

NORTHWESTERN UNIVERSITY MASTERS OF SCIENCE PROGRAM IN GEOTECHNICAL ENGINEERING

2018-2019

The M.S. in GEO program requires 12 courses (9 required + 3 electives) and the Geotechnical Engineering Seminars in winter and spring quarters.

Track		1 st Quarter/Fall	2 nd Quarter/Winter	3 rd Quarter/Spring
Recommended: 4 Courses/Quarter plus Geotechnical Engineering Seminar		Ground Improvement (495-37)	Foundation Engineering (352)	Case Studies in Geotechnical Engineering (495-29)
		Hydrogeology and Subsurface Contamination (355)	Engineering Properties of Soil (451)	Unsaturated Soil Mechanics (452)
		Computational Plasticity and Limit Analysis (495-35)	Soil-Machine Interaction (495-39)	LRFD in geotechnical engineering (495-34)
		4 th Course from Tracks below	4 th Course from Tracks below	MS Design project (495) see below
			Seminar in Geotechnical Engineering in winter (515-1) and spring (515-2) quarters	
Tracks Choose 1 Course/Quarter	Design	Uncertainty analysis (306)	STR/GEO Capstone Pre-design Seminar (504); zero units	MS STR/GEO Capstone Design Project (495-25), pre-req.: 504
	Earth Science	Introductory (Aqueous) Geochemistry (Earth 310)	Seismology and Earth Structure (Earth 323-0)	
	Structures	Finite Elements (327)	Reinforced Concrete (325) Advanced Reinforced Concrete Design (495-27) Steel Design (323), <i>by permission only</i>	Advanced Steel Design (495-20)
Note: required courses/projects are in bold face ¹ number in parenthesis are Civ-Env courses unless noted otherwise				