

## Chemflex Overview:

### Common Chemistry core

CHM 40, 41 (or CHM 30, 31)	8	Introductory chemistry
CHM 110,111,112,113	8	Organic chemistry
CHM 332	3	Analytical chemistry
CHM 201***	2	Technical writing
CHM 301*	1	Undergraduate seminar
CHM 307	3	Advanced inorganic chemistry
Total = 25 credits		

### Collateral Requirements

#### PATH A (CREDITS)

Math 21 (4)	Calculus I
Math 22 (4)	Calculus II
Math 23 (4)	Calculus III
Math 205 (3)	Linear methods
Phys 11, 12 (5)	Introductory Physics I and lab
Phys 21, 22 (5)	Introductory Physics II and lab
Eng 1or CSC 12 (3)	Survey of Computer Science
Total credits = 28	

#### PATH B (CREDITS)

Math 51 (4)	Survey of Calculus I
Math 52 (3)	Survey of Calculus II
Math 43 (3)	Survey of Linear Methods
Phys 10, 12 (5)	General Physics I and lab
Phys13, 22 (4)	General Physics II and lab
Total credits = 19	

## Degrees:

### BS Chemistry (ACS certified Degree)

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A	28	see above
and the following:	21 (for concentration)	
CHM 343	1	Physical chemistry laboratory
CHM 341	4	Physical chemistry I
CHM 342	4	Physical chemistry II
CHM 334	3	Advanced chemistry laboratory I
CHM 335	3	Advanced chemistry laboratory II
CHM 371	3	Elements of biochemistry I
CHM ELECT 3__	3	Advanced chemistry elective

### BS Chemistry - Analytical/Physical Concentration

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A	28	see above
and the following:	15 (for concentration)	
CHM 343	1	Physical chemistry laboratory
CHM 341	4	Physical chemistry I
CHM 342	4	Physical chemistry II
CHM 334	3	Advanced chemistry laboratory I
CHM 335	3	Advanced chemistry laboratory II

### **BS Chemistry – Polymers Concentration**

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A	28	see above
and the following:	18	
CHM 341	4	Physical chemistry I
CHM 342	4	Physical chemistry II
CHM 343	1	Physical chemistry laboratory
CHM 388	3	Polymer synthesis and characterization lab
CHM 393	3	Physical polymer science
CHM 394	3	Organic polymer science

### **BS Pharmaceutical Chemistry**

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A or B	28 or 19	see above
and the following:	26 (for concentration)	
CHM 194 (or CHM 341)	3	Physical Chemistry for Biological Sciences
CHM 358	3	Advanced organic
CHM 371	3	Elements of biochemistry I
CHM 372	3	Elements of biochemistry II
CHM 3__	3	Advanced chemistry elective
BioS 41, 42	4	Cellular and molecular biology
BioS 115	3	Genetics
Math 12**	4	Statistics

### **BS Chemistry – Materials Concentration**

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A	28	see above
and the following:	18 (for concentration)	
CHM 343	1	Physical chemistry laboratory
CHM 341	4	Physical chemistry I
CHM 342	4	Physical chemistry II
CHM 334	3	Advanced chemistry laboratory I
CHM 335	3	Advanced chemistry laboratory II
Mat 33	3	Engineering materials and processing

### **BA Chemistry**

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A or B	28 or 19	see above
and the following:	7-8 (for concentration)	
CHM 341 or CHM 194	3-4	Physical chemistry
CHM 343	1	Physical chemistry laboratory
CHM elective	3	

### BA Chemistry - Business Concentration

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A or B	28 or 19	see above
and the following:	29-30 (for concentration)	
CHM elective	3	
CHM 341 or CHM 194	3-4	Physical chemistry
CHM 343	1	Physical chemistry laboratory
Eco 1	4	Principles of economics
Bus 125	1	Behavioral skills workshop
Bus 126	3	Information analysis and financial decision making I
Bus 127	3	Information analysis and financial decision making II
Bus 225	3	Developing, producing, and marketing products and services I
Bus 226	3	Developing, producing, and marketing products and services II
Bus 326	1	Business strategy
Math 12**	4	Statistics

**Please note: admission to the Business minor program is controlled by the Business College.**

### BA Chemistry – Health Professions Concentration

Course Number	Number of Credits	Name of Course
Common core	25	see above
Path A or B	28 or 19	see above
and the following:	18-19	
CHM elective	3	
CHM 341 or CHM 194	3-4	Physical chemistry
CHM 343	1	Physical chemistry laboratory
EES 31, 32	4	Introduction to Environmental and Organismal Biology
BioS 41	4	Biology Core I: Molecular and Cellular Biology
Math 12**	4	Statistics

Additional courses in Biological Sciences are recommended.

\* CHM 301 may be substituted by any course having a major presentation component with the approval of the major advisor.

\*\* Math 12 may be substituted by any statistics course.

\*\*\* Other writing intensive courses may be substituted with the approval of the advisor but should have a science focus.

\*\*\*\*CHM 301 is not required for the Biochemistry degree.