

CERTIFICATE OF ACHIEVEMENT

The Certificate of Achievement in Environmental Safety and Health, Water Treatment emphasis is an 18-month program that prepares students for a lucrative career in this area. Students learn how to maintain and operate plants that treat water supplies for urban areas. Classes are generally held at the Clark County Sanitation District.

**STUDENT LEARNING OUTCOMES - Graduates of this program will have the opportunity to:**

- Demonstrate an understanding of the fundamentals of water treatment and related technologies.
- Demonstrate an understanding of the laws and regulations that apply to drinking water treatment.
- Demonstrate an understanding of the various treatment methodologies and technologies applicable to drinking water treatment.
- Demonstrate an understanding of pump operation and maintenance for drinking water treatment operation.

**GENERAL EDUCATION REQUIREMENTS (3 Credits):**

	CR	SEMESTER
COMMUNICATIONS: ENG 107	3	_____

**SPECIAL PROGRAM REQUIREMENTS (28 Credits):**

	CR	SEMESTER
ESH 202 Environmental Laws and Regulations	3	_____
ESH 243B Water Treatment Plant Operations I	3	_____
ESH 244B Water Distribution I	3	_____
ESH 245B Water Treatment Plant Operations II	3	_____
ESH 246B Water/Wastewater Mathematics I	3	_____
ESH 247B Water/Wastewater Mathematics II	3	_____
ESH 248B Water Quality Analysis and Laboratory	4	_____
ESH 250B Pump Operation and Maintenance	3	_____
ESH 251B Current Issues	3	_____

Computation included in ESH 246B  
Human Relations included in ESH 202

**NOTE:** Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

ESHWAT-CT

**31**  
Total Credits

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.

Guided Pathway 2014-2015  
**COA ENVIRONMENTAL SAFETY AND HEALTH**  
**WATER TREATMENT**  
 31 Credits

<b>First Semester</b> <i>Fall</i>		<i>Credits</i>		<i>Completed</i>
ESH 243B	Water Treatment Plant Operation I	3	<b>Fall Only</b>	
ENG 107	Technical Communication I	3		
	Prerequisite: English Placement Exam			
<b>Total</b>		<b>6</b>		

<b>Second Semester</b>		<i>Credits</i>		
ESH 202	Environmental Laws and Regulations	3	<b>Spring Only</b>	
ESH 245B	Water Treatment Plant Operation II	3		<b>Spring Only</b>
	Prerequisite: ESH 245B			
ESH 246B	Water/Wastewater Mathematics I	3	<b>Spring Only</b>	
	Prerequisite: ESH 240B or 243B			
<b>Total</b>		<b>9</b>		

<b>Summer Semester</b>		<i>Credits</i>		
ESH 250	Pump Operation and Maintenance	3	<b>Summer Only</b>	
ESH 251	Current Issues	3		<b>Summer Only</b>
<b>Total</b>		<b>6</b>		

<b>Third Semester</b>		<i>Credits</i>		
ESH 244B	Water Distribution	3	<b>Fall Only</b>	
ESH 247B	Water/Wastewater Mathematics II	3		<b>Fall Only</b>
	Prerequisite: ESH 246B			
ESH 248B	Water Quality Analysis and Laboratory	4	<b>Fall Only</b>	
	Prerequisite: ESH 241B and 246B			
<b>Total</b>		<b>10</b>		