

## Geological Engineering

Truman State University					University of Missouri-Rolla			
Semester	TS #	Title	Hours	Grade	UMR #	Title	Hours	
First	MATH 198	Analytic Geometry & Calculus I	5		MATH 014	Calculus w/Analytic Geometry I	4	
	CHEM 120	General Chemistry I	4		CHEM 001,002	General Chemistry (4) and Lab (1)	5	
	ENG 190	Writing Critical Thinking	3		ENG 020	Exposition & Argumentation	3	
	HIST 133 or HIST 104 or HIST 106 or POL 161	World Civilization since 1700 or US History I, 1607-1877 or US History II, 1877-present or American National Government	3		HIST 112 or HIST 175 or HIST 176 or PS 090	Modern Western Civilization or American History to 1877 or American History since 1877 or American Government	3	
	Total Semester Hours			15	Total Semester Hours			15
	Second	MATH 263	Analytic Geometry & Calculus II	5		MATH 015	Calculus w/Analytic Geometry II	4
		PAYS 195	Physics w/Calculus I	5		PHYS 023	Engineering Physics I	4
CHEM 121		General Chemistry II	4		CHEM 003	General Chemistry	3	
NASC 140		Physical Geology	4		GEOL 051	Physical Geology	4	
Total Semester Hours			18	Total Semester Hours			15	
Third	MATH 264	Analytic Geometry & Calculus III	3		MATH 022	Calculus w/Analytic Geometry III	3	
	PHYS 196	Physics w/Calculus II	5		PHYS 024	Engineering Physics II	4	
	PHYS 387	Statics	3		IDE 050	Engineering Mechanics - Statics	3	
	PHYS 208	Design & Drafting	2		IDE 020	Engineering Design w/Computer Applications	3	
	CS 180	Foundations of Computer Science	3		CS 053	Introduction to Programming	3	
	Total Semester Hours			16	Total Semester Hours			16
Fourth	MATH 365	Ordinary Differential Equations	3		MATH 204	Elementary Differential Equations	3	
	ECON 201 or ECON 200	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 121 or ECON 122	Principles of Microeconomics or Principles of Macroeconomics	3	
	ENG 314 or ENG 212 or COMM 170	English Composition II or Technical Writing or Fundamentals of Speech	3		ENG 060 or ENG 160 or SPMS 085	Writing and Research or Technical Writing or Principles of Speech	3	
		Humanities/Social Science Elective	3			Humanities/Social Science Elective	3	
		Humanities/Social Science Elective	3			Humanities/Social Science Elective	3	
	Total Semester Hours			15	Total Semester Hours			15

This is a guide; with the consent of your advisor you may choose to vary the sequence or combination of some courses in a manner appropriate to individual course requirements and prerequisites. A grade of "C" or better is required in calculus and physics.