

WATER RESOURCES OPTION

1 to 7 additional credits of upper-division courses approved by research mentor, for a total of 29 credits.¹ 1-7

Total Hours 23-34

This option is offered within the following major(s):

- Bioresource Research - College of Agricultural Sciences (<http://catalog.oregonstate.edu/college-departments/agricultural-sciences/other-degrees-programs/bioresource-research-bs-hbs>)

Water resources research involves the use of science and policy tools to identify contaminants and make assessments of water quality. Students will acquire laboratory skills to detect water contaminants and track their movements and transformations while learning related policy and management concerns. Research areas could include microbial contaminants, the impact of urbanization on water quality, and marine and estuarine water quality and its impact on fisheries and shellfish industries. Option course work covers water sciences and hydrology, environmental policy and management. Students completing this option will be prepared for graduate school or for positions in environmental consulting, research, and natural resource management.

¹ **Recommended areas:** Climatology, geology, resource economics, watersheds, watersheds management, microbial ecology, engineering, mathematics, hydrology, hydrogeology, irrigation, toxicology, ecology, environmental analysis, environmental chemistry, geochemistry, environmental management, environmental policy, economics, marine biology, aquatic and marine botany and zoology, oceanography, statistics, geography, environmental ethics, research ethics.

* Baccalaureate Core Course (BCC)

^ Writing Intensive Course (WIC)

Option Code: 626

Code	Title	Hours
Water Sciences		
Select four courses from the following:		12-16
CSS 305	PRINCIPLES OF SOIL SCIENCE (EOU campus only) or SOIL 205 SOIL SCIENCE	
FW 456	FRESHWATER ECOLOGY AND CONSERVATION	
GEO 487	HYDROGEOLOGY	
MB 302	GENERAL MICROBIOLOGY	
OC 332	COASTAL OCEANOGRAPHY	
OC 433	COASTAL AND ESTUARINE OCEANOGRAPHY	
TOX 430	CHEMICAL BEHAVIOR IN THE ENVIRONMENT	
Watersheds and Hydrology		
Choose one course from below:		4
CE 412	HYDROLOGY or FE 430 WATERSHED PROCESSES	
FE 430	WATERSHED PROCESSES	
Water Resources Environmental Analysis		
Select one course from the following:		3
BI 371	^ECOLOGICAL METHODS	
BOT 547	NUTRIENT CYCLING	
CE 413	GIS IN WATER RESOURCES	
ENVE 456	SUSTAINABLE WATER RESOURCES DEVELOPMENT	
GEOG 441	INTERNATIONAL WATER RESOURCES MANAGEMENT	
TOX 455	ECOTOXICOLOGY: AQUATIC ECOSYSTEMS	
Water Resources Environmental Policy and Management		
Select one course from the following:		3-4
AEC 432	ENVIRONMENTAL LAW	
FOR 462	NATURAL RESOURCE POLICY AND LAW	
FW 326	INTEGRATED WATERSHED MANAGEMENT	
GEOG 440	WATER RESOURCES MANAGEMENT IN THE UNITED STATES	
PS 475	ENVIRONMENTAL POLITICS AND POLICY	
RNG 455	RIPARIAN ECOHYDROLOGY AND MANAGEMENT	
Specialization and Breadth Courses		