

North Carolina State University
CONSTRUCTION ENGINEERING

Degree: B.S. in Construction Engineering; Dept. of Civil, Construction, and Environmental Engineering

GENERAL CONSTRUCTION CONCENTRATION

For Students entering after July 2017 (SUM 2 '17)

FRESHMAN YEAR

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
CH 101	Chemistry – A Molecular Science	3	EC 205	Economics (GEP Requirement) ¹	3
CH 102	General Chemistry Laboratory	1	MA 241	Calculus II	4
E 101	Intro. to Engineering & Prob. Solving	1	PY 205	Physics for Engrs. & Sci. I	3
E 115	Intro. to Computing Environments	1	PY 206	Physics for Engrs. & Sci. I Lab	1
ENG 101	Academic Writing and Research	4	E 102	Engineering in 21 st Century (GEP Req) ¹	2
MA 141	Calculus I	4	GEP Requirement ¹		<u>3</u>
HESF 1XX	Fitness & Wellness Course	<u>1</u>			
		15			16

SOPHOMORE YEAR

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
CSC 111	Intro. To Computing: Python	3	PY 208	Physics for Engineers & Scientists II ⁵	3
CE 214	Engineering Mechanics - Statics	3	CE 313	Mechanics of Solids	3
TDE 220	Civil Engineering Graphics	3	ST 370	Probability and Statistics for Engrs.	3
MA 242	Calculus III	4	CE 365	Construction Equip't & Methods (S)	3
CE Elective ⁴		<u>3</u>	CE 263	Intro. To Construction Engineering (S)	3
			HES*** Phys. Ed/Healthy Living Course		<u>1</u>
		16			16

JUNIOR YEAR

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
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 Elec. Sys, in Buildings (S)	3
CE 382	Hydraulics	3	MEA 101		3
CE 463	Const. Est., Planning & Control (F)	3	MEA 110		<u>1</u>
COM 110	or	<u>3</u>	GEP Requirement ¹		<u>3</u>
ENG 331	Communication for Engr & Tech				
		18			17

SENIOR YEAR

<u>Fall Semester</u>		<u>Credits</u>	<u>Spring Semester</u>		<u>Credits</u>
CE 426	Structural Steel Design	3	CE 464	Legal Aspects of Contracting (S)	3
CE 466	Building Construction Engr. (F)	3	CE 469	Construction Engr. Project (S)	3
ECE 331	Princ. of Electrical Engr. I		Management Science Elective (GEP) ^{1,2}		3
MAE 201	Engineering Thermodynamics I	3	GEP Requirement ¹		3
ACC 210	Intro. To Managerial Accounting	3	GEP Requirement ¹		<u>3</u>
Basic Science Elective ³		<u>3</u>			
		15			15

Minimum Credit Hours Required for Graduation = 128

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

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, PS 320

³ Basic Science Elective Select one: SSC 200; FOR 260; FOR/BIO/FW 221

⁴ CE Elective: Advised elective from CE course list (For Fall 2017 the approved course list is only CE 297)

⁵ PY 208 – Lab (PY209) is not required

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

CONSTRUCTION ENGINEERING
GENERAL CONSTRUCTION CONCENTRATION
 COURSE LISTING WITH PRE- AND COREQUISITES IN PARENTHESES
 For students entering after June 2017 (Sum2'17)

Fall Semester

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

Spring Semester

FRESHMAN YEAR

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)	PY 208 (C- or better in PY 205 & MA 241) ⁵
CE 214 (C or better PY205 & MA241; Co: MA 242)	CE 313 (MA 242, C- or better in CE 214)
TDE 220 (Graphics Elective)	ST 370 (MA 241)
MA 242 (C or better in MA 241)	CE 365 (CoReq CE 263, ST 370) (S)
CE Elective ⁴	CE 263 (CoReq CE 214) (S)
	HES*** Phys. Ed/Healthy Living Course

JUNIOR YEAR

MSE 200 (CH 101)	CE 332 (MSE 200)
CE 301 (matriculation into CE, CNE, or ENE)	CE 342 (C- or better in CE 313, CoReq. CE 382)
CE 327 (C- or better in CE 313)	CE 367 (CE 382)
CE 382 (C- or better in CE 214, CoReq ST 370)	MEA 101
CE 463 (CE 263) (S), CE 365 (S), TDE 220	MEA 110
COM 110 or	GEP Requirement ¹
ENG 331 (Junior Standing)	

SENIOR YEAR

CE 426 (C- or better in CE 313)	CE 464 (CE 463, CoReq. CE 365)(S)
CE 466 (CoReq CE 327) (F)	CE 469 (CE 463, CoReq CE 464) (S)
ECE 331 (MA 241, PY 208) or	Management Science Elective (GEP) ^{1,2}
MAE 201 (MA 242, PY 208)	GEP Requirement ¹
ACC 210	GEP Requirement ¹
Basic Science Elective ¹	

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³ Basic Science Elective, Select one: SSC 200; FOR 260; FOR/BIO/FW 221

⁴CE Elective: Advised elective from CE course list (for Fall 2017 the approved course list is only CE 297)

⁵PY 208 – Lab (PY 209) is not required

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