

# BA DEGREE in CHEMISTRY

REQUIRED CHEMISTRY & CORE COURSES	Year	SEM	Crs	Gr	Pts	TOT P
<b>GENERAL Chemistry I CHM 131 or Equivalent (4-5 credits)</b>						
CHM 131 Chem Concepts I (5) OR AP/Equiv		Fall			0.0	0.0
<b>ORGANIC Chemistry - FRESHMAN ORGANIC OR STANDARD Sequence (9 credits)</b>						
<b>FRESHMAN ORGANIC Sequence</b>						
CHM 171 Org Chem I (4)		Fall			0.0	0.0
CHM 173 Org Chem I LAB (1)		Fall			0.0	0.0
CHM 172 Org Chem II (4)		Spring			0.0	0.0
<b>OR STANDARD Sequence</b>						
CHM 203 Org Chem I (4)		Fall			0.0	0.0
CHM 207 Org Lab I (1)		Fall			0.0	0.0
CHM 204 Organic Chem II (4)		Spring			0.0	0.0
<b>Three (3) of the following THEORY courses (12-13 credits)</b>						
CHM 132 Chem Concepts II (5)		Spring			0.0	0.0
CHM 211 Inorganic Chem (4)		Fall			0.0	0.0
CHM 251 Physical Chem I (4)		Fall			0.0	0.0
CHM 252 Physical Chem II (4)		Spring			0.0	0.0
<b>Two (2) of the following LAB courses (6-8 credits) - May be taken as W for ULW</b>						
CHM 210W Org Chm II Lab (2)		Spring			0.0	0.0
CHM 231W Cheml Instrumt (4)		Fall			0.0	0.0
CHM 232 or 232W Molclr Sp(choose) (4)		Spring			0.0	0.0
CHM 234 or 234W Adv Lab T (choose) (4)		Spring			0.0	0.0
CHM244(W) or PHY245(W) ANSEL Lab (4)		Spring			0.0	0.0
<b>Two (2) additional 200 LEVEL CHM or Approved Science courses (8 credits)</b>						
CHM 2XX or Approved Science					0.0	0.0
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No more than 4 credits may be from laboratory courses and no credits can be from independent research. Permission of the Undergraduate Studies Committee must be granted to use a course that is not listed on the Approved 200 Level List ( <a href="http://www.sas.rochester.edu/chm/undergraduate/courses-200-level.html">www.sas.rochester.edu/chm/undergraduate/courses-200-level.html</a> ).						
<b>- Optional Additl CHM courses (NOT Required but will count in CHM GPA)</b>						
					0.0	0.0
					0.0	0.0
					0.0	0.0
					0.0	0.0
					0.0	0.0
0	:AP/Transferred Chem Credits:		ChmCr (GPA): 0		0.0	0.0

**0.0 Total Chem Cr.**

Student: \_\_\_\_\_ DATE: \_\_\_\_\_  
 Class & ID#: \_\_\_\_\_ Other Major? \_\_\_\_\_  
 Email: \_\_\_\_\_ CHEM GPA: \_\_\_\_\_  
 Ac Advisor: \_\_\_\_\_ General GPA: \_\_\_\_\_

REQUIRED ANCILLARY & ALLIED COURSES	Year	SEM	Crs	Gr
<b>MATHEMATICS - 140 OR 160 Sequence (8-12 credits)</b>				
<b>140 Sequence</b>				
MTH 141 Calculus I (4)				
MTH 142 Calculus II (4)				
MTH 143 Calculus III (4)				
<b>OR 160 Sequence</b>				
MTH 161 Calculus IA (4)				
MTH 162 Calculus IIA (4)				
<b>+ ONE (1) of the following courses (4 credits):</b>				
MTH 163 Ordinary Differential Eq (4)				
MTH 165 Linear Alg & Diffntl Eq (4)				
MTH 2XX 200-Level MTH (4)				
CSC 161 Intro to Programming (4)				
CSC 171 Intro to Computer Science (4)				
STT 201 Intro to Probability (4)				
STT 211 Apld STT for Social Sci I (4)				
STT 212 Apld STT BIO PHY SCI I (4)				
<b>PHYSICS - Two (2) of the following PHY courses (8 cr)</b>				
PHY 113 General Physics I (4)				
PHY 114 General Physics II (4)				
PHY 121 Mechanics (4)				
PHY 122 Elec & Magnetism (4)				
PHY 123 Waves & Modern PHY (4)				
PHY 141 Mechanics *Hnrs (4)				
PHY 142 Elec & Magnetism *Hnrs(4)				
<b>Primary Writing Requirement (WRT 105 or Equivalent)</b>				
WRT 105 or Equiv:				
<b>Upper-Level Writing Requirement Satisfaction</b>				
CHM 2XXW CHM ULW (choose) (4)				
XXX 2XXW 2nd ULW (4)				
Any CHM labs taken as a W can be carried down to this area to meet this requirement. Do not duplicate credits. Students may use one writing course from another department.				

