

Water Resource Management

Associate in Applied Science Degree

Why Water Resource Management?

The Water Resource Management Program at Bay College is designed for providing specialized training in water and wastewater treatment theory and application to both entry-level personnel and those already in the field. Persons who complete degree requirements and gain appropriate work experience may qualify to progress through certification to the highest grade licensure in municipal and industrial water and wastewater treatment. This career has a 100% placement rate!

Why Bay College?

The Bay College Water Resource Management program has run for 47 continuous years and is one of the few programs of its kind in the nation. Graduates are highly sought after and targeted as desired candidates for employment. There is great opportunity for rapid promotion and job mobility because graduates are in such high demand nationwide. Upon completion of the program, graduates are immediately eligible to take highest level state certifications, which are accepted across the country. Instructors help students with state exam preparation and practice certification exams. The [Water Resource Management 1+1 degree](#) is designed for students who have completed a basic Freshman curriculum in science. It allows students to transfer to Bay College and take specialized courses in Water Technology, and upon graduation, they will receive an Associate in Applied Science in Water Resource Management degree. Graduates are immediately eligible for certification and entrance into the water/wastewater treatment industry.

Career Opportunities

Students can complete an Associate in Applied Science Degree in Water Resource Management and then can obtain a career as:

- **Water Resource Specialist**
- **Water Resource Project Manager**
- **Water Resource Maintenance Mechanic**
- **Water Resources Director**
- **Water/Wastewater Operations Specialist**
- **Laboratory Technician**
- **Water/Wastewater Consultant**
- **Entrepreneur**

Contact

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baycollege.edu



Water Resource Management

2019-2020 Catalog

Award Granted Upon Completion: Associate in Applied Science in Water Resource

Credits/Contacts Required: **69/78**

Major code: 03/340

Management

CIP Code: 150506

Description

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General Education Requirements – Min 18 credits

		<u>Cr</u>
ENGL-101	Rhetoric & Composition	3
ENGL-145	Technical Report Writing	3
MATH-105	Intermediate Algebra * -OR-	4
MATH-106	Tech Algebra & Trig I *	
CHEM-108	Technical Chemistry **	5
POLI-111	American Government -OR-	3
POLI-262	State & Local Government	

Requirements – Min 51 credits

		<u>Cr</u>
ELEC-145	Basic Process Control	4
GIS -201	Intro to Geographic Info Systems	3
WATR-110	Wastewater Operations & Mgmt.	4
WATR-120	Water Operations & Management	4
WATR-150	Team Project Course	2
WATR-220	Industrial Solutions	3
WATR-230	Aquatic Evaluations & Bacteriology	3
WATR-240	Environmental Analysis	5
WATR-250	Water Analysis & Techniques	5
WATR-255	Mechanical & Instrumentation	3
WATR-260	Current Issues for Managers	3
WATR-270	Water in Motion	4
WATR-272	Professional Field Experience (Water)	4
WATR-273	Professional Field Experience (Wastewater)	4
<u>OPTIONAL</u>		
CHEM-110	General Chemistry I**	5
CHEM-112	General Chemistry II **	5

Suggested Sequences Per Semester

		<u>Cr / Ct</u>
First Semester		
ENGL-101	Rhetoric & Composition	3/3
MATH-105	Intermediate Algebra -OR-	4/4
MATH-106	Technical Algebra & Trig I *	
WATR-110	Wastewater Operations & Mgmt.	4/4
WATR-260	Current Issues for Managers	3/3
		14/14
Second Semester		
CHEM-108	Technical Chemistry **	5/7
ENGL-145	Technical Report Writing	3/3
ELEC-145	Basic Process Control	4/4
WATR-120	Water Operations & Management	4/4
WATR-230	Aquatic Evaluations & Bacteriology	3/4
		19/22
Third Semester		
GIS -201	Intro to Geographic Info Systems	3/3
POLI-111	American Government -OR-	3/3
POLI-262	State & Local Government	
WATR-150	Team Project Course	2/3
WATR-240	Environmental Analysis	5/7
WATR-270	Water in Motion	4/4
		17/20
Fourth Semester		
WATR-220	Industrial Solutions	3/3
WATR-250	Water Analysis & Techniques	5/7
WATR-255	Mechanical & Instrumentation	3/4
WATR-272	Professional Field Exp. (Water)	4/4
WATR-273	Professional Field Exp. (Wastewater)	4/4
		19/22

* MATH-106 and MATH-105 do not satisfy MTA.

- Transfer students should take MATH-110, which will fulfill the math requirement.

- Students will need to complete additional General Education requirements to satisfy MTA. See course catalog for additional information about the Michigan Transfer Agreement.

- Students should also check with their transfer institution for the level of math required.

** Students planning to transfer into a Baccalaureate degree program are encouraged to satisfy the chemistry requirement by taking CHEM-110 and CHEM-112 instead of CHEM-108 because CHEM-108 is not transferrable in some cases. Students should check with their transfer institution.