

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 **after** July 2024 (Fall 24)

FRESHMAN YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CH 101 Chemistry, A Molecular Science <sup>1</sup>	3	EC 205 Economics (GEP Req)	3
CH 102 General Chemistry Laboratory <sup>1</sup>	1	MA 241 Calculus II	4
E 101 Introduction to Engr & Prob. Solving <sup>1,2</sup>	1	PY 205 Physics for Engineers & Scientists I	3
E 115 Intro to Computing Environments <sup>1,2</sup>	1	PY 206 Physics for Engineers & Scientists I Lab	1
ENG 101 Academic Writing and Research <sup>1,2</sup>	4	E 102 Engineering in the 21 <sup>st</sup> Century (GEP Req)	2
MA 141 Calculus I	4	GEP Requirement <sup>3</sup>	3
HESF 1XX Fitness & Wellness Course	1		
<i>Total:</i>	15	<i>Total:</i>	16
SOPHOMORE YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 214 Engineering Mechanics – Statics <sup>2</sup>	3 (CP) <sup>3</sup>	CE 225 Mechanics of Solids <sup>2</sup>	3 (CP) <sup>3</sup>
CE 263 Intro to Construction Engineering (F) <sup>2</sup>	3 (CP) <sup>3</sup>	CE 365 Construction Equipment & Methods (S)	3
CSC 111 Intro to Computing: Python	3	PY 208 Physics for Engineers & Scientists II	3
TDE 220 Civil Engineering Graphics	3	PY 209 Physics for Engineers & Scientists II Lab	1
MA 242 Calculus III	4	ST 370 Probability and Statistics for Engrs.	3
		HES *** Phys. Ed/Healthy Living Course	1
		GEP Requirement <sup>4</sup>	3
<i>Total:</i>	16	<i>Total:</i>	17
JUNIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 282 Hydraulics <sup>2</sup>	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	Engineering Elective 1 <sup>5</sup>	3
<i>Total:</i>	15	<i>Total:</i>	17
SENIOR YEAR			
FALL SEMESTER	CREDITS	SPRING SEMESTER	CREDITS
CE 466 Building Construction Engr. (F)	3	CE 464 Legal Aspects of Contracting (S)	3
Engineering Elective <sup>5</sup>	3	CE 469 Construction Eng. Project (S)	3
ACC 280 Survey of Financial and Managerial Acc.	3	Management Science Elective (GEP Req) <sup>7</sup>	3
COM 110 Public Speaking <b>OR</b>		GEP Requirement <sup>4</sup>	3
ENG 331 Communication for Engr. & Tech.	3	GEP Requirement <sup>4</sup>	3
Basic Science Elective <sup>6</sup>	3		
<i>Total:</i>	15	<i>Total:</i>	15
Minimum Credit Hours Required for Graduation: 126			

**Major/Program Footnotes:**

<sup>1</sup> Courses required for Change of Degree Audit (CODA). CH 101, 102; MA 141, 241; PY 205, 206 must be completed with C or higher.

<sup>2</sup> Minimum grade of C-, E 115 requires satisfactory completion (S).

<sup>3</sup> CP = Critical Path major specific course predictive of student success.

<sup>4</sup> GEP Requirements to be selected from the appropriate lists in consultation with the advisor.

<sup>5</sup> Engineering Elective – Select two: CE 305, CE 325, CE 383, CE 401, CE 402, CE 403, CE 405, CE 413, CE 426, CE 435, CE 443, CE 444, CE 478, CE 484, CE 487, CE497, or CE 499

<sup>6</sup> Basic Science Elective - Select one: SSC 200, FOR 260, or FW 221.

<sup>7</sup> Management Science Elective (2<sup>nd</sup> 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.

North Carolina State University  
**CONSTRUCTION ENGINEERING CURRICULUM**

Course Listing with Pre- and Corequisites  
Department of Civil, Construction, and Environmental Engineering  
For students entering NCSU Department **after** July 2024 (Fall 24)

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

**CODA Requirements:** <sup>1</sup>C or better in CH 101, CH 102, MA 141, PY 205, and PY 206 <sup>2</sup> 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 263 (CoReq CSC 111 and CE 214 ) (F) CSC 111 (CoReq E 115 and MA 141) TDE 220 MA 242 (C or better in MA 241)	CE 225 (MA 242, C- or better in CE 214) CE 365 (CoReq CE 214 and ST 370) (S) PY 208 (C- or better in PY 205 and MA 241) PY 209 (CoReq PY 208) ST 370 (MA 241) HES *** Phys. Ed/Healthy Living Course GEP Requirement <sup>1</sup>

JUNIOR YEAR	
FALL SEMESTER	SPRING SEMESTER
CE 282 (C- or better in CE 214, CoReq ST 370) CE 301 (CE 225; CoReq ST 370) CE 327 (C- or better in CE 225) CE 463 (C- or better CE 263 (F), CE 365 (S), TDE 220) (F) MSE 200 (C or better in CH 101)	CE 332 (C- or better in CE 225; MSE 200) CE 342 (C- or better in CE 225 and CE 282) CE 367 (C- or better CE 282) (S) MEA 101 Engineering Elective 1 <sup>2</sup>

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

**Footnotes:**

<sup>1</sup> GEP Requirements to be selected from the appropriate lists in consultation with the advisor.

<sup>2</sup> Engineering Elective – Select two: CE 305, CE 325, CE 383, CE 401, CE 402, CE 403, CE 405, CE 413, CE 426, CE 435, CE 443, CE 444, CE 478, CE 484, CE 487, CE497, or CE 499

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

<sup>4</sup> Management Science Elective (2<sup>nd</sup> 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.