

ENVIRONMENTAL HEALTH AND WATER QUALITY MAJOR (M)

The Environmental Health and Water Quality Technology Major consists of 50 credit hours of course work completed through a cooperative program with Milwaukee Area Technical College (MATC). MATC-Mequon Campus is just a 5-minute drive from Concordia. In addition to the CUW Liberal Arts core requirements and required courses listed below, all environmental and pollution control technology majors must complete requirements for a CUW Minor. Required core courses may be taken at either MATC or CUW.

This program promotes environmental protection, improvement and sustainability, with a focus on protecting our water, food and air resources. Hands-on coursework includes techniques used to determine water, food, and air quality along with implementing needed corrective actions.

For specific information about MATC courses and degree requirements, please visit the MATC website at <http://www.matc.edu/>

Program Learning Outcomes

Students will:

- Demonstrate an understanding of and an ability to explain major biological and related scientific concepts (Knowledge Base of Biology and Related Sciences);
- Demonstrate the ability to appropriately collect and analyze data while utilizing laboratory equipment and procedures safely and effectively (Biological Procedures and Data)
- Develop investigative and critical thinking skills to explore complex questions and solve challenging scientific problems (Scientific Inquiry);
- Demonstrate the ability to communicate scientific information effectively to both scientists and non-scientists (Scientific Communication);
- Recognize how vocations in science provide opportunities for service to Christ and others and necessitate ethical behavior in all aspects of science (Vocation and Ethics)
- Demonstrate an understanding of how/why a Christian sees evidence of God's design in nature and how to be good stewards of His creation (God's Design and Stewardship).

Curriculum

Code	Title	Hours
Core Requirements (https://catalog.cuw.edu/undergraduate/university/acad-prog/trad/core/)		45
Major Requirements		47
Electives		4-10
Minor: Required		18-24
Total Hours		120

Major Requirements

Code	Title	Hours
Required Core Courses		
COMM 105	Public Speaking (Communication)	
	or COMM 20 Interpersonal Communication	
MATH 205	Statistics I (Mathematics)	
ENVHEL 109	Applied Environmental Chemistry (Lab Science)	
LEGL 230	Environmental Law & Politics (Human Beings and Being Human)	
Required Courses		
PHIL 240	Environmental Ethics (Taken at CUW)	3
ENVHEL 101	Introduction to Environmental Health and Water Quality	3
ENVHEL 102	Environmental Biology	4
ENVHEL 104	Industrial Hygiene Technology	4
ENVHEL 105	Fundamentals of Hazardous Materials Control	4
ENVHEL 109	Applied Environmental Chemistry (Taken in Core)	
ENVHEL 111	Applied Water Chemistry and Analysis	4
ENVHEL 115	Air Pollution Technology	4
ENVHEL 119	Food and Dairy Quality Control	3
ENVHEL 127	Environmental Field Projects	3
ENVHEL 128	Environmental Health Internship	1
ENVHEL 142	Principles of Water Resources	3
ENVHEL 143	Interpersonal Communication Skills and Environmental Management	3
ENVHEL 145	Water/Wastewater Operations – Municipal	3
ENVHEL 146	Water/Wastewater Operations – Industrial	2
ENVHEL 173	Environmental Bacteriology	3
Total Hours		47