

Major Advisories

Bioengineering - no longer requires BIOLOGY 1A/1AL for admission. CHEM 3B, ENGIN 10, CIV ENG C30/MEC ENG C85 are no longer strongly recommended.

Civil Engineering - prerequisites no longer include PHYSICS 7C. Students have the option to take CHEM 1B, BIOLOGY 1B, or CIV ENG 70.

Effective for Fall 2019 admissions cycle, the Chemical Engineering Department will no longer accept applications into the two joint majors: Chemical Engineering & Materials Science and Engineering, and Chemical Engineering & Nuclear Engineering.

Beginning Fall 2020, all students planning to apply to the Media Studies major at the University of California, Berkeley MUST complete Media Studies 10 or N10 at UC Berkeley, in accordance with the policy approved Spring 2018. Any Media Studies 10 transfer course equivalents completed after summer 2020 will not satisfy the Media Studies 10 prerequisite requirement. Media Studies 10 or N10 must be completed before applying to the major.

Beginning Fall 2020, all transfer students planning to apply to the Statistics major at the University of California, Berkeley must also complete a lower division statistics course (either COMPSCI/INFO/STAT C8, STAT 20 or STAT 28) with a C or higher, in accordance with the policy approved Spring 2018.

Students could complete remaining prerequisites for the Statistics major when they transfer and begin classes at UC Berkeley.

Changed Curriculum

Engin 45/45L changed to Mat Sci 45/45L - Properties of Materials/Properties of Materials Lab

Discontinued Majors

Asian Studies, Latin American Studies, Middle Eastern Studies, Peace and Conflict Studies and Development Studies majors have been retired and folded into Global Studies – Students are no longer able to declare these majors. Please visit the Global Studies website or the Global Studies page on the Berkeley Academic Guide for more information.

Effective for Fall 2019 admissions cycle, the Chemical Engineering Department will no longer accept applications into the two joint majors: Chemical Engineering & Materials Science and Engineering, and Chemical Engineering & Nuclear Engineering.

New Curriculum

GLOBAL 10A - Introduction to Global Studies (4)

This course is designed as an introduction to Global Studies. Using a social science approach, the course prepares students to think critically about issues of international development, conflict, and peace in a variety of societies around the world. As such it provides students with a basic theoretical introduction to the impact of global interaction as well as an opportunity to explore such interaction in a variety of case studies.

GLOBAL 10B - Critical Issues in Global Studies (3)

Global Studies 10B serves as an introduction to the Global Studies curriculum. Global Studies 10B introduces students to global issues through the lens of the humanities, such as art, literature, film, and culture. The topic of Global Studies 10B will vary from year to year, depending on the instructor. Students in each iteration of this course will learn about salient global interactions from a variety of cultural perspectives.

STAT C8/COMPSCI C8/INFO C8 – Foundations of Data Science (4)

Foundations of data science from three perspectives: inferential thinking, computational thinking, and real-world relevance. Given data arising from some real-world phenomenon, how does one analyze that data so as to understand that phenomenon? The course teaches critical concepts and skills in computer programming and statistical inference, in conjunction with hands-on analysis of real-world datasets, including economic data, document collections, geographical data, and social networks. It delves into social and legal issues surrounding data analysis, including issues of privacy and data ownership.

New Majors

Global Studies, B.A.

Data Science, B.A.

Global Studies, B.A. Description

As interactions between states, societies, and cultures increase, so too do the responses to these interactions multiply. The Global Studies major allows students to explore such interactions and their outcomes. By bringing in both historical and contemporary material, the major provides students with the tools that they need in order to make sense of the world in which they live—as well as understanding how it got to be that way. Students pursuing an undergraduate degree in global studies will engage in thinking critically about how global change has (and can) come about during their lifetimes. The major aims to have students focus on relevant issues to them in a way that provides intellectual flexibility. The major will offer solid training in how to use acquired knowledge to become agents of positive change on the global issues that matter most to people here, and elsewhere around the world. See the Global Studies website or the Global Studies page on the Berkeley Academic Guide for more information.

Requirements

GLOBAL 10A Introduction to Global Studies

GLOBAL 10B Critical Issues in Global Studies

IAS 45 Survey of World History (must be taken at UCB)

Select one course in economics from the following:

ECON 1 Introduction to Economics

ECON 2 Introduction to Economics--Lecture Format

Select one course in statistics from the following:

STAT 2 Introduction to Statistics

STAT C8 Foundations of Data Science

STAT 20 Introduction to Probability and Statistics

STAT 21 Introductory Probability and Statistics for Business

Foreign Language Requirement (proficiency in a language other than English by the last semester of the senior year at UCB. This language must be connected, in either the past or the present, to the student's geographic region of specialization.)

See the Global Studies website or the Global Studies page on the Berkeley Academic Guide for more information.

Data Science, B.A. Description

Data Science is a new field of study that combines computational and inferential reasoning to draw conclusions based on data about some aspect of the real world. Data scientists come from all walks of life, all areas of study, and all backgrounds. They share an appreciation for the practical use of mathematical and scientific thinking and the power of computing to understand and solve problems for business, research, and societal impact.

The **Data Science Major** will equip students to draw sound conclusions from data in context, using knowledge of statistical inference, computational processes, data management strategies, domain knowledge, and theory. Students will learn to carry out analyses of data through the full cycle of the investigative process in scientific and practical contexts. Students will gain understanding of the human and ethical implications of data analysis and integrate that knowledge in designing and carrying out their work.

See the Data Science website or the Data Science page on the Berkeley Academic Guide for more information.

Requirements

STAT/COMPSCI/INFO C8 Foundations of Data Science

MATH 1A & MATH 1B Calculus

MATH 54 Linear Algebra and Differential Equations OR

EL ENG 16A + EL ENG 16B Designing Information Devices and Systems I and II

CS 61A The Structure and Interpretation of Computer Programs OR

ENGIN 7 Introduction to Computer Programming for Scientists and Engineers

CS 61B Data Structures

See the Data Science website or the Data Science page on the Berkeley Academic Guide for more information.