

Name:	ID:
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2019-2020 Program Advising Guide

Bachelor of Science in Civil 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 “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 grade in each course to graduate.

1 st Semester (Fall)	Pre/coreq	Offered	Hrs
ENGR 1100 – Transition to University Studies			1
ENGR 1211* – Engineering Fundamentals 1	MATH 1316c <u>or</u> MATH 2412c	Fa, Sp	2
MATH 2413* – Calculus 1	MATH 1316 <u>or</u> MATH 2412 <u>or</u> Placement	All	4
CHEM 1409* – College Chemistry for Engineers		Fa	4
2 nd 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 rd Semester (Fall)	Pre/coreq	Offered	Hrs
ENGR 2321 – Eng. Mechanics: Statics	(ENGR 1212, PHYS 2425c, MATH 2414c) <u>or</u> (ENGR 1212c, PHYS 2425, MATH 2414c)	Fa, Sp	3
CVEN 2200* – Surveying	ENGR 1212c, MATH 2413c	Fa	2
ENVE 2311* – Soil Mechanics	MATH 2413, PHYS 2425c	Fa	3
MATH 3433* – Calculus 3	MATH 2414	Fa, Sp	4
CVEN 2312 – Intro to Civil Engineering	ENGR 1212c	Fa	3
CVEN 2235* – Civil Engineering Graphics	CVEN 2312c <u>or</u> ENVE 2310c	Fa	2
4 th Semester (Spring)	Pre/coreq	Offered	Hrs
ENGR 3311 – Engineering Math Methods	ENGR 1212, MATH 2413	Sp	3
CVEN 3423* – Strength of Materials	ENGR 2321	Sp	4
ENVE 3300* – Fluid Mechanics	PHYS 2425, MATH 2414	Sp	3
MATH 3306 – Differential Equations	MATH 2414	Fa, Sp	3
ENGR 2324 – Eng. Mechanics: Dynamics	ENGR 2321, MATH 2414	Sp	3

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

5 th /7 th Semester (Fall odd)	Pre/coreq	Offered	Hrs
CVEN 4450* – Transportation Engineering [WI] [FA1]	CVEN 2312	Fa odd	4
ENVE 3310 – Engineering Hydrology [WI] [FA4]	ENVE 3300	Fa odd	3
CVEN 4325 – Foundation Engineering [FA2]	CVEN 2312, ENVE 2311	Fa odd	3
5 th sem: BIOL 1406* <u>or</u> GEOL 1403* [Add. Basic Sci.]	N/A	Fa, Sp	4
7 th sem: ENGR 4259* – Capstone 1	w/in 1 yr of graduating [#]	Fa	2

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6th/8th Semester (Spring even)	Pre/coreq	Offered	Hrs
CVEN 4360 – Highway Planning and Design [FA1]	ENGR 3311	Sp even	3
CVEN 3430* – Civil Engineering Materials	CVEN 2312, CHEM 1409	Sp even	4
6 th sem: PHYS 2426* - Physics 2	PHYS 2425, MATH 2414c	Fa, Sp	4
8 th sem: ENGR 4360* – Capstone 2 [WI]	ENGR 4259	Sp	3
7th/5th Semester (Fall even)	Pre/coreq	Offered	Hrs
CVEN 3301* – Structural Analysis [FA3]	CVEN 2312, ENGR 2321	Fa even	3
ENVE 4310 – Water Resources Engineering [FA4]	ENVE 3300	Fa even	3
CVEN 4305 – Reinforced Concrete Design [FA3]	CVEN 3423	Fa even	3
5 th sem: BIOL 1406* or GEOL 1403* [Add. Basic Sci.]	N/A	Fa, Sp	4
7 th sem: ENGR 4259* – Capstone 1	w/in 1 yr of graduating [#]	Fa	2
8th/6th Semester (Spring odd)	Pre/coreq	Offered	Hrs
CVEN 3320 – Construction Planning & Management	CVEN 2312, CVEN 2235	Sp odd	3
CVEN 4306 – Steel Design [FA3]	CVEN 3423	Sp odd	3
6 th sem: PHYS 2426* - Physics 2	PHYS 2425, MATH 2414c	Fa, Sp	4
8 th sem: ENGR 4360* – Capstone 2 [WI]	ENGR 4259	Sp	3

* indicates the class has a lab; [WI] – Writing Intensive

Focus Areas [FA]:

[#]Ensure that student has had design-experience in *at least two focus areas prior to entering ENGR 4259.*

FA1 (Transportation)	FA2 (Geotechnical)	FA3 (Structural)	FA4 (Water resources)	Add. Basic Sci.
CVEN 4450	CVEN 4325	CVEN 3301	ENVE 3310 or 4310	BIOL 1406 or
CVEN 4360		CVEN 4305 or 4306		GEOL 1403

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

Additional Advising Notes: (date each note)

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