

Chemical Engineering

Catalog Year 2024-2025

Note: This is a recommended sequence, and shifts are likely to occur due to prerequisite completion and course availability.

Semester One	Semester Two
CHEM 1127Q: General Chemistry I (4 credits)	CHEM 1128Q: General Chemistry II (4 credits)
MATH 1131Q: Calculus I (4 credits)	MATH 1132Q: Calculus II (4 credits)
CSE 1010: Intro to Computing for Engineers (3 credits)	ENGR 1166: Foundations of Engineering (3 credits)
ENGL 1007: Writing and Composition (4 credits)	Gen Ed (3 credits)
	Gen Ed (3 credits)
15 credits	17 credits

Semester Three	Semester Four
PHYS 1501Q: Physics for Engineers I (4 credits)	PHYS 1502Q: Physics for Engineers II (4 credits)
MATH 2110Q: Multivariable Calculus (4 credits)	MATH 2410Q: Elem. Differential Equations (3 credits)
CHEG 2103: Intro to Chemical ENGR (3 credits)	CHEG 2111: Thermodynamics 1 (3 credits)
CHEM 2443: Organic Chemistry 1 (3 credits)	CHEM 2444: Organic Chemistry II (3 credits)
PHIL 1104: Philosophy & Social Ethics (CA 1) (3 credits)	CHEM 2446: Organic Chemistry Lab (1 credit)
	CHEG 2201: CBE Professional Skills 1 (1 Credit)
	Gen Ed (3 credits)
17 credits	18 credits

Semester Five	Semester Six
CHEG 3112: Thermodynamics II (3 credits)	CHEG 3220: Transport Phenom. II (4 credits) <small>(fka CHEG 3124)</small>
CHEG 3120: Transport Phenom. I (4 credits) <small>(fka CHEG 3123)</small>	CHEG 3151: Process Kinetics (3 credits)
MATH 2210Q: Applied Linear Algebra [Pre-req] (3 credits)	CHEG 3240: Junior Design (3 credits) <small>(fka CHEG 3128)</small>
ENGR 2000+: Engineering Elective (3 credits)	CHEG 3201: CBE Professional Skills 1 (1 Credit)
Gen Ed (3 credits)	ENGR 2000+: Engineering Elective (3 credits)
	Gen Ed/Free Elective* (3 credits)
16 credits	17 credits

Semester Seven	Semester Eight
CHEG 4140: Capstone Design 1 (3 credits)	CHEG 4143W: Capstone Design II (3 credits)
CHEG 4139 or 4144: Experimental or In Silico Senior Lab (2 credits)	CHEG 4139 or 4144: Experimental or In Silico Senior Lab (2 credits)
CHEG 4145: Chemical Engineering Analysis (3 credits)	CHEG 4147: Process Dynamics & Control (3 credits)
CHEG Elective (3 credits)	CHEG Elective (3 credits)
CHEG 4101: CBE Professional Skills III (1 credit)	Free Elective* (2+ credits)
Free Elective* (3 credits)	
15 credits	13+ credits

*As needed to reach total degree credits.

See reverse for important general education and major specific information.