

CIVIL ENGINEERING - BACHELOR OF SCIENCE IN CIVIL ENGINEERING

A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1511G Calculus and Analytic Geometry I and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

First Year

Fall		Credits
C E 151	Introduction to Civil Engineering ¹	3
CHEM 1215G	General Chemistry I Lecture and Laboratory for STEM Majors ²	4
ENGL 1110G	Composition I ²	4
ENGR 190	Introduction to Engineering Mathematics ³	4
Credits		15

Spring

E T 109	Computer Drafting Fundamentals ⁴	3
GEOL 1110G	Physical Geology ³	4
MATH 1511G	Calculus and Analytic Geometry I ^{2,5}	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab ²	4
Credits		15

Second Year

Fall		Credits
COMM 1115G	Introduction to Communication ²	3
ECON 2110G or ECON 2120G	Macroeconomic Principles ² or Principles of Microeconomics	3
ENGL 2210G	Professional and Technical Communication Honors ²	3
ENGR 233	Engineering Mechanics I ²	3
MATH 1521G	Calculus and Analytic Geometry II ²	4
Credits		16

Spring

C E 256 & 256 L	Environmental Engineering and Science and Environmental Science Laboratory ³	4
C E 301	Mechanics of Materials ²	3
ENGR 234	Engineering Mechanics II ²	3
MATH 2530G	Calculus III ²	3
SUR 222	Introduction to Geomatics ³	3
Credits		16

Third Year

Fall		Credits
C E 315	Structural Analysis ³	4
C E 331 & 331 L	Fluid Mechanics and Hydraulics and Fluid Mechanics and Hydraulics Laboratory ³	4
C E 356	Fundamentals of Environmental Engineering ³	3
STAT 3110	Statistics for Engineers and Scientists ³	3

Select a General Education Area V (Humanities) Course ^{1,5}	3	
Credits		17

Spring

C E 311	Civil Engineering Materials ³	3
C E 357	Soil Mechanics ³	3
C E 382	Hydraulic and Hydrologic Engineering ³	3
PHYS 1320G & PHYS 1320L or CHEM 1225G	Calculus -Based Physics II ² or General Chemistry II Lecture and Laboratory for STEM Majors	4
Select a General Education Area VI (Creative and Fine Arts) Course ^{1,6}	3	
Credits		16

Fourth Year

Fall

C E 445	Reinforced Concrete Design ³	3
C E 477	Engineering Economics and Construction Management ⁷	3
MATH 3160	Introduction to Ordinary Differential Equations ²	3
Select a A EN, C E, or ENVE Elective Course ^{3,8}	3	
Select a Viewing a Wider World (VWW) Course ^{1,9}	3	
Credits		15

Spring

C E 457	Foundation Design ¹⁰	3
C E 471	Transportation Engineering ¹⁰	3
C E 497	Senior Seminar ³	1
Select a A EN, C E, or ENVE Elective Course ^{3,8}	3	
Select a Capstone Design Course ^{3,8}	3	
Select a Viewing a Wider World (VWW) Course ^{1,9}	3	
Credits		16
Total Credits		126

¹ Courses are typically taught in the Fall semester.

² Courses are typically taught in the Fall, Spring and Summer semesters.

³ Courses are typically taught in the Fall and Spring semesters.

⁴ See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of the catalog to see a full list of courses.

⁵ Math Placement: MATH 1511G Calculus and Analytic Geometry I is the starting Math course for the degree but students may need to complete any prerequisites prior to enrolling in this course depending on math placement.

⁶ See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses

⁷ Courses are typically taught in the Fall and Summer semesters.

⁸ See your advisor for more detailed information about selecting elective courses that are approved to fulfill this requirement.

⁹ Courses are typically taught in the Spring semester.