

Geological Engineering

Southeastern Illinois College				University of Missouri-Rolla		
Semester	SIC #	Title	Hours	UMR #	Title	Hours
First	MATH 161*	Pre-Calculus	4	MATH 004*	College Algebra	3
	CHEM 121	General Chemistry I	5	CHEM 001, 002	General Chemistry and Lab	5
	ENG 121	Rhetoric and Composition I	3	ENG 020	Exposition and Argumentation	3
	Total Semester Hours		12	Total Semester Hours		11
Second	MATH 162	Calculus & Analytic Geometry I	5	MATH 014	Calculus with Analytic Geometry I	5
	CHEM 122	General Chemistry & Qualitative Analysis II	5	CHEM 003	General Chemistry	3
	HIST 122 or HIST 241 or GOV 121	History of Western Civilization or American History I or American Government	3	HIST 112 or HIST 175 or PS 090	Modern Western Civilization or American History to 1877 or American Government	3
		Humanities/Social Science Elective	3		Humanities/Social Science Elective	3
	Total Semester Hours		16	Total Semester Hours		14
	Third	MATH 221	Calculus and Analytic Geometry II	5	MATH 015	Calculus with Analytic Geometry II
CIS 254		C++ Object Oriented Programming	3	CS 74, 78	Intro to Programming Methodology and Lab	3
PHYS 221		General Physics I	5	PHYS 023	Engineering Physics I	4
ECON 121 or ECON 122		Principles of Macroeconomics or Principles of Microeconomics	3	ECON 122 or ECON 121	Principles of Macroeconomics or Principles of Microeconomics	3
Total Semester Hours		16	Total Semester Hours		15	
Fourth		MATH 222	Calculus and Analytic Geometry III	5	MATH 022	Calculus with Analytic Geometry III
	PHYS 241	Statics	3	IDE 050	Engineering Mechanics - Statics	3
	PHYS 222	General Physics II	5	PHYS 024	Engineering Physics II	4
	ENG 122 or SPCH 121	Rhetoric and Composition II or Principles of Speaking	3	ENG 060 or SPMS 085	Writing and Research or Principles of Speech	3
	Total Semester Hours		16	Total Semester Hours		14

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.

*MATH 161 will not count toward an engineering degree at UMR; the credit and grade will transfer.