

# Academic Plan for a B.S. in Chemistry

## FRESHMAN YEAR

### Fall

CHEM 151*	4
MATH 122A/B (or 125)	5 (3)
ENGL 101	3
TIER 1	3
<hr/> Total	<hr/> 13-15

### Spring

CHEM 152*	4
MATH 129	3
ENGL 102	3
TIER 1	3 (or 6)
<hr/> Total	<hr/> 13-16

## SOPHOMORE YEAR

### Fall

<b>CHEM 246A/247A*</b>	<b>5</b>
<b>CHEM 380</b> or MATH 223	<b>3/4</b>
PHYS 141	4
Second Language	4
<hr/> Total	<hr/> 16-17

### Spring

<b>CHEM 246B/247B*</b>	<b>5</b>
<b>CHEM 395A</b>	<b>1</b>
PHYS 241	4
Second Language	4
TIER 1	3
<hr/> Total	<hr/> 14-17

## JUNIOR YEAR

### Fall

CHEM 325*	2
CHEM 326*	2
<b>BIOC 462A*~</b>	<b>4</b>
TIER 1/2	6
Optional Elective	3
<hr/> Total	<hr/> 14-17

### Spring

<b>CHEM 401A*</b>	<b>3</b>
<b>CHEM 404A*</b>	<b>3</b>
CHEM Elective	3/2
TIER 2/Electives	3-9
<hr/> Total	<hr/> 12-18

## SENIOR YEAR

### Fall

<b>CHEM 480A*</b>	<b>3</b>
<b>CHEM 400A*</b>	<b>3</b>
CHEM Elective	3/2
TIER 2/Electives	3-9
<hr/> Total	<hr/> 12-18

### Spring

<b>CHEM 480B* or 481*</b>	<b>3</b>
CHEM 412*	3
<b>CHEM 400B*</b>	<b>3</b>
CHEM Elective	3/2
Optional Elective	3
<hr/> Total	<hr/> 12-15

**TOTAL UNITS NEEDED: 120**  
**UPPER DIVISION UNITS NEEDED: 42**

\* Denotes grade of C or better required.

~Denotes department consent required to enroll.

**Classes in bold are only offered in the fall or spring semester as shown.**

Please note that this checklist indicates CHEMBS requirements. Additional coursework not listed on this page may be required in order to graduate.

# B.S. Chemistry

## Catalog Year 2017-2018



THE UNIVERSITY OF ARIZONA  
COLLEGE OF SCIENCE  
COLLEGE OF MEDICINE TUCSON

Chemistry  
& Biochemistry

NAME \_\_\_\_\_ SID \_\_\_\_\_ Date \_\_\_\_\_

### GENERAL EDUCATION COURSES:

#### **i. Freshman Composition** (*Complete one sequence*)

ENGL 101 (3) \_\_\_\_\_ and ENGL 102 (3) \_\_\_\_\_ or  
(ENGL 106 (3) \_\_\_\_\_)\*  
ENGL 107 (3) \_\_\_\_\_ and ENGL 108 (3) \_\_\_\_\_ or  
ENGL 109H (3) \_\_\_\_\_

MCWA \_\_\_\_\_

#### **ii. Mathematics: Satisfied by math foundation courses.**

#### **iii. Second Language** (*Second Semester Proficiency*)

### TIER ONE COURSES:

#### **i. Individuals and Societies 150** (*6 units*)\*

\_\_\_\_\_  
\_\_\_\_\_

#### **ii. Traditions and Cultures 160** (*6 units*)\*

\_\_\_\_\_  
\_\_\_\_\_

### TIER TWO COURSES:

#### **i. Arts** (*3 units*)

\_\_\_\_\_

#### **ii. Humanities** (*3 units*)

\_\_\_\_\_

#### **iii. Individuals and Societies** (*3 units*)

\_\_\_\_\_

#### **iv. Diversity Emphasis Requirement:** *One course must meet this requirement. It can be double-dipped with any Tier One or Tier Two course.*

**Note:** Courses offered only in the fall or spring semesters are labeled with F or S.

\*Some students may be required to take ENGL 106 prior to taking ENGL 107. If not, ENGL 107 and ENGL 108 will complete foundation composition requirements.

Total units completed: \_\_\_\_\_

Total upper division units completed: \_\_\_\_\_

### FOUNDATION COURSES: (17–20 units)

#### **Mathematics**

MATH 122A/B (5) or 125 (3) \_\_\_\_\_  
MATH 129 (3) \_\_\_\_\_  
CHEM 380 (3; F) or MATH 223 (4) \_\_\_\_\_

#### **Physics**

PHYS 141 (4) \_\_\_\_\_  
PHYS 241 (4) \_\_\_\_\_

### MAJOR COURSES: (56 units) *Must earn a C or better in all major courses.*

#### **General Chemistry**

CHEM 151 (4) \_\_\_\_\_ CHEM 152 (4) \_\_\_\_\_

#### **Organic Chemistry**

CHEM 246A (3; F) \_\_\_\_\_ CHEM 247A (2; F) \_\_\_\_\_  
CHEM 246B (3; S) \_\_\_\_\_ CHEM 247B (2; S) \_\_\_\_\_

#### **Majors Colloquium**

CHEM 395A (1; S) \_\_\_\_\_

#### **Quantitative Analysis (Analytical Chemistry)**

CHEM 325 (2) \_\_\_\_\_ CHEM 326 (2) \_\_\_\_\_

#### **Instrumental Analysis**

CHEM 401A (3; S) \_\_\_\_\_ CHEM 400A (3; F) \_\_\_\_\_

#### **Inorganic Chemistry**

CHEM 404A (3; S) \_\_\_\_\_ CHEM 412 (3) \_\_\_\_\_

#### **Biochemistry**

BIOC 462A (4; F) \_\_\_\_\_

#### **Physical Chemistry**

CHEM 480A (3; F) \_\_\_\_\_ CHEM 400B (3; S) \_\_\_\_\_  
CHEM 480B (3; S) or 481 (3; S) \_\_\_\_\_

#### **Core Electives** (*A list of options is available in the advisement report or course catalog. A maximum of 3 upper division units in research or preceptor will apply to the Chemistry major.*)

Course or Lab (3) \_\_\_\_\_

Course or Lab (3) \_\_\_\_\_

Course, Lab, Research or Preceptorship (2) \_\_\_\_\_

\_\_\_\_\_