

Sample Program for Pre-Pharmacy 3+ Dual Degree Biochemistry Major (updated 2025)

Freshman					
Fall			Spring		
Course		Credits	Course		Credits
CHE161	General Chemistry 1	4	CHE162	General Chemistry 2	4
CHE168	General Chemistry Lab 1	1	CHE169	General Chemistry Lab 2	1
MAT221	Calculus 1	4	BIO202	Principles of Biology 2	4
ENG101	Writing & Rhetoric	3	COM101	Introduction to Communication	3
COL101	Intro to College Exp	1	LAS101	Liberal Arts Seminar	1
THE 1xx	General Education	3	XXX	General Education (Fine Arts)	3
		16			16
Sophomore					
Fall			Spring		
CHE221*	Organic Chemistry 1	3	CHE222	Organic Chemistry 2	3
CHE210	Quantitative Analysis	3	CHE228	Organic Chemistry Lab 1	1
BIO201	Principles of Biology 1	4	PHY201	General Physics 1	5
HIS	History	3	THE 2xx	General Education	3
	Free Elective	3		Free Elective	3
		16			15
Junior					
Fall			Spring		
BIO	Genetics	4	BIO	Cell Bio or BIO Elective	4
Stats	BIO 310 or MAT 117	3	ENG	English Literature	3
BIO350*	Biochemistry 1	3	BIO351*	Biochemistry 2	3
THE 3xx	General Education	3	BIO 358*	Biochemistry Lab	1
Soc.Sci.	ANT 102 or SOC 101 or PSY 101	3	THE 4xx	General Education	3
PED100	Health & Wellness	1	LAS401	Liberal Arts Capstone	2
		17			16

*Note: BCH 351 and BCH 358 are offered every other year; therefore, students may need to take BCH350, 351 and 358 in sophomore year. CHE 221 would then need to be taken in Summer after Freshmen year.

Courses used to fulfill prerequisites for admission to the MCW School of Pharmacy are highlighted in red.

This sample program assumes students have completed at least two years of foreign language study in high school. This also assumes reverse transfer of 26 total credits from the School of Pharmacy to fulfill the requirements for a Bachelor of Science degree (minimum of 120 total credits) with a major in Biochemistry as follows:

MCW Year 1 PharmD course		WLC reverse transfer course	Credits toward B.S.
518	Principles of Drug Actions, Pharmacokinetics/dynamics	BIO 401	2
520	Pharmaceutical Calculations	BIO 402	3
521/2	Pharmaceutical Drug Delivery	BIO/CHE electives	21
517	Principles of Medicinal Chemistry		
511	Biochemistry		
540/1	Intro. Pharmacy Practice Experience		
516	Human Pathophysiology		
510	Clinical Immunology		
560	Microbiology		

