

APPLICATION TO GRADUATE (MPS in Applied Statistics)

Student information:

Name (Print) _____ Graduation Date: Jan _____ May _____ Aug _____

Option # _____ Advisor Name _____ (please print)

Cornell ID _____ NET ID _____ Phone _____

Acceptance of Terms for MPS in Applied Statistics Requirements:

I have reviewed this Application to Graduate with my faculty advisor(s). I understand that it is my responsibility to complete the coursework listed below, and if I fail to do so, I may not be awarded my degree. I further understand that my address in student center must be current for me to receive my diploma as well as important information from the commencement office.

Student Signature

Date

MPS Required Courses

Required courses must be taken for a letter grade.

Required for both Option I and II

- STSCI 5030 - Linear Models with Matrices (4 credits)
- STSCI 5080 - Probability Models and Inference (4 credits)
- STSCI 5953 - MPS Professional Development (1 credit, S/U only)
- STSCI 5999 - Applied Statistics MPS Data Analysis Project (Spring Only) (4 credits)

Additional courses required for Option II only

- STSCI 5060 – Database Management and SAS (4 credits)
- STSCI 4060 – Python Programming and its Applications in Statistics (3 credits)
- STSCI 5065 – Data Management and Analysis (3 credits)

At most one elective per semester can be taken S/U. Electives taken during the summer session must be taken for a letter grade.

Option I students must take at least 12 credit hours and Option II students at least 4 credits of Statistical Science electives from this list. Option II students cannot use STSCI 4060, 5060, or 5065 as a Statistical Science elective since these courses are required as core option II courses.

Statistical Science Electives

- STSCI 3100:** Statistical Sampling (4 credits)
- STSCI 4060:** Python Programming and its Applications in Statistics (3 credits)
- STSCI 4100:** Multivariate Analysis (4 credits)
- STSCI 4110:** Categorical Data (4 credits)
- STSCI 4140:** Applied Design (4 credits)
- STSCI 4270:** Survival Analysis (4 credits) (3 credits)
- STSCI 4520:** Statistical Computing (4 credits)
- STSCI 4550:** Applied Time Series Analysis (4 credits)
- STSCI 4740:** Data Mining and Machine Learning (4 credits)
- STSCI 4780:** Bayesian Data Analysis: Principles and Practice
- STSCI 5640:** Statistics for Financial Engineering (4 credits)
- STSCI 5010:** Applied Statistical Computation with SAS (4 credits)
- STSCI 5060:** Database Management and SAS High Performance Computing with DBMS (4 credits)
- STSCI 5065:** Big Data Management and Analysis (3 credits)
- STSCI 6070:** Functional Data Analysis (3 credits)
- STSCI 6520:** Computationally Intensive Statistical Methods (4 credits)

Other Approved MPS Electives

- AEM 7100:** Econometrics I (3 credits)
- BTRY 3090:** Theory of Interest (3 credits)
- BTRY 4830:** Quantitative Genomics and Genetics (4 credits)
- BTRY 4840:** Computational Genetics and Genomics (4 credits)
- BTRY 6381:** Bioinformatics Programming (3 credits)
- CS 4780:** Machine Learning (4 credits)
- CS 5786:** Machine Learning for Data Science (4 credits)
- MATH 4740:** Stochastic Processes (4 credits)
- ORIE 3120:** Practical Tools for Operations Research, Machine Learning, and Data Science (4 credits)
- ORIE 4630:** Operations Research Tools for Financial Engineering (3 credits)
- ORIE 4741:** Learning with Big Messy Data (4 credits)
- ORIE 5510:** Introduction to Engineering Stochastic Processes I (4 credits)
- ORIE 5580:** Simulation Modeling & Analysis (4 credits)
- ORIE 5581:** Monte Carlo Simulation (2 credits)
- ORIE 5600:** Financial Engineering with Stochastic Calculus I (4 credits)
- ORIE 5610:** Financial Engineering with Stochastic Calculus II (4 credits)
- ORIE 5640:** Statistics for Financial Engineering (4 credits)
- ORIE 6500:** Applied Stochastic Processes (4 credits)
- ORIE 6741:** Bayesian Machine Learning (3 credits)
- ORIE 6780:** Bayesian Statistics and Data Analysis (3 credits)

