Water Science Major

Area of Emphasis

Students must complete requirements in one of the following areas of emphasis:

- Water Science
- Water Science (Accelerated) - Integrated with graduate Environmental Science & Policy program

Water Science

Code	Title	Credits
Supporting Courses		**33**
BIOLOGY 203	Principles of Biology: Organisms and Evolution	
BIOLOGY 204	Principles of Biology Lab: Organisms and Evolution	
GEOSCI 202	Physical Geology	
GEOSCI 222	Ocean of Air: Weather and Climate	
CHEM 211	Principles of Chemistry I	
CHEM 212	Principles of Chemistry II	
CHEM 213	Principles of Chemistry I Laboratory	
CHEM 214	Principles of Chemistry II Laboratory	
MATH 260	Introductory Statistics	
WATER 201	Introduction to Water Science	
Physics (choose one option):		
PHYSICS 103 & PHYSICS 203	Fundamentals of Physics I and Introductory Physics Lab I	
PHYSICS 201 & PHYSICS 203	Principles of Physics I and Introductory Physics Lab I	
Upper-Level Required Courses		**19**
ENV SCI/ET 330	Hydrology	
GEOSCI 432	Hydrogeology	
WATER 444	Aqueous Geochemistry	
Lakes/Streams (choose one):		
ENV SCI 401	Stream Ecology	
ENV SCI 403	Limnology	
Water Resources (choose one):		
ENV SCI 433	Ground Water: Resources and Regulations	
EPP 351	Water Resources Policy and Management	
Waste Treatment (choose one:):		
ENV SCI 335	Water and Waste Water Treatment	
ET 331	Advanced Water and Waste Water Treatment	
Elective Courses (choose 16 credits):		**16**
BIOLOGY 322	Environmental Microbiology	
BIOLOGY 341	Ichthyology	
BIOLOGY 357	Marine Biology	
CHEM 311	Analytical Chemistry	
CHEM 413	Instrumental Analysis	
ECON 305	Environmental Economics	
ENV SCI 305	Environmental Fate and Transport	
ENV SCI 320	The Soil Environment	
ENV SCI 337	Environmental GIS	
ENV SCI 338	Environmental Modeling	
ENV SCI 339	Scientific Writing	
ENV SCI 401	Stream Ecology	

ENV SCI 403	Limnology
ENV SCI/ET 424	Hazardous and Toxic Materials
ENV SCI 425	Global Climate Change
ENV SCI/ET 433	Ground Water: Resources and Regulations
ENV SCI 491	Senior Thesis/Research in Environmental Science
ENV SCI 492	Practicum in Environmental Science
EPP 351	Water Resources Policy and Management
EPP 379	Natural Resources Policy, Law, and Administration
GEOSCI 325	Regional Climatology
POL SCI 378	Environmental Law
WATER 321	Stable Isotopes in the Environment
WATER 410	Agriculture-Water Nexus in Wisconsin
WATER 411	Agriculture-Water Nexus Field Experience
WATER 491	Senior Thesis/Research in Water Science
WATER 492	Special Topics in Water Science
WATER 497	Internship
WATER 498	Independent Study
Freshwater Collaborative of Wisconsin [1]	
Total Credits	**68**

[1] May use up to 8 credits of Specialty and Field Immersion Courses offered by Freshwater Collaborative of Wisconsin

Water Science (Accelerated) -Integrated with graduate Environmental Science & Policy program

Code	Title	Credits
Supporting Courses		**33**
BIOLOGY 203	Principles of Biology: Organisms and Evolution	
BIOLOGY 204	Principles of Biology Lab: Organisms and Evolution	
CHEM 211	Principles of Chemistry I	
CHEM 212	Principles of Chemistry II	
CHEM 213	Principles of Chemistry I Laboratory	
CHEM 214	Principles of Chemistry II Laboratory	
GEOSCI 202	Physical Geology	
GEOSCI 222	Ocean of Air: Weather and Climate	
MATH 260	Introductory Statistics	
WATER 201	Introduction to Water Science	
Physics (choose one option):		
PHYSICS 103 & PHYSICS 203	Fundamentals of Physics I and Introductory Physics Lab I	
PHYSICS 201 & PHYSICS 203	Principles of Physics I and Introductory Physics Lab I	
Upper-Level Required Courses		**19**
ENV SCI 335	Water and Waste Water Treatment	
ENV SCI/ET 330	Hydrology	
GEOSCI 432/632	Hydrogeology	
WATER 444/644	Aqueous Geochemistry	
Lakes/Streams (choose one):		
ENV SCI 401/601	Stream Ecology	
ENV SCI 403/603	Limnology	
Water Resources (choose one):		
ENV SCI 433/633	Ground Water: Resources and Regulations	
EPP 351	Water Resources Policy and Management	

Elective Courses (Choose 16 credits)		**16**
BIOLOGY 322	Environmental Microbiology	
BIOLOGY 341	Ichthyology	
BIOLOGY 357	Marine Biology	
CHEM 311	Analytical Chemistry	
CHEM 413/613	Instrumental Analysis	
ECON 305	Environmental Economics	
ENV SCI 305	Environmental Fate and Transport	
ENV SCI 320/520	The Soil Environment	
ENV SCI 337	Environmental GIS	
ENV SCI 338	Environmental Modeling	
ENV SCI 339	Scientific Writing	
ENV SCI 401	Stream Ecology	
ENV SCI 403	Limnology	
ENV SCI 424/624/ET 424	Hazardous and Toxic Materials	
ENV SCI 425/625	Global Climate Change	
ENV SCI 433/633	Ground Water: Resources and Regulations	
ENV SCI 491	Senior Thesis/Research in Environmental Science	
ENV SCI 492	Practicum in Environmental Science	
EPP 351	Water Resources Policy and Management	
EPP 379	Natural Resources Policy, Law, and Administration	
GEOSCI 325	Regional Climatology	
POL SCI 378	Environmental Law	
WATER 321	Stable Isotopes in the Environment	
WATER 410	Agriculture-Water Nexus in Wisconsin	
WATER 411	Agriculture-Water Nexus Field Experience	
WATER 491	Senior Thesis/Research in Water Science	
WATER 492	Special Topics in Water Science	
WATER 497	Internship	
WATER 498	Independent Study	
Freshwater Collaborative of Wisconsin [1]		
Total Credits		**68**