

College of Engineering

Introduction to the College

It's been said that engineering is the liberal arts of the 21st century – because it's so fundamental to so many other fields. UC Berkeley's College of Engineering offers a comprehensive range of disciplines. Students can pursue their specific passion – from biomedical devices to clean energy technologies. Whichever field they choose, students find that Berkeley Engineering students all receive a robust, multidisciplinary education. They have direct access to top faculty, who happen to be some of the brightest minds in their fields. Students get hands-on experience in the lab or studio. Most of all, students are all driven to find the most innovative, high-impact ways to change the world.

Explore majors and minors (http://guide.berkeley.edu/archive/2014-15/undergraduate/degree-programs/?filter_2=true) available through the College of Engineering.

Students in the College of Engineering must complete 120 semester units with the following provisions:

1. Completion of the requirements of one Engineering major program (<http://engineering.berkeley.edu/academics/undergraduate-programs>) of study.
2. A minimum overall grade point average of 2.0 (C average) and a minimum 2.0 grade point average in upper division technical course work required of the major.
3. The final 30 units must be completed in residence in the College of Engineering on the Berkeley campus in two consecutive semesters.
4. All technical courses (math, science & engineering), required of the major or not, must be taken on a letter-graded basis (unless they are only offered P/NP).
5. Entering freshman are allowed a maximum of eight semesters to complete their degree requirements. Entering junior transfers are allowed a maximum of four semesters to complete their degree requirements. Summer terms are optional and do not count toward the maximum. Students are responsible for planning and satisfactorily completing all graduation requirements within the maximum allowable semesters.

Humanities and Social Science Requirement

To promote a rich and varied educational experience outside of the technical requirements for each major, the College of Engineering has a Humanities and Social Sciences breadth requirement which must be completed to graduate. This requirement is built into all the Engineering programs of study. The requirement includes two approved reading and composition courses and four additional approved courses, within which a number of specific conditions must be satisfied:

1. Complete a minimum of six courses (3 units or more) from the approved Humanities/Social Sciences (H/SS) lists (<http://coe.berkeley.edu/hssreq>).
2. Two of the six courses must fulfill the Reading and Composition Requirement (<http://guide.berkeley.edu/archive/2014-15/undergraduate/colleges-schools/engineering/reading-composition-requirement>) (R&C). These courses must be taken for a letter grade (C- or better required) and MUST be completed by no later than the end of the sophomore year (4th semester of enrollment). The first half of R&C, the "A" course, must be completed by the end of the

freshman year; the second half of R&C, the "B" course, must be completed no later than the end of the sophomore year.

3. The four additional courses must be chosen from the H/SS comprehensive list. These courses may be taken on a *Pass/Not Pass* Basis (P/NP).
4. At least two of the six courses must be upper division (courses numbered 100-196).
5. At least two courses must be from the same department and at least one of the two must be upper division. This is called the Series requirement*. AP tests can be combined with a course to complete the Series Requirement. For example, AP History (any) combined with an upper division History course would satisfy the series requirement
6. One of the six courses must satisfy the campus American Cultures Requirement (<http://guide.berkeley.edu/archive/2014-15/undergraduate/colleges-schools/engineering/american-cultures-requirement>).
7. A maximum of two exams (Advanced Placement, International Baccalaureate, or A-Level) may be used toward completion of the H/SS requirement. Visit this link (<http://coe.berkeley.edu/exams>)
8. No courses offered by an Engineering department (IEOR, CE, etc.) other than BIOE 100, CS C79, ENGIN 125, ENGIN 130AC, 157AC, ME 191K and ME 191AC may be used to complete H/SS requirements.
9. Courses may fulfill multiple categories. For example, completing the City and Regional Planning 115 and 118AC would satisfy the Series Requirement, the two upper division courses requirement, and the American Cultures Requirement.
10. The College of Engineering (COE) uses modified versions of five of the College of Letters and Science (L&S) breadth requirements lists to provide options to students for completing the Humanities and Social Science requirement. The COE requirement is different from that of L&S requirement, so the guidelines posted on the top of each L&S breadth list do NOT apply to COE students.
11. Foreign language courses MAY be used to complete H/SS requirements. L&S does not allow students to use many language courses, so their lists will not include all options open to Engineering students. For a list of language options, visit the website (<http://engineering.berkeley.edu/approved-foreign-language-courses>)

*NOTE: for the Series Requirement: The purpose of the series requirement is to provide depth of knowledge in a certain area. Therefore, a two-course sequence not in the same department may be approved by petition in cases in which there is a clear and logical connection between the courses involved.

