

2026-2027 Bachelor of Science in Chemistry-Pre-Engineering

Semester-by-Semester Worksheet



Student Name:

Student ID:

Y E A R 1	Fall Courses		Cr	Notes	Spring Courses		Cr	Notes
	MATH 101		3	Pre-Calculus	MATH 201		4	Calculus I
	CHEM 201		4	General Chemistry I	CHEM 202 & 204		5	General Chemistry II w/ Lab
	BIOL 220 & 222		4	Intro Cell & Molec Bio w/ Lab	HMXP 102/102H		3	
	WRIT 101/101H		3		CSCI 101 or 151 or 207		3-4	Technology
	ACAD 101/101H		1		CHEM 491		0	Department Seminar
Total:			15 credits		Total:			15-16 credits
Y E A R 2	Fall Courses		Cr	Notes	Spring Courses		Cr	Notes
	CHEM 301		4	Organic Chemistry I	CHEM 302 & 304		4	Organic Chemistry II w/ Lab
	MATH 202		4	Calculus II	CHEM 312, 313, 314		5	Chemom & Quan Analy w/ Lab
	PHYS 211 & 211L		4	Calc Based Physics I w/ Lab	PHYS 212 & 212L		4	Calc Based Physics II w/ Lab
	CHEM 305 Chem. Hygiene		1	or Physical Activity	CHEM 305 Chem. Hygiene		1	or Physical Activity
	CRTW 201		3	or Social Science #1	CRTW 201		3	or Social Science #1
	CHEM 492		0	Department Seminar				
Total:			16 credits		Total:			17 credits
Y E A R 3	Fall Courses		Cr	Notes	Spring Courses		Cr	Notes
	MATH 301 or MATH 305		3-4	Calc III or Diff. Equations	MATH 301 or MATH 305		3-4	Calc III or Diff. Equations
	CHEM 407 & 409		4	Physical Chemistry I w/ Lab	CHEM 408 & 410		4	Physical Chemistry II w/ Lab
	CHEM 330 & 332		4	Intro Inorganic Chem w/ Lab	CHEM 323		3	Intro Biochemistry
	Constitution-Founding Docs		3	or Humanities & Arts #1	PHYS 321		3	or Social Science #2
	CHEM 493		0	Department Seminar	Constitution-Founding Docs		3	or Humanities & Arts #1
Total:			14-15 credits		Total:			16-17 credits
Y E A R 4	Fall Courses		Cr	Notes	Spring Courses		Cr	Notes
	CHEM 551		3	Research I	CHEM 552/552H		3	Research II
	CHEM 523 & 525		3-5	Biochem I or Huma & Arts #2	CHEM 530		3	Inorg Chem or Huma & Arts #2
	Global Perspectives		3	or Historical Perspectives	Global Perspectives		3	or Historical Perspectives
	Foreign Language I		4		Foreign Language II		4	
	CHEM 494		0	Department Seminar	CHEM 495		1	Senior Seminar
					PHYS 321		3	or Social Science #2
Total:			13-15 credits		Total:			14-17 credits

Additional Notes: Either CHEM 530 OR CHEM 523 & 525 is/are required. PHYS 321 is offered in alternating spring semesters. This CHEM-PENG plan meets requirements for an ACS-certified degree. There are other options for a non-ACS-certified CHEM-PENG degree. CHEM 552 meets Oral Communication and Intensive Writing requirements. Constitution courses also meet Social Science (PLSC 201, ECON 103) or Historical Perspectives (HIST 211, 212) requirement. A minimum of 120 hours is required for graduation.