

HORTICULTURE TECHNOLOGY, A.A.S. - HRT3

Students majoring in Horticulture Technology will learn the art, science, and technical skills necessary to:

1. Grow high-quality plants in greenhouses and gardens.
2. Design attractive, functional and sustainable landscapes.
3. Install whole landscapes including plants, irrigation systems, water features, landscape lighting, and hardscapes.
4. Maintain healthy and pristine lawns, golf courses, athletic fields, and landscapes.

Students will learn the scientific principles and practices of plant growth and development, soils, and pest and pathogen control. Additionally, students will gain substantial hands-on experience operating the latest tools, equipment, and technologies used in the horticulture industry by participating in laboratory activities and field trips.

Graduates of the two-year Horticulture Technology major may pursue supervisory, middle management or technical careers in garden centers, nurseries, greenhouses, landscape operations, golf courses, athletic fields, lawn care companies, tree care companies, and public and private gardens.

Requirements

| Courses | Course Title | Credit Hours |
|--|---|--------------|
| General Education Courses | | |
| Select one of the following Communication/Literature courses ¹ | | 3 |
| ENG 165 | Professional Communications | |
| ENG 101 | English Composition I | |
| ENG 102 | English Composition II | |
| Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) ¹ | | 3 |
| Elective Social/Behavioral Sciences (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) ¹ | | 3 |
| Mathematical Requirement (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) ¹ | | 3 |
| SPC 205 | Public Speaking | 3 |
| Subtotal | | 15 |
| Required Core Subject Areas | | |
| HRT 107 | Woody Ornamentals | 2 |
| HRT 108 | Annuals and Perennials | 2 |
| HRT 110 | Plant Form and Function | 4 |
| or BIO 101 | Biological Science I | |
| HRT 125 | Soils | 4 |
| HRT 141 | Horticulture Pest Control | 4 |
| Subtotal | | 16 |
| Other Courses Required for Graduation | | |
| AGR 101 | Technology and Professionalism in Agriculture | 2 |

| | | |
|------------------------------|-------------------------------------|-----------|
| COL 103 | College Skills | 3 |
| HRT 101 | Introduction to Horticulture | 3 |
| HRT 104 | Landscape Design and Implementation | 3 |
| HRT 121 | Commercial Irrigation | 3 |
| HRT 130 | Greenhouse Production | 3 |
| HRT 133 | Basic Plant Propagation | 2 |
| HRT 153 | Landscape Construction | 3 |
| HRT 200 | Horticulture Business Management | 3 |
| HRT 212 | Commercial Landscape Design | 3 |
| HRT 241 | Turfgrass Management | 3 |
| HRT 254 | Landscape Maintenance | 2 |
| HRT 255 | Urban Tree Care | 3 |
| Select one of the following: | | 3 |
| MGT 120 | Small Business Management | |
| ACC 101 | Accounting Principles I | |
| BUS 101 | Introduction to Business | |
| Subtotal | | 39 |
| Total Hours | | 70 |

¹ Students considering transferring to a 4-year institution should consult with the department head regarding specific transfer pathways.

Graduation Plan

Our semester-by-semester graduation plans will show you when required courses in your major are offered. Following this plan will help you stay on track and graduate on time.

Fall Start

| Course | Title | Hours |
|----------------------|---|-----------|
| First Year | | |
| Fall Semester | | |
| AGR 101 | Technology and Professionalism in Agriculture | 2 |
| COL 103 | College Skills | 3 |
| ENG 165 | Professional Communications ¹ | 3 |
| or ENG 101 | or English Composition I | |
| HRT 101 | Introduction to Horticulture | 3 |
| HRT 107 | Woody Ornamentals | 2 |
| HRT 254 | Landscape Maintenance | 2 |
| Hours | | 15 |

