

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Berkeley  
2022-2023 General Catalog, Semester

From: Madera Community College  
2022-2023 General Catalog, Semester

## Computer Science, Lower Division B.A.

### COLLEGE OF LETTERS AND SCIENCE

#### COLLEGE ADMISSION REQUIREMENTS FOR TRANSFER STUDENTS THIS MAJOR IS OFFERED BY THE COLLEGE OF LETTERS AND SCIENCE (L&S).

**By the end of the spring term preceding fall enrollment at Berkeley, you must complete:**

- 1) The L&S Requirements in Reading & Composition, Quantitative Reasoning, and Foreign Language; **OR**
- 2) IGETC

#### **Major Requirements:**

Complete as many lower division major requirements as possible. See details on preparation for this major below.

#### **Primary selection criteria for admission, in general:**

- completion of L&S Requirements (or IGETC), plus
- strength of academic preparation, and
- grade point average.

#### **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>

### PROGRAM

#### **Fall 2023 Admission For this Major:**

Students who select this major on their College of Letters and Science (L&S) application and are offered admission to L&S will be directly admitted into this major. No additional steps are required to be admitted to the major

If you are interested in this major, it is very important to select this major on your application. If you do not select this major on your application, it may not be possible for you to declare this major at a later date. Complete as many lower-division major requirements as possible prior to transfer. See details on course preparation for this major below.

#### **Advice regarding courses in computer science:**

The **Computer Science** department at Berkeley recognizes the fact that courses comparable to Berkeley's Computer Science 61A-61B-61C series are difficult to find at most community colleges. With few exceptions, transfer students must take **COMPSCI 61A** during their first semester at Berkeley.

To be competitive for admission purposes, the department advises prospective transfer students to take UC-transferable courses in:

- 1) All equivalent Mathematics prerequisites: Math 1A, Math 1B, and Math 54.
- 2) Data structures--even if not officially comparable to Berkeley's COMPSCI 61B; and
- 3) Java (preferred) or C++.

The entire Computer Science 61 series is also offered during the Berkeley Summer session. The department recommends that, when possible, students take one of these courses during the summer session prior to transfer.

#### **COMPSCI 61B**

Any course/s approved as comparable to COMPSCI 61B must include coverage of object-oriented programming, hashing, heaps, priority queues and graphs, together with at least one programming assignment of 1000 or more lines of code. **If any of these topics are missing, the missing material may be acquired by taking a bridge course, COMPSCI 47B, at Berkeley.** If you see "Articulation subject to completion of a university course" below the community college course, then in addition to completing the community college course, you must complete COMPSCI 47B after enrollment at UC Berkeley.

#### **COMPSCI 70**

COMPSCI 70 is offered during the Berkeley Summer session or Concurrent Enrollment.

#### **SERIES/SEQUENCE ARTICULATION**

Unless the course equivalents are separately specified, do not assume that a sequence can be divided. If a series of courses at a community college is required (e.g., English 1A + 1B + 1C = English R1A and R1B), all the courses in the series must be completed, and must be completed at the same community college in order to ensure that you have satisfied the requirement.

#### **For more information:**

Center for Student Affairs-CS Advising Office  
(510) 642-7214/664-4436  
[cs-advising@cs.berkeley.edu](mailto:cs-advising@cs.berkeley.edu)

## LOWER DIVISION MAJOR REQUIREMENTS

<b>COMPSCI 61A</b> - The Structure and Interpretation of Computer Programs (4.00)	←	No Course Articulated
<b>COMPSCI 61B</b> - Data Structures (4.00)	←	<b>CSCI 41</b> - Programming Concepts and Methodology II (4.00) <ul style="list-style-type: none"> <li>• <i>Articulation subject to completion of a university course</i></li> </ul>
<b>COMPSCI 61C</b> - Machine Structures (4.00)	←	No Course Articulated
<b>COMPSCI 70</b> - Discrete Mathematics and Probability Theory (4.00) <ul style="list-style-type: none"> <li>• <i>Course(s) must be taken at university</i></li> </ul>	←	This course must be taken at the university after transfer
<b>MATH 1A</b> - Calculus (4.00)	←	<b>MATH 5A</b> - Math Analysis I (5.00)
<b>MATH 1B</b> - Calculus (4.00)	←	<div> <b>MATH 5B</b> - Math Analysis II (4.00) <div> <div>--- And ---</div> <b>MATH 17</b> - Differential Equations and Linear Algebra (5.00) </div> </div>
<b>MATH 53</b> - Multivariable Calculus (4.00) <ul style="list-style-type: none"> <li>• <i>Optional lower-division course(s)</i></li> </ul>	←	<b>MATH 6</b> - Math Analysis III (5.00)
<b>MATH 54</b> - Linear Algebra and Differential Equations (4.00)	←	<b>MATH 17</b> - Differential Equations and Linear Algebra (5.00)
--- Or ---		
<b>EECS 16A</b> - Designing Information Devices and Systems I (4.00)	←	No Course Articulated

END OF AGREEMENT