

WATER TECHNOLOGY EDUCATION, CERTIFICATE OF ACHIEVEMENT (C)

Overview

The Water Science Certificate Program is designed to serve those people employed or interested in employment in the water and/or wastewater fields and those who desire to upgrade their skills and/or receive certification from the State of California, the American Water Works Association, or the California Water Environment Association.

For further information, students should contact the Counseling Center at 965-0581, ext. 2285, or the Career Technical Education Office, ext. 2721.

To receive the Certificate of Achievement in any of the program options, students must complete the required core courses for that option, one additional course from the Water Science elective list and one course from the elective support course list.

Requirements

Certificate of Achievement Requirements

Complete all Department Requirements for the Certificate of Achievement with a cumulative grade point average (GPA) of 2.0 or better. Candidates for a Certificate of Achievement are required to complete at least 20% of the department requirements through SBCC.

Code	Title	Units
Department Requirements		
COMP 101	Introduction to Computer Applications	4
WTRS 101 or WTRS 110	Water Distribution Systems Basic Water Treatment	3
WTRS 103	Pumps And Motors; Operation And Maintenance	3
WTRS 105	Water Science Chemistry And Bacteriology	3
WTRS 113	Water And Wastewater Hydraulics	3
WTRS 117 or MATH 095	Water and Wastewater Calculations Elementary Algebra	3-5
Complete two courses from the following:		5-6
ERTH/GEOG 171	Introduction To Geographic Information Systems And Maps	
WTRS 101	Water Distribution Systems ¹	
WTRS 102	Water Systems Instrumentation And Controls	
WTRS 106	Groundwater Production And Protection	
WTRS 110	Basic Water Treatment ¹	
WTRS 112	Water Quality Protection And Cross Connection Control	
WTRS 114	Advanced Wastewater Treatment	
WTRS 116	Water And Wastewater Management/ Supervision	
Total Units		24.00-27.00

¹ WTRS 101 Water Distribution Systems and WTRS 110 Basic Water Treatment can only satisfy the core requirement or the elective requirement, not both.

Learning Outcomes

1. Become familiar with state and federal regulations for water and wastewater treatment
2. Apply mathematical problem solving techniques to water/wastewater problems.
3. Use scientific methods to discover, analyze and resolve water/wastewater issues.
4. Become knowledgeable about processes and equipment used in water treatment, water distribution, waste water treatment and waste water collection.
5. Learn the principles of managing a water/wastewater utility.

Recommended Sequence

Make an appointment with your SBCC academic counselor through Starfish to create a Student Education Plan that reflects a recommended course sequence for this program that is tailored to your individual needs.

How to schedule an Academic Counseling appointment (<https://www.sbcc.edu/counselingcenter/counselingappointments.php>).