

Rogers State University
Department of Mathematics and Physical Science
B.S. Chemical Engineering

General Education Requirements			46 cr hrs
UNIV	1152	University Experience	2
ENGL	1113	Composition I	3
ENGL	1213	Composition II	3
SPCH	1113	Speech Communication	3
		Social/Behavioral Science	3
HIST	2483/2493	American History	3
POLS	1113	American Federal Government	3
BIOL	1114/1134	Biological Science	4
CHEM	1315	General Chemistry I (required)	5
MATH	1715	Precalculus (required)	5
		Humanities	6
		Global Studies	3
		General Education Elective	3
Program Core Requirements			41 cr hrs
CHEM	1415	General Chemistry II	5
CHEM	3125	Organic Chemistry I	5
CHEM	3225	Organic Chemistry II	5
CHEM	3323	Physical Chemistry*	3
PHYS	2014	Engineering Physics I	4
PHYS	2114	Engineering Physics II	4
MATH	2264	Analytic Geometry and Calculus I	4
MATH	2364	Analytic Geometry and Calculus II	4
MATH	2464	Analytic Geometry and Calculus III	4
MATH	3113	Differential Equations	3
Chemical Engineering Emphasis			23 cr hrs
ENGR	1411	Engineering Orientation	1
CHE	3113	Chemical Engineering Fundamentals	3
CHE	3213	Chemical Reaction Engineering	3
CHE	3413	Heat and Mass Transfer I	3
CHE	4413	Heat and Mass Transfer II	3
CHE	3713	Fluid Mechanics	3
CHE	3712	Chemical Engineering Laboratory I	2
CHE	4712	Chemical Engineering Laboratory II	2
CHE	3913	Chemical Engineering Thermodynamics	3
Chemical Engineering Electives (Choose 9 credit hours from the following)			9 cr hrs
CHEM	3515	Environmental Chemistry	5
CHE	3313	Numerical Methods for Engineering Computations	3
CHE	3513	Structure and Properties of Materials	3
CHE	3613	Separation Processes	3
CHE	4313	Chemical Engineering Kinetics	3
CHE	4213	Chemical Process Control	3
Free Electives			6 cr hrs
Total			125 cr hrs