The 12-15 credit hour Hydrogeology Certificate will provide students with a competitive advantage in beginning a career in the hydrogeological fields or pursuing entrance into a graduate degree program in fields related to hydrogeology. The certificate is designed to enhance both critical thinking and the technical skills for practicing hydrogeology.

One groundwater course (4 credits):
• EARTHSC 5651: Hydrogeology (4)

One surface water course (3 credits):
• EARTHSC 5665: Land surface hydrology (3)
• ENR 4285: Watershed hydrology (3)
• CIVILEN 5130: Applied Hydrology (3)

Electives (at least 5 credit hours):
• EARTHSC 5751: Quantitative Reservoir Modeling (4)
• EARTHSC 4450: Water, Ice and Energy in the Earth System (3)
• EARTHSC 5203: Geo-environment and Human Health (3)
• EARTHSC 5621: Introduction to Geochemistry (3)
• EARTHSC 5550: Geomorphology (4)
• ENR 5268: Soils and Climate Change (2)
• ENR 5261: Environmental Soil Physics (3)
• ENR 5273: Environmental Fate and Impact of Contaminants in Soil and Water (3)
• CIVILEN 5220: Open Channel Hydraulics (3)
• AGSYSMT 4575: Applied Agricultural Water Management (2)
• GEOG 5210: Fundamentals of GIS (3)

Hydrogeology Certificate program guidelines

The following guidelines govern the Hydrogeology Certificate. Required for certificate:

Credit hours required: 12-15 credit hours.

Overlap with a major
• The certificate must be in a different subject than the major.
• Max 50% overlap with degree program (i.e. major, minor, other certificate, or GE)

Grades required
• Minimum C- for a course to be listed on the certificate.

Minimum 2.00 cumulative point-hour ratio required for the certificate.

X193 credits: Not permitted.

Certificate Completion: If the certificate is not complete on the DAR, the student must consult with the College of Arts and Sciences Coordinating Advisor.

Filing the certificate program form: The certificate program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the certificate: Once the certificate program is filed in the college office, any changes must be approved by the College of Arts and Sciences Coordinating Advisor.

School of Earth Sciences undergraduate advisor:
Dr. Karen Royce, royce.6@osu.edu

School of Earth Sciences graduate advisor:
Professor Michael Durand, durand.8@osu.edu