Courses Approved for Quantitative Reasoning with Data

The following courses are approved for Harvard College’s Quantitative Reasoning with Data (QRD) requirement.

QRD courses offered in a particular academic year can be found on my.harvard.

This list was most recently updated on 30 Apr 2021. For the most up-to-date version, please consult the QRD page on the Office of Undergraduate Education website.

For questions about the QRD requirement, e-mail qrd@fas.harvard.edu.

- APCODE 209A  Data Science 1: Introduction to Data Science
- APCODE 209B  Data Science 2: Advanced Topics in Data Science
- APMTH 10  Computing for Science and Engineering
- APMTH 22A  Solving and Optimizing
- APMTH 22B  Integrating and Approximating
- APMTH 50  Introduction to Applied Mathematics
- APMTH 101  Statistical Inference for Scientists and Engineers
- APMTH 120  Applied Linear Algebra and Big Data
- APMTH 121  Introduction to Optimization: Models and Methods
- APMTH 205  Advanced Scientific Computing: Numerical Methods
- APMTH 207  Advanced Scientific Computing: Stochastic Methods for Data Analysis, Inference and Optimization
- APMTH 231  Decision Theory
- APPHY 50A  Physics as a Foundation for Science and Engineering, Part I
- ASTRON 2  Celestial Navigation
- COMPSCI 10  Elements of Data Science
- COMPSCI 50  Introduction to Computer Science
- COMPSCI 109A  Data Science 1: Introduction to Data Science
- COMPSCI 109B  Data Science 2: Advanced Topics in Data Science
- COMPSCI 124  Data Structures and Algorithms
- COMPSCI 134  Networks
- COMPSCI 181  Machine Learning
- COMPSCI 282BR  Topics in Machine Learning: Interpretability and Explainability
- E-PSCI 100  The Missing MATLAB Course: A Practical Intro to Programming and Data Analysis
- E-PSCI 101  Global Warming Science 101
- E-PSCI 102  Data Analysis and Statistical Inference in the Earth and Environmental Sciences
- E-PSCI 131  Introduction to Physical Oceanography and Climate
- E-PSCI 139  Paleoclimate as Prologue
• ECON 20    Introduction to Data Analysis
• ECON 50    Using Big Data to Solve Economic and Social Problems
• ECON 50A   Using Big Data to Solve Economic and Social Problems with Laboratory Component
• ECON 1123  Introduction to Econometrics
• ECON 1126  Quantitative Methods in Economics
• ENG-SCI 53  Quantitative Physiology as a Basis for Bioengineering
• ENG-SCI 120 Introduction to the Mechanics of Solids
• ESE 102    Data Analysis and Statistical Inference in the Earth and Environmental Sciences
• ESE 131    Introduction to Physical Oceanography and Climate
• GOV 50     Data
• GOV 51     Data Analysis and Politics
• GOV 52     Models
• GOV 61     Research Practice in Quantitative Methods
• GOV 1000   Quantitative Methods for Political Science I
• GOV 1010   Survey Research Methods
• GOV 1360   American Public Opinion
• GOV 2000   Introduction to Quantitative Methods I
• LIFESCI 50A Integrated Science
• LING 105   Sounds of Language
• MATH MA    Introduction to Functions and Calculus I
• MATH 1A    Introduction to Calculus
• MATH 1B    Calculus, Series, and Differential Equations
• MATH 18A   Multivariable Calculus for Social Sciences
• MATH 18B/19B Linear Algebra, Probability, and Statistics
• MATH 19A   Modeling and Differential Equations for the Life Sciences
• MATH 21A   Multivariable Calculus
• MATH 21B   Linear Algebra and Differential Equations
• MATH 22A   Vector Calculus and Linear Algebra I
• MATH 23A   Linear Algebra and Real Analysis I [note: in Fall 2020, two versions of MATH 23A are taught. Only one of these fulfills QRD. Further details are on the syllabus and my.harvard.]
• MATH 23C   Mathematics for Computation, Statistics, and Data Science
• MATH 156   Mathematical Foundations of Statistical Software
• MCB 111    Mathematics in Biology
• MCB 112    Biological Data Analysis
• MCB 198    Advanced Mathematical Techniques for Modern Biology
- PHYSCI 12A  Mechanics and Statistical Physics from an Analytic, Numerical and Experimental Perspective
- PHYSCI 12B  Electromagnetism and Statistical Physics from an Analytic, Numerical and Experimental Perspective
- PHYSICS 15A  Introductory Mechanics and Relativity
- PHYSICS 15B  Introductory Electromagnetism and Statistical Physics
- PHYSICS 15C  Wave Phenomena
- PHYSICS 16  Mechanics and Special Relativity
- PHYSICS 145  Elementary Particle Physics
- PHYSICS 201  Data Analysis for Physicists
- PSY 1900  Introduction to Statistics for the Behavioral Sciences
- SOCIOL 156  Quantitative Methods in Sociology
- STAT 10  Elements of Data Science
- STAT 100  Introduction to Quantitative Methods for the Social Sciences and Humanities
- STAT 102  Introduction to Statistics for Life Sciences
- STAT 104  Introduction to Quantitative Methods for Economics
- STAT 109  Intro to Statistical Modeling
- STAT 111  Introduction to Statistical Inference
- STAT 121A  Data Science 1: Introduction to Data Science
- STAT 121B  Data Science 2: Advanced Topics in Data Science
- STAT 131  Time Series & Prediction
- STAT 139  Linear Models
- STAT 149  Generalized Linear Models
- STAT 151  Multilevel and Longitudinal Models
- STAT 160  Design and Analysis of Sample Surveys
- STAT 186  Causal Inference
- STAT 195  Statistical Machine Learning
- STAT 220  Bayesian Data Analysis