

MAJOR IN GEOSCIENCES, HYDROGEOLOGY CONCENTRATION

Major Completion Map

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)	X		1A	3
GEOL 150	Dynamic Earth (GT-SC2)	X		3A	4
GEOL 192	New Student Seminar--Exploring Geosciences	X			1
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)			X	3B	3
Social and Behavioral Sciences (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)			X	3C	3

Total Credits

14

Semester 2		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
GEOL 154	Earth and Climate Change Through Time	X			4
MATH 160	Calculus for Physical Scientists I (GT-MA1)	X		1B	4
1C (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#aucc)		X		1C	3
CO 150 must be completed by the end of Semester 2.		X			

Total Credits

16

Sophomore

Semester 3		Critical	Recommended	AUCC	Credits
CHEM 113	General Chemistry II	X			3
CHEM 114	General Chemistry Lab II	X			1
GEOL 310	Earth Materials	X			4
GEOL 311	Earth's Interior	X			3
MATH 161	Calculus for Physical Scientists II (GT-MA1)	X		1B	4

Total Credits

15

Semester 4		Critical	Recommended	AUCC	Credits
GEOL 312	Earth's Surface	X			2
GEOL 313	Earth Systems	X			2
GEOL 314	Earth's Surface Laboratory	X			1
PH 141	Physics for Scientists and Engineers I (GT-SC1)	X		3A	5
Historical Perspectives (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)			X	3D	3
CHEM 113 must be completed by the end of Semester 4.		X			

Total Credits

13

Junior

Semester 5		Critical	Recommended	AUCC	Credits
GEOL 344	Stratigraphy and Sedimentology	X			3
MATH 261	Calculus for Physical Scientists III	X			4
SOCR 470	Soil Physics	X			3
Select one from the following:		X			3
CO 300	Writing Arguments (GT-CO3)			2	
CO 301B	Writing in the Disciplines: Sciences (GT-CO3)			2	

JTC 300	Strategic Writing and Communication (GT-C03)			2
GEOL 344 must be completed by the end of Semester 5.		X		
Total Credits				13
Semester 6		Critical	Recommended	AUCC
GEOL 372	Structural Geology	X		4B
GEOL 376	Geologic Field Methods	X		4A,4C
NR 319	Introduction to Geospatial Science	X		
Select one course from the following:		X		
STAT 301	Introduction to Applied Statistical Methods			
STAT 315	Intro to Theory and Practice of Statistics			
Total Credits				13
Summer		Critical	Recommended	AUCC
GEOL 476	Field Geoscience Capstone	X		4A,4C
Total Credits				4
Senior				
Semester 8		Critical	Recommended	AUCC
GEOL 452	Hydrogeology	X		
MATH 340	Intro to Ordinary Differential Equations	X		
WR 416	Land Use Hydrology	X		
Select one course from the following:		X		
GEOL 340	Glacial Geology			
GEOL 366	Low-Temperature Geochemistry			
GEOL 415	Critical Zone Science			
GEOL 442	Applied Geophysics			
GEOL 446	Environmental Geology			
GEOL 450	Reservoir Geosciences Fluid Storage Flow			
GEOL 454	Geomorphology			
Total Credits				14-15
Semester 9		Critical	Recommended	AUCC
Directed Technical Electives (see list on Concentration Requirements tab)		X		
Arts and Humanities (https://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)		X		3B
Electives		X		
The benchmark courses for the 9th semester are the remaining courses in the entire program of study.		X		
Total Credits				17-18
Program Total Credits:				120