Spring Semester

| | | |
|---|---------------------------------------|---|
| BUS 101 | Introduction to Business ² | 3 |
| HRT 104 | Landscape Design and Implementation | 3 |
| HRT 108 | Annuals and Perennials | 2 |
| HRT 125 | Soils | 4 |
| HRT 133 | Basic Plant Propagation | 2 |
| Elective Social/Behavioral Sciences (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) | | 3 |

Hours **17**



Summer Semester

| | | |
|---|-------------------------|----------|
| HRT 110 | Plant Form and Function | 4 |
| Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) | | 3 |
| Hours | | 7 |

Second Year

Fall Semester

| | | |
|---|---------------------------|-----------|
| HRT 121 | Commercial Irrigation | 3 |
| HRT 141 | Horticulture Pest Control | 4 |
| HRT 153 | Landscape Construction | 3 |
| HRT 241 | Turfgrass Management | 3 |
| Mathematical Requirement (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) ³ | | 3 |
| Hours | | 16 |

Spring Semester

| | | |
|--------------------|----------------------------------|-----------|
| HRT 130 | Greenhouse Production | 3 |
| HRT 200 | Horticulture Business Management | 3 |
| HRT 212 | Commercial Landscape Design | 3 |
| HRT 255 | Urban Tree Care | 3 |
| SPC 205 | Public Speaking | 3 |
| Hours | | 15 |
| Total Hours | | 70 |

¹ If transferring, preference is for ENG 101; may also choose ENG 102, if pre-requisites are satisfied.

² May also choose ACC 101 or MGT 120.

³ Preference is for MAT 170; if transferring, preference is for MAT 120.

Spring Start

| Course | Title | Hours |
|------------------------|--|-----------|
| First Year | | |
| Spring Semester | | |
| COL 103 | College Skills | 3 |
| ENG 165 or ENG 101 | Professional Communications ¹ or English Composition I | 3 |
| HRT 104 | Landscape Design and Implementation | 3 |
| HRT 108 | Annuals and Perennials | 2 |
| HRT 125 | Soils | 4 |
| HRT 133 | Basic Plant Propagation | 2 |
| Hours | | 17 |

Summer Semester

| | | |
|---|-------------------------|----------|
| HRT 110 | Plant Form and Function | 4 |
| Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) | | 3 |
| Hours | | 7 |

Fall Semester

| | | |
|---------|---|---|
| AGR 101 | Technology and Professionalism in Agriculture | 2 |
| BUS 101 | Introduction to Business ² | 3 |
| HRT 101 | Introduction to Horticulture | 3 |

² Horticulture Technology, A.A.S.

| | | |
|---|-----------------------|-----------|
| HRT 107 | Woody Ornamentals | 2 |
| HRT 254 | Landscape Maintenance | 2 |
| Elective Social/Behavioral Sciences (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) | | 3 |
| Hours | | 15 |

Second Year

Spring Semester

| | | |
|---|----------------------------------|-----------|
| HRT 130 | Greenhouse Production | 3 |
| HRT 200 | Horticulture Business Management | 3 |
| HRT 212 | Commercial Landscape Design | 3 |
| HRT 255 | Urban Tree Care | 3 |
| Mathematical Requirement (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) ³ | | 3 |
| Hours | | 15 |

Fall Semester

| | | |
|--------------------|---------------------------|-----------|
| HRT 121 | Commercial Irrigation | 3 |
| HRT 141 | Horticulture Pest Control | 4 |
| HRT 153 | Landscape Construction | 3 |
| HRT 241 | Turfgrass Management | 3 |
| SPC 205 | Public Speaking | 3 |
| Hours | | 16 |
| Total Hours | | 70 |

¹ If transferring, preference is for ENG 101; may also choose ENG 102, if pre-requisites are satisfied.

² May also choose ACC 101 or MGT 120.

³ Preference is for MAT 170; if transferring, preference is for MAT 120.

