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
GEOL 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			3
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
MECH 237	Introduction to Thermal Sciences	X			3
	Total Credits				**15**
Junior					
Semester 5		**Critical**	**Recommended**	**AUCC**	**Credits**
CIVE 300	Fluid Mechanics	X			3
CIVE 302	Evaluation of Civil Engineering Materials	X			3
CIVE 367	Structural Analysis	X			3
CONE 301	Engineering Contracts	X			1
CONE 401	Construction Safety Engineering	X			3
MATH 340	Intro to Ordinary Differential Equations	X			4
	Total Credits				**17**
Semester 6		**Critical**	**Recommended**	**AUCC**	**Credits**
CIVE 303	Infrastructure and Transportation Systems	X			3
CIVE 322	Basic Hydrology	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				**18**
Senior					
Semester 7		**Critical**	**Recommended**	**AUCC**	**Credits**
CIVE 355	Geotechnical Engineering	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
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)			X	1C	3
Advanced Writing (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#advanced-writing)			X	2	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
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			X	3D	3
Social and Behavioral Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)			X	3C	3
The benchmark courses for the 8th semester are the remaining courses in the entire program of study.					
	Total Credits				**15**
	Program Total Credits:				**127**