

MINOR IN APPLIED MATHEMATICS AND STATISTICS

Sample Programs

The following sample programs satisfy the requirements for the Minor in Applied Mathematics and Statistics. These are meant to be illustrative, not prescriptive. The number of credits follows.

1. Student with interest in econometrics:	
553.291 Linear Algebra & Differential Equations	4
553.420 Introduction to Probability	4
553.430 Introduction to Statistics	4
553.432 Linear Statistical Models	3
500.200 Computing for Engineers and Scientists	4
180.334 Econometrics	3
2. Student majoring in electrical engineering:	
553.291 Linear Algebra & Differential Equations	4
553.420 Introduction to Probability	4
553.430 Introduction to Statistics	4
553.391 Dynamical Systems	4
500.200 Computing for Engineers and Scientists	4
520.213 Circuits	4
3. Student majoring in computer science:	
553.291 Linear Algebra & Differential Equations	4
553.385 Scientific Computing: Linear Algebra	4
553.471 Combinatorial Analysis	4
553.472 Graph Theory	4
601.220 Intermediate Programming	4
601.226 Data Structures	3
4. Student interested in business applications:	
553.291 Linear Algebra & Differential Equations	4
553.310 Probability and Statistics	4
553.413 Applied Statistics and Data Analysis	4
553.361 Introduction to Optimization	4
500.200 Computing for Engineers and Scientists	4
553.442 Investment Science	4
5. Student (engineering) interested in mathematical modeling:	
553.420 Introduction to Probability	4
553.430 Introduction to Statistics	4
553.361 Introduction to Optimization	4
553.400 Mathematical Modeling and Consulting	4
553.385 Scientific Computing: Linear Algebra	4
6. Premedical student, with an interest in medical statistics:	
553.291 Linear Algebra & Differential Equations	4
553.311 Probability and Statistics for Biological Sciences & Eng	4
553.430 Introduction to Statistics	4
553.432 Linear Statistical Models	3
500.200 Computing for Engineers and Scientists	4
553.413 Applied Statistics and Data Analysis	4
6. Student interested in finance:	
110.302 Differential Equations with Applications	4
553.420 Introduction to Probability	4
553.427 Stochastic Processes in Finance	4
553.430 Introduction to Statistics	4
553.444 Modeling and Analysis of Securities & Financial Markets I	4
500.200 Computing for Engineers and Scientists	4