RATIONALE

Applied geomorphology emphasizes geomorphological processes that are of societal significance, including the effects of urbanization on the physical environment and hazards such as flooding, coastal erosion and sea-level rise. This track enables students to structure their degree plans around conceptual and technical aspects of applied geomorphology. Students completing this track may continue in higher education or find employment with government research and regulatory agencies, municipalities, planning organizations, water supply districts, or environmental consulting firms.

COURSE WORK

The MS professional degree requires a total of 36 semester credit hours. Core requirements: fundamental course in GIS, a methods course (e.g., statistics). Six additional courses will be taken from two of three distribution requirement groups: topical GIS courses; human geography; and physical geography. A project in lieu of a thesis course (GEOG 5920) is also required.

SUGGESTED TECHNIQUES COURSES

- GEOG 5050 - Cartography and Graphics
- GEOG 5060 - Applied GIS: MapInfo Professional
- GEOG 5170 - Mapping and Field Methods
- GEOG 5185 - Statistical Research Methods in Geography
- GEOG 5190 - Advanced Quantitative Techniques
- GEOG 5400 - Environmental Modeling
- GEOG 5410 - Location-Allocation Modeling
- GEOG 5430 - Remote Sensing
- GEOG 5510 - GIS for Applied Research
- GEOG 5550 - Advanced Geographic Information Systems
- GEOG 5560 - GIS Programming
- GEOG 5570 - Special Topics in GIS
- GEOG 5580 - Advanced GIS Methods in Health
- GEOG 5590 - Advanced GIS Programming
SUGGESTED TOPICS COURSES

- GEOG 5030 - British Isles Field School
- GEOG 5040 - Ghana Field School
- GEOG 5075 - China Field School
- GEOG 5120 - Research in Physical Geography
- GEOG 5150 - Water Resources Seminar
- GEOG 5240 - Meteorology
- GEOG 5250 - Climatology
- GEOG 5350 - Geomorphology
- GEOG 5400 - Environmental Modeling
- GEOG 5420 - Conservation and Resource Management
- GEOG 5600 - Seminar in Environmental Policy
- GEOG 5630 - Soils Geomorphology
- GEOG 5700 - Global Environmental Change
- GEOG 5750 - Surface Water Hydrology
- GEOG 5850 - Introduction to Groundwater Hydrology
- GEOG 5900 - Special Problems

The rest of the coursework in the MS Geography professional degree curriculum consists of a series of electives that are chosen in consultation with the major professor and committee.