The ARC horticulture program prepares students for self-employment or employment with nurseries, landscape contractors, arborists, park departments, fertilizer and insecticide companies, or as maintenance groundkeepers or horticulture consultants. Students receive a formal education in plant identification: their habits, growth, cultural requirements and landscape use in the climates of northern California as well as a basic knowledge of the tools and equipment used in the landscape and nursery industries. After completing the first year of training, students elect an option in either landscape or nursery practices. The Landscape Industry option builds skills and knowledge in the design and installation of landscape and turf grass systems, irrigation and sprinkler systems, fertilization, pruning, the use of power equipment and the law and regulations for pest control operations. The Nursery Industry option emphasizes plant propagation techniques, greenhouse management, plant merchandising and installation, maintenance and customer relations. Work experience is required.

**Career Opportunities**

The continued growth of suburban residential areas, the growth of gardening as a major leisure time activity, and the demand for park and recreational greenbelt areas all provide challenging opportunities to those who choose careers in horticulture. With the growing interest in protecting and enhancing the environment and the increased demand for park and recreation green belts, employment opportunities for horticulturists look bright. Employment opportunities should grow in both industry and government agencies as environmental research leads to new laws and standards for protecting the environment.

### Landscape Industry

**Requirements for Degree Major:** 33-37 units

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<th>Core Requirements</th>
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<td>HORT 100</td>
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<td>HORT 322</td>
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<td>HORT 326</td>
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**Concentration Requirements**

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<td>HORT 110</td>
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<td>HORT 298</td>
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<td>HORT 320</td>
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<td>HORT 324</td>
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**Recommended Electives:**

ACCT 101; ART 370; BIOL 320; BUS 105; CISC 300; DESGN 100; ENGWR 342; IDES 300.

### Nursery Industry

**Requirements for Degree Major:** 31-35 units

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<th>Core Requirements</th>
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<td>HORT 326</td>
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</table>
Students must also complete the general education graduation requirements for an A.S. degree. See Graduation requirements.

Recommended Electives
ACCT 101; BIOL 320; BUS 105; CISC 300; DESGN 100; ENGWR 342; HORT 110; IDES 300.

General Education Graduation Requirements:
Students must also complete the general education graduation requirements for an A.S. degree. See Graduation requirements.

Requirements for Certificate: 29 units

HORT 100  Plant Diseases and Pests  3 Units
Formerly: HORT 55
Prerequisite: None
Corequisite: HORT 300.
Course Not Transferable UC or CSU
Hours: 36 hours LEC; 54 hours LAB
This course is a study of local plant diseases and pests including weed problems, recognition of symptoms and causes, learn life cycles, host and habitat relationships and methods of control.

HORT 105  Pest Control Licensing for Certification  2 Units
Formerly: HORT 79
Prerequisite: HORT 300 with a grade of “C” or better.
Course Not Transferable UC or CSU
Hours: 36 hours LEC
This course covers the laws and regulations for operators, applicators, and advisors including the study of different pests and recommended control.

HORT 110  Irrigation Design  2 Units
Formerly: HORT 78
Prerequisite: HORT 300 with a grade of “C” or better.
Course Not Transferable UC or CSU
Hours: 36 hours LEC
This course is a study of water hydraulics irrigation equipment inclusive of heads, pipes, pumps, clocks, valves and design which includes preparing plans dealing with measurement, head layout, pipe sizing and specifications.

HORT 140  Advanced Student Projects  2 Units
Formerly: HORT 83
Prerequisite: HORT 300 with a grade of “C” or better.
Course Not Transferable UC or CSU
Hours: 108 hours LAB
This course provides the student with an opportunity to pursue advanced projects which are selected by the department. May be taken twice for credit.

HORT 298  Work Experience in Horticulture  1-4 Units
Formerly: HORT 98
Prerequisite: HORT 300.
Course Not Transferable UC or CSU
Hours: 18 hours LEC; 60-225 hours LAB
This course provides the student with supervised work experience with nurseries, landscape contractors, parks, state, county, federal agencies, and other horticultural enterprises. It is designed to provide developmental experience in horticulture.

HORT 300  Introduction to Horticulture  3 Units
Formerly: HORT 1
Prerequisite: None
Course Transferable to CSU
Hours: 54 hours LEC
This course is an overview of the practices involved in commercial nursery operations, including basic garden practices. AA/AS area A.

