WATER QUALITY TREATMENT, ASSOCIATE OF APPLIED SCIENCE

The Water Quality Technology, AAS degree includes five introductory courses in water and wastewater operations, 24-credit hours of related cooperative work, and foundational courses including math, science, and STEM elective courses. The coursework will help prepare for the Level 1 Certification exams. The cooperative work experience is hands on training and is equivalent to approximately 5 months full-time work experience.

PROGRAM STUDENT LEARNING OUTCOMES

- Define the terms and concepts along with the necessary mathematical skills required to pass the Level I water and wastewater certification examinations
- Describe the maintenance and operation of water treatment, water distribution, wastewater treatment, and wastewater collection systems, related to the operator's job
- Describe laboratory sampling and testing methods approved by regulatory agencies to evaluate water quality and treatment process performance
- Evaluate laboratory analyses and measurements, culminating in the interpreting and reporting or results against industry standards
- Model quantitative water an wastewater relationships using mathematics, equations, and graphs to interpret individual situations and determine plans of action using appropriate industry protocol

GRADUATION REQUIREMENTS

Students must complete a minimum of 90 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. All courses must be completed with a grade of 'C' or better. Twenty-four (24) credits must be completed at Southwestern before the degree 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).

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
Prerequisites		
Fall		
Placement into WR121Z or completion of WR90R		
Placement into MTH65 or higher		
	Credits	**0**
First Year		
Fall		
BI101	General Biology [2]	4
MTH65	Algebra II [1]	4
WQT226	Wastewater Treatment I - Liquids	3
WQT261	Water Distribution	4
WQT280	CWE: Water Quality Treatment	1
	Credits	**16**
Winter		
BA285	Human Relations in Organizations [4]	3
GS105	Physical Science [3]	4
WQT227	Wastewater Treatment II - Solids	3
WQT228	Wastewater Collection Systems	3
WQT280	CWE: Water Quality Treatment	4
	Credits	**17**
Spring		
WR121Z	Composition I	4
WQT260	Water Treatment	3
WQT280	CWE: Water Quality Treatment	7
	Credits	**14**
Second Year		
Fall		
COMM100Z	Introduction to Communication [5]	4
WQT280	CWE: Water Quality Treatment	4
Specific Elective [6]		4
Specific Elective [6]		3
	Credits	**15**
Winter		
WQT280	CWE: Water Quality Treatment	4
Specific Elective [6]		4
Specific Elective [6]		3
Specific Elective [6]		3
	Credits	**14**
Spring		
WQT280	CWE: Water Quality Treatment	4
Specific Elective [6]		4
Specific Elective [6]		3
Specific Elective [6]		3
	Credits	**14**
	Total Credits	**90**

1. MTH95 or higher may be substituted for MTH65 excluding MTH211.
2. BI102, 103, 221Z, 222Z, 223Z, 234 may be substituted for BI101.
3. CHEM221Z and CHEM227Z may be substituted for GS105.
4. BA120, PSY100, 201Z, or 202Z may be substituted for BA285.
5. COMM111Z, 218Z, or 219 may be substituted for COMM100Z.
6. Specific Electives: NR260, NR201, F222A, F251, GEOG265, ENV235, DRFT110, F223, CHEM110, CS160, CIS125DB, GEOG209, BA169Z.