Summer Start

| Course | Title | Hours |
|---|-------------------------|----------|
| First Year | | |
| Summer Semester | | |
| HRT 110 | Plant Form and Function | 4 |
| Elective Humanities/Fine Arts (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) | | 3 |
| Hours | | 7 |

Fall Semester

| | | |
|-----------------------|--|-----------|
| AGR 101 | Technology and Professionalism in Agriculture | 2 |
| COL 103 | College Skills | 3 |
| ENG 165 or ENG 101 | Professional Communications ¹ or English Composition I | 3 |
| HRT 101 | Introduction to Horticulture | 3 |
| HRT 107 | Woody Ornamentals | 2 |
| HRT 254 | Landscape Maintenance | 2 |
| Hours | | 15 |

Spring Semester

| | | |
|---------|---------------------------------------|---|
| BUS 101 | Introduction to Business ² | 3 |
| HRT 104 | Landscape Design and Implementation | 3 |

| | | |
|---|----------------------------------|-----------|
| HRT 108 | Annuals and Perennials | 2 |
| HRT 125 | Soils | 4 |
| HRT 133 | Basic Plant Propagation | 2 |
| Elective Social/Behavioral Sciences (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) | | 3 |
| Hours | | 17 |
| Second Year | | |
| Fall Semester | | |
| HRT 121 | Commercial Irrigation | 3 |
| HRT 141 | Horticulture Pest Control | 4 |
| HRT 153 | Landscape Construction | 3 |
| HRT 241 | Turfgrass Management | 3 |
| Mathematical Requirement (https://catalog.ptc.edu/student-handbook/advising-registration/general-education-courses/) ³ | | 3 |
| Hours | | 16 |
| Spring Semester | | |
| HRT 130 | Greenhouse Production | 3 |
| HRT 200 | Horticulture Business Management | 3 |
| HRT 212 | Commercial Landscape Design | 3 |
| HRT 255 | Urban Tree Care | 3 |
| SPC 205 | Public Speaking | 3 |
| Hours | | 15 |
| Total Hours | | 70 |

¹ If transferring, preference is for ENG 101; may also choose ENG 102, if pre-requisites are satisfied.

² May also choose ACC 101 or MGT 120.

³ Preference is for MAT 170; if transferring, preference is for MAT 120.

Application and Advising

If you are ready to start your education, there are a few simple steps involved in enrolling at Piedmont Technical College.

Get Started Today (<https://www.ptc.edu/admissions/new-students/>)

Advising Information

The following information provides a guide for advisors who are helping students enroll in this program.

Program Notes

HRT courses should be taken as sequenced in the Graduation Plans because they are only offered in specific semesters. If students deviate from this schedule, they risk delaying course completion and consequently graduation. If students desire to make an adjustment from the graduation plan, they should consult with the Program Director first.

Students considering transferring to a 4-year institution after completing the A.A.S. in agriculture or horticulture should consult with the department head regarding specific transfer pathways.

The following classes are offered in the fall semester: HRT 107, HRT 121, HRT 130, HRT 141, HRT 153, HRT 241, and HRT 254.

Notes About Individual Classes

If a student would like to transfer to a four-year institution, he or she should take ENG 101 for the Communications/Literature requirement, MAT 120 for the Mathematical Requirement, and PSY 201 for the Behavioral Science Elective.

Program Student Learning Outcomes

Purpose Statement

Prepare students for supervisory, middle management and technical positions in horticulture. Promote excellence in teaching, learning, and educational services to ensure that each student has the opportunity to attain her or his fullest potential.

Program Student Learning Outcomes:

1. Propagate and grow marketable plants in commercial plant production settings.
2. Produce attractive and functional landscape designs that meet client goals and expectations.
3. Interpret landscape plans and install plants and other landscape features according to specifications.
4. Maintain healthy and well-manicured lawns, golf courses, athletic fields, and landscapes.
5. Diagnose and provide solutions for biotic and abiotic plant problems utilizing principles of Integrated Pest Management.
6. Demonstrate an understanding of business principles needed to start and run a horticulture business.
7. Visually identify ornamental plants and provide their scientific names, growth habit, and cultural requirements for optimal growth in the landscape.