MAJOR IN GEOLOGY, GEOLOGY 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
Arts and Humanities (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#arts-humanities)				3B	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
Select one course from the following:			X		3-4
MATH 159	One Year Calculus IB (GT-MA1)			1B	
MATH 160	Calculus for Physical Scientists I (GT-MA1)			1B	
Diversity, Equity, and Inclusion (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#diversity-equity-inclusion)				1C	3
CO 150 and MATH 126 must be completed by the end of Semester 2.					
	Total Credits				**15-16**

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 332	Optical Mineralogy		X		2
Select one course from the following:			X		5
PH 121	General Physics I (GT-SC1)			3A	
PH 141	Physics for Scientists and Engineers I (GT-SC1)			3A	
Social and Behavioral Sciences (http://catalog.colostate.edu/general-catalog/all-university-core-curriculum/aucc/#social-behavioral-sciences)				3C	3
	Total Credits				**17**
Semester 4		**Critical**	**Recommended**	**AUCC**	**Credits**
GEOL 250	The Solid Earth		X		3
GEOL 364	Igneous and Metamorphic Petrology	X		4B	4
MATH 161	Calculus for Physical Scientists II (GT-MA1)		X	1B	4
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	
	Total Credits				**14**

Junior

Semester 5		**Critical**	**Recommended**	**AUCC**	**Credits**
GEOL 344	Stratigraphy and Sedimentology	X		4A	4
Select one course from the following:		X			5

PH 122	General Physics II (GT-SC1)		X	3A	
PH 142	Physics for Scientists and Engineers II (GT-SC1)			3A	
Select one course from the following:					3-4
MATH 340	Intro to Ordinary Differential Equations				
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				**15-16**
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:					4
NR 319	Geospatial Applications in Natural Resources				
NR 322	Intro. to Geographic Information Systems				
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 6.		X			
	Total Credits				**14**
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 366	Sedimentary Petrology and Geochemistry	X		4A,4B	4
Geology Electives					4
Elective					1
Technical Elective (See Department List on Concentration Requirements tab)					3
STAT 301 or STAT 315 or MATH 340 must be completed by the end of Semester 8.		X			
	Total Credits				**12**
Semester 9		**Critical**	**Recommended**	**AUCC**	**Credits**
GEOL 454	Geomorphology	X			4
Geology Elective		X			3
Electives		X			5-7
The benchmark courses for the 9th semester are the remaining courses in the entire program of study.		X			
	Total Credits				**12-14**
	Program Total Credits:				**120**