



Water/Wastewater Technology Certificate

2018–2019

DESCRIPTION:

The Water/Wastewater Technology Certificate applies the principles of science, math, technology, engineering, communications, economics, management, and law to ensure water quality and to sustainably manage water as a resource to protect the public’s health. This certificate is designed to serve the educational needs of employees who work in water and/or wastewater treatment, such as those employed with municipalities or in industry. This certificate will also provide a strong educational foundation for those students who have an interest in entering an occupation in water or wastewater treatment. The coursework in this certificate program will help to students prepare to take the state water or wastewater treatment operator exams. For more information, see csc.edu/essh.

ADMISSION REQUIREMENTS:

This is a non-selective, open-admission program, and can be started in any semester.

ONGOING REQUIREMENTS:

If planning on completing the A.A.S. in ESSH, students enrolled in the Water/Wastewater Technology Certificate program may consider taking higher level math or chemistry courses required for that or other degrees.

OPPORTUNITIES FOR GRADUATES:

Career:

The demand for water and wastewater treatment technicians capable of performing tasks in this field is increasing. Jobs in water and wastewater careers are generally in municipalities (cities or villages) and counties, but opportunities also exist with industries that use and treat water or wastewater. Job settings include water and wastewater treatment facilities, water testing labs, home water treatment system companies, regulatory agencies, manufacturing, and industrial services.

Transfer:

Students who complete the Water/Wastewater Technology Certificate will have most courses apply to the Environmental Science, Safety, and Health A.A.S. or Civil Engineering Technology A.A.S. degrees.

CERTIFICATE REQUIREMENTS (WATER/WASTEWATER TECHNOLOGY CERTIFICATE):**FIRST SEMESTER**

Course	Term	Credits	Milestones/Progress Check
ENGL 1100 Composition I	AU/SP/SU	3	
MATH1025 Quantitative Literacy	AU/SP/SU	3	
CHEM 0100 Intro to Chemistry	AU/SP/SU	4	
ESSH 1101 Intro to Environ. Science, Safety & Health	AU/SP/SU	3	
ESSH 2240 Environmental Hydrology	AU	3	
Semester Credits		16	

SECOND SEMESTER

Course	Term	Credits	Milestones/Progress Check
ESSH 1140 Industrial/Municipal Pollution Control	SP	3	<ul style="list-style-type: none"> • Successful completion of ESSH 1650, 1700 or 2520 results in an OSHA credential.
CIVL 2210 Principles of Hydraulics	AU	2	
Select one: ESSH 1650 OSHA 30 Hr Construction Safety & Health, ESSH 1700 OSHA 30 Hr Gen. Industry Safety & Health, or ESSH 2520 Health & Safety Training for Haz Waste Op.	AU/SP/SU	2	
ESSH 2230 Wastewater Treatment Techniques	AU	2	
ESSH 2530 Applied Environmental Engineering	SP	2	
Semester Credits		11	

THIRD SEMESTER

Course	Term	Credits	Milestones/Progress Check
ESSH 2220 Drinking Water Treatment	SU	2	
CIVL 2230 Public Utility Systems	AU	2	
ITST 1101 Industrial Applications and Software or CSCI1101 Computer Concepts & Apps	AU/SP/SU	2 or 3	
Semester Credits		6-7	
Total		33-34	

AU: Autumn Semester/SP: Spring Semester/SU: Summer Semester
 Requirements subject to change.