North Carolina State University

CONSTRUCTION ENGINEERING CURRICULUM

Degree Earned: B.S. in Construction Engineering (14CONBS)

Department of Civil, Construction, and Environmental Engineering

For students entering NCSU <u>after</u> July 2021 (Fall 21)

	FRESHN	IAN YEAR	
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CH 101 Chemistry, A Molecular Science ¹	3	EC 205 Economics (GEP Reg)	3
CH 102 General Chemistry Laboratory ¹	1	MA 241 Calculus II	4
E 101 Introduction to Engr & Prob. Solving ^{1,2}	1	PY 205 Physics for Engineers & Scientists I	3
E 115 Intro to Computing Environments ^{1,2}	1	PY 206 Physics for Engineers & Scientists I Lab	1
ENG 101 Academic Writing and Research ^{1,2}	4	E 102 Engineering in the 21st Century (GEP Req)	2
MA 141 Calculus I	4	GEP Requirement ³	3
HESF 1XX Fitness & Wellness Course	1		
Total:	15	Total:	16
	SOPHON	IORE YEAR	
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 214 Engineering Mechanics – Statics ²	3 (CP) ³	CE 225 Mechanics of Solids ²	3 (CP) ³
CE 250 Introduction to Sustainable Infrastructure	3 (CP) ³	CE 263 Intro to Construction Engineering (S)	3 (CP) ³
CSC 111 Intro to Computing: Python	3	CE 365 Construction Equipment & Methods (S)	3
TDE 220 Civil Engineering Graphics	3	PY 208 Physics for Engineers & Scientists II	3
MA 242 Calculus III	4	PY 209 Physics for Engineers & Scientists II Lab	1
		ST 370 Probability and Statistics for Engrs.	3
		HES *** Phys. Ed/Healthy Living Course	1
Total:	16	Total:	17
		OR YEAR	
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 282 Hydraulics ²	3	CE 332 Civil Engineering Materials	4
CE 301 Civil Engr. Surveying & Geomatics	3	CE 342 Engineering Behavior of Soils & Fdns.	4
CE 327 Reinforced Concrete design	3	CE 367 Mech. and Elect. Systems in Buildings (S)	3
CE 463 Const. Est., Planning & Control (F)	3	MEA 101 Geology I: Physical	3
MSE 200 Mech. Prop. of Structural Materials	3	GEP Requirement ⁴	3
Total:	15	Total:	17
		PR YEAR	
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 466 Building Construction Engr. (F)	3	CE 464 Legal Aspects of Contracting (S)	3
Engineering Elective ⁵	3	CE 469 Construction Eng. Project (S)	3
ACC 280 Survey of Financial and Managerial Acc.	3	Management Science Elective (GEP Req) ⁷	3
COM 110 Public Speaking OR		GEP Requirement ⁴	3
ENG 331 Communication for Engr. & Tech.	3	GEP Requirement⁴	3
Basic Science Elective ⁶	3		
Total:	15	Total:	15
Minimum	Credit Hours Re	equired for Graduation: 126	

Major/Program Footnotes:

- ¹ Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.
- ² Minimum grade of C-, E 115 requires satisfactory completion (S).
- ³ CP = Critical Path major specific course predictive of student success.
- ⁴GEP Requirements to be selected from the appropriate lists in consultation with the advisor.
- ⁵ Engineering Elective Select one: CE 426, CE 499, or an advised elective from CE course list.
- ⁶ Basic Science Elective Select one: SSC 200, FOR 260, or FW 221.
- ⁷ Management Science Elective (2nd Soc Sci GEP) Select one: SOC 205, SOC 301, SOC 305/AFS 305 (USD), PS 202, PS 310, PS 312, PS 314, or PS 320.

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Course Listing with Pre- and Corequisites

Department of Civil, Construction, and Environmental Engineering For students entering NCSU Department <u>after</u> July 2021 (Fall 21)

FRESHMAN YEAR		
FALL SEMESTER	SPRING SEMESTER	
CH 101 (CoReq CH 102)	EC 205 Economics (GEP Soc. Sci. Req.)	
CH 102 (CoReq CH 101)	MA 241 (C or better in MA 141)	
E 101	PY 205 (C or better in MA 141)	
E 115	PY 206 (C or better in MA 141; CoReq PY 205)	
ENG 101	E 102 (CoReq E 115 and MA 141) (GEP Int. Disc. Persp. Req.)	
MA 141	GEP Requirement ¹	
HESF 1XX Fitness & Wellness Course		

CODA Requirements: ¹C or better in CH 101, CH 102, ENG 101, MA 141, PY 205, and PY 206 ² Completion of E 115

SOPHOMORE YEAR		
FALL SEMESTER	SPRING SEMESTER	
CE 214 (C or better in PY 205 and MA 241; CoReq MA 242)	CE 225 (MA 242, C- or better in CE 214)	
CE 250 (CoReq CSC 111 and CE 214)	CE 263 (CoReq CE 214 and CE 250) (S)	
CSC 111 (CoReq E 115 and MA 141)	CE 365 (CoReq CE 263 and ST 370) (S)	
TDE 220	PY 208 (C- or better in PY 205 and MA 241)	
MA 242 (C or better in MA 241)	PY 209 (CoReq PY 208)	
	ST 370 (MA 241)	
	HES *** Phys. Ed/Healthy Living Course	

JUNIOR YEAR		
FALL SEMESTER	SPRING SEMESTER	
CE 282 (C- or better in CE 214, CoReq ST 370)	CE 332 (C- or better in CE 225; MSE 200)	
CE 301 (CE, CON, or ENE standing)	CE 342 (C- or better in CE 225 and CE 282)	
CE 327 (C- or better in CE 225)	CE 367 (C- or better CE 282) (S)	
CE 463 (CE 263 (S), CE 365 (S), TDE 220) (F)	MEA 101	
MSE 200 (C or better in CH 101)	GEP Requirement ¹	

SENIOR YEAR		
FALL SEMESTER	SPRING SEMESTER	
CE 466 (CoReq CE 327) (F)	CE 464 (CE 463; CoReq CE 365) (S)	
Engineering Elective ²	CE 469 (CE 463; CoReq CE 464) (S)	
ACC 280	Management Science Elective (GEP Req) ⁴	
COM 110 Public Speaking OR	GEP Requirement ¹	
ENG 331 Communication for Engr. & Tech.	GEP Requirement ¹	
Basic Science Elective ³		

Footnotes:

 $^{^{1}\}text{GEP}$ Requirements to be selected from the appropriate lists in consultation with the advisor.

² Engineering Elective – Select one: CE 426, CE 499, or an advised elective from CE course list.

³ Basic Science Elective - Select one: SSC 200, FOR 260, or FW 221.

⁴ Management Science Elective (2nd Soc Sci GEP) - Select one: SOC 205, SOC 301, SOC 305/AFS 305 (USD), PS 202, PS 310, PS 312, PS 314, or PS 320.