

John Carroll University Chemistry Department

Chemistry Major with preparation for 5th year MBA Study Plan

First Year

Fall Semester	Credits	Major	Core	Other	Spring Semester	Credits	Major	Core	Other
CH141 General Chemistry 1*	4	X			CH142 General Chemistry II*	4	X		
CH143 General Chemistry Lab I*	1	X			CH144 General Chemistry Lab II*	1	X		
MT135 Calculus / Analytic Geometry I	4	X			MT136 Calculus / Analytic Geometry II	4	X		
EN125 Seminar on Academic Writing	3		X		COMM125 Speech Communications	3		X	
TRS Course	3		X		PL 311 Business Ethics (PLVS)	3		X	X
Total Credit Hours	15				Total Credit Hours	15			

Second Year

Fall Semester	Credits	Major	Core	Other	Spring Semester	Credits	Major	Core	Other
CH221 Organic Chemistry I	3	X			CH222 Organic Chemistry II	3	X		
CH223 Organic Chemistry Lab I	1	X			CH224 Organic Chemistry Lab II	1	X		
PH125 General Physics I	3	X			CH261 Analytical Chemistry	3	X		
PH125L General Physics Lab I	1	X			CH263 Analytical Chemistry Lab (QA)	1	X	X	
Engaging the Global Community (EGC)	3		X		PH126 General Physics II	3	X		
BI100 Business Analysis with Excel	1			X	PH126L General Physics Lab II	1	X		
Creative and Performing Arts (CAPA)	1-3		X		EC211 Fundamentals of Economics	3			X
Total Credit Hours	15				Total Credit Hours	15			

Third Year

Fall Semester	Credits	Major	Core	Other	Spring Semester	Credits	Major	Core	Other
CH363 Physical Chemistry I	3	X			CH399 Undergraduate Research	1	X		
CH367 Physical Chemistry I Lab	2	X			CH478 Chemistry Seminar	0	X		
CH399 Undergraduate Research	1	X			Management	3			X
AC221 Fundamentals of Accounting	3			X	Career or Program Electives	3	X	X	X
TRS Course	3		X		Linked Pair of Courses	6		X	
Issue in Social Justice Course (ISJ)	3		X		Philosophy Knowledge/Reality	3		X	
Total Credit Hours	15				Total Credit Hours	16			

Fourth Year

Fall Semester	Credits	Major	Core	Other	Spring Semester	Credits	Major	Core	Other
CH441 Instrumental Analysis	3	X			Career or Program Electives	3	X	X	
CH443 Instrumental Analysis Lab**	2	X			FN312 Business Finance	3			X
CH399 Undergraduate Research	1	X			Humanities Course	3		X	
MK301 Marketing Principles	3			X	Language Requirements	3		X	
Social Sciences Course	3		X		Engaging the Global Community (EGC)	3		X	
Language Requirements	3		X						
Total Credit Hours	15				Total Credit Hours	15			

If you are planning to attend graduate school, take the GRE in summer and begin submitting applications this fall.

Total CH Credit Hours Required: 42 Total Credit Hours Required to Graduate: 120

Notes:

* Well prepared students may substitute the CH141-144 sequence with CH151/153 - Chemical Principles and Lab in the Fall Semester

** CH443 will satisfy the Core Requirements for Capstone, Advanced Writing, and Oral Presentation within the major (CAP, AW,OP)

*Please consult your academic advisor to address specific needs of your major, minor, and/or concentration.