CERTIFICATE IN WATER EFFICIENCY MANAGEMENT

This certificate prepares students for entry-level careers in water use efficiency and conservation. After completing the program, students may find employment as a specialist in water supply, water efficiency, program conservation, conservation outreach, natural resources, or environmental protection. Those already employed in public works, construction, landscaping, municipal administration, water distribution/treatment, or facilities oversight and planning are encouraged to complete this certificate to complement their knowledge and potentially increase employability, wages, and promotion opportunities. Students are expected to complete several industry certifications throughout the program including the California State Water Resources Control Board (SWRCB) D-1 Water Distribution Operator's Certificate examination and the T-1 Water Treatment Operator's Certificate examination as well as the California/Nevada American Water Works Association (AWWA) Grade 1 and 2 Water Use Efficiency Practitioner Certification exams.

Learning Outcomes

Certificate of Achievement Level Student Learning Outcomes

Students completing the Water Efficiency Management Certificate of Achievement will:

1. Collect, interpret, and analyze water use data; calculate possible water savings; recommend ways business, agriculture, municipalities, and consumers can save water; and analyze implemented programs to determine if an agency is meeting usage goals.
2. Adhere to water conservation regulations, implement water conservation projects, and promote conservation practices and regulations in the region.

Requirements

Code	Title	Units
Required courses:		
WATR 150	Introduction to Water Systems	3
WATR 162	Water Use Efficiency I	3
WATR 164	Water Use Efficiency II	3
BIOL 145	Environmental Science	3
PUB 165	Environmental Management	3
COMM C1004	Interpersonal Communication	3
or COMM C1004H	Interpersonal Communication - Honors	
Complete the following math course:		
MATH 144	Technical Mathematics	5
Students may substitute a higher level mathematics course		
Complete one (1) of the following courses:		
BUS 152	Business Communications	3
ITIS 130	Microcomputer Applications I	4
PUB 159	Urban Forest Management Planning	3
PUB 163	Turf and Landscape Management	3
WATR 151	Water Resources and Distribution I	3
WATR 156	Water Treatment I	3
Total Units		**26-27**

Curriculum Map

1-Year Curriculum Map Example

This map represents one possible pathway through the program and is only for reference.

*It is highly recommended that you make an appointment (https://www.citruscollege.edu/stdntsrv/counsel/Pages/ApptSchedule.aspx) to create a customized education plan that fits your needs.

First Year		
Fall Term 1		**Units**
MATH 144	Technical Mathematics	5
WATR 150	Introduction to Water Systems	3
WATR 162	Water Use Efficiency I	3
	Units	**11**
Winter Term 1		
BIOL 145	Environmental Science	3
	Units	**3**
Spring Term 1		
BUS 152 or ITIS 130 or PUB 159 or PUB 163 or WATR 151 or WATR 156	Business Communications or Microcomputer Applications I or Urban Forest Management Planning or Turf and Landscape Management or Water Resources and Distribution I or Water Treatment I	3-4
SPCH 100 or SPCH 100H	Interpersonal Communication or Interpersonal Communication - Honors	3
WATR 164	Water Use Efficiency II	3
	Units	**9-10**
Summer Term 1		
PUB 165	Environmental Management	3
	Units	**3**
	Total Units	**26-27**

Career Information

Career Opportunities

There are a variety of careers you can do with this major.

To explore more about this major, schedule an appointment (https://www.citruscollege.edu/studentservices/supportservices/career/counselingappointments.html) with a career counselor.