

Saint Joseph's University

BS Chemistry Major Curriculum Requirements *(For Students who entered Fall 2023 forward)*

Name _____

ID# _____

General Education Program (GEP)

Signature Core (19 credits)

Sem.		Course #
	First Year Seminar(XXX150)	
	PHL 154 Moral Foundations	
	Theology Signature Core (THE 153, 154, or 155)	
	ENG 102 Texts and Contexts (<i>pre-req: ENG 101</i>)	
	HIS 154 Forging the Modern World	
	Faith & Reason (<i>pre-reqs: THE154 & PHL154</i>)	
	INT 151 Inequality in American Society (<i>Students who entered Fall 2023 forward only</i>)	

Variable Courses (# of credits varies, depending on language placement)

	ENG 101 Craft of Language	
	Art, Music/Theatre/Film, or Lit	
	MAT 161 Calculus I or higher calculus, based on placement	
	CHM 120/120L General Chemistry I + Lab (<i>ACS Intro</i>)	
	Social/Behavioral Science	
	Non-Native Language I	
	Non-Native Language II	
	Philosophical Anthro (<i>pre-req: PHL 154</i>)	
	Religious Difference (THE or REL)	

Integrative Learning Courses (3 courses)

	MAT 162 Calculus II	
	PHY 105/105L University Physics I/Lab I	
	PHY 106/106L – University Physics II /Lab II	

Overlays (All students complete 4 overlays (EI, WI, DGNW, DIV) that may be combined with other GEP requirements, major courses, or electives.)

	Diversity	
	Diversity or Global or Non-Western	
	Ethics-Intensive (<i>pre-req: PHL 154</i>)	
	Writing-Intensive (<i>pre-req: ENG 101</i>)	

Major Requirements

	CHM 118 Chemical Sciences Orientation (1 cr)	
	CHM 125/125L General Chemistry II + Lab (<i>ACS Introductory</i>)	
	CHM 210/210L Organic Chemistry I + Lab (<i>ACS Foundational</i>)	
	CHM 215 & 215L Organic Chemistry II + Lab (<i>ACS In-Depth</i>)	
	CHM 204 Literature of Chemistry (1 cr)	
	CHM 300 Discussions in Chemistry (1 Credit)	
	CHM 310/310L– Physical Chemistry I + Lab (<i>ACS Foundational</i>)	
	CHM 315/315L – Physical Chemistry II + lab (<i>ACS In-Depth</i>)	
	CHM 330/330L – Instrumental Analysis+Lab (<i>ACS In-Depth</i>)	
	CHM 340/340L – Biochemistry I + Lab (<i>ACS Foundational</i>)	
	CHM 350 Inorganic Chemistry (<i>ACS Foundational</i>) + CHM 350L Inorganic Lab	
	CHM 360 Nanochemistry	
	CHM 361/361L Analytical Chemistry I + Lab (<i>ACS Foundational</i>)	
	CHM 390 Seminar in Chemistry I (0 credits)	
	CHM 402 Seminar in Chemistry II (1 credit)	
	In-Depth Chemistry Elective (<i>ACS In-Depth</i>)	

Electives (A minimum of 18 elective credits required)

	Free Elective	
	Free Elective	
	Free Elective	
	Free Elective	
	Free Elective/Senior Research I	
	Free Elective/Senior Research II	

Typical Course Sequence - Chemistry Major

Freshman Year					
Fall	Cred.		Spring	Cred.	
CHM 120,120L General Chemistry I + Lab	4	☐	CHM 125,125L General Chemistry II + Lab	4	☐
MAT 161 - Calculus I (GEP Math Beauty)	4	☐	MAT 162 Calculus II	4	☐
ENG 101 Craft of Language (GEP)	3	☐	ENG 102 Text and Contexts	3	☐
First Year Seminar	3	☐	THE 154 Faith, Justice, & the Catholic Tradition	3	☐
PHL 154 Moral Foundations	3	☐	HIS 154 Forging the Modern World	3	☐
Chemical Sciences Orientation	1	☐			
Total Semester Credits	18			17	
Sophomore Year					
Fall	Cred.		Spring	Cred.	
CHM 210,210L Organic Chemistry I + Lab	4	☐	CHM 215, 215L Organic Chemistry II + Lab	4	☐
PHY 105,105L University Physics I + Lab	4	☐	PHY 106,106L University Physics II + Lab	4	☐
Non-Native Language I (GEP)	4	☐	Non-Native Language II (GEP)	4	☐
Social Science (GEP)	3	☐	Elective	3	☐
CHM 204 Literature of Chemistry	1	☐	INT 151 Inequality in American Society	1	
Total Semester Credits	16			16	
Junior Year					
Fall	Cred.		Spring	Cred.	
CHM 310/310L Physical Chemistry I + Lab	4	☐	CHM 315 Physical Chemistry II	3	☐
CHM 340/340L Biochemistry I + Lab	4	☐	CHM 361/361L Analytical Chemistry I + Lab	4	☐
Rel. Diff. (GEP)	3	☐	ART/LIT (GEP)	3	☐
PHL Anthropology (GEP)	3	☐	Faith & Reason (GEP)	3	☐
CHM 300 Discussions in Chemistry	1	☐	Free Elective	3	☐
Total Semester Credits	15			16	
Senior Year					
Fall	Cred.		Spring	Cred.	
CHM 350/350L Inorganic Chemistry + Lab	5	☐	CHM 360 Nanochemistry/MSN Elective	3	☐
Chemistry in Depth/Elective	3	☐	CHM 330/330L Instrumental Analysis + Lab	4	☐
Free Elective/Senior Research I	3	☐	Free Elective/Senior Research II	3	☐
Free Elective	3	☐	Free Elective	3	☐
CHM 390 Seminar I	0	☐	CHM 402 Chemistry Seminar	1	☐
Total Semester Credits	15			14	

Requirements for American Chemical Society Certification

ACS Introductory Courses

CHM 120,120L General Chemistry I + Lab
CHM 125,125L General Chemistry II + Lab

ACS Foundational Courses

CHM 210,210L Organic Chemistry I + Lab
CHM 341/444L Biochemistry I + Lab
CHM 320 Essentials of PCHM/PCHM Bio
CHM 361/361L Analytical Chem I + Lab
CHM 350 Inorganic Chemistry

ACS In-Depth

Students who wish to have an ACS certified degree must take a minimum of [4 in-depth courses](#) that add to at least 12 credits. Students must also take Calc II, and Senior Research

Chemistry Department Contact:

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