

# ENVIRONMENTAL HORTICULTURE AND DESIGN

## Program Description

Environmental Horticulture & Design is a broad field encompassing the functional, aesthetic, and environmentally sound creation and care of our landscapes. Students learn to combine principles of environmental design, construction, and maintenance practices for urban, rural, and natural landscapes. The green industry is one of the largest employers in the United States.

The Environmental Horticulture & Design department offers an Associate in Science degree and two Certificates of Achievement. Students may also take courses in preparation for transfer to four-year institutions where they may continue their studies in horticulture, landscape architecture, and other related disciplines. We also encourage people currently working in the field to attend classes to supplement or update their knowledge and to work toward certification in the field. For the homeowner or the landscape professional, short courses from two to four weeks are available.

Learn more about the program on the [Environmental Horticulture and Design website](#).

## Program Learning Outcomes

- Students will demonstrate skills necessary to design residential landscapes.
- Students will be able to identify plant material.

## Career Opportunities

Examples of career opportunities include: arboriculture, environmental management, historic garden and estate management, horticultural consulting and fine gardening, horticultural therapy, interiorscaping, landscape construction, landscape design, and park and golf course management.

## Award Type(s)

- AS = Associate in Science Degree
- CA = Certificate of Achievement

## Units Required

- Major: 65
- Certificate(s): 18-65

## Additional Information

**Note:** Partial or full general education waivers may be possible for people possessing an existing degree from an accredited institution or having existing college credits.

## Associate Degree Requirements

Code	Title	Units
<b>English Proficiency</b>		
Select one of the following:		
ENGL 1A	COMPOSITION & READING	5
ENGL 1AH	HONORS COMPOSITION & READING	5

ESLL 26	ADVANCED COMPOSITION & READING	5
or equivalent		
<b>Mathematics Proficiency</b>		
College-level math course at or above the level of Intermediate Algebra		

A minimum of 90 units is required<sup>1</sup> to include:

- Completion of one of the following general education patterns: Foothill General Education, CSU General Education Breadth Requirements or the Intersegmental General Education Transfer Curriculum (IGETC)
- Core courses (38 units)
- Support courses (27 units)

<sup>1</sup> Additional elective course work may be necessary to meet the 90-unit minimum requirement for the associate degree.

**Note:** All courses pertaining to the major must be taken for a letter grade. In addition, a grade of "C" or better is required for all core and support courses used for the degree or certificates.

## Core and Support Courses

Code	Title	Units
<b>Core Courses</b>		
HORT 10	ENVIRONMENTAL HORTICULTURE & THE URBAN LANDSCAPE	3
HORT 15	ORIENTATION TO ENVIRONMENTAL HORTICULTURE	4
HORT 21	PLANT MATERIALS I	3
HORT 22	PLANT MATERIALS II	3
HORT 30	HORTICULTURAL PRACTICES: SOILS	3
HORT 40	LANDSCAPE DESIGN: GRAPHIC COMMUNICATION	4
HORT 52C	HORTICULTURE PRACTICES: PLANT INSTALLATION & MAINTENANCE	4
HORT 54A	LANDSCAPE CONSTRUCTION: GENERAL PRACTICES	5
HORT 54B	LANDSCAPE CONSTRUCTION: TECHNICAL PRACTICES	3
HORT 54C	LANDSCAPE CONSTRUCTION: IRRIGATION PRACTICES	3
HORT 60B	LANDSCAPE DESIGN: THEORY	3
<b>Support Courses</b>		
<i>Plant Material Specialization</i>		
Select at least two units from the following:		2
HORT 23	PLANT MATERIALS: CALIFORNIA NATIVE PLANTS	
HORT 24	PLANT MATERIALS: GROUND COVERS & VINES	
HORT 25	PLANT MATERIALS: BAMBOOS & PALMS	
HORT 26	PLANT MATERIALS: PERENNIALS & ANNUALS	
HORT 90Y	CACTI & SUCCULENTS	
HORT 90Z	ORNAMENTAL GRASSES	
<i>Plant Production Specialization</i>		
Select at least eight units from the following:		8
HORT 31	HORTICULTURAL PRACTICES: PLANT PROPAGATION	
HORT 80A	ENVIRONMENTAL HORTICULTURE FALL SKILLS	

HORT 80B	ENVIRONMENTAL HORTICULTURE WINTER SKILLS
HORT 80C	ENVIRONMENTAL HORTICULTURE SPRING SKILLS
HORT 80D	ENVIRONMENTAL HORTICULTURE SUMMER SKILLS

