

## Sample Program for Pre-Pharmacy 3+ Dual Degree Chemistry 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	PHY201	General Physics 1	5
ENG101	Writing & Rhetoric	3	MAT222	Calculus 2	4
COL101	Intro to College Exp	1	LAS101	Liberal Arts Seminar	1
THE 1xx	General Education	3			
		16			15
Sophomore					
Fall			Spring		
CHE221	Organic Chemistry 1	3	CHE222	Organic Chemistry 2	3
CHE210	Quantitative Analysis	3	CHE228	Organic Chemistry Lab 1	1
PHY202	General Physics 2	5	CHE229	Organic Chemistry Lab 2	1
COM101	Introduction to Communication	3	BIO202	Principles of Biology 2	4
PED100	Health & Wellness	1	THE 2xx	General Education	3
			XXX	General Education (Fine Arts)	3
		15			15
Junior					
Fall			Spring		
BIO	Genetics or BIO Elecitive	4	BIO	Cell Bio or BIO Elecitive	4
Stats	DSC 311 or MAT 117	3	ENG	English Literature	3
BIO201	Principles of Biology 1	4	THE 4xx	General Education	3
THE 3xx	General Education	3	LAS401	Liberal Arts Capstone	2
HIS	History	3	Soc.Sci.	ANT 102 or SOC 101 or PSY 101	3
				Free Elective	1-3
		17			16-18

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 Chemistry as follows:

MCW Year 1 PharmD course		WLC reverse transfer course	Credits toward B.S.
518	Principles of Drug Actions, Pharmacokinetics/dynamics	CHE 310	4
520	Pharmaceutical Calculations	CHE 341	3
521/2	Pharmaceutical Drug Delivery	CHE 498	2
517	Principles of Medicinal Chemistry	CHE electives	17
511	Biochemistry		26
540/1	Intro. Pharmacy Practice Experience		
516	Human Pathophysiology		
510	Clinical Immunology		
560	Microbiology		