

A.S. IN WATER EFFICIENCY MANAGEMENT

This degree prepares students for 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 degree to complement their knowledge and 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

A.S. Degree Level Student Learning Outcomes

Students completing the Water Efficiency Management A.S. Degree 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

This degree requires meeting the Citrus College General Education and proficiency requirements combined with successful

completion (grades of "C" and above) of the following major 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
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

Code	Title	Units
WATR 151	Water Resources and Distribution I	3
WATR 156	Water Treatment I	3

Total Units **18-19**

Curriculum Map

2-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/stdntsrvcounsel/Pages/ApptSchedule.aspx>) to create a customized education plan that fits your needs.

Note: Substitute ENGL 101E (5 units) may be needed based on placement.

Course	Title	Units
Fall Term 1		
WATR 150	Introduction to Water Systems	3
WATR 162	Water Use Efficiency I	3
WATR 156	Water Treatment I	3
MATH 144	Technical Mathematics	5
Units		14
Winter Term 1		
SPCH 100 or SPCH 100H	Interpersonal Communication or Interpersonal Communication - Honors	3
Units		3
Spring Term 1		
WATR 153	Water Resources and Distribution II	3
WATR 157	Water Treatment II	3
WATR 164	Water Use Efficiency II	3
WATR 151	Water Resources and Distribution I	3
Units		12
Summer Term 1		
PUB 165	Environmental Management	3
BIOL 145	Environmental Science	3
Units		6
Fall Term 2		
PUB 160	Public Administration	3
ITIS 130	Microcomputer Applications I	4
ENGL 101 or ENGL 101H	Reading and Composition or Reading and Composition - Honors	4
ANTH 212 & 212L	Introduction to Physical Anthropology and Introduction to Physical Anthropology Lab	4
Units		15
Winter Term 2		
PUB 166	Supervision in Public Works	3
HIST 107 or HIST 107H or HIST 108 or HIST 108H or HIST 160 or POLI 103 or POLI 103H	History of the United States before 1877 or History of the United States before 1877 - Honors or History of the United States since 1877 or History of the United States since 1877 - Honors or History of Women in the United States or American Government and Politics or American Government and Politics - Honors	3
Units		6
Spring Term 2		
ETHN 101 or ETHN 116	Introduction to Ethnic Studies or Introduction to Chicano/Latino Studies	3

Course	Title	Units
ARCH 250	History of Architecture: Prehistory to Mannerism	3
or ARCH 251	or History of Architecture: Baroque to the Present Day	
or ART 100	or Art History - Fundamentals of Global Art History	
or ART 105	or Art History - Topics in Contemporary Art	
or ART 108	or History of Photography	
or ART 110	or Introduction to the Visual Arts	
or ART 199	or Motion Picture Appreciation	
or ART 199H	or Motion Picture Appreciation - Honors	
or DANC 102	or History of Dance	
or MUSE 113	or History of Rock and Roll	
or THEA 101	or Introduction to Theatre Arts	
or THEA 101H	or Introduction to Theatre Arts - Honors	
ENGL 290	Ethnic Voices in Film	3
or ENGL 293	or Children's Literature	
or ENGL 293H	or Children's Literature - Honors	
or ENGL 298	or Literature of the Bible	
or KIN 166	or American Food And Culture: Global Origins, History,	
or PHIL 101	and Current Impacts	
or SOC 130	or Great Religions of the World	
	or Introduction to LGBTQ Studies	
Units		9
Total Units		65

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/stdntsrvtcenter/Pages/ApptSchedule.aspx>) with a career counselor.