

MAJOR IN CONSTRUCTION ENGINEERING

TO PREPARE FOR FIRST SEMESTER: The curriculum for this major assumes students enter college prepared to take calculus.

Major Completion Map

Distinctive Requirements for Degree Program:

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CHEM 111	General Chemistry I (GT-SC2)	X		3A	4
CHEM 112	General Chemistry Lab I (GT-SC1)		X	3A	1
ENGR 111	Fundamentals of Engineering	X			3
MATH 160	Calculus for Physical Scientists I (GT-MA1)	X		1B	4
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3

Total Credits

15

Semester 2		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)	X		1A	3
ENGR 114	Engineering for Grand Challenges	X			3
MATH 161	Calculus for Physical Scientists II (GT-MA1)	X		1B	4
PH 141	Physics for Scientists and Engineers I (GT-SC1)	X		3A	5

Total Credits

15

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
CIVE 260	Engineering Mechanics-Statics	X			3
CON 101	Introduction to Construction Management	X			3
CONE 103	Virtual Design and Construction I	X			3
GEO 120	Geology and Society (GT-SC2)		X	3A	3
MATH 261	Calculus for Physical Scientists III	X			4

Total Credits

16

Semester 4		Critical	Recommended	AUCC	Credits
CIVE 261	Engineering Mechanics-Dynamics	X			2
CIVE 360	Mechanics of Solids	X			3
CONE 201	Construction Systems and Decision Analysis	X			3
CONE 203	Virtual Design and Construction II	X			3
MATH 340	Intro to Ordinary Differential Equations				4
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3

Total Credits

18

Junior

Semester 5		Critical	Recommended	AUCC	Credits
CIVE 300	Fluid Mechanics	X			3
CIVE 302	Evaluation of Civil Engineering Materials	X			2
CIVE 367	Structural Analysis	X			3
CONE 301	Engineering Contracts	X			1
CONE 401	Construction Safety Engineering	X			3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)				3D	3

Total Credits

15

Semester 6		Critical	Recommended	AUCC	Credits
CIVE 303	Infrastructure and Transportation Systems	X			3

CONE 302	Preconstruction and Project Control Systems	X			5
CONE 404	Production Planning of Construction Operation	X			3
CONE 487	Construction Engineering Internship	X			1
Design Focus Area Elective (see list on Program Requirements tab)			X		3
Total Credits					15
Senior					
Semester 7		Critical	Recommended	AUCC	Credits
CIVE 355	Geotechnical Engineering I	X			3
CIVE 356	Geotechnical Engineering Laboratory	X			1
CONE 402	Senior Project Design I	X		4A,4B	3
Design Focus Area Elective (see list on Program Requirements tab)		X			3
Advanced Writing (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)			X	2	3
Electives					3
Total Credits					16
Semester 8		Critical	Recommended	AUCC	Credits
CONE 403	Senior Project Design II	X		4A,4C	3
Design Focus Area Elective (see list on Program Requirements tab)		X			3
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)				1C	3
Social and Behavioral Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)			X	3C	3
Electives		X			3
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.					
Total Credits					15
Program Total Credits:					125