

ECOLOGICAL HORTICULTURE, CERTIFICATE OF ACHIEVEMENT

This certificate prepares students to reduce the environmental impact of built landscapes by applying ecological principles to their work in landscape design, installation, and management. Ecological Horticulture reduces the use of energy and water, reduces pollution of water and air, nurtures soil, reduces the carbon footprint, and enhances wildlife habitat. Students will be able to successfully incorporate locally native plants in landscape gardens and ecological restoration projects. This certificate complements other Certificates of Achievement in Landscape Irrigation, Landscape Pest Management, and Tree Care Specialist.

Upon successful completion of the program, students will be able to:

- Identify plant communities of Monterey County and at least 25 species native to California used in habitat restoration and functional landscaping.
- Explain the impact of landscape and nursery operations on air and water quality, energy and water consumption, wildlife habitat loss or gain, and carbon emissions.
- Discover, identify, monitor, assess and clearly communicate the threat of at least 3 invertebrate species, 1 vertebrate species, 5 invasive weedy plants, 2 biotic diseases, and 3 abiotic factors affecting plant success, in horticultural and restoration settings.
- Describe the inorganic and organic components in soil, determine soil texture, and identify practices that support the development of soil suitable for horticultural purposes.

Code	Title	Units
Required Core		
BIOL 31	Introduction to Environmental Science	3
HORT 51	Introduction to Horticulture I	3
HORT 52	Introduction to Horticulture II	3
HORT 64	Growing and Using California Native Plants	3
Total Units		12