



Water Science

Imagine a career using your skills to assess water for environmental quality, public health, recreation and irrigation!

You will gather and synthesize information from several disciplines then apply your knowledge to multiple issues related to water resources.

Make an appointment with one of our faculty advisors to learn more about the Water Science degree at the University of Nebraska-Lincoln

WATER SCIENCE DEGREE PROGRAM

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School of Natural Resources



Career Path

Water Resources Manager, Research Scientist, Research Technician for a public agency, Consultant, Professional Hydrologist, Water Lobbyist, Community Planner, Environmental Chemist, Tribal Liaison, or work for a non-profit organization

Special Emphasis Courses

Surface and Groundwater Hydrogeology, Lake, River and Stream Ecology, Natural Resources Policy, Environmental Law, Irrigation Management, Conservation and Watershed Management, Water Chemistry, Environmental Planning, Water Economics. Students develop a specialization in one or more of the following areas: Aquatic Ecology, Hydrology, Watershed Management, Water Law and Policy, and Water Quality

Internships Available

Students have enjoyed internships with Nebraska's natural resource districts, the Nebraska Department of Environmental Quality, consulting firms, the U.S. Geological Survey, and other state and federal agencies.



University of Nebraska-Lincoln

The University of Nebraska-Lincoln is an equal opportunity educator and employer with a comprehensive plan for diversity.

Students seeking a degree in Water Science are broadly educated in all areas of science and natural resources. Course work includes Intro to Ag and Natural Resource Systems, Natural Resources Policy, Introductory Biology, Botany or Zoology, Ecology, Gen Chem I (Chem 109), Hydrology, Resource and Environmental Economics II, Intro to Water Science, Soil, Conservation, and Watershed Management, Water Resources Seminar, and one course each in climate, geographic information systems, physics, and geology. Students select an additional course in natural resources law, policy, and management, and two additional courses in biology, chemistry, soils, irrigation, or aquatic ecology. Other courses for degree completion include Calculus I (Math 106), statistics, three semesters of communication, and five semesters of humanities and social sciences. Prior to the beginning of the junior year, students must specialize in one of the five option areas listed below. In addition all students are required to complete either a senior project or senior thesis.

Aquatic Ecology Option - This option is designed for students interested in lake, river, stream, or wetland ecology. Students are prepared for careers as research scientists or technicians with public agencies, private consulting firms, universities, and non-profit organizations. Course work includes Botany and Zoology, Limnology, River and Stream Ecology, Ecosystem Ecology or Biogeochemical Cycles, and Gen Chem II. Students select one other course from Aquatic Insects, Freshwater Algae, Lake and Reservoir Restoration, Wetlands, or Ichthyology.

Hydrology Option - This option trains students in the quantitative aspects of hydrologic sciences and is designed for students considering careers as a professional hydrologist, research scientist, or consultant (among others). Course work includes Calculus II, Physics II (212 + 222), Groundwater Geology, and Soil Physics. In addition, students choose one additional course from Gen Chem II, Surface Water Hydrology, Field Techniques in Hydrogeology, Water in Geosciences, Calculus III, or Differential Equations.

Water Law and Policy Option - Under this option, a student gains expertise in water issues pertaining to water quality, quantity, allocation, and planning. Careers in this rapidly emerging field of water include lobbyists, community planners, public and tribal liaisons, and policymakers to name some. This option also prepares students for continued education in water law. The courses under this option include Environmental Law, Water Law, Environmental Planning, Public Policy, Macroeconomics, Resource and Environmental Economics I, or Environmental Sociology.

Water Quality - This option trains students with a desire to pursue a career examining water quality within lakes, streams, rivers, and groundwater. This option is designed for students considering careers as water quality specialists, research scientists, laboratory and field technicians, environmental chemists, and many more. Course work includes Gen Chem II, Organic Chemistry or Elementary Quantitative Analysis, Chemistry of Natural Waters, Water Quality Strategy, and Soils, Environment, and Water Quality. Students select two more courses in either Microbiology, Surface Water Hydrology, Groundwater Geology, Biogeochemical Cycles, Water in Geosciences, Physics II, Lake and Reservoir Restoration, Limnology or River and Stream Ecology, Calc II, or statistics.

Watershed Management - Watershed management is the management of the water, land, and biological resources to achieve a desired outcome of the water quality and water quantity. This option is designed for students considering careers as water resource managers working for local, state, and federal agencies and private consultants. Course work includes Natural Resources and Environmental Law, Gen Chem II, Soils, Environment, and Water Quality, Irrigation Systems Management, and Limnology, Wetlands, or River and Stream Ecology.