P=Planned IP=In Progress X=Complete ✓=Section Requirements Met

## Bachelor of Arts (B.A.) Program in Chemistry

The B.A. program makes fewer specifications at the advanced level than the B.S. degree and encourages a wide range of elective courses. It is particularly suitable for students with interdisciplinary scientific interests in the health professions, biology, physics, geological sciences, engineering, or education. B.A. students may elect advanced courses in chemistry, including independent research, and can, thereby, create a curriculum best suited to their individual interests. For more information, please contact our Undergraduate Studies Coordinator at: [ugradadm@chem.rochester.edu](mailto:ugradadm@chem.rochester.edu).

### Blank POS Worksheet

#### Plan Your Own POS for CHM BA

Total: at least 31 credit-hours in chemistry,  
and at least 59 credit-hours overall

Year 1 / Freshman Year			
Fall	Cr	Spring	Cr
Year 2 / Sophomore Year			
Fall	Cr	Spring	Cr
Year 3 / Junior Year			
Fall	Cr	Spring	Cr
Year 4 / Senior Year			
Fall	Cr	Spring	Cr
Year 5 / for Take 5 students			
Fall	Cr	Spring	Cr
AP Credit / Transfer Credit / Summer Credits			
	Cr		Cr

### Sample Program of Studies

While the required courses leading to a B.A. in chemistry may be scheduled with some flexibility (e.g., the mathematics and physics courses), one of the following programs are suggested:

#### SAMPLE Regular Sequence POS

Year 1 / Freshman Year			
Fall	Cr	Spring	Cr
CHM 131	5	CHM 132	5
MTH 141 (or MTH 161)	4	MTH 142 (or MTH 162)	4
Elective		Elective	
Elective		Elective	
Year 2 / Sophomore Year			
Fall	Cr	Spring	Cr
CHM 203	4	CHM 204	4
CHM 207	1	CHM 210W	2
PHY 113	4	PHY 114	4
MTH 143 or Elective	4	MTH 163 or MTH 165	4
Year 3 / Junior Year			
Fall	Cr	Spring	Cr
CHM 211	4	CHM 232 (234, or 244W)	4
CHM 251	4	CHM 252	4
Elective		Elective	
Elective		Elective	
Year 4 / Senior Year			
Fall	Cr	Spring	Cr
CHM 231	4	CHM 234 (or CHM 2XX)	4
200-level Science4	4	Elective	4
Elective		Elective	
Elective		Elective	

#### SAMPLE Freshman Organic Sequence POS

Year 1 / Freshman Year			
Fall	Cr	Spring	Cr
CHM 171	4	CHM 172	4
CHM173	1	CHM 210W	2
MTH 161	4	MTH 162	4
Elective	4	Elective	4
Elective	4	Elective	4
Year 2 / Sophomore Year			
Fall	Cr	Spring	Cr
CHM 211 (or 132)	4	CHM 234 (232 or 244W)	4
PHY 113	4	PHY 114	4
MTH 163 (or MTH 165)	4	Elective	4
Elective	4	Elective	4
Year 3 / Junior Year			
Fall	Cr	Spring	Cr
CHM 251	4	CHM 232 (234 or 244W)	4
Elective		CHM 252	4
Elective		Elective	
Elective		Elective	
Year 4 / Senior Year			
Fall	Cr	Spring	Cr
CHM 231	4	CHM 262 (or 200 lev Sci)	4
200-level Science4	4	Elective	4
Elective		Elective	
Elective		Elective	

**Notes:**

- Total: at least 39 credit-hours in chemistry, and at least 59 credit-hours overall
- The Freshman Organic sequence is designed for first year students with good preparation in chemistry (e.g., two years of general chemistry and an Advanced Placement score 4 or 5, or equivalent preparation). This sequence fast tracks students to more advanced chemistry courses and the fulfillment of degree requirements in other disciplines.
- B.A. candidates considering employment in the chemical profession or graduate work in chemistry should include: CHM 210, 211, 231, 232, 251, and 252 in their curriculum.
- Approved 200-Level Courses for the Chemistry Program that will satisfy the requirement of Two additional 200-level (or higher) chemistry courses (8 credits) are listed online at: [www.sas.rochester.edu/chm/undergraduate/courses-200-level.html](http://www.sas.rochester.edu/chm/undergraduate/courses-200-level.html).
- Students should speak with a chemistry advisor to tailor their programs specifically to their career goals. Particular electives that are not included in the chemistry curriculum may be required for some graduate programs.
- Students who are interested in pursuing a double major or double degree, are advised to consult the College website which outlines the course overlap rules and additional credit requirements.