MAJOR IN GEOLOGY, HYDROGEOLOGY CONCENTRATION

Major Completion Map

Freshman

Semester 1		Critical	Recommended	AUCC	Credits
CO 150	College Composition (GT-CO2)			1A	3
GEOL 150	Physical Geology for Scientists and Engineers	X		3A	4
MATH 124	Logarithmic and Exponential Functions (GT-MA1)	X		1B	1
MATH 125	Numerical Trigonometry (GT-MA1)	X		1B	1
MATH 126	Analytic Trigonometry (GT-MA1)		X	1B	1
Social and Behavioral Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)				3C	3
	Total Credits				**13**

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	Historical and Analytical Geology	X			4
MATH 160	Calculus for Physical Scientists I (GT-MA1)	X		1B	4
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)				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				3
CHEM 114	General Chemistry Lab II				1
GEOL 232	Mineralogy	X			3
GEOL 344	Stratigraphy and Sedimentology		X	4A	4
MATH 161	Calculus for Physical Scientists II (GT-MA1)	X		1B	4
	Total Credits				**15**

Semester 4		Critical	Recommended	AUCC	Credits
GEOL 364	Igneous and Metamorphic Petrology	X		4B	4
PH 141	Physics for Scientists and Engineers I (GT-SC1)	X		3A	5
Select one course from the following:					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-CO3)			2	
Historical Perspectives (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#historical-perspectives)				3D	3
CHEM 113 must be completed by the end of Semester 4.		X			
	Total Credits				**15**

Junior

Semester 5		Critical	Recommended	AUCC	Credits
GEOL 366	Sedimentary Petrology and Geochemistry			4A,4B	4
MATH 261	Calculus for Physical Scientists III	X			4
Select one course from the following:		X			3-5
PH 142	Physics for Scientists and Engineers II (GT-SC1)			3A	

SOCR 470	Soil Physics				
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
GEOL 344 must be completed by the end of Semester 5.		X			
	Total Credits				**14-16**
Semester 6		**Critical**	**Recommended**	**AUCC**	**Credits**
GEOL 372	Structural Geology	X		4B	4
GEOL 376	Geologic Field Methods	X		4A,4C	3
Select one course from the following:		X			3
STAT 301	Introduction to Applied Statistical Methods				
STAT 315	Intro to Theory and Practice of Statistics				
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	3
	Total Credits				**13**
Semester 7		**Critical**	**Recommended**	**AUCC**	**Credits**
GEOL 436	Geology Summer Field Course	X		4C	6
	Total Credits				**6**
Senior					
Semester 8		**Critical**	**Recommended**	**AUCC**	**Credits**
GEOL 452	Hydrogeology	X			4
MATH 340	Intro to Ordinary Differential Equations				4
WR 416	Land Use Hydrology	X			3
Select one course from the following:					4
NR 319	Introduction to Geospatial Science				
NR 322	Intro. to Geographic Information Systems				
GEOL 366 must be completed by the end of Semester 8.		X			
	Total Credits				**15**
Semester 9		**Critical**	**Recommended**	**AUCC**	**Credits**
GEOL 454	Geomorphology	X			4
Directed Technical Electives (See Department List on Concentration Requirements tab)		X			6
Elective		X			3
The benchmark courses for the 9th semester are the remaining courses in the entire program of study.		X			
	Total Credits				**13**
	Program Total Credits:				**120**