

# Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Los Angeles  
2022-2023 General Catalog, Quarter

From: De Anza College  
2022-2023 General Catalog, Quarter

## Data Theory/B.S.

### IMPORTANT MAJOR INFORMATION

Listed below are the lower division preparation courses for the major. Transfer applicants to the Data Theory major are admitted to the pre-major and must petition to enter the major no later than the Spring Quarter of their year at UCLA. **To be considered for this major, you must complete four semesters/five quarters of calculus through multivariable, and either linear algebra or differential equations and one introductory statistics course by the end of spring before transfer.** All courses must be taken for a letter grade. **For more information regarding this major and UCLA's transfer selection process, visit: <https://www.math.ucla.edu> and <https://admission.ucla.edu>.**

**PLEASE NOTE:** the community college courses listed below have been approved to satisfy the preparation requirements for this major at UCLA, but they may not be exact equivalents of the UCLA courses listed.

### ADDITIONAL INFORMATION

Students are strongly encouraged complete the following coursework prior to transfer: 6 quarters of calculus (encompassing single variable, multivariable, and linear algebra ) and Comptng 10A (C++). Additional requirements for the Mathematics major can be found at: <https://math.ucla.edu>.

### LOWER DIVISION MAJOR REQUIREMENTS

**MATH 31A** - Differential and Integral Calculus (4.00)

← **MATH 1A** - Calculus (5.00)

--- Or ---

**MATH 31AL** - Differential and Integral Calculus Laboratory (5.00)

← No Course Articulated

**MATH 31B** - Integration and Infinite Series (4.00)

←

**MATH 1B** - Calculus (5.00)

--- And ---

**MATH 1C** - Calculus (5.00)

--- Or ---

**MATH 1B** - Calculus (5.00)

--- And ---

**MATH 1CH** - Calculus - HONORS (5.00)

--- Or ---

**MATH 1BH** - Calculus - HONORS (5.00)

--- And ---

**MATH 1C** - Calculus (5.00)

--- Or ---

**MATH 1BH** - Calculus - HONORS (5.00)

--- And ---

**MATH 1CH** - Calculus - HONORS (5.00)

**MATH 32A** - Calculus of Several Variables (4.00)

← **MATH 1C** - Calculus (5.00)

**MATH 32B** - Calculus of Several Variables (4.00)

← **MATH 1D** - Calculus (5.00)

**MATH 33A** - Linear Algebra and Applications (4.00)

← **MATH 2B** - Linear Algebra (5.00)

**MATH 33B** - Differential Equations (4.00)

← **MATH 2A** - Differential Equations (5.00)

**MATH 42** - Introduction to Data-Driven Mathematical Modeling:  
Life, Universe, and Everything (4.00)

← No Course Articulated

**COMPTNG 10A** - Introduction to Programming(C++ ) (5.00)



**CIS 27** - Programming in C++ for C/Java Programmers (4.50)

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**CIS 22A** - Beginning Programming Methodologies in C++ (4.50)

--- And ---

**CIS 22B** - Intermediate Programming Methodologies in C++ (4.50)

Select 1 or more Course(s) from the following

**STATS 10** - Introduction to Statistical Reasoning (5.00)



**MATH 10** - Introductory Statistics (5.00)

--- Or ---

**STATS 12** - Introduction to Statistical Methods for Geography and Environmental Studies (5.00)



**MATH 10** - Introductory Statistics (5.00)

--- Or ---

**STATS 13** - Introduction to Statistical Methods for Life and Health Sciences (5.00)



**MATH 10** - Introductory Statistics (5.00)

--- And ---

**STATS 20** - Introduction to Statistical Programming with R. (4.00)



**CIS 44H** - R Programming (4.50)

**END OF AGREEMENT**