

## Chemical Engineering Roadmap

FALL			SPRING		
<b>Year 1</b>					
CHEM 1A (GE Area 5A + 5C)	General Chemistry	5	CHEM 1B (GE Area 5A + 5C)	General Chemistry	5
ENGR 10	Introduction to Engineering	3	ENGL 1B (GE Area 3B)	Argument and Analysis	3
MATH 30 (GE Area 2)	Calculus I	3	MATH 31 (GE Area 2)	Calculus II	4
GE Area 1A	ENGL 1A	3	PHYS 50 (GE Area 5A + 5C)	General Physics I: Mechanics	4
<b>Year 2</b>					
CHEM 112A	Organic Chemistry	3	CHE 110A	Math Methods in Chem and Mat Eng	2
MATH 32 (GE Area 2)	Calculus III	3	CHE 115	Industrial Chemical Calculations	3
PHYS 51 (GE Area 5A + 5C)	Gen Phys II: Electricity & Magnetis	4	CE 99	Introductory Statics	2
GE Area 3A		3	CHEM 112B	Organic Chemistry	3
GE Area 4 + US 1 or US 2-3		3	CHEM 113A	Organic Chemistry Lab	2
			GE Area 4 + US 1 OR US 2-3		3
<b>Year 3</b>					
CHE 110B	Computational Methods in Chem Eng	2	CHE 114	Data Sci in Chem & Mat Eng	3
CHE 162	Engineering Statistics and Analysis	2	CHE 151	Process Engineering Thermodynamics	4
CHE 190	Introduction to Transport Phenomena	3	CHE 160A	Unit Operations I	4
ENGR 100W (GE UD Area 2/5 + WID)	Engineering Reports	3	GE UD Area 4		3
MATE 25	Introduction to Materials	3	Technical Major Elective		3
GE Area 1C	COMM 20	3			
<b>Year 4</b>					
CHE 158	Kinetics and Reactor Design	3	CHE 163L	Undergrad Chem Eng Lab II	2
CHE 160B	Unit Operations II	4	CHE 165B	Plant Design II	2
CHE 161L	Undergrad Chem Eng Lab I	2	CHE 185	Process Dynamics and Control	2
CHE 165A	Plant design I	2	Technical Major Elective		3
CHEM 130A/135/161A	Biochemi/ General Biochem/ Phys Chem	3 or 4	GE Area 6		3
			GE UD Area 3		3