

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 or MATH 1511H Calculus and Analytic Geometry I Honors and ENGL 1110G Composition I or ENGL 1110H Composition I Honors. 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 or ENGL 1110H	Composition I ² or Composition I Honors	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 or MATH 1511H	Calculus and Analytic Geometry I ^{2,5} or Calculus and Analytic Geometry I Honors	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 or HNRS 2175G	Introduction to Communication ² or Introduction to Communication Honors	3
ECON 2110G or ECON 2120G or ECON 2110H or ECON 2120H	Macroeconomic Principles ² or Principles of Microeconomics Honors or Principles of Macroeconomics Honors or Principles of Microeconomics Honors	3
ENGL 2210G or ENGL 2210H	Professional and Technical Communication ² or Professional and Technical Communication	3
ENGR 233	Engineering Mechanics I ²	3
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II ² or Calculus and Analytic Geometry II Honors	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
C E 331	Fluid Mechanics and Hydraulics	3
C E 331 L	Fluid Mechanics and Hydraulics Laboratory	1
MATH 2530G	Calculus III ²	3
SUR 222	Introduction to Geomatics ³	3
Credits		17

Third Year

Fall

C E 315	Structural Analysis ³	4
C E 356	Fundamentals of Environmental Engineering ³	3
ENGR 234	Engineering Mechanics II	3
STAT 3110 or I E 311	Statistics for Engineers and Scientists ³ or Engineering Data Analysis	3
Select a General Education Area V (Humanities) Course ^{1,5}		3
Credits		16

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 481	Civil Engineering Capstone Design	3
C E 497	Senior Seminar ³	1
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		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.