# Chemistry BA / Accelerated 3-Year Plan (Sample)

This academic map is a sample 3-year schedule to complete your major in an accelerated format. This map is not a substitute for academic advisement. Contact your advisor when making final selections. **Courses in red text should be taken in the semester shown. This will help you graduate on time.**

* Recommended course to fulfill elective requirement. You may choose a different course as you prefer.

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<tr>
<th>Fall Year 1</th>
<th>Fall Year 2</th>
<th>Fall Year 3</th>
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<tr>
<td><strong>CHEM 1111: Introductory Chemistry I</strong>&lt;br&gt;<strong>ENGL 1100: First-Year Writing</strong>&lt;br&gt;<strong>MATH 1035: Trigonometry</strong>&lt;br&gt;<strong>INTDSC 1003: First-Year Experience</strong>&lt;br&gt;<strong>CHEM 1000: Chem., the Central Science</strong>&lt;br&gt;<strong>GEN ED: Humanities and Fine Arts</strong></td>
<td><strong>CHEM 2612: Organic Chemistry I</strong>&lt;br&gt;<strong>MATH 1900: Analyt. Geom &amp; Calculus I</strong>&lt;br&gt;<strong>PHYSICS 2111: Phys: Mechanics &amp; Heat</strong>&lt;br&gt;<strong>CHEM 2223: Quant. Analysis in Chem.</strong></td>
<td><strong>CHEM 3312: Physical Chemistry I</strong>&lt;br&gt;<strong>CHEM 3643: Adv. Organic Chem Lab</strong>&lt;br&gt;<strong>CHEM 3022: Intro to Chemical Lit</strong>&lt;br&gt;<strong>CHEM 3412: Basic Inorganic Chemistry</strong>&lt;br&gt;<strong>FGN LANG 1001: Language &amp; Culture I</strong>&lt;br&gt;<strong>16 Total Credit Hours</strong></td>
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<td><strong>CHEM 1121: Introductory Chemistry II</strong>&lt;br&gt;<strong>MATH 1800: Analyt. Geom &amp; Calculus I</strong>&lt;br&gt;<strong>HIST 1001: American Civ to 1865</strong>&lt;br&gt;<strong>GEN ED: Humanities and Fine Arts</strong></td>
<td><strong>MATH 2000: Analyt. Geom &amp; Calculus III</strong>&lt;br&gt;<strong>CHEM 2622: Organic Chemistry II</strong>&lt;br&gt;<strong>CHEM 2633: Organic Chemistry Lab</strong>&lt;br&gt;<strong>FGN LANG 1001: Language &amp; Culture I</strong>&lt;br&gt;<strong>FGN LANG 1002: Language &amp; Culture II</strong>&lt;br&gt;<strong>15 Total Credit Hours</strong></td>
<td><strong>CHEM 3322: Physical Chemistry II</strong>&lt;br&gt;<strong>CHEM 3333: Physical Chemistry Lab I</strong>&lt;br&gt;<strong>CHEM 4897: Seminar in Chemistry</strong>&lt;br&gt;<strong>FGN LANG 2101: Language &amp; Culture II</strong>&lt;br&gt;<strong>PHYSICS 2112: Electricity, Magnetism, and Optics</strong>&lt;br&gt;<strong>15 Total Credit Hours</strong></td>
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<th>Summer Year 1</th>
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<td><strong>GEN ED: Social Sciences</strong>&lt;br&gt;<strong>GEN ED: Social Sciences</strong>&lt;br&gt;<strong>Cultural Diversity Requirement</strong>&lt;br&gt;<strong>GEN ED CORE: Communication</strong>&lt;br&gt;<strong>12 Total Credit Hours</strong></td>
<td><strong>ENGL 3100: Junior-Level Writing</strong>&lt;br&gt;<strong>GEN ED: Humanities or Social Science</strong>&lt;br&gt;<strong>Elective</strong>&lt;br&gt;<strong>Elective</strong>&lt;br&gt;<strong>12 Total Credit Hours</strong></td>
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*Control the pace* by taking courses in the two-week January term or as Advanced Credit (ACP) courses in high school to lighten the load.
Our graduates are heavily recruited by the chemical and life sciences industry. Our alumni have led innovation at large companies in the St. Louis region. Our graduates are regularly accepted into many of the top 20 chemistry graduate programs and into medical or dental schools. Still others have forged their own way in business and law. This breadth reflects the value of chemistry training in a wide array of professional settings.

**Example Career Pathways**
- Research & Development
- Applied Research and Product Development
- Cheminformatics
- Chemical Engineering
- Chemical Technology
- Crystallography
- Dyes, Pigments and Inks
- Industrial Management
- Laboratory Management
- Project Management

**SKILLS**
- Understand essential principles of the foundational areas of chemistry and apply them to solve chemical problems
- Employ investigative and quantitative methods for chemistry research
- Critically evaluate existing scientific studies
- Design studies to test hypotheses addressing unsolved problems in chemistry
- Know scientific software, and statistical and regression analysis
- Perform and document laboratory experiments
- Work independently or as part of a small team
- Identify the need for, gather and analyze information

**TAKE THE NEXT STEP**

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