

PLANT SCIENCE AND LANDSCAPE TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE



This ornamental horticulture program prepares students for entry level to middle management positions in the Green Industry. Many opportunities exist for graduates in landscape design and construction, landscape maintenance, wholesale nursery and greenhouse plant production, garden center management, inside sales, arboriculture and urban forestry, theme parks, public horticulture, arboreta, and much more. The curriculum of this two-year, full-time program includes a summer field experience between the first and second years and is composed of a balance of classroom, laboratory and practical educational experiences. This program is fully accredited by the National Association of Landscape Professionals, meeting the national standard for industry performance. Classes are available in a variety of formats and students may enroll on either a full- or part-time basis.

Program contact: Learn more

This degree program contains one or more embedded certificates which will be automatically awarded when the certificate requirements are completed. If you do not want to receive the embedded certificate(s), please notify the Office of the Registrar at RegistrarOffice@tri-c.edu.

Learn more about how certificate credits apply to the related degree.

Program Admission Requirements

- High School Diploma/GED not required, but highly recommended.
- ENG-0995 Applied College Literacies or appropriate score on English Placement Test.
- Eligibility for MATH-1190 Algebraic and Quantitative Reasoning or MATH-1410 Elementary Probability and Statistics I or higher.

Other Information

- Submit all college transcripts to Office of the Registrar.

Program Learning Outcomes

This program is designed to prepare students to demonstrate the following learning outcomes:

- Demonstrate the successful completion of a professional internship in the Green Industry.
- Identify and describe the cultural conditions for over 450 ornamental landscape plants commonly used in the Green Industry.

- Utilize the principles of Plant Health Care to identify, correct, or prevent biotic and abiotic plant issues.
- Utilize knowledge of plants, soils, amendments, and fertilizers to promote plant health and growth.
- Demonstrates the safe and proper use of common hand tools, power tools, and heavy equipment commonly used in the Green Industry.
- Recognize the best business practices in the Green Industry.
- Apply the principles of landscape design.
- Identify the components of an irrigation system and apply troubleshooting techniques to address common issues in the landscape.
- Demonstrate landscape maintenance services including, pruning, turfgrass management, plant installation, and gardening.
- Recognize the importance of professional standards set forth by local, state, and national Green Industry organizations.

Suggested Semester Sequence

First Semester		Credit Hours
PST-1301	Horticultural Botany	3
PST-1311	Deciduous Woody Landscape Plants	3
PST-1411	Equipment Operations and Safety	2
HLTH-1230	Standard First Aid and Personal Safety	1
Select one of the following:		3
ENG-1010	College Composition I	
ENG-101H	Honors College Composition I	
Select one of the following:		3
IT-1090	Computer Applications	
IT-109H	Honors Computer Applications	
Credit Hours		15
Second Semester		
Select one of the following: ¹		3
MATH-1190	Algebraic and Quantitative Reasoning	
MATH-1410	Elementary Probability and Statistics I (Or Any Approved Ohio Transfer 36 Mathematics course) ²	
PST-1321	Evergreens, Groundcovers, and Herbaceous Landscape Plants	3
PST-1420	Landscape Practices	3
PST-1441	Introduction to Landscape Design	3
PST-1380	Introduction to Tree Care	2
Credit Hours		14
Summer Session		
PST-2950	Field Experience	3
Credit Hours		3
Third Semester		
PST-2321	Plant Pest Diagnostics	3
Select one of the following:		3
ART-1010	Art Appreciation	
GEOG-2030	Environmental Geography	
PHIL-1000	Critical Thinking	
PHIL-1010	Introduction to Philosophy	
PHIL-101H	Honors Introduction to Philosophy	
Select one lecture & lab from the following:		4

BIO-1060	Environment, Ecology, and Evolution	
BIO-106L	Environment, Ecology, & Evolution Laboratory	
CHEM-1000	Everyday Chemistry	
CHEM-100L	Everyday Chemistry Laboratory	
Select one from the following:		3
BADM-1301	Small Business Management	
PST-1400	Garden Center and Nursery Management	
PST-1510	Landscape Contracting	
PST-XXXX	Plant Science Elective (Select from below list)	3
PST-1331	Plant Propagation	
PST-2431	Planting Design	
PST-2381	Arboriculture	
Credit Hours		16

Fourth Semester

PST-1600	Irrigation and Drainage	2
PST-2310	Soil Technology	3
PST-2370	Introduction to Turfgrass	2
PST-xxxx	Plant Science Elective (select from below list)	3
PST-1351	Plant Production	
PST-1450	Landscape Design - CAD	
PST-2480	Arboriculture Practices	
Select one of the following:		3
COMM-1010	Fundamentals of Speech Communication	
COMM-101H	Honors Speech Communication	
ENG-1020	College Composition II	
ENG-102H	Honors College Composition II	
Credit Hours		13

Total Credit Hours 61

¹ MATH-1240 Contemporary Mathematics taken prior to Fall 2024 will be accepted to meet Mathematics requirement for this program.

² MATH-1410 Elementary Probability and Statistics I recommended for transfer.

Electives**Landscape Contracting Concentration**

Recommended Electives for concentration in Landscape Contracting

Code	Title	Credit Hours
PST-1510	Landscape Contracting	3
PST-2431	Planting Design	3
PST-1450	Landscape Design - CAD	3

Tree Care Concentration

Recommended Electives for concentration in Tree Care

Code	Title	Credit Hours
PST-1510	Landscape Contracting	3
PST-2381	Arboriculture	3
PST-2480	Arboriculture Practices	3

Garden Center/Nursery Management Concentration

Recommended electives for concentration in Garden Center/Nursery Management.

Code	Title	Credit Hours
PST-1400	Garden Center and Nursery Management	3
PST-1331	Plant Propagation	3
PST-1351	Plant Production	3

MATH-1140, MATH-1141, MATH-1200, MATH-1270, and MATH-1280 can no longer count towards fulfilling the college-level mathematics requirement. These courses were re-classified as developmental mathematics by the state of Ohio in 2016. Tri-C established a 5-year transitioning window for students who had completed these courses prior to 2016 to apply them towards meeting graduation requirements, which expired in Summer 2021. It is highly recommended to see a counselor to determine the appropriate math required for your current major.