MINOR IN STATISTICS AND DATA SCIENCE

Statistics, the science of making inferences and decisions under uncertainty, is becoming increasingly relevant in the modern world due to the widespread availability of and access to unprecedented amounts of data and computational resources. Unlike classical statistics, the need to process and manage massive amounts of data has become a key feature of modern statistics. This aspect of managing and processing data is popularly referred to as “data science.”

Through six required subjects, the Minor in Statistics and Data Science provides students with a working knowledge base in statistics, probability, and computation, along with an ability to perform data analysis.

Foundation
Select one of the following: 6-12

2.087 Engineering Mathematics: Linear Algebra and ODEs
6.00 Introduction to Computer Science and Programming
6.01 Introduction to EECS via Robotics
18.03 Differential Equations
18.06 Linear Algebra

Statistics 1
Select one of the following: 12

1.010 Introduction to Probability and Statistics in Engineering
6.041A Introduction to Probability I
& 6.041B and Introduction to Probability II
9.07 Statistics for Brain and Cognitive Science
14.30 Introduction to Statistical Methods in Economics
15.0791 Introduction to Applied Probability
16.09 Statistics and Probability
18.600 Probability and Random Variables

Statistics 2
Select one of the following: 12

14.32 Econometric Data Science
15.075[J] Statistical Thinking and Data Analysis

Computation & Data Analysis
Select two of the following: 24

1.00 Engineering Computation and Data Science
2.086 Numerical Computation for Mechanical Engineers
6.008 Introduction to Inference
6.036 Introduction to Machine Learning
6.819 Advances in Computer Vision
14.36 Advanced Econometrics
15.053 Optimization Methods in Business Analytics
16.90 Computational Modeling and Data Analysis in Aerospace Engineering 2
18.642 Topics in Mathematics with Applications in Finance 2

Capstone Subject
IDS.012[J] Statistics, Computation and Applications 12

1 Consult minor advisor about potential substitutions.
2 Subject has prerequisites that are outside of the program.

A minimum of four subjects taken for the Statistics and Data Science Minor cannot also count toward a major or another minor.

See the Statistics and Data Science Minor webpage (http://idss.mit.edu/academics) for additional information. Inquiries about the undergraduate program may be directed to the IDSS Academic Office (idss_academic_office@mit.edu).

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