

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:

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

3. Utilize the principles of Plant Health Care to identify, correct, or prevent biotic and abiotic plant issues.
4. Utilize knowledge of plants, soils, amendments, and fertilizers to promote plant health and growth.
5. Demonstrates the safe and proper use of common hand tools, power tools, and heavy equipment commonly used in the Green Industry.
6. Recognize the best business practices in the Green Industry.
7. Apply the principles of landscape design.
8. Identify the components of an irrigation system and apply troubleshooting techniques to address common issues in the landscape.
9. Demonstrate landscape maintenance services including, pruning, turfgrass management, plant installation, and gardening.
10. 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 | | Credit Hours |
|---|--|--------------|
| Select one of the following: ¹ | | 3 |
| MATH-1190 | Algebraic and Quantitative Reasoning | |
| MATH-1410 | Elementary Probability and Statistics I (Or higher 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 | | Credit Hours |
|---------------------|------------------|--------------|
| PST-2950 | Field Experience | 3 |
| Credit Hours | | 3 |

| Third Semester | | Credit Hours |
|--|-----------------------------------|--------------|
| 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.