Articulation Agreement by Major

Effective during the 2021-2022 Academic Year

To: University of California, Berkeley 2021-2022 General Catalog, Semester

From: De Anza College 2021-2022 General Catalog, Quarter

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

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.

If admitted, transfer students must achieve a 3.30 cumulative GPA in those remaining prerequisite courses (CS 61A, CS 61B, and CS 70) taken **at UC Berkeley** in order to petition for admission to the major.

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

 ${\tt COMPSCI~70~is~offered~during~the~Berkeley~Summer~session~or~Concurrent~Enrollment.}$

RECOMMENDED

Math 53 is not required for the major. Completion of a Math 53 equivalent would waive 3 units of upper-division tech electives for the major.

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

LOWER DIVISION MAJOR REQUIREMENTS

COMPSCI 61A - The Structure and Interpretation of Computer Programs No Course Articulated (4.00)COMPSCI 61B - Data Structures (4.00) CIS 22C - Data Abstraction and Structures (4.50) • Articulation subject to completion of a university course --- Or ---CIS 22CH - Data Abstraction and Structures - HONORS (4.50) • Articulation subject to completion of a university course CIS 26B - Advanced C Programming (4.50) • Articulation subject to completion of a university course COMPSCI 61C - Machine Structures (4.00) No Course Articulated COMPSCI 70 - Discrete Mathematics and Probability Theory (4.00) This course must be taken at the university after transfer Course(s) must be taken at university MATH 1A - Calculus (4.00) **MATH 1A** - Calculus (5.00) --- And ---MATH 1B - Calculus (5.00) Regular and honors courses may be combined to complete this --- Or ---MATH 1AH - Calculus - HONORS (5.00) MATH 1BH - Calculus - HONORS (5.00) Regular and honors courses may be combined to complete this series **MATH 1B** - Calculus (4.00) **MATH 1B** - Calculus (5.00) --- And ---MATH 1C - Calculus (5.00) Regular and honors courses may be combined to complete this --- Or ---MATH 1BH - Calculus - HONORS (5.00) MATH 1CH - Calculus - HONORS (5.00) Regular and honors courses may be combined to complete this series ${\sf Series}$ MATH 53 - Multivariable Calculus (4.00) **MATH 1C** - Calculus (5.00) • Recommended; Not required for the major --- And ---**MATH 1D** - Calculus (5.00) Regular and honors courses may be combined to complete this series --- Or --MATH 1CH - Calculus - HONORS (5.00) MATH 1DH - Calculus - HONORS (5.00) Regular and honors courses may be combined to complete this series MATH 2A - Differential Equations (5.00)

--- And --
MATH 2B - Linear Algebra (5.00)

Regular and honors courses may be combined to complete this series

--- Or --
MATH 2AH - Differential Equations - HONORS (5.00)

--- And ---

END OF AGREEMENT

MATH 2BH - Linear Algebra - HONORS (5.00)

Regular and honors courses may be combined to complete this series $% \left(1\right) =\left\{ 1\right\} =\left\{ 1\right\}$