HORT 302  Soils and Plant Nutrition  3 Units
Formerly: HORT 2
Prerequisite: None
Corequisite: HORT 300.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB
This course is a study of the nature and properties of soils and their relationship to plant needs; water and irrigation problems and erosion control, composition, value and use of fertilizer materials, conditioners and agricultural minerals. (CAN REC 8)

HORT 305  Plant Materials I  3 Units
Formerly: HORT 51
Prerequisite: None
Corequisite: HORT 300.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB
This course is a study of the identification, habits of growth, cultural requirements and uses of ornamental woods and herbaceous plants used in the California landscape. Emphasis will be concentrated on those plants best seen in the fall and winter months and frequently used in the nursery and landscape trade.

HORT 306  Plant Materials II  3 Units
Formerly: HORT 52
Prerequisite: None
Corequisite: HORT 300.
Course Transferable to UC/CSU
Hours: 36 hours LEC; 54 hours LAB
This course is the study of the identification, habits of growth, cultural requirements and uses of ornamental woody and herbaceous plants used in the California landscape. Emphasis will be concentrated on those plants best seen in the spring and summer months and frequently in the nursery and landscape trade.

HORT 310  Nursery Practices  3 Units
Formerly: HORT 60
Prerequisite: HORT 300 with a grade of “C” or better.
Course Transferable to CSU
Hours: 36 hours LEC; 54 hours LAB
This course is an overview of the practices involved in commercial nursery operations, including basic garden practices.
HORT 312  Plant Propagation  3 Units  
Formerly: HORT 70  
Prerequisite: HORT 300 with a grade of “C” or better.  
Course Transferable to CSU  
Hours: 36 hours LEC; 54 hours LAB  
This course is a study of the fundamental principles involved in propagating plants including identification of facilities, equipment and techniques utilized in plant propagation.

HORT 314  Greenhouse Operations  3 Units  
Formerly: HORT 80  
Prerequisite: HORTiculture 300 with a grade of “C” or better.  
Course Transferable to CSU  
Hours: 36 hours LEC; 54 hours LAB  
This course is a study of the problems and practices in the management of greenhouses, including the production of specific greenhouse crops.

HORT 320  Landscape Construction  3 Units  
Formerly: HORT 75  
Prerequisite: HORT 300 with a grade of “C” or better.  
Course Transferable to CSU  
Hours: 36 hours LEC; 54 hours LAB  
This course develops the skill and knowledge needed in carpentry, masonry, concrete, and irrigation; plan reading, estimating and bidding in the landscape trades.

HORT 322  Landscape Graphics  3 Units  
Formerly: HORT 76  
Prerequisite: HORT 300 with a grade of “C” or better.  
Course Transferable to CSU  
Hours: 36 hours LEC; 54 hours LAB  
This course is the study of technical drafting skills and freehand graphics including line quality, lettering and organization as it relates to landscape design. The use of a variety of graphic skills and media will be developed along with an introduction to three-dimensional sketching.

HORT 324  Landscape Maintenance  3 Units  
Formerly: HORT 81  
Prerequisite: HORT 300 with a grade of “C” or better.  
Course Transferable to CSU  
Hours: 36 hours LEC; 54 hours LAB  
This course is a study of landscape maintenance of residential and commercial landscapes, parks, highways and public buildings. Development of skills including planting, pruning, watering, fertilizing, pest control and power equipment operation and maintenance.

HORT 326  Landscape Design  3 Units  
Formerly: HORT 86  
Prerequisite: HORT 322 with a grade of “C” or better.  
Course Transferable to CSU  
Hours: 36 hours LEC; 54 hours LAB  
This course is a study of the basic principles and elements of landscape design related to the problem solving process, design theory and composition, functional and design uses of landscape materials, and client and maintenance criteria.

HORT 328  Turf Grass Management  3 Units  
Formerly: HORT 85  
Prerequisite: HORTiculture 300 with a grade of “C” or better.  
Course Transferable to CSU  
Hours: 36 hours LEC; 54 hours LAB  
This course is a study of the maintenance and management of turf grass areas including golf greens, athletic fields, parks, as well as for home lawns.