INTERDISCIPLINARY DOCTOR OF PHILOSOPHY IN STATISTICS

Interdisciplinary Doctoral Program in Statistics (http://catalog.mit.edu/interdisciplinary/graduate-programs/phd-statistics)

Common Core
All students in the Interdisciplinary Doctoral Program in Statistics are required to complete the common core for a total of 27 units.

or 18.675 Theory of Probability (http://catalog.mit.edu/search/?P=18.675)

IDS.190 (http://catalog.mit.edu/Data Science search/?P=IDS.190) Doctoral Seminar in Statistics and Data Science


Total Units 27

Program-specific Requirements
Each student must complete the requirements specified by their home department in the lists below by taking one subject from the Computation and Statistics category and one subject from the Data Analysis category.

Aeronautics and Astronautics

Computation and Statistics
Select one of the following: 12


Data Analysis
Select one of the following: 12


Brain and Cognitive Sciences

Computation and Statistics
Select one of the following: 12


Total Units 24
INTERDISCIPLINARY DOCTOR OF PHILOSOPHY IN STATISTICS


Data Analysis
Select one of the following: 12-15

7.57 (http://catalog.mit.edu/search/?P=7.57) Quantitative Biology for Graduate Students


Total Units 24-27

Economics
Computation and Statistics
Select one of the following: 1 12


Data Analysis


Total Units 36

1 Students may substitute a more advanced subject with permission of the program director.

Mathematics
Computation and Statistics
Select one of the following: 12


6.256 (http://catalog.mit.edu/search/?P=6.256) Algebraic Techniques and Semidefinite Optimization


## Interdisciplinary Doctor of Philosophy in Statistics

**18.338** Eigenvalues of Random Matrices  
([link](http://catalog.mit.edu/search/?P=18.338))

**18.415** Advanced Algorithms  
([link](http://catalog.mit.edu/search/?P=18.415))

**18.416** Randomized Algorithms  
([link](http://catalog.mit.edu/search/?P=18.416))

**18.657** Topics in Statistics  
([link](http://catalog.mit.edu/search/?P=18.657))

**6.555** Biomedical Signal and Image Processing  
([link](http://catalog.mit.edu/search/?P=6.555))

**6.869** Advances in Computer Vision  
([link](http://catalog.mit.edu/search/?P=6.869))

**9.073** Statistics for Neuroscience Research  
([link](http://catalog.mit.edu/search/?P=9.073))

**9.272** Topics in Neural Signal Processing  
([link](http://catalog.mit.edu/search/?P=9.272))

**18.367** Waves and Imaging  
([link](http://catalog.mit.edu/search/?P=18.367))

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**Total Units**: 24

### Political Science

**Computation and Statistics**

Select one of the following: 12

- **6.867** Machine Learning  
  ([link](http://catalog.mit.edu/search/?P=6.867))

- **9.520** Statistical Learning Theory and Applications  
  ([link](http://catalog.mit.edu/search/?P=9.520))

- **14.381** Applied Econometrics  
  ([link](http://catalog.mit.edu/search/?P=14.381))

**Data Analysis**

Select one of the following: 12

- **17.802** Quantitative Research Methods II: Causal Inference  
  ([link](http://catalog.mit.edu/search/?P=17.802))

- **17.804** Quantitative Research Methods III: Generalized Linear Models and Extensions  
  ([link](http://catalog.mit.edu/search/?P=17.804))

- **17.806** Quantitative Research Methods IV: Advanced Topics  
  ([link](http://catalog.mit.edu/search/?P=17.806))

**Total Units**: 24

### Social and Engineering Systems

**Computation and Statistics**

Select one of the following: 12

- **6.434** Statistics for Engineers and Scientists  
  ([link](http://catalog.mit.edu/search/?P=6.434))

**Total Units**: 24


15.077[1] (http://catalog.mit.edu/search/?P=15.077)  Statistical Learning and Data Mining

17.802 (http://catalog.mit.edu/search/?P=17.802)  Quantitative Research Methods II: Causal Inference

17.804 (http://catalog.mit.edu/search/?P=17.804)  Quantitative Research Methods III: Generalized Linear Models and Extensions

17.806 (http://catalog.mit.edu/search/?P=17.806)  Quantitative Research Methods IV: Advanced Topics

Data Analysis
Select one of the following: 12-15


Total Units: 24-27