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)
Please list any approved course substitutions here: (Courses used toward the degree)

________________________________________ substitute for __________________________________________
Course number & Title Course number & Title
________________________________________ substitute for __________________________________________
Course number & Title Course number & Title:

Other Courses Counted Towards the MPS Degree (Electives)

Course number:_________________________ course title: ______________________________

Course number:_________________________ course title: ______________________________

☐ The above coursework will satisfy the MPS requirements.
☐ The above coursework will not satisfy the MPS requirements.

Advisor Signature:_________________________ Date: __/__/___

Please return this form to Phillip Rusher, 301 Malott Hall, 255-8066, par246@cornell.edu no later than 3 weeks before graduation date.