

Civil Engineering (BS) (14CEBS)

Critical Path Courses- Identify using the code (CP) which courses are considered critical path courses which represent specific major requirements that are predictive of student success in a given program/plan. Place the (CP) next to the credit hours for the course.

Freshman Year

Fall Semester	Credit	Spring Semester	Credit
CH 101 Chemistry, A Molecular Science	3	EC 205 Economics (GEP Req*) ¹	3
CH 102 General Chemistry Lab		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 Engr. in the 21st Century (GEP IP) ¹	2
MA 141 Calculus I	4	GEP Requirement ¹	3
HES_***Health & Exercise Studies Course	1		
	15		16

Sophomore Year

Fall Semester	Credit	Spring Semester	Credit
CE 214 Engr Mech - Statics	3(CP)	CE 225 Mechanics of Solids	3(CP)
CE 250 Introduction to Sustainable Infrastructure	3(CP)	CE 282 Hydraulics	3(CP)
CSC 111 Intro to Computing: Python	3	PY 208 Physics for Engr & Sc II	3
TDE 220 Civil Engineering Graphics	3	PY 209 Physics for Engr & Sc II Lab	1
MA 242 Calculus III	4	MA 341 Appl Differential Eq OR MA 305 Elem Linear Algebra	3
		MSE 200 Mech Prop of Struct Mat	3
		HES_***Health & Exercise Studies Course*	1
	16		17

Junior Year

Fall Semester	Credit	Spring Semester	Credit
CE Core Course - Lab Intensive Elective I ²	3/4	CE Core Course - Lab Intensive Elective II ²	3/4
CE Core Course - Elective I ³	3	CE Core Course - Elective II ³	3
CE Junior Elective I ⁴	3	CE Junior Elective II ⁴	3
ST 370 Prob & Stat for Engr.	3	Basic Science Elective ⁷	3
GEP Requirement ¹	3	Engineering Science Elective ⁸	3
	15/16		15/16

Senior Year

Fall Semester	Credit	Spring Semester	Credit
CE Senior Elective I ⁵	3	CE Senior Elective III ⁵	3
CE Senior Elective II ⁵	3	CE Senior Elective IV ⁵	3
Senior Elective ⁹	3	CE Senior Design ⁶	3
COM 110 Public Speaking OR ENG 331 Communication for Engr. & Tech.	3	GEP Requirement ¹	3
GEP Requirement ¹	3	GEP Requirement ¹	3
	15		15

Minimum Credit Hours Required for Graduation*:

125

Major/Program requirements and footnotes

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

^{2,3} CE Core Courses,

⁴ CE Junior Electives,

⁵ CE Senior Electives,

⁶ CE Senior Design,

⁷ Basic Science Elective,

⁸ Engineering Science Elective

⁹ Senior Elective: select from lists on worksheet in consultation with advisor.

(CP) Critical Path major course predictive of student success.

*** General Education Program (GEP) requirements and GEP Footnotes**

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <http://oucc.dasa.ncsu.edu/general-education-program/>.

A. Mathematical Sciences (6 credit hours – one course with MA or ST prefix)

Fulfilled as part of the Major requirements.

B. Natural Sciences (7 credit hours – include one laboratory course or course with a lab)

Fulfilled as part of the Major requirements.

C. Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list.

D. Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

EC 205 (or EC 201 or ARE 201) taken as part of the Major requirements, satisfies 3 credit hours needed to fulfill the GEP Social Sciences Requirement. Choose 3 credit hours from the University approved GEP Social Sciences course list.

E. Health and Exercise Studies (2 credit hours – at least one 100-level Health and Exercise Studies Course)

Choose from the University approved GEP Health & Exercise Studies course list.

F. Additional Breadth - (3 credit hours to be selected from the following checked University approved GEP course lists)

Humanities/Social Sciences/Visual and Performing Arts or Mathematical Sciences/Natural Sciences/Engineering

G. Interdisciplinary Perspectives (5-6 credit hours)

E 102 taken as part of the Major requirements satisfies 2 credit hours needed to fulfill the GEP Interdisciplinary perspectives requirement. Choose 3 credit hours from the University approved GEP Interdisciplinary Perspectives course list.

H. Introduction to Writing (4 credit hours satisfied by completing ENG 101 with a C- or better)

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements

I. U.S. Diversity (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: none

J. Global Knowledge(GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: none

K. Foreign Language proficiency - Proficiency at the FL_102 level is required for graduation.