

# Statistics-Computer Science Major

## Prerequisites: 4 courses

- 1) Calc 1, Calc 2, and Calc 3
- 2) Linear Algebra (COMS, Math, or Applied Math)
- 3) STAT 1001, 1111 or 1211

## Core: 9 courses (STAT and COMS)

### STAT:

- 1) Probability: STAT 3105 or 4105
- 2) Statistical Inference: STAT 3107 or 4107
- 3) Linear Regression Models: W3315 or 4315
- 4) Statistical Machine Learning STAT W4400 **or** Machine Learning COMS W4771

### COMS:

- 1) Introduction to CS 1004/1005/1006/1007
- 2) Data Structures: 3134/3136/3137
- 3) Discrete Math: 3203
- 4) Scientific Computing COMS 3210
- 5) Analysis of Algorithms 4231

## Electives: 4 Courses

### STAT: 2 from the following

- 1) Applied Data Mining 3026
- 2) Data Mining 4240
- 3) Statistical Computing in SAS 4199
- 4) Elementary Stochastic Processes 4606
- 5) Applied Data Science 4249

### COMS: 2 from the following

- 1) Computer Science Theory 3261
- 2) Introduction to Computational Complexity 4236
- 3) Introduction to Computational Learning Theory 4252
- 4) Databases 4111
- 5) Parallel Programming 4130
- 6) Any 47xx course (these are our AI/ML oriented courses)