

Computer Engineering

Semester	Southwestern Illinois College			University of Missouri-Rolla			
	SWIC #	Title	Hours	Grade	UMR #	Title	Hours
First	MATH 203	Analytic Geometry & Calculus I	5		MATH 014	Calculus w/Analytic Geometry I	4
	CHEM 105	Inorganic Chemistry I Pending Evaluation	5		CHEM 001, 002	General Chemistry and Lab	5
	ENG 101	Rhetoric & Composition I	3		IDE 020	Engineering Design with Computer Application	3
					ENG 020	Exposition & Argumentation	3
		Total Semester Hours	13			Total Semester Hours	15
Second	MATH 204	Analytic Geometry & Calculus II	5		MATH 015	Calculus w/Analytic Geometry II	4
	PHYS 204*	Engineering Physics (Mechanics)	4		GNCR*	General Credit	4
	HIST 102 or HIST 180 or HIST 181 or POLS 150	World Civilization II or US History to 1865 or US History 1865-present or Intro to American 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
	SPCH 151	Fundamentals of Public Speaking	3		SPMS 085	Principles of Speech	3
		Total Semester Hours	15			Total Semester Hours	14
Third	MATH 205	Analytic Geometry & Calculus III	4		MATH 022	Calculus w/Analytic Geometry III	4
	PHYS 205*	Engineering Physics (Heat, Electricity, and Magnetism)	4		PHYS 023*	Engineering Physics I	4
	PHYS 263	Analytical Mechanics - Statics**	3		IDE 050	Engineering Mechanics - Statics**	3
	CIS 260	Advanced C++ Programming II	3		CS 53, 54	Intro to Programming and Lab	4
		Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	Total Semester Hours	17			Total Semester Hours	18	
Fourth	MATH 290	Differential Equations	3		MATH 204	Elementary Differential Equations	3
	PHYS 206	Engineering Physics (Wave, et al)	4		PHYS 024	Engineering Physics II	4
	PHYS 264	Analytical Mechanics - Dynamics**	3		IDE 150	Engineering Mechanics - Dynamics**	3
	ECON 201 or ECON 202	Principles of Economics I (Macro) or Principles of Economics II (Micro)	3		ECON 122 or ECON 121	Principles of Macroeconomics or Principles of Microeconomics	3
		Humanities/Social Science Elective	3			Humanities/Social Science Elective	3
	Total Semester Hours	16			Total Semester Hours	16	

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.

*The combination of SWIC PHYS 204 & 205 is equivalent to UMR PHYS 023.