University of Rochester
Department of Chemical Engineering

Proposed Academic Curriculum: Class of 2020 and up*

(The position of electives and some of the basic science courses are arbitrary.
The choices shown below balance technical courses and non-technical courses on a semester basis.)

Fall Term				Spring Term			
First Year (34 credits)							
5	CHEM	131	Chemical Concepts I	5	CHEM	132	Chemical Concepts II
4	MATH	161	Calculus I	4	MATH	162	Calculus II
4	WRTG	105	Primary Writing Requirement	4	PHYS	121	Mechanics
4	ChE	150	Intro to Sustainable Energy	4	Elective		Humanities/Social Science
17				17			
Sophomore Year (35 credits)							
4	CHEM	203	Organic Chemistry I	4	CHEM	204	Organic CHM II/BIO/EES Equivalent
1	CHEM	207	Organic Chem. Lab IH (1cr)	4	ChE	116	Numerical Methods & Statistics
4	ChE	113	Chemical Process Analysis	4	ChE	243	Fluid Dynamics
4	MTH	164	MultiDimensional Calculus	4	MATH	165	Linear Algebra & Differential Equations
4	Elective		Humanities/Social Science	2	WRTG	273	Communicating Your Professional Identity
17				18			
Junior Year (33 credits)							
4	ChE	225	Thermodynamics I	4	ChE	226	Thermodynamics II
4	ChE	244	Heat & Mass Transfer	4	ChE	250	Separation Processes
4	PHYS	122	Electricity & Magnetism	4	ChE	231	Kinetics & Reactor Design
4	Elective		Humanities/Social Science	1	ChE	279	Chemical Engineering Practice
16				4	Elective		Humanities/Social Science
				17			
Senior Year (30 credits)							
4	ChE	246	Lab in ChE Principles	4	ChE	255	ChE Senior Design Lab
4	ChE	272	ChE Process Control	2	ChE	273	ChE Process Design & Simulation
4	Elective		Humanities/Social Science	4	Elective		Advanced CHM/BIO/EES Elective
4	Elective		Technical	4	Elective		Technical
16				14			

TOTAL (132 credits)