Water Resource Management, AAS

2023-2024 Catalog

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

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

Major code: 03/340

CIP Code: 150506

Description

The Water Resource Management Program 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.

General Education Requirements (Min 18 Credits)

- ENGL 101 - Rhetoric & Composition **Credit(s): 3**
- ENGL 145 - Technical and Report Writing **Credit(s): 3**
- CHEM 102 - Introduction to Chemistry **Credit(s): 4**
- CHEM 104 - Introduction to Chemistry Lab **Credit(s): 1**
- MATH 105 - Intermediate Algebra **Credit(s): 4 * OR**
- MATH 106 - Technical Algebra & Trigonometry I **Credit(s): 4** *
- POLI 111 - American Government **Credit(s): 3 OR**
- POLI 262 - State & Local Government **Credit(s): 3**

Program Requirements (Min 51 Credits)

- ELEC 145 - Basic Process Control **Credit(s): 4**
- WATR 111 - Wastewater Operations and Management I **Credit(s): 3**
- WATR 112 - Wastewater Operations and Management II **Credit(s): 3**
- WATR 121 - Water Operations and Management I **Credit(s): 3**
- WATR 122 - Water Operations and Management II **Credit(s): 3**
- WATR 125 - Water Math **Credit(s): 3**
- WATR 152 - Water Career Preparation **Credit(s): 2**
- WATR 220 - Industrial Solutions **Credit(s): 3**
- WATR 231 - Aquatics and Bacteriology **Credit(s): 2**
- WATR 232 - Aquatics and Bacteriology Lab **Credit(s): 2**
- WATR 241 - Environmental Analysis **Credit(s): 2**
- WATR 242 - Environmental Analysis Lab **Credit(s): 3**
- WATR 251 - Water Analysis Lecture **Credit(s): 2**
- WATR 252 - Water Analysis Lab **Credit(s): 3**
- WATR 256 - Power and Instrumentation **Credit(s): 2**
- WATR 262 - Utility Management and Business **Credit(s): 3**
- WATR 272 - Professional Field Experience (Water) **Credit(s): 4**
- WATR 273 - Professional Field Experience (Wastewater) **Credit(s): 4**

Optional

- CHEM 110 - General Chemistry I **Credit(s): 5** **

Suggested Sequences Per Semester

First Semester

- MATH 105 - Intermediate Algebra **Credit(s): 4 * OR**
- MATH 106 - Technical Algebra & Trigonometry I **Credit(s): 4** *
- ENGL 101 - Rhetoric & Composition **Credit(s): 3**
- CHEM 102 - Introduction to Chemistry **Credit(s): 4**
- CHEM 104 - Introduction to Chemistry Lab **Credit(s): 1**
- WATR 111 - Wastewater Operations and Management I **Credit(s): 3**
- WATR 121 - Water Operations and Management I **Credit(s): 3**

First Semester Total - Credit(s): 18 | Contacts: 18

Second Semester

- ELEC 145 - Basic Process Control **Credit(s): 4**
- WATR 262 - Utility Management and Business **Credit(s): 3**
- WATR 112 - Wastewater Operations and Management II **Credit(s): 3**
- WATR 122 - Water Operations and Management II **Credit(s): 3**
- POLI 111 - American Government **Credit(s): 3 OR**
- POLI 262 - State & Local Government **Credit(s): 3**

Second Semester Total - Credit(s): 16 | Contacts: 16

Third Semester

- ENGL 145 - Technical and Report Writing **Credit(s): 3**
- WATR 125 - Water Math **Credit(s): 3**
- WATR 231 - Aquatics and Bacteriology **Credit(s): 2**
- WATR 232 - Aquatics and Bacteriology Lab **Credit(s): 2**
- WATR 241 - Environmental Analysis **Credit(s): 2**
- WATR 242 - Environmental Analysis Lab **Credit(s): 3**

Third Semester Total - Credit(s): 15 | Contacts: 22

Fourth Semester

- WATR 152 - Water Career Preparation **Credit(s): 2**
- WATR 220 - Industrial Solutions **Credit(s): 3**
- WATR 251 - Water Analysis Lecture **Credit(s): 2**
- WATR 252 - Water Analysis Lab **Credit(s): 3**
- WATR 256 - Power and Instrumentation **Credit(s): 2**
- WATR 272 - Professional Field Experience (Water) **Credit(s): 4**
- WATR 273 - Professional Field Experience (Wastewater) **Credit(s): 4**

Fourth Semester Total - Credit(s): 20 | Contacts: 22

Note(s)

* MATH 105 and MATH 106 do not satisfy MTA.

-Transfer students should take MATH 110, which will fulfill the math requirement. Students should also check with their transfer institution for the level of math required.

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

** Students planning to transfer into a Baccalaureate degree program are encouraged to satisfy the chemistry requirement by taking CHEM 110 and CHEM 112. Students should check with their transfer institution.