

# NORTHWESTERN - MASTER OF SCIENCE: PROGRAM IN ENVIRONMENTAL ENGINEERING & SCIENCE

## 2022-2023

**The MS in EES requires 12 course units in addition to the Environmental Seminar Series – CIV ENV 516. 9 Courses constitute the core and are required, 3 are graduate elective courses that can be taken from other Departments/Programs after approval.**

**For the students with a BS in Environmental Engineering from Northwestern, 3 of their undergraduate courses, denoted by \*, count towards the MS degree. As a result, they need to follow 9 additional courses. For other BS degrees, 3 graduate level courses can be selected for electives.**

	1 <sup>st</sup> Quarter/Fall	2 <sup>nd</sup> Quarter/Winter	3 <sup>rd</sup> Quarter/Spring	Optional 4 <sup>th</sup> Quarter/Summer
<b>4 Courses/Quarter and the EES seminar series</b>	<b>Environmental Microbiology*</b> (Marcelino) CIV ENV 361-1	<b>Environmental Laboratory*</b> (Gaillard) CIV ENV 365 <i>Or: CIV ENV 361-2, 314</i>	<b>Computational Chemodynamics</b> (Gaillard) CIV ENV 448	<b>Sustainability: The City</b> (Gray) CIV ENV 368
	<b>Chemical Processes in Aquatic Systems*</b> (Gaillard) CIV ENV 367	<b>Environmental Particles &amp; Surface Chemistry</b> (Aristilde) CIV ENV 495	<b>Microbial Ecology for Resource Recovery</b> (Wells) CIV ENV 443	<b>Environmental Law and Policy</b> (Harley) CIV ENV 303
	<b>Environmental Transport Processes</b> (Packman) CIV ENV 440	<b>Ecohydrology</b> (Packman) CIV ENV 346 <i>Or: CIV ENV 314 for BS-MS</i>	<b>Emerging Organic Contaminants</b> (Hartmann) CIV ENV 370	
	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	
	<b>Environmental Engineering Science Seminar Series (CIV ENV 516-1,2,3)</b>			<b>CIV ENV 516-1</b>
<b>Technical Electives</b> Choose 1 additional Course per Quarter	<b>Sustainability: The City</b> (Gray) CIV ENV 368	<b>Biogeochemistry</b> (Blair) CIV ENV 314	<b>Water in Arid Lands: Israel &amp; the Middle East</b> (Packman) CIV ENV 395- 0- 25	
	<b>Environmental Law and Policy</b> (Harley) CIV ENV 303	<b>Public &amp; Environ. Health</b> (Marcelino) CIV ENV 361-2	<b>Environmental Justice</b> (Harley) CIV ENV 308-0	
		<b>Climate and Energy Law &amp; Policy</b> (Harley) CIV ENV 309-0		
<b>MS Thesis</b> <i>(Typical path)</i>	<i>Finding an advisor</i> <i>Or starting with CIV ENV 499</i>	Research Project - CIV ENV 499	Research Project CIV ENV 590	Research Project CIV ENV 590 or TGS 512 to continue