Articulation Agreement by Major

Effective during the 2021-2022 Academic Year

To: University of California, Berkeley	From: Santa Monica College
2021-2022 General Catalog, Semester	2021-2022 General Catalog, Semester

Data 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

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.

For more information on this major:
ds-advising@berkeley.edu
https://data.berkeley.edu/academics/undergraduate-programs/data-science-major/information-prospective-transfer-students

LOWER DIVISION PREREQUISITES

DATA/COMPSCI/INFO/STAT/C8 - Foundations of Data Science

MATH 1A - Calculus
and
MATH 1B - Calculus

MATH 54 - Linear Algebra and Differential Equations
or
EECS 16A - Designing Information Devices and Systems I (formerly known as Electrical Engineering EL ENG 16A)
and
EECS 16B - Designing Information Devices and Systems II (formerly known as Electrical Engineering EL ENG 16B)

COMPSCI 61A - The Structure and Interpretation of Computer Programs
or
ENGIN 7 - Introduction to Computer Programming for Scientists and Engineers

COMPSCI 61B - Data Structures

Articulation subject to completion of a university course
If the above statement is indicated under any of the community college course listed below (e.g., COMPSCI 61B) you will be required to take an additional course at UC Berkeley in order to complete the requirement.

DATA C8 - Foundations of Data Science (4.00) Same-As: STAT C8, INFO C8, COMPSCI C8	←	No Course Articulated

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MATH 1A - Calculus (4.00)	←	**MATH 7** - Calculus 1 (5.00)
MATH 1B - Calculus (4.00)	←	**MATH 8** - Calculus 2 (5.00)

MATH 54 - Linear Algebra and Differential Equations (4.00)	←	**MATH 13** - Linear Algebra (3.00) **--- And ---** **MATH 15** - Differential Equations (3.00)
--- Or ---		
EECS 16A - Designing Information Devices and Systems I (4.00)	←	No Course Articulated
--- And ---		
EECS 16B - Designing Information Devices and Systems II (4.00)	←	No Course Articulated

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COMPSCI 61A - The Structure and Interpretation of Computer Programs (4.00)	←	No Course Articulated
--- Or ---		
ENGIN 7 - Introduction to Computer Programming for Scientists and Engineers (MATLAB) (4.00)	←	No Course Articulated
COMPSCI 61B - Data Structures (4.00)	←	No Course Articulated

END OF AGREEMENT