## 2019 - 2020 Major Map

**Chemistry, BA**

**School/College:** The College of Liberal Arts and Sciences  
**Location:** Tempe campus

### LACHMBA

#### Term 1 0 - 15 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>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)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>MAT 270: Calculus with Analytic Geometry I (MA)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 105: Advanced First-Year Composition OR</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 107 or ENG 108: First-Year Composition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIA 101: Student Success in the College of Liberal Arts and Sciences</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social-Behavioral Sciences (SB) AND Global Awareness (G)</td>
<td>3</td>
<td></td>
<td></td>
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</tbody>
</table>

**Term hours subtotal:** 15

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#### Term 2 15 - 30 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>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)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 105: Advanced First-Year Composition OR</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>ENG 107 or ENG 108: First-Year Composition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAT 271: Calculus with Analytic Geometry II (MA)</td>
<td>4</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>MAT 270: Calculus with Analytic Geometry I (MA)</td>
<td>4</td>
<td>C</td>
<td>Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.</td>
</tr>
<tr>
<td>Complete ENG 101 OR ENG 105 OR ENG 107 course(s).</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Term hours subtotal:** 15

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#### Term 3 30 - 45 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 233: General Organic Chemistry I</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>CHM 237: General Organic Chemistry Laboratory I</td>
<td>1</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>PHY 111: General Physics (SQ)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>PHY 113: General Physics Laboratory (SQ)</td>
<td>1</td>
<td>C</td>
<td>Second Language: Requirement satisfied through the following: * Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.</td>
</tr>
<tr>
<td>Computer/Statistics/Quantitative Applications (CS)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete First-Year Composition requirement.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Mathematics (MA) requirement.</td>
<td></td>
<td></td>
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</tbody>
</table>

**Term hours subtotal:** 15

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#### Term 4 45 - 60 Credit Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
</table>

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- SAT, ACT, Accuplacer, IELTS, or TOEFL score determines placement into first-year composition courses
- Mathematics Placement Assessment score determines placement in mathematics course
- ASU 101 or college-specific equivalent First-Year Seminar required of all freshman students.
- Select your Career Interest Areas and play me3@ASU
PHY 112: General Physics (SQ) 3 C
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.

Social-Behavioral Sciences (SB) AND Historical Awareness (H) 3

Term hours subtotal: 15

<table>
<thead>
<tr>
<th>Term 5 60 - 74 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 325: Analytical Chemistry</td>
<td>3</td>
<td>C</td>
<td></td>
<td>• Create a first draft resume.</td>
</tr>
<tr>
<td>CHM 326: Advanced Analytical Chemistry Laboratory</td>
<td>1</td>
<td>C</td>
<td></td>
<td>• This is an ideal semester to study abroad.</td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)</td>
<td>3</td>
<td></td>
<td></td>
<td>CHM 325 and CHM 326 may be taken in Term 7.</td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

Term hours subtotal: 14

<table>
<thead>
<tr>
<th>Term 6 74 - 90 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 341: Elementary Physical Chemistry</td>
<td>3</td>
<td>C</td>
<td></td>
<td>• Explore internship opportunities.</td>
</tr>
<tr>
<td>CHM 343: Elementary Physical Chemistry Laboratory</td>
<td>1</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete 3 courses:</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Term hours subtotal: 16

<table>
<thead>
<tr>
<th>Term 7 90 - 105 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 453: Inorganic Chemistry</td>
<td>3</td>
<td>C</td>
<td></td>
<td>• CHM 453 is only offered in the Fall semester.</td>
</tr>
<tr>
<td>Literacy and Critical Inquiry (L)</td>
<td></td>
<td>3</td>
<td></td>
<td>• Apply for full-time career opportunities.</td>
</tr>
<tr>
<td>Upper Division Elective OR CHM 484: Internship</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td></td>
<td></td>
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</table>

Term hours subtotal: 15

<table>
<thead>
<tr>
<th>Term 8 105 - 120 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM OR BCH Upper Division Elective</td>
<td>3</td>
<td>C</td>
<td></td>
<td>• Upper Division CHM or BCH Elective must be completed at Tempe campus and cannot be met with BCH 341, BCH 371, BCH 372, and CHM 480.</td>
</tr>
<tr>
<td>Upper Division Humanities, Arts and Design (HU) OR Upper Division Social-Behavioral Sciences (SB)</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Literacy and Critical Inquiry (L)</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Term hours subtotal: 15
Notes:
- 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.

<table>
<thead>
<tr>
<th>Total Hours: 120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Division Hours: 45 minimum</td>
</tr>
<tr>
<td>Major GPA: 2.00 minimum</td>
</tr>
<tr>
<td>Cumulative GPA: 2.00 minimum</td>
</tr>
<tr>
<td>Total hrs at ASU: 30 minimum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hrs Resident Credit for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Recognition: 56 minimum</td>
</tr>
<tr>
<td>Total Community College Hrs: 64 maximum</td>
</tr>
<tr>
<td>Total College Residency Hrs: 12 minimum</td>
</tr>
</tbody>
</table>

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

First-Year Composition

General Studies designations listed on the major map are current for the 2019 - 2020 academic year.