems in horticulture and examine the production, harvest and post-harvest handling of herb, fruit, nursery and vegetable crops. Students will have the opportunity to focus learning on crops of their choice.	
		Pre-requisite : HRT - 1700 :	

TERM 6

			Course Credits (Total Credits:12)
HRT	2000	Starting a Horticulture Business (3-0-0 hrs)	3
		This course will provide learners with an overview of the legal and financial requirements needed to start a small business.	
HRT	2300	Developing a Specialty Landscape (0-3-0 hrs)	3
		Students assess current trends in non-traditional landscapes through the assessment of construction and plant material needs.	
HRT	2600	Managing Pests II (1-2-0 hrs)	3
		Students will examine and assess management practices, including biological, cultural, chemical, and physical methods, for pests of horticulture.	
WTR	1200	Managing Water Systems (0-3-0 hrs)	3
		Students explore the water management issues of horticulture operations focusing on the design and installation of appropriate irrigation systems to reflect industry standards and specific site needs.	

ELECTIVE: Course from the Term 6 Approved Electives list below.

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Term 6 Approved Electives

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			(Total Credits:6)
HRT	1600	Producing Greenhouse Crops (0-3-0 hrs)	3
		Students explore greenhouse systems, grow plants and manage production cycles to produce marketable crops.	
HRT	2150	Exploring Non-Conventional Food Production (0-3-0 hrs)	3
		This course introduces the learner to non-conventional food production systems. The learner will compare and evaluate the benefits and challenges of these systems in the context of local and global food security.	
		Pre-requisite : HRT - 1700 :	
HRT	2800	Managing Landscape Construction (0-3-0 hrs)	3
		Students apply procedures and techniques in project planning, estimating and construction of horticulture projects.	

HRT	2850	Designing Landscapes (0-3-0 hrs)	3
<p>This course is an introduction to the fundamental principles applied to landscape designs. The learner will apply the landscape design process for residential and commercial designs by developing basic graphic skills utilized in the production of landscape presentation and construction drawings. Emphasis will be placed on implementing sustainable site initiatives. Computer-aided design software shall be used in the course.</p> <p>Pre-requisite : HRT - 2250 :</p>			
HRT	2050	Designing with Fresh Flowers (0-3-0 hrs)	3
<p>This course will introduce the learner to the mechanics, principles and elements, care and handling, and creation of floral designs for a variety of occasions developing general employability skills. It will focus on the use of fresh flowers and foliage.</p>			
HRT	2350	Applied Horticulture Ecology (3-0-0 hrs)	3
<p>This course provides an introduction to ecological principles at the species, population, community, and ecosystem levels. Specific application of ecology to sustainability and the management of landscape and production ecosystems are studied.</p>			

Graduation Requirements

- Completion of 60 credits
- Completion of all required courses and credits as per Program of Study
- Cumulative program G.P.A. of 2.00 or better
- Satisfactory completion of occupational experience and/or assignment, if required

Changes to this Program

Every effort has been made to ensure that information in this program is accurate at the time of publication. The College reserves the right to change programs if it becomes necessary so that program content remains relevant. In such cases, Olds College will provide clear and timely notice of the changes.

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