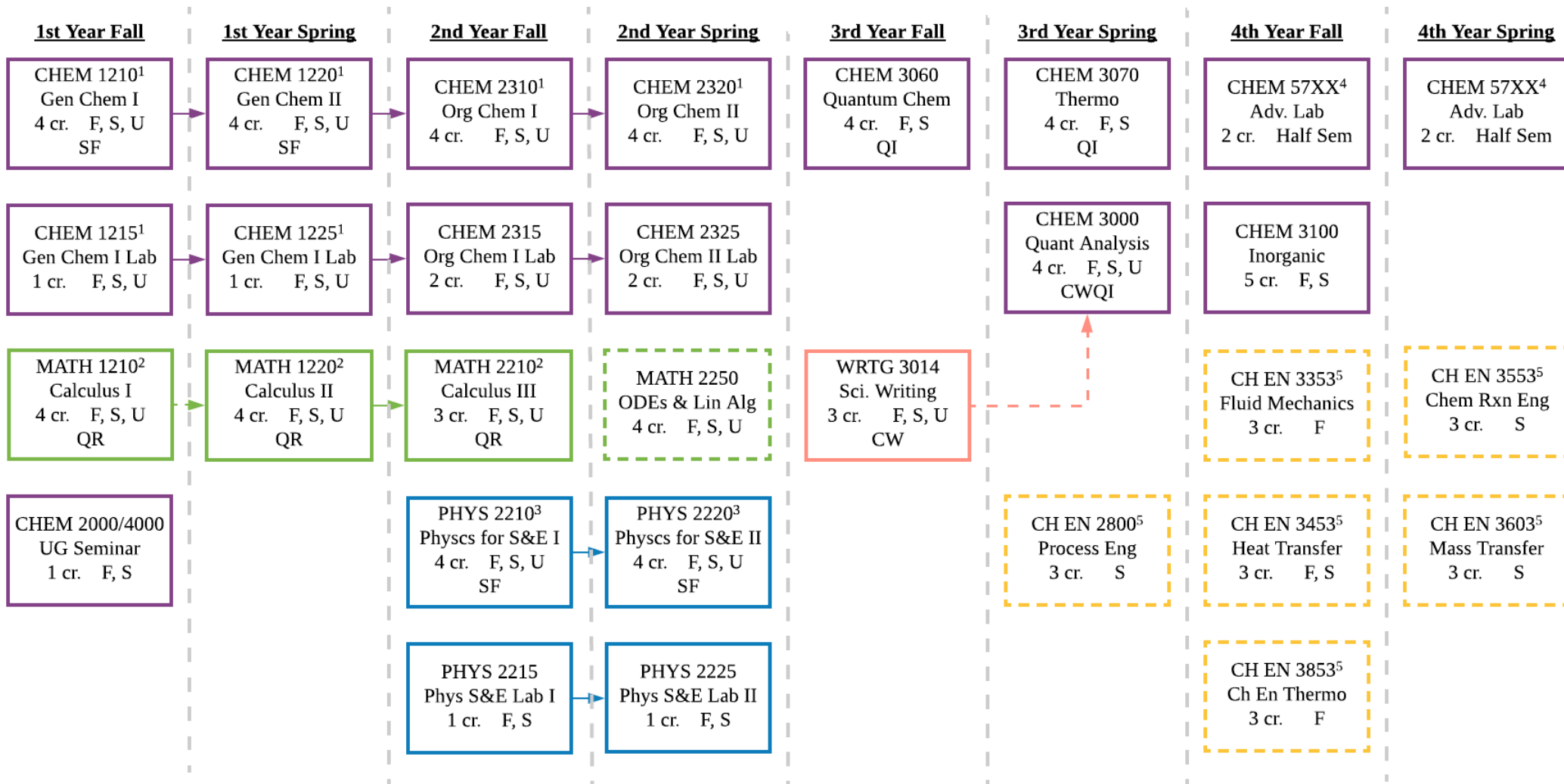


Chemistry Course Requirements - Chemical Engineering Emphasis (2018-2019)

This emphasis is great for those interested in double majoring in chemistry and chemical engineering as well as those who are considering graduate school in chemical engineering.



- Honors versions of available. Sequence starts in the Fall. Must apply to be in the class.
- Talk with advisors to see how other calculus sequences could fulfill the calculus requirement.
- Honors versions are PHYS 3210 + 3220.
- 2 upper division labs required. Fall options: CHEM 5710 (org) 1st half, CHEM 5730 (inorg) 2nd half. Spring options: CHEM 5700 (ana) 1st half, CHEM 5720 (phys) 2nd half, CHEM 3200 (radiochem) + NUCL 4000 Spring + Fall.
- Visit chemical engineering website to get permission code for these classes if you are not double majoring in chemical engineering.
- MATH 2270 + 2280 are more rigorous, and will take 2 semesters to complete.

Chemistry Course Requirements – Chemical Engineering Emphasis (2018-19)

This emphasis is great for those interested in double majoring in chemistry and chemical engineering as well as those who are considering graduate school in chemical engineering.

