

BACHELOR OF SCIENCE IN GEOLOGICAL ENGINEERING

REQUIRED DEPARTMENTAL COURSES: COMPLETE THE FOLLOWING 15 COURSES AND ONE ADDITIONAL TECHNICAL ELECTIVE CHOSEN IN CONSULTATION WITH THE ACADEMIC ADVISOR

Course	Title	Credits	Prerequisites	Offered	Taking When
GEO 3010	GEOPHYSICS (QI)	3	MATH 1220, GEO 3070, PHYS 2220	SPRING	
GEO 3075 AND GEO 3070	INTRO TO GEOLOGICAL ENGINEERING AND MINERALOGY AND PETROLOGY FOR ENGINEERS	2/2	MATH 1220, CHEM 1220 AND N/A	FALL	
GEO 3060	STRUCTURAL GEOLOGY AND TECTONICS (QI)	3	GEO 1110 or 3070/3075, MATH 1060	FALL/SPRING	
GEO 3090	EARTH MATERIAL II	3	GEO 1110 or 3070, MATH 1210	FALL/SPRING	
GEO 3400	COMPUTATIONAL AND FIELD METHODS IN APPLIED GEOLOGY	2	INTRO GEO COURSE	FALL	
GEO 4500	FIELD METHODS (CW)	3	GEO 3070, 3060, 3080, 3090, 5760	SPRING	
GEO 4510 GEO 4550	FIELD GEOLOGY FOR GEOLOGICAL ENGINEERING MAJORS	2 2	GEO 4500 GEO 3075, 4500, 5350, CVEEN 3310	SUMMER	
GEO 5150	GEOLOGICAL ENGINEERING DESIGN	4	MGEN 5150 CVEEN 5305 GEO 5350	SPRING	
GEO 5350	GROUNDWATER	3	GEO 1110 or equivalent, MATH 1220	FALL	
GEO 5360	FLUID DYNAMICS OF EARTH MATERIALS	3	MATH 2250	SPRING EVEN YEARS	
GEO 5385	INTRO TO GROUNDWATER MODELING	1	GEO 5350, coreq-5390	SPRING	
GEO 5390	SOLUTE TRANSPORT AND SUBSURFACE REMEDIATION	3	GEO 3080, 3090, 5350, coreq-5385	SPRING	
GEO 5560	NUMERICAL METHODS IN THE GEOSCIENCES	3	N/A	FALL ODD YEARS	
GEO 5760	STRATIGRAPHY AND SEDIMENTARY PROCESSES	4	GEO 3090, 3060	FALL	
GEO 0000	TECHNICAL ELECTIVE	3	DEPENDING ON COURSE SELECTED	DEPENDING ON COURSE	

ALLIED ENGINEERING COURSES:

Course	Title	Credits	Prerequisites	Offered	Taking When
MG EN 1050	TECHNICAL COMMUNICATIONS	2	N/A	SPRING	
MG EN 2400	INTRODUCTORY SURVEYING	3	MATH 1060	FALL	
CVEEN 2010	STATICS	3	MATH 1210 OR 1310 OR 1311 AND PHYS 2210	FALL/SPRING	
CVEEN 3310	GEOTECHNICAL ENGINEERING I	3	MG EN 5150	FALL/SPRING	
CVEEN 5305	INTRO TO FOUNDATION ENGINEERING	3	CVEEN 3310	FALL	
MG EN 5150	MECHANICS OF MATERIALS	3	PHYS 2220, MATH 2210, CVEEN 2010	SPRING	
MG EN 5160	ROCK MECHANICS APPLICATIONS	3	MG EN 5150	FALL	

CHEMISTRY COURSES:

Course	Title	Credits	Prerequisites	Offered	Taking When
CHEM 1210	GENERAL CHEMISTRY I	4	CHEM 1200 OR MATH 1050, 1080, 1210, 1220, 1250, 1260, 1310, 1320	ALL	
CHEM 1215	GENERAL CHEMISTRY I LAB	1	CHEM 1210 OR 1211	ALL	
CHEM 1220	GENERAL CHEMISTRY II	4	CHEM 1210 OR 1211	ALL	
CHEM 1225	GENERAL CHEMISTRY II LAB	1	CHEM 1070 OR 1215, 1240	ALL	

PHYSICS COURSES:

Course	Title	Credits	Prerequisites	Offered	Taking When
PHYS 2210	PHYSICS FOR SCIENTISTS AND ENGINEERS I	4	MATH 1210	ALL	
PHYS 2215	PHYSICS FOR SCIENTISTS AND ENGINEERS LAB	1	PHYS 2210	ALL	
PHYS 2220	PHYSICS FOR SCIENTISTS AND ENGINEERS II	4	PHYS 2210, MATH 1210	ALL	

MATH COURSES:

Course	Title	Credits	Prerequisites	Offered	Taking When
MATH 1210	CALCULUS I	4	MATH 1050 AND 1060 OR 1080	ALL	
MATH 1220	CALCULUS II	4	MATH 1210 OR 1250 OR 1270 OR 1311 OR 1310	ALL	
MATH 2210	CALCULUS III	3	MATH 1220 OR 1250 OR 1320	ALL	
MATH 2250	DIFFERENTIAL EQUATIONS AND LINEAR ALGEBRA	4	MATH 2210 OR 1260 OR 1280 OR 1321 OR 1320 OR 1220 OR 1250 OR 1270 OR 1311 AND PHYS 2210 OR 3210	ALL	
MET E 3070	STATISTICAL METHODS IN EARTH SCIENCE AND ENGINEERING	3	RECOMMENED MATH 1050	FALL	

FUNDAMENTALS OF ENGINEERING EXAM:

Complete and pass the Fundamentals of Engineering Exam

Academic Advisor

Michelle Tuitupou

michelle.tuitupou@utah.edu

801-581-6553

383 FASB

Faculty Advisor

Prof. Paul Jewell

paul.jewell@utah.edu

801-581-6636

445 FASB