

North Carolina State University

CONSTRUCTION ENGINEERING

Degree: B.S. in Construction Engineering; Dept. of Civil, Construction, and Environmental Engineering
For Students entering after July 2019 (F'19)

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CH 101 Chemistry, A Molecular Science	3	EC 205 Economics (GEP Req) ¹	3
CH 102 General Chemistry Laboratory	1	MA 241 Calculus II	4
E 101 Introduction to Engr & Prob. Solving	1	PY 205 Physics for Engineers & Scientists I	3
E 115 Intro to Computing Environments	1	PY 206 Physics for Engineers & Scientists I Lab	1
ENG 101 Academic Writing and Research	4	E 102 Engineering in the 21 st Century (GEP Req) ¹	2
MA 141 Calculus I	4	GEP Requirement ¹	3
HESF 1XX Fitness & Wellness Course	1		
	<i>Total: 15</i>		<i>Total: 16</i>
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CSC 111 Intro. to Computing: Python	3	PY 208 Physics for Engineers & Scientists II	3
CE 214 Engineering Mechanics – Statics	3 (CP)	PY 209 Physics for Engineers & Scientists II Lab	1
TDE 220 Civil Engineering Graphics	3	CE 225 Mechanics of Solids	3 (CP)
MA 242 Calculus III	4	ST 370 Probability and Statistics for Engrs.	3
CE 250 Introduction to Sustainable Infrastructure	3 (CP)	CE 365 Construction Equipment & Methods (S)	3
		CE 263 Intro to Construction Engineering (S)	3 (CP)
		HES *** Phys. Ed/Healthy Living Course	1
	<i>Total: 16</i>		<i>Total: 17</i>
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
MSE 200 Mech. Prop. of Structural Materials	3	CE 332 Materials of Construction	3
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 282 Hydraulics	3	MEA 101 Geology I: Physical	3
CE 463 Const. Est., Planning & Control (F)	3	GEP Requirement ¹	3
Basic Science Elective ³	3		
	<i>Total: 18</i>		<i>Total: 16</i>
SENIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 426 Structural Steel Design	3	CE 464 Legal Aspects of Contracting (S)	3
CE 466 Building Construction Engr. (F)	3	CE 469 Construction Eng. Project (S)	3
Engineering Elective ⁴	3	Management Science Elective (GEP Req) ^{1,2}	3
ACC 280 Survey of financial & Managerial Acc.	3	GEP Requirement ¹	3
COM 110 Public Speaking OR ENG 331 Communication for Engr. & Tech.	3	GEP Requirement ¹	3
	<i>Total: 15</i>		<i>Total: 15</i>
Minimum Credit Hours Required for Graduation*: 128			

Major/Program Footnotes:

¹GEP Requirements to be selected from the appropriate lists in consultation with the advisor.

² Management Science Elective (2nd Soc Sci GEP) - Select one: SOC205, SOC301, SOC305/AFS305 (USD), PS202, PS310, PS312, PS314, or PS320

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

⁴ Engineering Elective – Select one: ECE 331, MAE 201, CE 499, or an advised elective from CE course list

*Foreign Language Proficiency at the FL_102 level is required for graduation

(CP) – Critical Path major specific course predictive of student success

CONSTRUCTION ENGINEERING
 COURSE LISTING WITH PRE- AND COREQUISITES IN PARENTHESES
 For students entering after July 2019 (F'19)

Fall Semester

Spring Semester

FRESHMAN YEAR

CH 101 (CoReq CH 102)
 CH 102 (CoReq CH 101)
 E 101
 E 115
 ENG 101
 MA 141
 HESF 1XX Fitness & Wellness

EC 205 (GEP Soc. Sci. Requirement)¹
 MA 241 (C or better in MA 141)
 PY 205 (C or better in MA 141)
 PY 206 (C or better in MA 141; CoReq: PY 205)
 E102 (CoReq: E 115 and MA 141) GEP Req¹
 GEP Requirement¹

Matriculation Requirements (CODA): 1. C or better in CH 101, CH 102, ENG 101, MA 141, MA 241, PY 205, & PY 206
 2. Completion of E 115

SOPHOMORE YEAR

CSC 111 (CoReq E 115 and MA 141)
 CE 214 (C or better PY205 & MA241; Co: MA 242)
 TDE 220 (Graphics Elective)
 MA 242 (C or better in MA 241)
 CE 250 (CoReq CSC 111, CE 214)

PY 208 (C- or better in PY 205 & MA 241)
 PY 209 (CoReq PY 208)
 CE 225 (MA 242, C- or better in CE 214)
 ST 370 (MA 241)
 CE 365 (CoReq CE 263, ST 370) (S)
 CE 263 (CoReq CE 214, CE 250) (S)
 HES*** Phys. Ed/Healthy Living Course

JUNIOR YEAR

MSE 200 (CH 101)
 CE 301 (matriculation into CE, CNE, or ENE)
 CE 327 (C- or better in CE 225)
 CE 282 (C- or better in CE 214, CoReq ST 370)
 CE 463 (CE 263) (S), CE 365 (S), TDE 220

CE 332 (MSE 200)
 CE 342 (C- or better in CE 225, CoReq. CE 282)
 CE 367 (CE 282)
 MEA 101
 GEP Requirement¹

Basic Science Elective³

SENIOR YEAR

CE 426 (C- or better in CE 225)
 CE 466 (CoReq CE 327) (F)
 Engineering Elective⁴
 ACC 280
 COM 110 Public Speaking OR
 ENG 331 Communication for Engr. & Tech.

CE 464 (CE 463, CoReq. CE 365)(S)
 CE 469 (CE 463, CoReq CE 464) (S)
 Management Science Elective (GEP)^{1,2}
 GEP Requirement¹
 GEP Requirement¹

¹GEP Requirements to be selected from the appropriate lists

² 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

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

⁴ Engineering Elective – Select one: ECE 331, MAE 201, CE 499, or an advised elective from CE course list

*Foreign Language Proficiency at the FL_102 level is required for graduation

(CP) – Critical Path major specific course predictive of student success