**Horticulture**

**Science, Technology, Engineering & Mathematics Division**

The Horticulture Certificate program is designed to develop the skills and understanding needed for students to take responsible positions in grounds maintenance, tree and shrub nurseries, wholesale plant growing, landscaping, garden centers and retail greenhouses, golf courses, lawn care, and parks/recreation departments. The certificate will be awarded on completion of all courses and a cooperative work experience.

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| **Course No.** | **Title** | **Credits** |
| HRT\*H101 | Landscape Construction | 4 |
| HRT\*H102 | Woody Plants | 3 |
| HRT\*H103 | Herbaceous Plants | 3 |
| HRT\*H104 | Soil Systems | 3 |
| HRT\*H202 | Landscape Design I† | 3 |
| HRT\*H207 | Landscape Maintenance | 3 |
| HRT\*H222 | Greenhouse Operations and Management | 4 |
| HRT\*H290 | CWE Horticulture Co-op | 3 |
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| Elective | Horticulture†† | 3 |
|  | Total Credit Hours | 29 |

†Prerequisite HRT\*H102-Woody Plants or waiver by coordinator.

††Horticulture Electives
HRT\*H105 Fruit and Vegetable Production

HRT\*H106 Fruit Production

HRT\*H107 Vegetable & Herb Production
HRT\*H115 Turf Management
HRT\*H124 Floral Design I
HRT\*H125 Floral Design II
HRT\*H203 Landscape Design II
HRT\*H204 Computers in Landscape Design
HRT 206: Landscaping Small Properties

HRT\*H208: Landscape Contract Admin.

HRT\*H215 Integrated Pest Management
HRT\*H219 Arboriculture
HRT\*H224 Plant Propagation & Hybridization
HRT\*H240 Nursery Management

HRT\*H250 Hydroponic Production

Program Outcomes

Upon successful completion of all program requirements, graduates will be able to:

1. Identify common trees and shrubs, ground covers, various annuals, biennials, and perennials by botanical and common names, and describe the outstanding characteristics of each; summarize landscape, garden center and greenhouse uses; and know the cultural requirements of these plants.
2. Identify foliage plants commonly used indoors by botanical and common names, state distinguishing characteristics of each, and describe their use and culture in various indoor landscape areas.
3. Control the common weeds, insects, pests and diseases of ornamentals and turf.
4. Select the proper procedures, define the physiological basis, and describe practical applications of the reproduction of plants by asexual and sexual methods.
5. Describe proper design and operation of greenhouse environmental systems, and evaluate their advantages and disadvantages in commercial production.
6. Demonstrate a responsible attitude in relationships with employers, fellow employees, and toward the world of work.
7. Select appropriate techniques for the establishment and management of lawns and utility turf areas.
8. Manage the procedures used in landscape constructions and in the maintenance of small engines.
9. Design flower beds, and mixed borders; place trees and shrubs for a variety of gardens for both residential and commercial properties.
10. Access available resources to incorporate technological innovations.
11. Demonstrate those skills, abilities and values which allow a person to function as a free and responsible citizen.
12. Apply mathematics to calculating area, volume and application rates of fertilizers and pesticides.
13. Evaluate site conditions to design attractive, functional landscapes.