

NORTHWESTERN - GRADUATE PROGRAM IN ENVIRONMENTAL ENGINEERING & SCIENCE

2024-2025

The MS in EES requires 12 course units in addition to the Environmental Seminar Series – CIV ENV 516. It is also the program followed by first year graduate students enrolled in the PhD program. 9 Courses constitute the core and are required for all graduate students, 3 are graduate elective courses – 300 level or higher - that can be taken from other Departments/Programs after approval. The MS thesis is only an option, most MS students graduate in June after following 12 graded courses. CIV ENV 499 is graded whereas CIV ENV 590 is not. CIV ENV 590 is only used for continuing research purposes. The optional 4<sup>th</sup> Quarter list courses that can be taken in the Fall of 2024 to finish degree requirements if need be.

	1 <sup>st</sup> Quarter/Fall	2 <sup>nd</sup> Quarter/Winter	3 <sup>rd</sup> Quarter/Spring	Optional 4 <sup>th</sup> Quarter/Fall
4 Courses/Quarter and the EES seminar series	Environmental Microbiology* (Marcelino) CIV ENV 361-1	Computational Chemodynamics (Gaillard) CIV ENV 448	Emerging Organic Contaminants* (Hartmann) CIV ENV 370	Sustainability: The City* (Gray) CIV ENV 368
	Chemical Processes in Aquatic Systems* (Gaillard) CIV ENV 367	Environmental Metabolomics (Aristilde) CIV ENV 495-0-1	Microbial Ecology for Resource Recovery (Wells) CIV ENV 443	Environmental Law and Policy* (Harley) CIV ENV 303
	Env. Transport Processes (Packman) CIV ENV 440	Ecohydrology* (Packman) CIV ENV 346	Environmental Particles & Surface Chemistry (Aristilde) CIV ENV 449	
	4 <sup>th</sup> Course from <b>courses</b> below or unrestricted electives	4 <sup>th</sup> Course from <b>courses</b> below or unrestricted electives	4 <sup>th</sup> Course from <b>courses</b> below or unrestricted electives	
	Environmental Engineering Science Seminar Series (CIV ENV 516-1,2,3)			CIV ENV 516-1
Electives Choose 1 additional Course per Quarter	Sustainability: The City* (Gray) CIV ENV 368	Organic Geochemistry* (Blair) CIV ENV 314	Molecular Microbiology (Hartmann) CIV ENV 447	
	Environmental Law and Policy* (Harley) CIV ENV 303	Public & Environ. Health* (Marcelino) CIV ENV 361-2	Environmental Justice* (Harley) CIV ENV 308	
		Climate & Energy Law & Policy* (Harley) CIV ENV 309	Water in Arid Lands* (Packman) CIV ENV 395-0-25	
		Environmental Laboratory* (Xiong) CIV ENV 365		
MS Thesis Option (Need an advisor/PI, 9 Courses are required and at least 3 quarters of research)	Finding an advisor or starting with a CIV ENV 499 – carrying a course credit if you already have an advisor	Research Project Starts with a CIV ENV 499 To carry on with MS thesis research: CIV ENV 590	Research Project CIV ENV 590 or starts with CIV ENV 499	Research Project CIV ENV 590 or TGS 512 to continue

For the students completing a BSEN – BS in Environmental Engineering – at Northwestern, some courses\* count also towards the BS degree. As a result, BSEN/MS students need to follow TGS requirements for an MS degree, *i.e.*, take 9 additional courses that are not used towards their BS degree.

