NORTHWESTERN UNIVERSITY MASTERS OF SCIENCE PROGRAM IN GEOTECHNICAL ENGINEERING

Note: The recommended program includes 12 courses, in addition to the Geotechnical Engineering Seminar.
The minimum number of courses for an MS is 12 (9 required + 3 electives).

Track		1st Quarter/Fall	2nd Quarter/Winter	3rd Quarter/Spring
Recommended: 4 Courses/Quarter plus Geotechnical Engineering Seminar		**Advanced Soil Mechanics I (450-1)[1]**	**Advanced Soil Mechanics II (450-2)[2] or Foundation Engineering (352)[3]**	**Advanced Soil Mechanics III (450-3)**
		Air Photo Interpretation (358)[3] or Rock Mechanics (453)[2]	**Soil Dynamics (458)[2] or Experimental Soil Mechanics (451)[3]**	**Ground Modification (495)[2] or Unsaturated Soil Mechanics (495)[3]**
		3rd Course from Tracks below	**Failure in Geomaterials (495)**	Geotechnical Aspects of Landfill Design (495)[2] or LRFD in Geotechnical Engineering (495)[3]
		4th Course from Tracks below	4th Course from Tracks below	4th Course from Tracks below
			Seminar in Geotechnical Engineering Civ-Env 515 in winter (515-1) and spring (515-2) quarters	
Tracks Choose 1 Course/Quarter	Design	Uncertainty analysis (Civ Env 306) Advanced Steel Design (CivEnv 495)	**MS Design Project (495) with a required zero unit pre-requisite course (504) in Winter quarter**	
	Earth Science	Introductory (Aqueous) Geochemistry (Earth 310)	Seismology and Earth Structure (Earth 323-0)	
	Structures	Finite Elements (Civ Env 327)	Reinforced Concrete (Civ Env 325)	Steel Design (Civ Env 323)

Note: required courses/projects are in **bold** face
[1] number in parenthesis are Civ-Env courses unless noted otherwise
[2] courses offered in even years
[3] courses offered in odd years