# Water and Wastewater Operations, Certificate of Completion

The Certificate of Completion in Water and Wastewater Operations teaches students the principles and practices of operating water and wastewater treatment facilities, covering various physical, chemical, and biological treatment methods. The program provides students the opportunity to gain skills in water quality testing, regulatory compliance, troubleshooting, communication, collaboration, and problem-solving. The program equips students to operate treatment facilities safely and effectively, ensuring the provision of clean and safe water to communities while protecting the environment.

### **Program Requirements**

Code	Title	Credit
		Hours
Total Credit Hours		30
Discipline Core Requirements		24
		Credits
ENGL 1010	Introduction to Academic Writing CC	3
or ENGH 1005	Literacies and Composition Across Contexts CC	
MATH 1050	College Algebra QL	4
ENVT 1200	Environmental Worker Safety	3
CHEM 1210	Principles of Chemistry I PP	4
CHEM 1215	Principles of Chemistry I Laboratory	1
ENVT 1270	Environmental Microbiology	3
ENVT 1300	Environmental Lab and Sampling	2
ENVT 3210	Water Quality and Reclamation	4
Elective Requirements		6
		Credits
Complete two of the following courses:		6
ENVT 1510	Hazardous Materials Emergency Response (3)	
ENVT 3280	Environmental Law (3)	
ENVT 2560	Environmental Health (3)	
ENVT 3010	Environmental Toxicology (3)	
ENVT 3320	Hydraulics of Water (3)	
ENVT 3330	Water Resources Management (3)	
ENVT 3790	Applied Hydrology WE (4)	
ENVT 3850	Environmental Policy WE (3)	

#### **Graduation Requirements**

- 1. Completion of a minimum of 30 credits.
- 2. Overall grade point average of 2.0 (C) or above.
- 3. Residency hours -- Minimum of 10 credits required through course attendance at UVU.

#### **Graduation Plan**

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in Wolverine Track (http://www.uvu.edu/wolverinetrack/).

	Credit Hours	15
CHEM 1215	Principles of Chemistry I Laboratory	1
CHEM 1210	Principles of Chemistry I PP	4
ENVT 1200	Environmental Worker Safety	3
MATH 1050	College Algebra QL	4
ENGL 1010	Introduction to Academic Writing CC	3
Semester 1		Credit Hours
First Year		

	Total Credit Hours	30
	Credit Hours	15
Certificate Elective		3
Certificate Elective		3
ENVT 3210	Water Quality and Reclamation	4
ENVT 1300	Environmental Lab and Sampling	2
ENVT 1270	Environmental Microbiology	3
Semester 2		

## **Program Learning Outcomes**

- 1. Apply physical science principles to water and wastewater treatment processes and technologies.
- 2. Explain local, state, and federal safety protocols and regulatory requirements in the operation of water and wastewater treatment facilities.
- 3. Collaborate with peers to ensure safe and efficient operation of water and wastewater treatment facilities.