



DEPARTMENT OF GEOLOGY & GEOPHYSICS

COLLEGE OF MINES AND EARTH SCIENCES | THE UNIVERSITY OF UTAH

COURSE REQUIREMENTS BACHELOR OF SCIENCE IN GEOLOGICAL ENGINEERING

Required Courses

Complete all of the following:

Core:	<u>Credits</u>	<u>Semester</u>	<u>Prerequisites</u>
• GEO 1100 Evolving Earth	3	Fall/Spring	None
• GEO 2100 Reactive Earth	3	Fall/Spring	CHEM 1210, GEO 1100
• GEO 2500 Wasatch in the Field	3	Fall	None
• GEO 3100 Dynamic Earth	3	Fall/Spring	PHYS 2210, GEO 2100
• GEO 4500 Field Methods	3	Spring	GEO 2500, 3100

Required Courses:

Complete all of the following:

• GEO 3010 Geophysics	3	Spring	PHYS 2220
• GEO 3040 Sed & Strat	4	Fall	
• GEO 3075 Intro to Geo Eng	2	Spring	MATH 1220, CHEM 1220
• GEO 3400 Comp & Num Methods	3	Fall	MATH 1210
• GEO 4510 Field Geol (Pt. 1)	2	Summer	GEO 4500
• GEO 5150 Geol Eng Design	3	Spring	CVEEN 3310, GEO 5350, MG EN 5150
• GEO 5350 Groundwater	3	Fall	MATH 1210
• GEO 5360 Fluid Dynamics	3	Spring Even Years	MATH 2250
• GEO 5385 Groundwater Modeling	1	Spring	GEO 5350, coreq-GEO 5390
• GEO 5390 Solute Trans & Sub Rem	3	Spring	GEO 5350, coreq-GEO 5385
• CMES/SCI/ENG Tech Elec 5000+	3	Varies	Varies

Complete at least 1 of the following:

• GEO 4060 Structural Geology	4	Spring	GEO 3100 or Equivalent
• GEO 3065 Structural Geol for Eng	2	Spring	GEO 1100, MATH 1060

*Take with GEO 3075

Allied Engineering Courses

Complete all of the following:

• CVEEN 2010 Statics	3	Fall/Spring	MATH 1210, PHYS 2210
• CVEEN 3310 Geotech Eng	3	Fall/Spring	MG EN 5150
• CVEEN 3315 Geotech Eng Lab	1	Fall/Spring	coreq-CVEEN 3310
• MET E 3070 Stat Methods in ESE	3	Fall	MATH 1050
• MG EN 1050 Tech Comm	2	Spring	None
• MG EN 2400 Intro to Surveying	3	Fall	MATH 1060
• MG EN 5150 Mech of Materials	3	Spring	PHYS 2220, MATH 2210, CVEEN 2010

Complete at least 1 of the following:

• CVEEN 5305 Intro to Found Eng	3	Fall	CVEEN 3310
• MG EN 5160 Rock Mech App	3	Fall	MG EN 5150

Allied Science

Complete all of the following:

• CHEM 1210 General Chemistry I	4	All	MATH 1050
• CHEM 1215 Gen Chem I Lab	1	All	CHEM 1210 coreq
• CHEM 1220 General Chemistry II	4	All	CHEM 1210
• MATH 1210 Calculus I	4	All	MATH 1050 & 1060 or MATH 1080
• MATH 1220 Calculus II	4	All	MATH 1210
• MATH 2210 Calculus III	3	All	MATH 1220
• MATH 2250 Diff Equat & Lin Alb	4	All	MATH 2210
• PHYS 2210 Physics for Sci&Eng I	4	All	MATH 1210
• PHYS 2215 Phys for Sci&Eng I Lab	1	All	PHYS 2210-coreq
• PHYS 2220 Physics for Sci&Eng II	4	All	PHYS 2210, MATH 1220

Other Requirements

Fundamentals of Engineering Exam: Pass

- Proof of passing exam must be emailed to academic advisor to clear graduation requirements

University of Utah General Education Requirements

The University of Utah requires a total of 122 college level credits to complete a Bachelor's degree. Additional elective courses may need to be completed to fulfill the total of 122 credits. Check with your academic advisor with any questions or concerns.

Academic Advisor

Michelle Tuitupou

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801-581-6553

383 FASB



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SAMPLE SCHEDULE BACHELOR OF SCIENCE IN GEOLOGICAL ENGINEERING

Fall Semester

MATH 1210	4
CHEM 1210	4
CHEM 1215	1
GEO 1100	3
*WRTG 2010	<u>3</u>
Total:	15

Spring Semester

MATH 1220	4
PHYS 2210	4
PHYS 2215	1
GEO 2100	3
CVEEN 2010	3
MG EN 1050	<u>2</u>
Total:	17

Summer

CHEM 1220	4
*AI	<u>3</u>
Total:	7

Fall Semester

MATH 2210	3
PHYS 2220	4
GEO 2500	3
GEO 3400	<u>3</u>
Total:	13

Spring Semester

MATH 2250	4
MG EN 5150	3
GEO 4060	3
GEO 3075	2
*IR	<u>3</u>
Total:	15

Summer

Possible Internship or Learning Abroad

Fall Semester

GEO 5350	3
*FF/DV	3
GEO 3100	3
GEO 3040	4
*HF	<u>3</u>
Total:	16

Spring Semester

GEO 4500	3
GEO 3010	3
CVEEN 3310	3
CVEEN 3315	1
*BF	<u>3</u>
Total:	13

Summer

GEO 4510	2
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Fall Semester

MET E 3070	3
MG EN 2400	3
MG EN 5160 or CVEEN 5305	3
*FF	3
*BF	<u>3</u>
Total:	15

Spring Semester

Tech Elective	3
GEO 5150	3
GEO 5385	1
GEO 5390	3
GEO 5360	3
*HF	<u>3</u>
Total:	16

Fundamentals of Engineering Exam: Pass

- Proof of passing exam must be emailed to the Geological Engineering Academic Advisor to clear graduation requirements
- Review materials and session information can be found at <https://www.coe.utah.edu/students/current/fe-exam/>
- It is highly recommended you purchase a review book to practice concepts at least six months prior to taking the exam

***Check with your academic advisor before changing your schedule.**

The University of Utah requires a total of 122 college level credits to complete a Bachelor's degree. Additional elective courses may need to be completed to fulfill the total of 122 credits. Check with your academic advisor with any questions or concerns.

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Updated: 4/30/2019