

## Computer Engineering

St. Charles Community College					University of Missouri-Rolla		
Semester	SCC #	Title	Hours	Grade	UMR #	Title	Hours
First	MAT 180	Calculus & Analytic Geometry I	5		MATH 014	Calculus w/Analytic Geometry I	4
	CHM 110	General Chemistry I	3		CHEM 001	General Chemistry	4
	CHM 113	General Chemistry I Lab	2		CHEM 002	General Chemistry Lab	1
	EGR 104	Engineering Design	3		IDE 020	Engineering Design w/Computer Applications	3
	ENG 101	English Composition I	3		ENG 020	Exposition & Argumentation	3
		Total Semester Hours	16			Total Semester Hours	15
Second	MATH 230	Calculus & Analytic Geometry II	5		MATH 015	Calculus w/Analytic Geometry II	4
	EGR 100	Intro to Engineering	1		FE 010	Study & Careers in Engineering	1
	SPE 101	Oral Communications	3		SPMS 085	Principles of Speech	3
	ECO 110 or ECO 120	Principles of Macroeconomics or Principles of Microeconomics	3		ECON 122 or ECON 121	Principles of Macroeconomics or Principles of Microeconomics	3
	HIS 146 or HIS 101 or HIS 102 or POL 101	Western Civ of Modern Europe or US History to 1877 or US History since 1877 or 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
		Total Semester Hours	15			Total Semester Hours	14
Third	MAT 240	Calculus & Analytic Geometry III	5		MATH 022	Calculus w/Analytic Geometry III	3
	PHY 240 and PHY 243	College Physics I (4) and Lab (1)	5		PHYS 023	Engineering Physics I	5
	EGR 170	Engineering Mechanics - Statics	3		IDE 050	Engineering Mechanics - Statics	3
	CPT 182*	Programming in C	3		GNCR*	General Credit	3
	Total Semester Hours	16			Total Semester Hours	14	
Fourth	MAT 250	Differential Equations	3		MATH 204	Elementary Differential Equations	3
	PHY 241 and PHY 244	College Physics II (4) and Lab (1)	5		PHYS 024	Engineering Physics II	5
	EGR 220	Electrical Circuits	3		EE 281	Electrical Circuits	3
	EGR 210	Engineering Mechanics - Dynamics	3		IDE 150	Engineering Mechanics - Dynamics	3
	CPT 186*	Object Oriented Programming in C++	3		CS 074, 078*	Introduction to Programming Methodology and Lab	3
	Total Semester Hours	17			Total Semester Hours	17	

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.

\*These courses are recommended preparatory courses but do not meet degree requirements for Computer Engineering and Computer Science majors at UMR. These majors must take CS 53 and 54 UMR.