



## 2023 - 2024 Major Map



### Chemistry, BA




School/College: The College of Liberal Arts and Sciences  
LACHMBA

Term 1 0 - 15 Credit Hours Critical course signified by ⚠	Hours	Minimum Grade	Notes
⚠ CHM 117: General Chemistry for Majors I (SQ) AND CHM 111: General Chemistry Laboratory for Majors I (SQ) OR CHM 113: General Chemistry I (SQ)	4	C	<ul style="list-style-type: none"> <li>ASU 101 or college-specific equivalent First-Year Seminar required of all first-year students.</li> <li>Students placing into lower level math can still graduate in 4 years -- see an academic advisor for planning.</li> <li>Select your <b>Career Interest Areas</b> and play <b>me3@ASU</b>.</li> </ul>
⚠ MAT 270: Calculus with Analytic Geometry I (MA) OR MAT 265: Calculus for Engineers I (MA)	4-3	C	
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
LIA 101: Student Success in The College of Liberal Arts and Sciences	1		
Social-Behavioral Sciences (SB)	3		
Term hours subtotal:	15-14		
Term 2 15 - 30 Credit Hours Critical course signified by ⚠	Hours	Minimum Grade	Notes
⚠ CHM 118: General Chemistry for Majors II (SQ) AND CHM 112: General Chemistry Laboratory for Majors II (SQ) OR CHM 116: General Chemistry II (SQ)	4	C	<ul style="list-style-type: none"> <li><b>ASU Language Placement:</b> Only true beginners are eligible for 101-level courses. All other students are required to take a placement exam, regardless of prior credit earned.</li> <li>Connect with a career advisor by registering for a <b>Handshake</b> account.</li> </ul>
ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition	3	C	
MAT 271: Calculus with Analytic Geometry II (MA) OR MAT 266: Calculus for Engineers II (MA)	4-3	C	
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
⚠ Complete ENG 101 OR ENG 105 OR ENG 107 course(s).			
Term hours subtotal:	15-14		
Term 3 30 - 45 Credit Hours Critical course signified by ⚠	Hours	Minimum Grade	Notes
⚠ CHM 233: General Organic Chemistry I	3	C	<ul style="list-style-type: none"> <li>Discuss <b>study abroad opportunities</b> with a School of Molecular Sciences advisor or an International Coordinator.</li> </ul>
⚠ CHM 237: General Organic Chemistry Laboratory I	1	C	
⚠ PHY 111: General Physics (SQ)	3	C	
PHY 113: General Physics Laboratory (SQ)	1	C	
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
Computer/Statistics/Quantitative Applications (CS)	3		
⚠ Complete First-Year Composition requirement.			
Complete Mathematics (MA) requirement.			



Term hours subtotal: 15

Term 4 45 - 60 Credit Hours <b>Critical course signified by</b> 	Hours	Minimum Grade	Notes
 PHY 112: General Physics (SQ)	3	C	<ul style="list-style-type: none"> <li>• Create a first draft <b>resume</b>.</li> </ul>
CHM 234: General Organic Chemistry II	3	C	
CHM 238: General Organic Chemistry Laboratory II	1	C	
PHY 114: General Physics Laboratory (SQ)	1	C	
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
Social-Behavioral Sciences (SB) AND Cultural Diversity in the U.S. (C)	3		
Term hours subtotal:	15		

Term 5 60 - 74 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 CHM 325: Analytical Chemistry	3		<ul style="list-style-type: none"> <li>• CHM 326 is only offered in the Fall semester.</li> <li>• This is an ideal semester to <b>study abroad</b>. CHM 325 and CHM 326 may be taken in Term 7.</li> </ul>
CHM 326: Advanced Analytical Chemistry Laboratory	1		
Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.	4	C	
Humanities, Arts and Design (HU) AND Historical Awareness (H)	3		
Upper Division Elective	3		
Term hours subtotal:	14		

Term 6 74 - 90 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 CHM 341: Elementary Physical Chemistry	3	C	<ul style="list-style-type: none"> <li>• Explore <b>internship</b> opportunities.</li> </ul>
CHM 343: Elementary Physical Chemistry Laboratory	1		
Humanities, Arts and Design (HU) AND Global Awareness (G)	3		
Complete 3 courses: Upper Division Elective	9		
 Complete Cultural Diversity in the U.S. (C) AND Global Awareness (G) AND Historical Awareness (H) course(s).			
Term hours subtotal:	16		

Term 7 90 - 105 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 CHM 453: Inorganic Chemistry	3	C	<ul style="list-style-type: none"> <li>• Apply for <b>full-time career opportunities</b>.</li> <li>• Students should take BCH 361/367 as their major electives to ensure competitiveness in pre-health programs where required and/or science industry related careers.</li> </ul>
Literacy and Critical Inquiry (L)	3		
Upper Division Elective OR CHM 484: Internship	3		
Complete 2 courses: Upper Division Elective	6		
Term hours subtotal:	15		

Term 8 105 - 120 Credit Hours <b>Necessary course signified by</b> 	Hours	Minimum Grade	Notes
 CHM OR BCH Upper Division Elective	3	C	<ul style="list-style-type: none"> <li>• Upper Division CHM or BCH Elective must be completed at the Tempe campus and cannot be met with BCH 341, BCH 371, BCH 372, or CHM 480.</li> </ul>
Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)	3		
Upper Division Literacy and Critical Inquiry (L)	3		
Upper Division Elective	4		
Elective	2-4		
Term hours subtotal:	15-17		

## Hide Course List(s)/Track Group(s)

### Notes:

- First-Year Composition: All students are placed in ENG 101 unless submission of SAT, ACT, Accuplacer, IELTS, or TOEFL score, or college-level transfer credit or test credit equivalent to ASU's first-year composition course(s), determine otherwise. Students on Polytechnic, Downtown Phoenix and West Campuses are encouraged to complete the Directed Self-Placement survey to choose the first-year composition option they believe best suits their needs. Visit: <https://cisa.asu.edu/DSP>
- Mathematics Placement Assessment score determines placement in first mathematics course.

Please keep in mind that the applicability of a specific transfer course toward an ASU degree program depends on the requirements of the department, division, college or school in which you are enrolled at ASU. Transfer agreements that guarantee the completion of university level requirements do not necessarily meet college and major requirements. Please consult with an advisor for more information.

**Total Hours:** 120

**Upper Division Hours:** 45 minimum

**Major GPA:** 2.00 minimum

**Cumulative GPA:** 2.00 minimum

**Total hrs at ASU:** 30 minimum

**Hrs Resident Credit for**

**Academic Recognition:** 56 minimum

**Total Community College Hrs:** 64 maximum

**Total College Residency Hrs:** 12 minimum

### General University Requirements Legend

#### General Studies Core Requirements:

- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

#### General Studies Awareness Requirements:

- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

#### First-Year Composition

General Studies designations listed next to courses on the major map were valid for the 2023 - 2024 academic year. Please refer to the course catalog for current General Studies designations at time of class registration. General Studies credit is applied according to the designation the course carries at the time the class is taken.