# WATER RESOURCES (GRADUATE MINOR FIELD)

Graduate School

Program Website (https://cals.cornell.edu/biological-environmental-engineering/graduate)

## Program Description

The minor in water resources provides an opportunity for students in M.S. and Ph.D. degree programs to complement their major subject area with studies related to water resources. The student chooses one of the field's faculty members to serve as a minor member of the Special Committee and to design a program of study consistent with the student's needs. Because the program in interdisciplinary, this faculty member cannot be a faculty member in the student's major field.

This is a minor field. Application for admission is made only to the major fields. After matriculation, a student may select minor subjects from the major or minor fields.

### Graduate Minor Requirements

Two courses (minimum of 6 credits) are required for M.S. students. Four courses (minimum of 12 credits) are required for Ph.D. students. For joint M.S./Ph.D. degree programs, the two M.S. courses may be applied toward the Ph.D. requirement. Although course selection is the prerogative of the student and Water Resources committee member, in general the courses should relate to some aspect of water resources and provide the student with an interdisciplinary experience. Courses may not be selected from the student's major field, nor may they simultaneously satisfy major and minor requirements.

Additional information may be obtained from the field's faculty members.

## Faculty

John David Albertson (https://www.duffield.cornell.edu/people/john-d-albertson/)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: environmental fluid mechanics and hydrology

Natalie L. Cápiro (https://cals.cornell.edu/people/natalie-capiro)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: applied environmental microbiology, bioremediation, fate and transport of legacy and emerging contaminants in natural systems, development of groundwater remediation strategies, and nanoparticle-microbial interactions in the environment

Riley Taylor Culberg (https://www.duffield.cornell.edu/people/riley-culberg/)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: glaciology, ice-penetrating radar, geophysics, geohydrology, planetary geology, environmental geophysics

Stefano Galelli (http://galelli.cee.cornell.edu/people/)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Water Resources:* water resources
- **Research Interests:** Sustainable water management, large-scale hydrology, optimal control

Jacqueline Gerson (https://cals.cornell.edu/people/jacqueline-gerson)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: biogeochemistry, contaminant fate and transport, water quality

Christine L Goodale (https://ecologyandevolution.cornell.edu/christine-l-goodale)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: catchment biogeochemistry, ecosystem ecology, water quality

Meredith A. Holgerson (http://ecologyandevolution.cornell.edu/meredith-holgerson)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: freshwater ecology, ponds and lakes, food webs, community ecology, ecosystem ecology, greenhouse gases, conservation, amphibians

Flavio Lehner (https://cals.cornell.edu/people/flavio-lehner)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: global and regional climate variability and change, land-atmosphere and ocean-atmosphere coupling, extreme event attribution

Andrew James McDonald (https://cals.cornell.edu/people/andrew-mcdonald)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: international cropping systems, sustainable intensification, environmental information systems for enhancing decision-making in agriculture

Sheila Marie Olmstead (https://publicpolicy.cornell.edu/people/sheila-olmstead/)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: water pollution, water scarcity, climate change adaptation, environmental impacts of fossil fuel development, market-based environmental policy

Angeline Greene Pendergrass (http://www.eas.cornell.edu/faculty-directory/angeline-pendergrass)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources

- **Research Interests**: extreme precipitation; hydrologic cycle; climate change and variability; atmospheric circulation

Brian Gramlich Rahm (https://cals.cornell.edu/people/brian-rahm)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: aquatic ecosystems; climate resilience; water infrastructure; water quality

Patrick M. Reed (http://www.cee.cornell.edu/faculty-directory/patrick-michael-reed)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Water Resources:* water resources
- **Research Interests:** sustainable water management, risk management, multiobjective decision making

Matthew Charles Reid (https://www.duffield.cornell.edu/people/matthew-charles-reid/)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: environmental biogeochemistry, fate and transport of contaminants; water systems; environmental processes

Richard C. Stedman (https://cals.cornell.edu/richard-c-stedman)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: linkages between social and ecological systems; natural resource and community interactions; natural resources; environmental sociology; human dimensions of natural resource management

Tammo S Steenhuis (http://cals.cornell.edu/tammo-steenhuis)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Water Resources:* water resources

Scott Steinschneider (http://cals.cornell.edu/scott-steinschneider)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Water Resources:* water resources
- **Research Interests:** sustainable water management, stochastic hydrology, risk analysis, climate change

Harold Mathijs Van Es (http://cals.cornell.edu/harold-mathijs-van-es)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Water Resources:* water resources

Todd Walter (http://cals.cornell.edu/m-todd-walter)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Water Resources:* water resources
- **Research Interests:** hydrology; echohydrology; transport; watershed modeling

Xiangtao Xu (https://ecologyandevolution.cornell.edu/xiangtao-xu)

- **Campus**: Ithaca - (Minor Member)
- **Concentrations**: *Water Resources*: water resources
- **Research Interests**: ecological modeling/forecasting, ecological remote sensing, plant functional ecology, global change biology, terrestrial ecosystem ecology

Yun Yang (http://cals.cornell.edu/yun-yang)

- **Campus:** Ithaca - (Minor Member)
- **Concentrations:** *Water Resources:* water resources
- **Research Interests:** remote sensing, sustainable water management, vegetation water use