



# Horticulture, Sustainable Irrigation and Water Management Technology Certificate

This certificate concentrates on those courses that develop the knowledge, skills, and attitudes essential to designing, installing, and managing water-efficient irrigation systems compliant with current California state and local ordinances. Students can become Qualified Water Efficient Landscaper (QWEL) certified through this certificate program. QWEL is an EPA WaterSense Partnership program.

**Total Units: 14.5-18**

## First Year

### Semester 1

**3 Units**

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>HORT 300</b> <sup>Z</sup> Introduction to Horticulture	3		F, S

<sup>Z</sup> At least one section of this course is offered with free textbooks and is labeled as zero textbook costs (ZTC). If it is a GE area class or elective, there may be several ZTC offerings to fulfill the GE requirement. Use the Free Textbook filter to find these courses. Learn more on the [ZTC page of the college website](#).

### Semester 2

**6 Units**

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>HORT 302</b> <sup>1</sup> <sup>Z</sup> Soils, Soil Management, and Plant Nutrition	3	HORT 300 or PLTS 300	S
<b>HORT 350</b> <sup>Z</sup> Landscape Irrigation	3	HORT 300; Advisory: HORT 340	S(odd year)

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<sup>1</sup> Also listed as PTLS 310.

## Year 2

### Semester 3

**2 Units**

COURSE	UNITS	PRE-REQS <sup>^</sup>	SEMESTERS OFFERED*
<b>HORT 351</b> <sup>Z</sup> Drip and Subsurface Irrigation	2	HORT 300; Advisory: HORT 340	F(odd year)

## Career

### Options/Outlook:

Supervisors of Landscaping, Lawn Service, and Groundskeeping  
Workers directly supervise and coordinate activities of workers engaged in landscaping or groundskeeping activities. Work may involve reviewing contracts to ascertain service, machine, and workforce requirements; answering inquiries from potential customers regarding methods, material, and price ranges; and preparing estimates according to labor, material, and machine costs.

### A sample of reported job titles:

Field Manager, Golf Course  
Superintendent, Grounds Crew Supervisor, Grounds Foreman, Grounds Maintenance Supervisor, Grounds Manager, Grounds Supervisor, Groundskeeper Supervisor, Landscape Manager, Landscape Supervisor

### Projected job openings in California (2020-2030):

2,550

### Projected growth in California (2020-2030):

12% growth

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## Semester 4

3.5-7 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
<b>HORT 353</b> <b>Z</b> Sustainable Water Management	3	HORT 350; Advisory: HORT 300	S
<b>HORT 498</b> <b>Z</b> Work Experience in Horticulture	0.5-4		F(O,P), S(O), Su(O)

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^You must have passed the prerequisite course(s) with a "C" or better; Corequisite must be taken during the same semester; Advisory means it is recommended but not required to enroll in the course.

\*(O) = online available (P) = partially online

## Median Salary in California (2021):

\$59,380/yr

## Source:

<https://www.onetonline.org/link/summary/37-1012.00>

## Honors option:

The CRC Honors Program is designed specifically for academically accomplished students and for students with the potential for high achievement. Students who complete 15 units or more in honors-designated courses will earn special recognition as an Honors Scholar, a distinction that may entitle the student to guaranteed transfer and scholarship opportunities at select transfer colleges and universities.

## About this program map:

This program map represents one possible pathway to complete the program. Please see a counselor to create an education plan customized to meet your needs. This map is not a guarantee of course availability or financial aid applicability.

## Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs page](#) of the college website.