

# WATER QUALITY, CERTIFICATE OF COMPLETION

The one-year Water Quality Completion Certificate provides both classes and hands-on, work-based learning. The certificate includes five introductory courses in water and wastewater operations, 12 credit hours of related cooperative work, and foundational courses in math and science. The coursework prepares students to take the Level I certification exams. The Cooperative Work Experience (CWE) is hands-on training and is equivalent to approximately 2.5 months of full-time work experience. This certificate is the first year of coursework for the AAS degree in Water Quality Technology.

## GRADUATION REQUIREMENTS

Students must complete a minimum of 52 credit hours with a minimum Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twelve (12) credits must be completed at Southwestern before the Certificate of Completion is awarded.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

## PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of this program, the student will be able to:

- Apply the terms and concepts, including the mathematical skills necessary to pass the Level I Water and Wastewater certification examinations.
- Express concepts, ideas, technical principles, and feedback in a manner that promotes understanding and encourages cooperation and collaboration.
- Apply laboratory sampling and testing methods approved by regulatory agencies to water quality and treatment process performance reporting.

Math and writing placement are unique to each student and are determined during the admissions and intake advising process. Additional math or writing courses may be required prior to taking the math or writing program requirements in this degree.

## PROGRAM GUIDE

Course	Title	Credits
<b>Prerequisites</b>		
<b>Fall</b>		
Placement into WR121Z or completion of WR90R		
Placement into MTH65 or higher		
<b>Credits</b>		<b>0</b>
<b>First Year</b>		
<b>Fall</b>		
BI101	General Biology	4
MEC100	Mechanical Systems I	3
WQT226	Wastewater Treatment I - Liquids	3

WQT261	Water Distribution	4
WQT280	CWE: Water Quality Treatment <sup>2</sup>	4
<b>Credits</b>		<b>18</b>
<b>Winter</b>		
CHEM104Z & CHEM124Z	Introduction To Chemistry and Introduction To Chemistry Lab	5
WR115	Fundamentals of Report Writing	4
WQT227	Wastewater Treatment II - Solids	3
WQT228	Wastewater Collection Systems	3
WQT280	CWE: Water Quality Treatment <sup>2</sup>	4
<b>Credits</b>		<b>19</b>
<b>Spring</b>		
COMM218Z	Interpersonal Communication <sup>3</sup>	4
MTH65	Beginning Algebra <sup>1</sup>	4
WQT260	Water Treatment	3
WQT280	CWE: Water Quality Treatment <sup>2</sup>	4
<b>Credits</b>		<b>15</b>
<b>Total Credits</b>		<b>52</b>

<sup>1</sup> This course may be substituted for a higher math course, excluding: MTH98, MTH211 - MTH213. STAT243Z will also meet this requirement.

<sup>2</sup> Call 541-888-7405 to schedule with the Internship Coordinator one month prior to term.

<sup>3</sup> This course may be substituted for COMM100Z, COMM111Z, or COMM219.