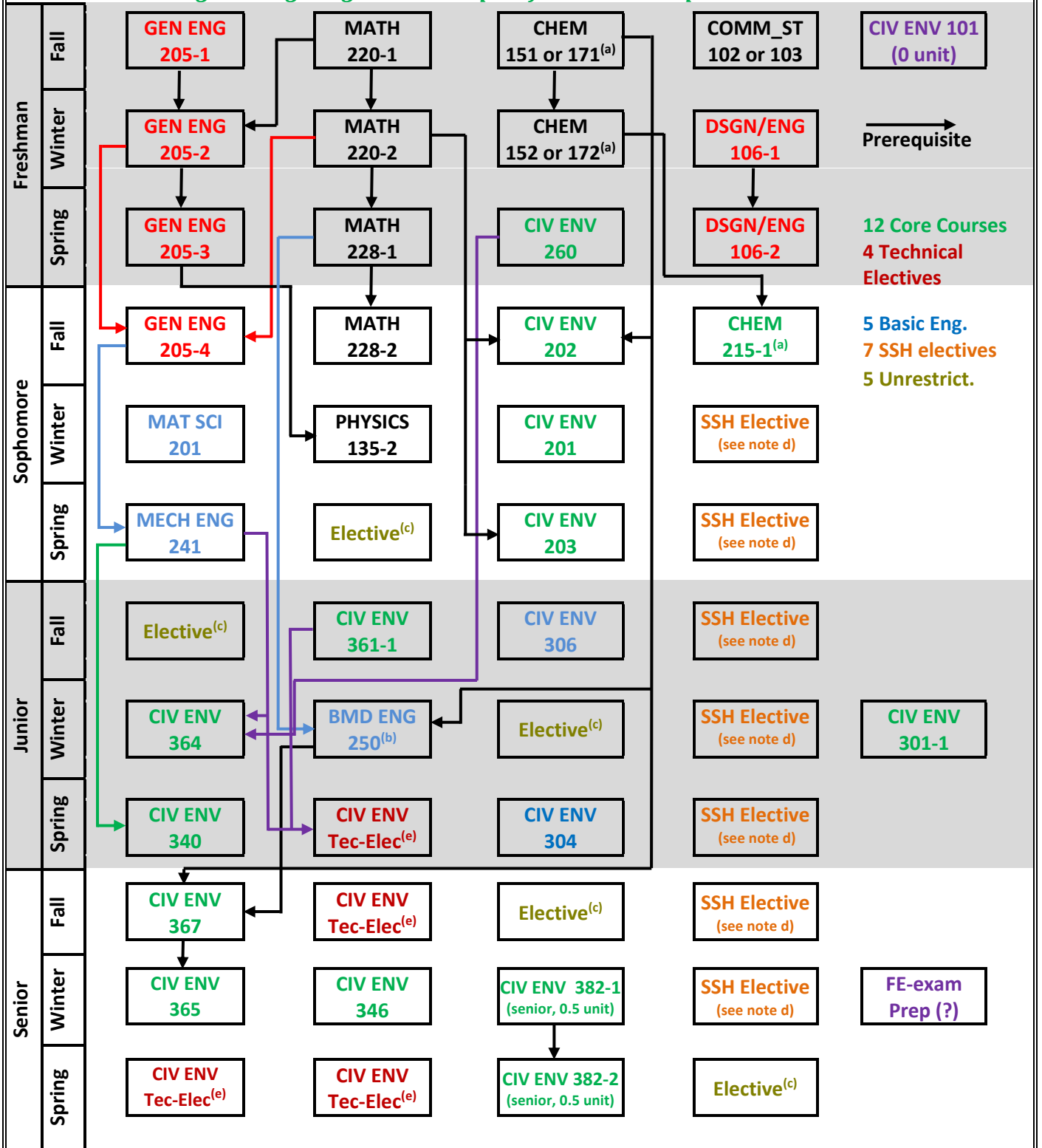


Environmental Engineering Program - example of a curriculum path 2023-2024



Notes:

- These courses have a laboratory requirement CHEM 161, 162, or 181, 182. If no placement in Chemistry then take CHEM 110 in the Fall, and then CHEM 131, 132 with associated laboratories CHEM 141, 142. CHEM 215-1 has a laboratory requirement CHEM 235-1.
- May choose from BME 250 or CHEM ENG 211 (need approval from ChemE for enrollment). Other Basic Engineering Thermodynamics course can be taken after approval.
- May choose from any course offered for credit by the University.
- Courses must be selected to meet the Social Science-Humanities requirement.
- Choose courses from the approved list: at least 3 must carry 100% engineering topics; courses listed are recommended.

Environmental Engineering Program 2023-2024

Social Science-Humanities Requirement (7 units)

Seven courses are required to satisfy the requirements of this subgroup. The seven courses must meet the following criteria.

- Maximum of 5 units from either social science or humanities category
- At least 3 units must be thematically related
- No more than 3 units of 100-level courses
- AP credits allowed

Foreign language study can be incorporated into the program, but should be started as early as possible, preferably in the freshman year.

Courses taken for a student's Social Science/Humanities requirement must be approved in advance by the McCormick Humanities Panel. Complete requirement information is at the McCormick Undergraduate Engineering Office web site, <http://www.mccormick.northwestern.edu/students/undergraduate/social-science-humanities-theme/index.html>. You must submit your theme form via McCormick Advising System (MAS).

Technical Electives (TE) – choose four courses

Technical Electives must be taken from the lists below. We are suggesting 3 different tracks based on sets of courses organized around specific themes. **General rule:** *a minimum of three (3) of these electives must carry 100% engineering topics⁽¹⁾, only one (1) CIV ENV 399 can be counted towards a technical elective.*

Urban Sustainability	
	CIV_ENV 368 - Sustainability: The City
	CIV_ENV 387 - Design of Sustainable Urban Districts
	CIV_ENV 353 – Energy Geostuctures and Geosystems
	CIV_ENV 309 – Climate and Energy - Law & Policy - (100% general topic course)
Fate of contaminants in the Environment	
	CIV_ENV 361-2 – Public and Environmental Health
	CIV_ENV 370 – Emerging Organic Contaminants
	CIV_ENV 317 – Biogeochemistry (100% MTS)
	CIV_ENV 395 - Projects Practicum in Environmental Engineering
Resource Recovery	
	CIV_ENV 353 – Energy Geostuctures and Geosystems
	CIV_ENV 368 - Sustainability: The City
	CIV_ENV 442 - Environmental Biotechnology for Resource Recovery
	CIV_ENV 399 - Research project (100% Eng.)

A la carte⁽²⁾: If you do not want to follow any of these tracks you need to take 3 courses that count towards 100% engineering content with 2 from {CIV_ENV 361-2, 368, 370, 395-Practicum} and any engineering 300 level - or higher - course counting towards 100% engineering content, and then one⁽¹⁾ 300 level course choose that you can choose from {CIV_ENV: 303; 314; 317; 395-20,23,25; EARTH 340; 343; 361; 370}. You can also choose courses at the graduate level courses such as CIV_ENV 440⁽²⁾, CIV_ENV 442/443⁽²⁾. Only 1 CIV_ENV 399 can be counted towards a technical elective content. You need to receive permission from your advisor and the EES program director – Prof. Jean-François Gaillard- for this selection of technical elective courses.

⁽¹⁾ (100% MTS), ⁽¹⁾ <https://www.mccormick.northwestern.edu/academics/undergraduate/abet/course-partitioning.html>

⁽²⁾ Requires instructor permission and a permission number from the CIV ENV office.