

SEM	CR	EVEN B.S. Degree: Block Diagram 2022-23					
Spr	16	Enviro Eng Opt list B 3- *	MCEN 4131 -3- Air Pollution Control P: fluid mechanics & Thermo #	CVEN 4333 -3- Engineering Hydrology P: Fluids C: Prob & Stat	EVEN 4434 -4- Environmental Engineering Design P: EVEN 4464 or CVEN 3424 #	Technical Elective III -3- or Senior thesis *	
Fall	18	Enviro Eng Opt list B -3-	EVEN 4494 -3- Fate & Transport	Free Elective -3	EVEN 4464 -3- Env Eng Processes P: CVEN3414 & fluids #	Technical Elective II -3- or Senior thesis *	H&SS Elective V -3- upper division
Spr	15	Enviro Eng Opt list A -3-	EVEN 4424 -3- Env Organic Chemistry P: CHEN 1211 or CHEN 1203 or CHEM 1133 & EVEN 4404 #	Probability & Statistics -3- CVEN 3227: JR or SR level only #	EVEN 4484 -3- Intro to Env Microbio P: CHEN 1201 or CHEN1211 & Calc 1 #	Engineering Fundamentals Course-3- Choice of: MCEN 3022 CVEN 3424 CVEN 3323	
Fall	16	Engineering Economics -3- EMEN 4100 CVEN 3246 CVEN 4147	EVEN 4404 -3- Water Chemistry EVEN 4414 -1- Water Chem Lab P: CHEN 1203 or CHEN1211 or CHEM1133 & C: CVEN3414 #	EVEN 3550 -3- Sustainability Principles for Engineers C: CVEN 3414 #		Thermodynamics -3- EVEN 3012 P: PHYS 1110, C: Calc 2 MCEN: P:Calc 3 AREN: P:PHYS 1110 C: Calc 2	Writing Course -3- (Jr. standing)
Spr	16	APPM 2360 -4- or MATH 2130/3430 Introduction to Differential Equations & Linear Algebra P: APPM 1360 or MATH 2300		Fluid Mechanics -3- CVEN P: solids MCEN P: solids, calc 3	CVEN 3414 -3- Fundamentals of Env. Engineering P: CHEN 1201 or CHEN 1211 and CHEM 1221, & APPM 1360	Technical Elective I -3- *	H&SS Elective IV -3- upper division
Fall	15	APPM 2350 -4- or MATH 2400-5 Calculus III for Engineers P: APPM 1360 or MATH 2300	PHYS 1120 -4- PHYS 1140 -1- Gen.Phys/Lab P: PHYS 1110 & C: MATH 2300 or APPM 1360	Statics / Mechanics -3- CVEN:P: PHYS 1110 & C: Calc III; MCEN: P: calc II & PHYS 1110			H&SS Elective III -3- lower division
Spr	17	APPM 1360 -4- or MATH 2300-5 Calculus II for Engineers P: APPM 1350 or MATH 1300	PHYS 1110 -4- Gen. Physics I P/C: APPM 1350 or MATH 1300	CHEN 1203- 2- Gen Chem for Engineers 2 CHEM 1221-1- Eng Gen Chem Lab P: CHEN 1201	CHEN 1310 -3- Introduction to Computing P/C: APPM 1350 or MATH 1300		H&SS Elective II -3- lower division
Fall	15	APPM 1350 -4- or MATH 1300-5 Calculus I for Engineers	CHEN 1201 -4- Gen Chem for Engineers 1		GEEN 1400 -3- Engineering Projects	EVEN 1000 -1- Introduction to Environmental Engineering #	H&SS Elective I -3- lower division

- Courses marked thus are offered only in SEMESTER shown.

* Note: CHEN 1211 & CHEM 1221 if taken must also complete 2 credits of Free Elec.

P/C - Prerequisite or Co-requisite required before taking course listed.

Statics/ Mechanics: CVEN 2121 Analytic Mechanics I (F,S; PHYS 1110, co-req APPM 2350);

GEEN 2851 Statics for Engr (PHYS 1110, APPM 2360); MCEN 2023 Statics &

Structures (F; APPM 1360 & PHYS 1110)

Fluid Mechanics: CVEN 3313 Theoretical Fluid Mechanics (S; Solid Mechanics);

MCEN 3021 Fluid Mechanics (F,S; Pre APPM 2350, Solid Mech coreq APPM 2360),

CHEN 3200 Chem Engr Fluid Mechanics (S; APPM2350/2360, CHEN2120/MCEN2023),

GEEN 3853 Fluid Mech for Engrs (sum,APPM 2350/2360, GEEN 1300)

Thermodynamics: AREN 2110 Thermo (F,S; APPM1360, PHYS1110), GEEN 3852 Thermo

for Engrs (SUM, APPM2350); MCEN 3012 Thermodynamics (F,S; reqd air quality option;

APPM 2350); CHEN 3320 Chem Eng Thermo (F; reqd chem proc option; CHEN2120,

CHEM4521); EVEN 3012 Environmental Engineering Thermodynamics (PHYS 1110, APPM
1360, CHEN 1211)

Engineering Fundamentals: MCEN 3022 Heat Transfer (F,S; Thermo, Fluids, APPM 2360);

CVEN 3424 Water/Wastewater (S; Preq: CVEN 3414); CVEN 4353 Hydraulic Eng (F;Preq

fluids)

*Tech electives: 3 cr can be lower division, others must be 3000 or 4000 level; one tech
elective (3cr) must relate to earth science noted on list by * next to it.

Engineering Economics: CVEN 4147 Civil Engineering Systems (F); EMEN 4100 Business
Methods and Economics for Engineers; CVEN 3246 Introduction to Construction
(F,S,Sum)

Probability and Statistics: CVEN 3227 Probability, Statistics, & Decision (S);

STAT 4000 Statistical Methods; CHEN 3010 Appl Data Analysis (F, CHEN1310, APPM
2360)

Writing Course: ENES 3100 Humanities for Engrs, WRTG 3030 Writing Sci & Society,

WRTG 3035 Tech Comm & Design; PHYS 3050 Wrtg for Phys; WRTG 3020 Irish

Odysseys:Writing in Ireland; HUEN 1010- Freshmen year only.

Key: P: Prereq C: Co-req All MCEN courses require grade of C for any pre/co req Fall 2015

No classes can double count for another BS course