*Horticultural Electives*

Select at least 14 units from the following:		14
HORT 45	VECTORWORKS FOR LANDSCAPE DESIGNERS	
HORT 52G	HORTICULTURAL PRACTICES: TURFGRASS MANAGEMENT	
HORT 52H	HORTICULTURE PRACTICES: INTEGRATED PEST MANAGEMENT	
HORT 52M	URBAN FORESTRY	
HORT 54D	LANDSCAPE CONSTRUCTION: APPLIED PRACTICES	
HORT 54J	HORTICULTURAL PRACTICES: INSECT IDENTIFICATION & DISORDERS	
HORT 54K	HORTICULTURAL PRACTICES: WEED IDENTIFICATION & ECOLOGY	
HORT 54L	HORTICULTURAL PRACTICES: DISEASE IDENTIFICATION & PATHOLOGY	
HORT 55A	GREEN INDUSTRY MANAGEMENT: BUSINESS PRACTICES	
HORT 60C	LANDSCAPE DESIGN: IRRIGATION	
HORT 60D	LANDSCAPE DESIGN: PLANTING	
HORT 60F	LANDSCAPE DESIGN: PROCESS	
HORT 60G	LANDSCAPE DESIGN: INTERMEDIATE COMPUTER APPLICATIONS	
HORT 60J	SKETCHUP FOR LANDSCAPE DESIGNERS	
HORT 60L	VECTORWORKS 3-D	
SPAN 110	ELEMENTARY SPANISH CONVERSATION I	

*Short Course Specialization*

Select at least three units from the following:		3
HORT 90C	GARDEN PONDS & WATER FEATURES	
HORT 90D	HERBS: IDENTIFICATION, USE & FOLKLORE	
HORT 90E	HORTICULTURAL & LANDSCAPE PHOTOGRAPHY	
HORT 90F	LANDSCAPE DESIGN: BASIC PRINCIPLES	
HORT 90G	LANDSCAPE DESIGN FORUM	
HORT 90H	LANDSCAPE LIGHTING	
HORT 90I	LANDSCAPE SUSTAINABILITY PRACTICES	
HORT 90K	LANDSCAPING WITH EDIBLES	
HORT 90L	PLANT PROPAGATION: BASIC SKILLS	
HORT 90M	PLANT NUTRITION & FERTILIZATION	
HORT 90P	PRUNING: BASIC SKILLS	
HORT 90Q	RESIDENTIAL IRRIGATION SYSTEMS	
HORT 90S	SUSTAINABLE INTEGRATED PEST MANAGEMENT (IPM)	
HORT 90U	LANDSCAPE DESIGN: PERSPECTIVE SKETCHING	
HORT 90V	SUSTAINABLE ORGANIC GARDENING	
HORT 90X	WATER CONSERVATION IN LANDSCAPE DESIGN	
HORT 91A	COMPOSTING THEORY & TECHNIQUES	
HORT 91C	CONSTRUCTION COST ESTIMATING	
HORT 91E	COMMUNITY GARDENING	
HORT 91F	FINE GARDENING	

*Industry Certification Courses<sup>1</sup>*

HORT 80E	LANDSCAPE CERTIFICATION: COMMON CORE
HORT 80F	LANDSCAPE CERTIFICATION: SOFTSCAPE INSTALLATION
HORT 80G	LANDSCAPE CERTIFICATION: HARDSCAPE INSTALLATION
HORT 80I	LANDSCAPE CERTIFICATION: IRRIGATION INSTALLATION
HORT 80J	LANDSCAPE CERTIFICATION: TURF MANAGEMENT
HORT 80K	LANDSCAPE CERTIFICATION: ORNAMENTAL MAINTENANCE

<b>Total Units</b>	<b>65</b>
--------------------	-----------

<sup>1</sup> No minimum required; these courses may be used as support courses for the degree or certificate with approval of program director.

## Certificate Requirements

### Certificate of Achievement in Environmental Horticulture and Design

- Units: 65

The certificate of achievement is awarded upon completion of the core and support courses. General education courses are not required.

