BS Chemistry Major Course Requirements 2020-2021

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CHEM A111</td>
<td>General Chemistry I</td>
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<tr>
<td>CHEM A112</td>
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<td>CHEM A310</td>
<td>Chemistry Research Methods</td>
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<td>CHEM A311</td>
<td>Intro. Inorganic Chemistry</td>
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<td>Intro. Inorganic Chemistry Lab</td>
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<td>CHEM A321</td>
<td>Quantitative Analysis</td>
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<td>CHEM A332</td>
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<td>CHEM A333</td>
<td>Physical Chemistry I</td>
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<td>CHEM A334</td>
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<td>CHEM A511</td>
<td>Advanced Inorganic Chem.</td>
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<td>CHEM A541</td>
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<td>CHEM A542</td>
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<td>CHEM A550</td>
<td>Advanced Biochemistry</td>
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<td>BIOL A121</td>
<td>Biology I</td>
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<tr>
<td>BIOL A541</td>
<td>Principles of Biochemistry</td>
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</table>

Any Elective Courses:

- 6-9 hours

Math A141 or A142:

- 2. Depending on placement, completion of Math A108, Math A111, and Math A112 may also be required.
- Developmental courses may not be used towards this degree.

Information about the Major

The bachelor of science degree program in chemistry at USC Aiken provides students with solid training in the theory and practical applications of chemistry in modern society. The degree prepares a student for a career in the chemical sciences, but it also can be a step along the path towards becoming a medical doctor, pharmacist or lawyer. Each student who graduates from the BS Chemistry program is required to complete an original research project in the lab of a professor in the Department of Chemistry and Physics.

"The Department of Chemistry and Physics provides a well-rounded curriculum with one-on-one research opportunities not available at larger schools. My ACS-certified degree has given me a leg-up in my career and stands out on applications and in interviews. I have received hands-on experience with many excellent instruments and have presented at numerous conferences and symposia across the Southeast. The department has provided endless support in my studies and has recognized my hard work and academic achievements."

Gabrielle Connor, Chemistry Major

Customize Your Major

- General Chemistry: Standard chemistry major with the most flexibility in courses.
- Engineering Concentration: Adds engineering and math courses. For students who want to see how engineering and chemistry interact.
- Biochemistry Concentration: Adds biology classes to emphasize the biological applications of chemistry.
- Computational Chemistry: Adds computer science classes to give students a better understanding of the powerful software tools used in modern chemistry.

https://www.usca.edu/chemistry-physics
### CHEMISTRY

**BACHELOR OF SCIENCE**

- **First Year**
  - Academics: Learn to Register for Classes, Learn DegreeWorks, Install ChemDraw, Attend Writing Room and Library Workshops
  - Community Engagement: Go to ICE Events, Join Chemistry Club, Get on Board Day
  - Research Experience: Go to Department Seminars, Research Rotation, Visit Scholar Showcase
  - Career: Talk to Academic Advisor about Careers

- **Second Year**
  - Academics: Choose a Concentration, Make Map to Graduation, Choose Junior Year Course Blocks (2)
  - Community Engagement: Volunteer at SEED, Attend Science on Tap/STEM in the Alley
  - Research Experience: Present Research at Scholar Showcase, South Carolina Academy of Science, Science on Tap, or American Chemical Society Meeting
  - Career: Apply for Summer Internships, REU, Summer Scholars, Magellan, GRE/MCAT/PCAT/DAT, Mock Interview at Career Services

- **Third Year**
  - Academics: Writing Proficiency Portfolio, Choose Senior Year Course Blocks (2)
  - Community Engagement: Go to ICE Events, Attend Science on Tap/STEM in the Alley
  - Research Experience: Join a Research Group, Senior Research Paper/Talk
  - Career: Apply to Grad./Prof. Schools, Attend Career Fair

- **Fourth Year**
  - Academics: Apply to Graduate, Choose Senior Year Course Blocks (2), Finish ICE
  - Community Engagement: Go to ICE Events, Attend Science on Tap/STEM in the Alley
  - Research Experience: Present Research at Scholar Showcase, South Carolina Academy of Science, Science on Tap, or American Chemical Society Meeting
  - Career: Apply for Jobs

### What Can I Do With My ACS Approved Chemistry Degree?

- **Attend Graduate School**
  - University of Ohio
  - University of California - Santa Cruz
  - USC - Columbia
  - UNC - Chapel Hill
  - University of Tennessee - Knoxville
  - Duke University
  - University of Minnesota
  - University of Texas - Austin

- **Attend Professional School**
  - USC School of Pharmacy
  - Medical University of South Carolina
  - Presbyterian College School of Pharmacy
  - Medical College of Georgia

- **Start a Career**
  - AmbioPharm
  - Savannah River National Lab
  - Savannah River Nuclear Solutions
  - Savannah River Remediation
  - South Carolina DHEC
  - Bridgestone/Firestone
  - GlaxoSmithKline
  - Parsons
  - BASF
  - Loop Industries