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		
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.