COLLEGE ADMISSION REQUIREMENTS

The Bachelor of Arts (B.A.) Degree in Chemistry is offered by the College of Letters and Science (L&S). The B.A. degree, which requires more humanities and social science courses than the B.S. degree, is intended for students interested in careers in teaching, medicine, or other sciences requiring a basic understanding of chemical processes.

You must complete:

1) The L&S Requirements in Reading & Composition, Foreign Language, Quantitative Reasoning; or

2) IGETC by the end of the spring term that precedes fall enrollment at Berkeley.

It is recommended that you complete as many major preparation courses as possible prior to transfer. As a transfer applicant you are expected to complete, at a minimum, coursework equivalent to Berkeley's:

- CHEMISTRY 1A + 1AL + 1B + 3A + 3AL + 3B + 3BL
- MATH 1A + 1B + 53
- PHYSICS 7A

The Bachelor of Science (B.S.) Degree in Chemistry is offered by the College of Chemistry. The B.S. degree is intended for students who are primarily interested in careers as professional chemists or desire a thorough grounding in chemistry in preparation for professional or graduate school in chemistry and other disciplines. In addition, there is a Materials Chemistry concentration that is intended for students interested in the application of basic chemical principles to the discovery, design, and characterization of materials.

Transfer applicants are expected to complete, at a minimum, coursework equivalent to Berkeley's:

- CHEMISTRY 1A + 1AL + 1B + 3A + 3AL + 3B + 3BL
- MATH 1A + 1B + 53
- PHYSICS 7A
- ENGLISH R1A + R1B

Coursework must be completed by the end of the spring term preceding fall enrollment at Berkeley.

IGETC is not required. Students who choose to complete the entire IGETC pattern by the end of the spring term preceding fall enrollment at Berkeley may use...
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Chemistry, Lower Division B.A. and B.S. (continued)

IGETC to fulfill the Reading and Composition and Foreign Language Requirements.

Lower division courses required for graduation (but not for admission) are also listed in this articulation agreement. Completion of those courses is strongly recommended in order to strengthen one's application. All major courses must be taken for a letter grade. High grades in major courses (B and A grades exclusively) are essential for applicants to be both competitive in the admissions process and to be adequately prepared to continue with junior year coursework at Berkeley.

The applicant's personal statement is important in the admissions process. The personal statement is reviewed for evidence of the student's interest in the chosen field and a thoughtful match between the intended major and academic and career objectives.

For more information on College of Chemistry policies and degree programs:
http://chemistry.berkeley.edu/ugrad/degrees/chem

For more information on admission to UC Berkeley:
http://admissions.berkeley.edu

For more information on majors at UC Berkeley:
Berkeley Academic Guide: http://guide.berkeley.edu

Additional questions about transferring to the College of Chemistry may be addressed to:
Sanjeev Chahal, Academic Adviser
sanjeev@berkeley.edu
(510) 642-7919

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CHEM 1A & CHEM 1A     General Chemistry and Chemical Analysis
CHEM 1AL    General Chemistry Laboratory (1) (5)
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CHEM 1B     General Chemistry and Chemical Analysis (4) (5)
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CHEM 15     Analytical and NO COURSE ARTICULATED
Bioanalytical Chemistry (3)

NOTE: Chemistry majors who transfer without having covered analytical chemistry are required to take CHEM 15 or CHEM 105 after transfer.

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ORGANIC CHEMISTRY

CHEM 12A + 12B (organic chemistry) are required for the Chemistry B.A. and B.S. degrees.
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Chemistry, Lower Division B.A. and B.S. (continued)

Completion of CHEM 3A + 3AL + 3B + 3BL combined with a score in the 75th percentile or higher on the American Chemical Society (ACS) Organic Chemistry Exam will constitute satisfactory completion of Berkeley's CHEM 12A + 12B. Students are encouraged to take the exam through their community college, if possible. NOTE: The College of Chemistry does not accept results from the 1994 and 1998 versions of the ACS Organic Chemistry Exam.

<table>
<thead>
<tr>
<th>CHEM 3A &amp; Chemical Structure and Reactivity</th>
<th>(3)</th>
<th>CHEM 8A Organic Chemistry</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3AL Organic Chemistry Laboratory</td>
<td>(2)</td>
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</table>

<table>
<thead>
<tr>
<th>CHEM 3B &amp; Chemical Structure and Reactivity</th>
<th>(3)</th>
<th>CHEM 8B Organic Chemistry</th>
<th>(5)</th>
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</thead>
<tbody>
<tr>
<td>CHEM 3BL Organic Chemistry Laboratory</td>
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</table>

**MATHEMATICS**

You may also satisfy this requirement with a score/grade of:
- 3 or higher on the AP Calculus AB exam satisfies MATH 1A;
- 3 or 4 on the AP Calculus BC exam satisfies MATH 1A;
- 5 on the AP Calculus BC exam satisfies MATH 1A + 1B.

