Master of Science in Earth and Environmental Sciences

Degree Requirements

Geology Option (45-46 units minimum)

Core Courses (25-26 units)
1. CHEM 610. Advanced Environmental Chemistry (5)
2. GEOL 610. Environmental Geosciences (5)
3. GEOL 621. Graduate Geological Mapping (4)
4. GEOL 690. Graduate Seminar in Geological Sciences (2)
5. GEOL 695. Supervised Graduate Study in Geology (4-5)
6. GEOL 696. Graduate Project (4)

Electives (20 units)
1. A minimum of 20 units, at least 15 of which are graduate level courses.

Undergraduate Electives:
(Some of these elective courses have prerequisites that must be satisfied before the course can be taken)
CHEM 345. Modern Quantitative Analysis (5)
GEOG 402. Geographic Information Systems Applications (5)
GEOL 375. Groundwater Hydrology (4)
GEOL 376. Field Methods in Hydrology (4)
GEOL 430. Engineering Geology (5)

Graduate Electives:
CHEM 501. Advanced Laboratory Techniques (1-2)
CHEM 545. Instrumental Analysis (6)
GEOL 540. Advanced Topics in Geology (4)
GEOL 545. Laboratory for Advanced Topics in Geology (1-2)
GEOL 550. Earth Resources (5)
GEOL 551. Neotectonics and Seismic Hazard Analysis (5)
GEOL 552. Volcanology and Volcanic Hazard Assessment (5)
GEOL 553. Advanced Structural Geology (5)
GEOL 575. Internship in Geology (4-5)
GEOL 595. Independent Study (2-6)
GEOL 620. Digital Mapping and GIS for Scientists (4)
GEOL 630. Environmental Geochemistry (4)
GEOL 635. Low-Temperature Geochemistry (4)
GEOL 691. Graduate Independent Study (2-4)
GEOL 696. Graduate Research in Geology (1-6)