

<b>Name:</b>	<b>ID:</b>
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## 2019-2020 Program Advising Guide

### Bachelor of Science in Environmental Engineering

Guide to notations:

*Taken*, *In progress*, **Advised for next semester**, *Missed/failed*

**Advisor Instructions** – strikethrough, color code or highlight pre/coreq as appropriate to indicate review and update the courses *taken*, *in progress*, *missed/failed* and **advised for next semester**.

**Engineering, Math and Science Course Requirements: (99 hours); add'l gen ed requirements shown below**

- A “c” on a prereq indicates “or concurrent registration” (coreq); See dept webpage for prereq policy.
- Offered – semesters in which the course is offered
- The student must earn a “C” or better in each course to graduate.

1 <sup>st</sup> Semester (Fall)	Pre/coreq	Offered	Hrs
ENGR 1100 – Transition to University Studies			1
ENGR 1211* – Engineering Fundamentals 1	MATH 1316c or MATH 2412c	Fa, Sp	2
MATH 2413* – Calculus 1	MATH 1316 or MATH 2412 or Placement	All	4
CHEM 1409* – College Chemistry for Engineers		Fa	4
2 <sup>nd</sup> Semester (Spring)	Pre/coreq	Offered	Hrs
ENGR 1212* – Engineering Fundamentals 2	ENGR 1211, MATH 2413c, PHYS 2425c	Fa, Sp	2
MATH 2414* – Calculus 2	MATH 2413	All	4
PHYS 2425* – University Physics 1	MATH 2413c	Fa, Sp	4
3 <sup>rd</sup> Semester (Fall)	Pre/coreq	Offered	Hrs
ENGR 2322 - Thermodynamics	ENGR 1212, MATH 2414c	Fa, Sp	3
ENVE 2251* – Fundamentals of GIS for Engrs	MATH 2413c	Fa, Sp	2
ENVE 2311* – Soil Mechanics	MATH 2413, PHYS 2425c	Fa	3
MATH 3433* – Calculus 3	MATH 2414	Fa, Sp	4
4 <sup>th</sup> Semester (Spring)	Pre/coreq	Offered	Hrs
ENGR 3311 – Engineering Math Methods	ENGR 1212, MATH 2413	Sp	3
ENVE 2310 – Intro to Env. Engr	CHEM 1409, MATH 2414	Sp	3
ENVE 3300* – Fluid Mechanics	PHYS 2425, MATH 2414	Sp	3
MATH 3306 – Differential Equations	MATH 2414	Fa, Sp	3

*Note some junior/senior courses are on a two year rotation. This is reflected in the ordering of the 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> semesters as shown below.*

5th/7th Semester (Fall odd)	Pre/coreq	Offered	Hrs
ENVE 3301* – Environmental Systems Modeling	MATH 3306, ENVE 2310	Fa odd	3
ENVE 3310 – Engineering Hydrology [WI]	ENVE 3300	Fa odd	3
CHEM 2423* – Organic Chemistry	CHEM 1409	All	4
5 <sup>th</sup> sem: PHYS 2426* - Physics 2	PHYS 2425, MATH 2414c	Fa, Sp	4
5 <sup>th</sup> sem: CVEN 2235* – Civil Engineering Graphics	ENVE 2310c or CVEN 2312c	Fa	2
7 <sup>th</sup> sem: ENGR 4259* – Capstone 1	w/in 1 yr of graduating	Fa	2

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<b>6<sup>th</sup>/8<sup>th</sup> Semester (Spring even)</b>	<b>Pre/coreq</b>	<b>Offered</b>	<b>Hrs</b>
ENVE 4320 – Water/Wastewater Treatment	CHEM 2423c, ENVE 3300, ENVE 2450c	Sp even	3
ENVE 4325* – Environmental Measurements and Monitoring	ENVE 3450c, ENVE 4320c	Sp even	3
ENVE 3333 – Groundwater Contamination and Remediation	ENVE 3310, MATH 3306c	Sp even	3
6 <sup>th</sup> sem: ENVE 3450* – Environmental Biotechnology	ENVE 2310, MATH 2414, CHEM 1409	Sp	4
8 <sup>th</sup> sem: ENGR 4360* – Capstone 2	ENGR 4259	Sp	3
<b>7<sup>th</sup>/5<sup>th</sup> Semester (Fall even)</b>	<b>Pre/coreq</b>	<b>Offered</b>	<b>Hrs</b>
ENVE 3340* – Environmental Risk Assessment	ENVE 2310, ENGR 3311	Fa even	3
ENVE 4310 – Water Resources Engineering	ENVE 3300	Fa even	3
BIOL 4441* - Limnology	1 year of CHEM and 12 hours of BIOL including BIOL 1406 and 1407	Fa	4
5 <sup>th</sup> sem: PHYS 2426* - Physics 2	PHYS 2425, MATH 2414c	Fa, Sp	4
5 <sup>th</sup> sem: CVEN 2235* – Civil Engineering Graphics	ENVE 2310c or CVEN 2312c	Fa	2
7 <sup>th</sup> sem: ENGR 4259* – Capstone 1	w/in 1 yr of graduating	Fa	2
<b>8<sup>th</sup>/6<sup>th</sup> Semester (Spring odd)</b>	<b>Pre/coreq</b>	<b>Offered</b>	<b>Hrs</b>
ENVE 4302 – Atmospheric Systems & Air Pollution Control	CHEM 1409, ENGR 2322	Sp odd	3
GEOL 1403* – Physical Geology	N/A	All	4
ENVE 4350 – Solid and Hazardous Waste	ENVE 2310, CHEM 1409	Sp odd	3
6 <sup>th</sup> sem: ENVE 3450* – Environmental Biotechnology	ENVE 2310, MATH 2414, CHEM 1409	Sp	4
8 <sup>th</sup> sem: ENGR 4360* – Capstone 2	ENGR 4259	Sp	3

\* indicates the class has a lab.

**Additional General Education Requirements (30 hours):**

These may be taken any semester unless otherwise noted; use these to fill in semesters. If gen ed is complete, consider adding a minor to maintain full time status by taking meaningful coursework. See catalog or DegreeWorks for details.

Advisors – ~~strikethrough~~, color code or highlight the general education component as appropriate. You may also update and highlight the following statement if the student has the freedom to select gen ed classes:

Take # of your remaining gen ed courses:

ENGL 1301 (1 <sup>st</sup> sem or prior)	COMM (Speech)	Creative Arts	HIST 1301	GOVT 2305
ENGL 1302 (2 <sup>nd</sup> sem or prior)	Language & Culture	Social/Behavioral	HIST 1302	GOVT 2306

**Additional Advising Notes: (date each note)**

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