# FRESHWATER AND MARINE SCIENCES, PHD

# REQUIREMENTS

# MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum degree requirements (https://guide.wisc.edu/graduate/#requirementstext) and policies (https://guide.wisc.edu/graduate/#policiestext), in addition to the program requirements listed below.

# MAJOR REQUIREMENTS MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

#### **Mode of Instruction Definitions**

**Accelerated:** Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

**Evening/Weekend:** Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face–to–face courses with the flexibility to keep work and other life commitments.

**Face-to-Face:** Courses typically meet during weekdays on the UW-Madison Campus.

**Hybrid:** These programs combine face-to-face and online learning formats. Contact the program for more specific information.

**Online:** These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

## **CURRICULAR REQUIREMENTS**

Requirement Detail				
Minimum Credit Requirement	51 credits			
Minimum Residence Credit Requirement	32 credits			
Minimum Graduate Coursework Requirement	26 credits must be graduate-level coursework. Refer to the Graduate School: Minimum Graduate Coursework (50%) Requirement policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/).			

Overall Graduate GPA Requirement	3.00 GPA required. Refer to the Graduate School: Grade Point Average (GPA) Requirement policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	Students must earn a B or above in all courses applied to degree requirements.
and	Doctoral students are required to take a comprehensive preliminary exam by the end of their fifth semester of study in the PhD program. A final oral exam of the doctoral dissertation is required. Deposit of the doctoral dissertation in the Graduate School is required.
Language Requirements	No language requirements.
Graduate School Breadth Requirement	All doctoral students are required to complete a doctoral minor or graduate/professional certificate. Refer to the Graduate School: Breadth Requirement in Doctoral Training policy: https://policy.wisc.edu/library/UW-1200 (https://policy.wisc.edu/library/UW-1200/).

### **REQUIRED COURSES**

CIV ENGR 415

Hydrology

PhD students in the Freshwater and Marine Sciences (FMS) program must complete courses and seminars to satisfy the minimum credit requirement for the degree. The FMS program does not require specific classes, but instead courses are approved by the student's advisor or advisory committee and depend on the student's research area, interests, and professional goals (below are a list common graduate level courses).

Code	Title	Credits
Breadth		9
<b>Graduate Seminars</b>	5	
Common coursework	examples include:	3-4
ZOOLOGY/ ATM OCN/ BOTANY/ CIV ENGR/ ENVIR ST/ GEOSCI 911	Limnology and Marine Science Seminar	
ZOOLOGY 955	Seminar-Limnology	
Research Credits		
Common coursework	examples include:	9-12
ATM OCN 990	Research	
BOTANY 995	Research-Plant Ecology	
CIV ENGR 890	Pre-Dissertator's Research	
CIV ENGR 990	Thesis	
ENVIR ST 990	Research	
F&W ECOL 990	Research and Thesis	
GEOSCI 990	Research	
MICROBIO 990	Research	
PATH-BIO 990	Research	
PLANTSCI 990	Research	
SOIL SCI 990	Research	
ZOOLOGY 990	Research	
<b>Graduate Level Co</b>	ursework	
	ts must be in courses designated irsework ("Grad 50%" attribute). c examples include:	26

## Freshwater and Marine Sciences, PhD

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CIV ENGR 500	Water Chemistry
F&W ECOL/ STAT 571	Statistical Methods for Bioscience I
F&W ECOL/ ZOOLOGY 660	Climate Change Ecology
F&W ECOL/ ENTOM 711	Multivariate Analysis of Ecological and Community Data
ZOOLOGY/ ENTOM 540	Theoretical Ecology
ZOOLOGY/ BOTANY 725	Ecosystem Concepts

Total Credits 51