

# WATER RESOURCES SCIENCE

A graduate major or minor in Water Resources Science for master of science, master of arts, and doctor of philosophy degree programs is offered with specialization in hydrology or geochemistry. Seminars, readings, and conferences are offered by the Water Resources Graduate Program.

The graduate minor options are structured around courses designed to broaden the student's education in water resources science, specifically in hydrology or geochemistry. University departments and schools that offer courses related to water resources science include the departments of Biochemistry and Biophysics; Biological and Ecological Engineering; Botany and Plant Pathology; Chemistry; Crop and Soil Science; Entomology; Fisheries and Wildlife; Geosciences; Mathematics; Microbiology; Rangeland Ecology and Management; Statistics; and Zoology; and the School of Forest Engineering, Resources and Management; the School of Biological and Population Health Sciences; the School of Chemical, Biological, and Environmental Engineering; the School of Civil and Construction Engineering; the School of Mechanical, Industrial, and Mechanical Engineering; the School of Public Policy; and the College of Earth, Ocean, and Atmospheric Sciences. About 20 departments conduct teaching or research programs in water resources.

For more information, contact [gradwater\\_director@oregonstate.edu](mailto:gradwater_director@oregonstate.edu) or visit <http://oregonstate.edu/gradwater/>.

**Major Code: 3530**

## Graduate Programs

### Major

- Water Resources Science (<http://catalog.oregonstate.edu/college-departments/graduate-school/water-resources-science/water-resources-science-ms-phd>)

### Minors

- Water Resources (<http://catalog.oregonstate.edu/college-departments/graduate-school/water-resources-science/water-resources-graduate-minor>)
- Water Resources Science (<http://catalog.oregonstate.edu/college-departments/graduate-school/water-resources-science/water-resources-science-graduate-minor>)

**Mary Santelmann, Director**

Water Resources Graduate Program

116 Gilmore Hall

Oregon State University

Corvallis, OR 97331

541-737-1215

Email: [santelmm@oregonstate.edu](mailto:santelmm@oregonstate.edu)

Website: <http://oregonstate.edu/gradwater/>

## Water Resources Science

**WRS 501. RESEARCH. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 503. THESIS. (1-16 Credits)**

*This course is repeatable for 999 credits.*

**WRS 505. READING AND CONFERENCE. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 506. PROJECTS. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 507. SEMINAR. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 508. WORKSHOP. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 510. INTERNSHIP. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 532. APPLIED FIELD PROBLEMS. (3 Credits)**

Introduces graduate students to real-world water resources problems and approaches to solving them. Students will assess and analyze the various constraints and limitations to integrated water management that often cannot be adequately simulated in classroom exercises. They will acquire the practical tools necessary to become effective water resources professionals in a rapidly changing world.

**WRS 536. FUNDAMENTALS OF HYDROLOGY. (3 Credits)**

Teaches students from a non-technical background in the Water Cooperation and Peace program the fundamentals of hydrology. Students will be introduced to hydrology and the hydrological cycle at the graduate level with a focus on key concepts. Students will apply these concepts to understanding of real world problems in the associated course, WRS 532, Applied Field Problems. Lec/lab.

**WRS 599. SPECIAL TOPICS. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 601. RESEARCH. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 603. THESIS. (1-16 Credits)**

*This course is repeatable for 999 credits.*

**WRS 605. READING AND CONFERENCE. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 606. PROJECTS. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 607. SEMINAR. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 608. WORKSHOP. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 610. INTERNSHIP. (1-16 Credits)**

*This course is repeatable for 16 credits.*

**WRS 699. SPECIAL TOPICS. (1-16 Credits)**

*This course is repeatable for 16 credits.*