

HYDROGEOLOGY AND GROUNDWATER MODELING, GRADUATE CERTIFICATE

A minimum of 9 credit hours of approved graduate coursework is required for the certificate in Hydrogeology and Groundwater Modeling. The following course is required:

| Code | Title | Hours |
|-----------------------------|-------------------------------------|----------|
| EEES 5410 | Hydrogeology | 3 |
| Select two of the following | | 6 |
| EEES 5220 | Environmental Geochemistry | |
| EEES 5610 | Solid Earth Geophysics | |
| EEES 6100 | Glacial Stratigraphy And Geophysics | |
| EEES 6440 | Contaminant Hydrogeology | |
| EEES 6450 | Advanced Applied Hydrogeology | |
| Total Hours | | 9 |

- Students will develop research questions and state a hypotheses that can be answered with data and observations.
- Students will be able to calculate groundwater flow rates, fluxes and storage.
- Students will evaluate groundwater resource availability and quality.
- Students will apply mathematical reasoning and scientific inquiry to hydrogeological problems.
- Students will be able to operate geophysical and coring equipment for field data collection.
- Students will process digital geophysical data and interpret and synthesize that data.