



2026-2027

CHEMISTRY - APPLIED RESEARCH MAJOR, B.S.

Biology & Chemistry Department; Shaw School of Sciences

Students must complete all Foundations requirements and major requirements, as well as any additional General Electives needed to reach the minimum of 124 total credits required for a Bachelor's degree. This program may require more than 124 credits for a degree due to specific requirements.

MAJOR REQUIREMENTS (81)

Cross-Disciplinary Requirements (29)

__ 3	BIO	201	General Biology I	
__ 3	BIO	202	General Biology II	
__ 1	BIO	203	General Biology Lab I	
__ 1	BIO	204	General Biology Lab II	
__ 2	BIO	341	Ethical Issues	
__ 4	MAT	181	Calculus I	__ Lab
__ 4	MAT	182	Calculus II	__ Lab
__ 4	PHY	201	Intro Physics I	__ Lab
__ 4	PHY	202	Intro Physics II	__ Lab
__ 3	PSY	315	Stats for Behavioral Science	

Chemistry Requirements (35)

__ 3	CHE	121	Gen College Chemistry I	
__ 3	CHE	122	Gen College Chemistry II	
__ 1	CHE	123	Gen College Chemistry Lab I	
__ 1	CHE	124	Gen College Chemistry Lab II	
__ 3	CHE	221	Organic Chemistry I	
__ 3	CHE	222	Organic Chemistry II	
__ 1	CHE	223	Organic Chemistry Lab I	
__ 1	CHE	224	Organic Chemistry Lab II	
__ 4	CHE	321	Analytical Chemistry	__ Lab
__ 3	CHE	361	Biochemistry	
__ 1	CHE	363	Biochemistry Lab	
__ 3	CHE	382	Inorganic Chemistry	
__ 1	CHE	399	Intro to Chem Research	
__ 2	CHE	400	Senior Research	
__ 4	CHE	421	Physical Chemistry	__ Lab
__ 1	CHE	475	Senior Seminar	

Applied Research Track (17)

__ 2	CHE	300	Junior Research	
__ 4	CHE	322	Analytical Chemistry II	__ Lab
__ 4	CHE	383	Inorganic Chemistry II	__ Lab
__ 3	CHE	422	Physical Chemistry II	

Choose one additional 4-credit Science 300 or higher w/Lab or Math 300 or higher:

__ 4 BIO/CHE _____

Plus FOUNDATIONS REQUIREMENTS (49)

(3 credits Math and 4 credits Science + Lab satisfied by required major courses.)

Plus GENERAL ELECTIVES if needed to reach minimum 124 credits