### Certificate of Achievement in Landscape Technician

- Units: 18

Code	Title	Units
<b>Core Courses</b>		
HORT 80A	ENVIRONMENTAL HORTICULTURE FALL SKILLS	2
HORT 80B	ENVIRONMENTAL HORTICULTURE WINTER SKILLS	2
HORT 80C	ENVIRONMENTAL HORTICULTURE SPRING SKILLS	2
HORT 80D	ENVIRONMENTAL HORTICULTURE SUMMER SKILLS	2
<b>Support Courses</b>		
Select 10 units from the following:		10
HORT 10	ENVIRONMENTAL HORTICULTURE & THE URBAN LANDSCAPE	
HORT 15	ORIENTATION TO ENVIRONMENTAL HORTICULTURE	
HORT 21	PLANT MATERIALS I	
HORT 22	PLANT MATERIALS II	
HORT 23	PLANT MATERIALS: CALIFORNIA NATIVE PLANTS	
HORT 24	PLANT MATERIALS: GROUND COVERS & VINES	
HORT 25	PLANT MATERIALS: BAMBOOS & PALMS	
HORT 26	PLANT MATERIALS: PERENNIALS & ANNUALS	
HORT 30	HORTICULTURAL PRACTICES: SOILS	
HORT 31	HORTICULTURAL PRACTICES: PLANT PROPAGATION	
HORT 40	LANDSCAPE DESIGN: GRAPHIC COMMUNICATION	
HORT 45	VECTORWORKS FOR LANDSCAPE DESIGNERS	
HORT 52C	HORTICULTURE PRACTICES: PLANT INSTALLATION & MAINTENANCE	

HORT 52G	HORTICULTURAL PRACTICES: TURFGRASS MANAGEMENT
HORT 52H	HORTICULTURE PRACTICES: INTEGRATED PEST MANAGEMENT
HORT 52M	URBAN FORESTRY
HORT 54A	LANDSCAPE CONSTRUCTION: GENERAL PRACTICES
HORT 54B	LANDSCAPE CONSTRUCTION: TECHNICAL PRACTICES
HORT 54C	LANDSCAPE CONSTRUCTION: IRRIGATION PRACTICES
HORT 54D	LANDSCAPE CONSTRUCTION: APPLIED PRACTICES
HORT 54J	HORTICULTURAL PRACTICES: INSECT IDENTIFICATION & DISORDERS
HORT 54K	HORTICULTURAL PRACTICES: WEED IDENTIFICATION & ECOLOGY
HORT 55A	GREEN INDUSTRY MANAGEMENT: BUSINESS PRACTICES
HORT 60B	LANDSCAPE DESIGN: THEORY
HORT 60C	LANDSCAPE DESIGN: IRRIGATION
HORT 60D	LANDSCAPE DESIGN: PLANTING
HORT 60F	LANDSCAPE DESIGN: PROCESS
HORT 60G	LANDSCAPE DESIGN: INTERMEDIATE COMPUTER APPLICATIONS
HORT 60J	SKETCHUP FOR LANDSCAPE DESIGNERS
HORT 90C	GARDEN PONDS & WATER FEATURES
HORT 90D	HERBS: IDENTIFICATION, USE & FOLKLORE
HORT 90E	HORTICULTURAL & LANDSCAPE PHOTOGRAPHY
HORT 90F	LANDSCAPE DESIGN: BASIC PRINCIPLES
HORT 90G	LANDSCAPE DESIGN FORUM
HORT 90H	LANDSCAPE LIGHTING
HORT 90I	LANDSCAPE SUSTAINABILITY PRACTICES
HORT 90K	LANDSCAPING WITH EDIBLES
HORT 90L	PLANT PROPAGATION: BASIC SKILLS
HORT 90M	PLANT NUTRITION & FERTILIZATION
HORT 90P	PRUNING: BASIC SKILLS
HORT 90Q	RESIDENTIAL IRRIGATION SYSTEMS
HORT 90S	SUSTAINABLE INTEGRATED PEST MANAGEMENT (IPM)
HORT 90U	LANDSCAPE DESIGN: PERSPECTIVE SKETCHING
HORT 90V	SUSTAINABLE ORGANIC GARDENING
HORT 90X	WATER CONSERVATION IN LANDSCAPE DESIGN
HORT 90Y	CACTI & SUCCULENTS
HORT 90Z	ORNAMENTAL GRASSES
HORT 91A	COMPOSTING THEORY & TECHNIQUES
HORT 91C	CONSTRUCTION COST ESTIMATING
HORT 91E	COMMUNITY GARDENING
HORT 91F	FINE GARDENING
SPAN 110	ELEMENTARY SPANISH CONVERSATION I

#### Industry Certification Courses <sup>1</sup>

HORT 80E	LANDSCAPE CERTIFICATION: COMMON CORE
HORT 80F	LANDSCAPE CERTIFICATION: SOFTSCAPE INSTALLATION

HORT 80G	LANDSCAPE CERTIFICATION: HARDSCAPE INSTALLATION
HORT 80I	LANDSCAPE CERTIFICATION: IRRIGATION INSTALLATION
HORT 80J	LANDSCAPE CERTIFICATION: TURF MANAGEMENT
HORT 80K	LANDSCAPE CERTIFICATION: ORNAMENTAL MAINTENANCE

**Total Units** **18**

<sup>1</sup> No minimum required; these courses may be used for the certificate with approval of program director.