GEOLOGY - 5-YEAR BACHELOR OF SCIENCE AND MASTER OF SCIENCE IN GEOLOGY

Program Requirements

First Year		
Fall		**Semester Credit Hours**
CHEM 119	Fundamentals of Chemistry I	4
ENGL 104	Composition and Rhetoric	3
GEOL 150	Introduction to the Solid Earth	4
GEOL 180	Introduction to Geology and Geophysics	1
MATH 151	Engineering Mathematics I	4
	Semester Credit Hours	**16**
Spring		
CHEM 120	Fundamentals of Chemistry II	4
GEOL 152	History of the Earth	4
MATH 152	Engineering Mathematics II	4
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)		3
	Semester Credit Hours	**15**
Second Year		
Fall		
GEOL 203	Mineralogy	4
GEOL 210	Geological Communication	3
MATH 251	Engineering Mathematics III	3
PHYS 206	Newtonian Mechanics for Engineering and Science	3
PHYS 226	Physics of Motion Laboratory for the Sciences	1
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science)		3
	Semester Credit Hours	**17**
Spring		
GEOL 250	Geological Field Methods	4
GEOL 304	Igneous and Metamorphic Petrology	4
MATH 308	Differential Equations	3
PHYS 207	Electricity and Magnetism for Engineering and Science	3
PHYS 227	Electricity and Magnetism Laboratory for the Sciences (Technical Electives) [2]	1
Technical electives [2]		1
	Semester Credit Hours	**16**
Summer		
Technical electives [2]		3
	Semester Credit Hours	**3**
Third Year		
Fall		
GEOL 306	Sedimentology and Stratigraphy	4
GEOP 341	Fundamentals of Geophysics	3
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)		3
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science)		3
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) [1]		3
	Semester Credit Hours	**16**
Spring		
GEOL 312	Structural Geology and Tectonics	4
GEOL 314	Paleontology and Geobiology	4
GEOL 350	Summer Field Geology	3
Technical electives [2]		8
	Semester Credit Hours	**19**
Summer		
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)		3
	Semester Credit Hours	**3**
Fourth Year		
Fall		
GEOL 450	Geology Senior Project	3
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) [1]		3
Social and behavioral sciences (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences) [1]		3
Technical electives [2]		6
	Semester Credit Hours	**15**
Spring		
Graduate electives [3]		12
	Semester Credit Hours	**12**
Fifth Year		
Fall		
Graduate electives [3]		9
	Semester Credit Hours	**9**
Spring		
Graduate electives [3]		9
	Semester Credit Hours	**9**
	Total Semester Credit Hours	**150**

[1] The Graduation requirements include a requirement for three hours of International and Cultural Diversity courses and three hours of Cultural Discourse courses. A course satisfying a Core category, a college/department requirement, or a free elective can be used to satisfy this requirement. See academic advisor.

[2] Any science, math or engineering course that augments the degree with the approval of the advisor. At least four credits should be GEOL 491 Research.

[3] The MS degree Non-Thesis Option is 36 total hours, with 6 hours double-counting with the undergraduate Technical Electives. The MS with Thesis Option is 32 hours, with 2 hours double-counting with Technical Electives. Graduate courses may be in Geology, Geophysics or a supporting math or science area, chosen with approval of the student's advisory committee. Students in the Thesis Option may include up to 8 hours of Research courses.

The program includes a total of 152 or 156 hours which up to 2 or 6 hours may be applied toward both the Bachelor of Science in Geology and the Master of Science in Geology.