

# Quantitative Reasoning Requirement

## Guidelines for Quantitative Reasoning Courses

The Quantitative Reasoning requirement is designed to ensure that students graduate with basic understanding and competency in mathematics, statistics, or computer science. The requirement may be satisfied by exam or by taking an approved course. Course work used to satisfy Quantitative Reasoning must be completed with a letter grade of C- or higher.

## Satisfying Quantitative Reasoning with an Exam

- SAT Math Section - Minimum Score: 620
- SAT Subject Test, Math Level 2 - Minimum Score: 520
- ACT Math Portion - Minimum Score: 28
- Advanced Placement Exams in Calculus AB or BC - Score: 3, 4, or 5
- Advanced Placement Exam in Computer Science Principles - Score: 3, 4, or 5
- Advanced Placement Exam in Statistics - Score: 3, 4, or 5
- International Baccalaureate Higher Level Exam in Mathematics or Computer Science - Score: 5, 6, or 7
- GCE A-Level Mathematics Exam - Score: A, B, or C
- Quantitative Reasoning Exam offered by the Department of Mathematics (<https://math.berkeley.edu/programs/undergraduate>) - Minimum Score: 26

## Satisfying Quantitative Reasoning Requirement with a Berkeley Course

The following Berkeley course options, completed with a letter grade of C- or higher, satisfy the Quantitative Reasoning requirement:

COMPSCI C8	Foundations of Data Science	4
COMPSCI 10	The Beauty and Joy of Computing	4
COMPSCI W10	The Beauty and Joy of Computing	4
COMPSCI 61A	The Structure and Interpretation of Computer Programs	4
COMPSCI 61B	Data Structures	4
COMPSCI 61C	Great Ideas of Computer Architecture (Machine Structures)	4
COMPSCI 70	Discrete Mathematics and Probability Theory	4
INFO C8	Foundations of Data Science	4
MATH 1A	Calculus	4
MATH 1B	Calculus	4
MATH 10A	Methods of Mathematics: Calculus, Statistics, and Combinatorics	4
MATH 10B	Methods of Mathematics: Calculus, Statistics, and Combinatorics	4
MATH 16A	Analytic Geometry and Calculus	3
MATH 16B	Analytic Geometry and Calculus	3
MATH 32	Precalculus	4
MATH N32	Precalculus	4

MATH 53	Multivariable Calculus	4
MATH H53	Honors Multivariable Calculus	4
MATH W53	Multivariable Calculus	4
MATH 54	Linear Algebra and Differential Equations	4
MATH H54	Honors Linear Algebra and Differential Equations	4
MATH 55	Discrete Mathematics	4
MATH 74	Transition to Upper Division Mathematics	3
STAT 2	Introduction to Statistics	4
STAT C8	Foundations of Data Science	4
STAT 20	Introduction to Probability and Statistics	4
STAT 21	Introductory Probability and Statistics for Business	4
STAT W21	Introductory Probability and Statistics for Business	4

## Satisfying Quantitative Requirement with a Transfer Course

All **transfer courses** (<https://ls.berkeley.edu/advising/planning/transfer-credit>) pursued for Quantitative Reasoning must be completed with a C- or higher.

- Students admitted with IGETC Certification or UC Reciprocity have satisfied Quantitative Reasoning. No additional course work is required.
- Continuing Berkeley students who have already completed course work at Berkeley may pursue a pre-approved course for Quantitative Reasoning at a California Community College during the summer, or while not enrolled at Berkeley during a fall or spring term. To identify pre-approved courses for Quantitative Reasoning, use ASSIST.org.
  - UC Berkeley Extension course STAT X10 - Introduction to Statistics is an additional pre-approved transfer course option, completed with a C- or higher, and for Quantitative Reasoning through Spring 2019.
- Other Pre-Calculus, Calculus or Introduction to Statistics transfer courses from accredited higher education institutions may also be considered. Talk to an L&S College Adviser or email ([AskLnS@berkeley.edu](mailto:AskLnS@berkeley.edu)) for more information.