<table>
<thead>
<tr>
<th>MATH 1A Calculus</th>
<th>(4)</th>
<th>MATH 005A Single Variable Calculus I</th>
<th>(5)</th>
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</thead>
<tbody>
<tr>
<td>MATH 1B Calculus</td>
<td>(4)</td>
<td>MATH 005B Single Variable Calculus II</td>
<td>(5)</td>
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<tr>
<td>MATH 53 Multivariable Calculus</td>
<td>(4)</td>
<td>MATH 005C Multivariable Calculus</td>
<td>(5)</td>
</tr>
<tr>
<td>MATH 54 Linear Algebra and Differential Equations</td>
<td>(4)</td>
<td>MATH 10 &amp; Linear Algebra and Applications</td>
<td>(5)</td>
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<tr>
<td></td>
<td></td>
<td>MATH 55 Differential Equations</td>
<td>(5)</td>
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**PHYSICS**

PHYSICS 7C is not required for the Chemistry major, but it is acceptable toward the 12-Unit Upper Division Chemistry and Allied Subjects Requirement for the Chemistry B.S. degree.

| PHYSICS 7A Physics for Scientists and Engineers | (4) | PHYS 1A & General Physics | (5) |
|                                               |     | PHYS 1B General Physics   | (5) |
| PHYSICS 7B Physics for Scientists and Engineers | (4) | PHYS 1C General Physics   | (5) |
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Chemistry, Lower Division B.A. and B.S. (continued)

PHYSICS 7C Physics for Scientists (4) | PHYS 1D General Physics (5)
and Engineers

Bachelor of Science (B.S.) Degree in Chemistry

Information on satisfying the Reading and Composition and Language Other Than English (LOTE) requirements for the Bachelor of Science (B.S.) Degree in Chemistry is listed below.

READING AND COMPOSITION REQUIREMENT

Coursework equivalent to Berkeley's:

English R1A + R1B; or

Entire IGETC pattern completed by the end of the spring term preceding fall enrollment at Berkeley.

NOTE: You may also satisfy this requirement with a score/grade of:
4 or 5 on the AP exam in English Language and Composition satisfies ENGLISH R1A;
4 on the AP exam in English Literature and Composition satisfies ENGLISH R1A;
5 on the AP exam in English Literature and Composition satisfies ENGLISH R1A + R1B.

<table>
<thead>
<tr>
<th>ENGLISH R1A</th>
<th>Reading and Composition (4)</th>
<th>OR</th>
<th>ENGL 1A</th>
<th>Reading and Composition (4)</th>
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<tbody>
<tr>
<td></td>
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<td>ENGL 1AH</td>
<td>Honors Reading and Composition (4)</td>
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<thead>
<tr>
<th>ENGLISH R1B</th>
<th>Reading and Composition (4)</th>
<th>OR</th>
<th>ENGL 1B</th>
<th>Reading and Composition (4)</th>
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<tbody>
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<td></td>
<td></td>
<td></td>
<td>ENGL 1BH</td>
<td>Honors Reading and Composition (4)</td>
</tr>
</tbody>
</table>
Chemistry, Lower Division B.A. and B.S. (continued)

LANGUAGE OTHER THAN ENGLISH (LOTE) REQUIREMENT

The Language Other Than English (LOTE) Requirement may be satisfied after transfer, but it should be satisfied by the end of the student's third (junior) year.

To satisfy this Requirement:

Complete a course equivalent to the third year of a language other than English in high school with a grade of C- or higher, or the second semester of a language other than English as taught at Berkeley; or

Complete the entire IGETC pattern by the end of the spring term preceding fall enrollment at Berkeley; or

You may satisfy this Requirement with a score/grade of:

550 on the SAT II Foreign Language Subject Exam, if taken before May 1995;
590 on the SAT II Subject Exam, if taken May 1995 or later;
3 or better on an AP Foreign Language Exam;
C or better on a GCE "A" or "O" Level Foreign Language Exam.
5 or better on a Higher Level IB Foreign Language A or B Exam.

OR

Courses that satisfy the Language Other Than English requirement:

| ARMN 2 | Elementary Armenian (5) |
| CHIN 2 | Elementary Chinese - Mandarin (5) |
| FRNC 2 | Elementary French (5) |
| GRMN 2 | Elementary German (5) |
| ITAL 2 | Elementary Italian (5) |
| JAPN 2 | Elementary Japanese (5) |
| RUSS 2 | Elementary Russian (5) |
| SPAN 2 | Elementary Spanish (5) |

(May be taken for a letter grade or pass/no pass).

END OF MAJOR