Chemical Engineering Emphasis										
Done?	Dept.	Number	Course Name	Credit Hours	Gen Ed/ Bach Req	Prerequisites		Taught		
						Chemistry	Math/Other	F	S	U
MATH CLASSES										
<input type="checkbox"/>	MATH	1210	Calculus I ^o	4	QR		MATH 1060 or 1080	x	x	x
<input type="checkbox"/>	MATH	1220	Calculus II ^o	4	QR		MATH 1210	x	x	x
<input type="checkbox"/>	MATH	2210	Calculus III ^o	4	QR		MATH 1220	x	x	x
<input type="checkbox"/>	MATH	2250	ODE's and Linear Algebra ^o	4	QR		MATH 2250	x	x	x
PHYSICS CLASSES										
<input type="checkbox"/>	PHYS	2210	Physics for Sci & Eng I ^o	4	SF		MATH 1210	x	x	x
<input type="checkbox"/>	PHYS	2215	Physics Lab for Sci & Eng I	1			MATH 1210	x	x	
<input type="checkbox"/>	PHYS	2220	Physics for Sci & Eng II ^o	4	SF		MATH 1220 + PHYS 2210	x	x	x
<input type="checkbox"/>	PHYS	2225	Physics Lab for Sci & Eng II	1			MATH 1220 + PHYS 2210	x	x	x
CHEMISTRY CLASSES										
<input type="checkbox"/>	CHEM	2000/4000	Undergrad Seminar	1				x	x	
<input type="checkbox"/>	CHEM	1210 + 1215	General Chemistry I ^o + Lab	4 + 1	SF		MATH 1050	x	x	x
<input type="checkbox"/>	CHEM	1220 + 1225	General Chemistry II ^o + Lab	4 + 1	SF		CHEM 1210 + 1215	x	x	x
<input type="checkbox"/>	CHEM	2310 + 2315	Organic Chemistry I ^A + Lab	4 + 2			CHEM 1220 + 1225	x	x	x
<input type="checkbox"/>	CHEM	2320 + 2325	Organic Chemistry II ^A + Lab	4 + 2			CHEM 2310 + 2315	x	x	x
<input type="checkbox"/>	CHEM	3000	Quantitative Analysis	4	QI, CW		CHEM 1220	MATH 1220 + 1250	x	x
<input type="checkbox"/>	CHEM	3060	Quantum Chemistry & Spect	4	QI		CHEM 1220 + PHYS 2220	x	x	
<input type="checkbox"/>	CHEM	3070	Thermodynamics & Kinetics ^T	4	QI		MATH 2210 + PHYS 2220	(x)	x	
<input type="checkbox"/>	CHEM	3100	Inorganic Chemistry	5			CHEM 1220		x	x
<input type="checkbox"/>	WRITG	3014	Scientific Writing	3			CHEM 2320 + 3060 WRITG 2010	x	x	x
ADVANCED LABS - Choose 2										
<input type="checkbox"/>	CHEM	5700	Analytical Chemistry Lab	2	CW		CHEM 3000			1st
<input type="checkbox"/>	CHEM	5710	Organic Chemistry Lab	2			CHEM 2320			1st
<input type="checkbox"/>	CHEM	5720	Physical Chemistry Lab	2			CHEM 3060, 3070			2nd
<input type="checkbox"/>	CHEM	5730	Inorganic Chemistry Lab	2			CHEM 3100			2nd
<input type="checkbox"/>	CHEM	3200	Radiochemistry	3						x
CHEMICAL ENGINEERING ELECTIVES¹										
<input type="checkbox"/>	CH EN	2800	Process Engineering	3			MATH 2210			x
<input type="checkbox"/>	CH EN	3853	Chem Eng Thermodynamics	3			CH EN 2800	x		
<input type="checkbox"/>	CH EN	3353	Fluid Mechanics	3			CH EN 2800	x		
<input type="checkbox"/>	CH EN	3453	Heat Transfer	3			CH EN 2800	x		
<input type="checkbox"/>	CH EN	3553	Chemical Rxn Engineering	3			CH EN 3853, 3353, 3453			x
<input type="checkbox"/>	CH EN	3603	Mass Transfer	3			CH EN 3853, 3353, 3453			x

^o: Can take whichever calculus sequence is appropriate, talk to advisor about sequencing.

^o: MATH 2270 + 2280 are more rigorous, but will take 2 semesters to complete.

^o: Honors versions are PHYS 3210 + 3220.

^o: Honors versions of General Chemistry are CHEM 1211 + 1221. Sequence starts in the Fall. Must apply to be in the class.

^o: Honors versions of Organic Chemistry are CHEM 2311 + 2321. Sequence starts in the Fall.

^T: CHEM 4800 (research), CHEM 4965 (internship), or CHEM 4999 (Honors Thesis) can waive with advisor consent for double majors in chemical engineering.

¹: Visit chemical engineering website to get permission code for these classes if you are not double majoring in chemical engineering.