There has never been a better time to be an engineer—and there is no better place to start the journey than at Berkeley!

Berkeley Engineering is committed to excellence—in top-notch faculty, groundbreaking research, and a dynamic student body. The College of Engineering believes that engineering has the power to solve the world's most pressing problems, and it is dedicated to preparing students to meet today's challenges with creativity and innovation.

The world-renowned program offers a solid foundation in math and science but also includes study in the humanities and social sciences in order to provide students with the knowledge and skills needed to contribute at the highest level to today's complex society. In addition to a rigorous curriculum, the College also offer numerous research

opportunities, support services, and engineering student organizations because Berkeley Engineering is invested in the success of its students.

There are many reasons why the program attracts the best and brightest. Students are encouraged to learn more about Berkeley Engineering — the departments (<http://coe.berkeley.edu/departments>) , admissions (<http://coe.berkeley.edu/students/prospective-students/admissions.html>) , resources, (<http://coe.berkeley.edu/students>) student life (<http://engineering.berkeley.edu/student-life>) , and rankings (<http://coe.berkeley.edu/about/rankings.html>) — by exploring the website.

Engineering Student Services (ESS) (<http://coe.berkeley.edu/ESS>) provides a wide array of programmatic and advising services to College of Engineering undergraduate students. Whether they want to get expert advice on the right classes to take, find an inspiring research position, or start a student club, ESS helps students achieve their goals.

Academic Advising

Each College of Engineering undergraduate student is assigned an adviser upon admission who fosters the academic achievement, intellectual curiosity, personal discovery and growth of the student. This person is referred to as the Engineering Student Services (ESS) Adviser. Advisers are assigned based upon the student's major and work with the student whenever possible throughout their entire undergraduate career. ESS advisers help students identify strengths and challenges in order to develop an academic plan that supports them in achieving their goals while ensuring completion of degree requirements. Visit their website (<http://coe.berkeley.edu/ESS>) for detailed information on advising services.

Faculty Advising

College of Engineering students are also assigned a faculty adviser who serves as the professional mentor to a student throughout their years at Berkeley. Faculty advisers assist with technical course selection, curriculum planning based upon the student's goals, connection to research opportunities, and advice on planning for graduate school and/or industry.

Department Advising

Academic departments (<http://coe.berkeley.edu/students/current-undergraduates/advising/departmental-advising.html>) also have advisers who work to see that students get connected to faculty, programs, facilities, courses, clubs, and research opportunities that create a meaningful educational experience in the student's major department.

Peer Advising

Sometimes, it's helpful to have an experienced student's perspective on how to juggle classes, study, manage time, choose the best enrichment opportunities, or how to navigate the waters of a large university like UC Berkeley. In cases like these, Engineering Student Services (ESS) Peer Advisers are an amazing resource! They can also assist in answering questions like how to drop a class or choose an elective, and they can provide information all about life in their particular major and the College of Engineering in general.

ESS Peer Advisers provide general information to engineering undergraduates regarding university and college requirements and procedures. This includes information about registration, deadlines, research and leadership opportunities, student organizations, campus resources, and special events. Peer Advisers also meet with prospective students and lead workshops throughout the semester. Visit their website (<http://coe.berkeley.edu/students/current-undergraduates/advising/peer->

[advising-program/peer-advising-program.html](http://coe.berkeley.edu/students/current-undergraduates/advising/peer-)) to learn more about the Peer Advising program

Career Advising

Dedicated engineering career counselors (<http://coe.berkeley.edu/students/current-undergraduates/career-development-opportunities>) give feedback on resumes and cover letters, provide advice on finding internships, and coach students on preparing for career fairs and interviews.

Content coming soon!