

CHEMISTRY COMPREHENSIVE MAJOR: BIOCHEMISTRY EMPHASIS

Program Requirements

A minimum of 67 credits is required including the 26-credit Chemistry Nucleus:

Code	Title	Credits
Chemistry Nucleus		
CHEM 111	General Chemistry I (GT-SC2)	3
CHEM 112	General Chemistry Laboratory I (GT-SC1)	1
CHEM 113	General Chemistry II	3
CHEM 114	General Chemistry Laboratory II	1
CHEM 302	Chemical Information Literacy and Communication	3
CHEM 306	Analytical Chemistry (with laboratory)	4
CHEM 331	Organic Chemistry I	3
CHEM 332	Organic Chemistry II	3
CHEM 334	Organic Chemistry Laboratory I	1
CHEM 335	Organic Chemistry Laboratory II	1
CHEM 451	Physical Chemistry I	3
Total Credits		26

And the following supporting courses:

Code	Title	Credits
BIOL 150	Biological Principles (with laboratory) (GT-SC1)	4
BIOL 151	Diversity and Patterns of Life (with laboratory)	4
BIOL 310	Cell Biology	3
BIOL 312	Genetics (with recitation)	4
CHEM 471	Biochemistry I	3
CHEM 472	Biochemistry II	3
CHEM 474	Biochemistry Laboratory	2
CHEM 494	Research Problem in Chemistry	2-4
MATH 151	Calculus I (GT-MA1)	4
MATH 251	Calculus II	4
PHYS 190 & PHYS 185	General Physics I (GT-SC2) and Laboratory Physics I (GT-SC1)	4
PHYS 191 & PHYS 186	General Physics II (GT-SC2) and Laboratory Physics II (GT-SC1)	4
Total Credits		41-43

Course	Title	Credits
Year One		
Fall		
BIOL 150	Biological Principles (with laboratory) (GT-SC1)	4
CHEM 111	General Chemistry I (GT-SC2)	3
CHEM 112	General Chemistry Laboratory I (GT-SC1)	1
ENG 102	Writing and Rhetoric I (GT-CO1)	3
HWTR 100	First Year Seminar	1
MATH 140	College Algebra (GT-MA1)	3
	Credits	15
Spring		
Arts & Humanities GE		3

BIOL 151	Diversity and Patterns of Life (with laboratory)	4
CHEM 113	General Chemistry II	3
CHEM 114	General Chemistry Laboratory II	1
MATH 141	Precalculus (GT-MA1)	4
	Credits	15

Year Two

Fall

BIOL 310	Cell Biology	3
ENG 103	Writing and Rhetoric II (GT-CO2)	3
CHEM 331	Organic Chemistry I	3
CHEM 334	Organic Chemistry Laboratory I	1
MATH 151	Calculus I (GT-MA1)	4

Credits 14

Spring

CHEM 302	Chemical Information Literacy and Communication	3
CHEM 332	Organic Chemistry II	3
CHEM 335	Organic Chemistry Laboratory II	1
MATH 251	Calculus II	4
Social Science GE		3

Credits 14

Year Three

Fall

Arts & Humanities GE		3
CHEM 471	Biochemistry I	3
CHEM 474	Biochemistry Laboratory	2
PHYS 190	General Physics I (GT-SC2)	3
PHYS 185	Laboratory Physics I (GT-SC1)	1
Elective	Elective	3

Credits 15

Spring

Arts & Humanities GE		3
CHEM 472	Biochemistry II	3
PHYS 191	General Physics II (GT-SC2)	3
PHYS 186	Laboratory Physics II (GT-SC1)	1
Elective	Elective	6

Credits 16

Year Four

Fall

CHEM 306	Analytical Chemistry (with laboratory)	4
CHEM 451	Physical Chemistry I	3
Social Science GE		3
Elective	Elective	6

Credits 16

Spring

BIOL 312	Genetics (with recitation)	4
CHEM 494	Research Problem in Chemistry	2
Social Science GE		3
Elective	Elective	6

Credits 15

Total Credits 120