MPS Course Matrix (Spring 2015)

MPS core courses:

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>9:05-9:55</td>
<td>STSCI 5065^</td>
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<td>STSCI 5065^</td>
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<tr>
<td>10:10-11:00</td>
<td>STSCI 5065^</td>
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<td>STSCI 5065^</td>
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<tr>
<td>10:10-11:25</td>
<td>STSCI 4090*</td>
<td>STSCI 4090*</td>
<td>ECON 6200*</td>
<td>ECON 6200 sub-course*</td>
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<td>11:15-12:05</td>
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<td>11:40-12:55</td>
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<td>12:20-1:10</td>
<td>STSCI 4060^</td>
<td>STSCI 4060^</td>
<td>MATH 4720*</td>
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<td>1:25-2:15</td>
<td>STSCI 4090 sub-course*</td>
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* STSCI/BTRY 4090 (Theory of Statistics), ECON 6200 (Econometrics II), or MATH 4720 (Statistics): each of which may be used to fill the requirement of probability theory or mathematical statistics.
^ STSCI 4060 (Python Programming and its Applications in Statistics) and STSCI 5065 (Big Data Management and Analysis): these are core courses for Option II students, but Option I students may take these as electives.

Requirements: A student’s course schedule must be approved by the student’s academic advisor and any changes must also be approved. Any student who did not take STSCI 5080 (or its alternative) in the Fall semester must take STSCI 4090 (Theory of Statistics) or its alternative in the Spring semester. STSCI 5999 (Applied Statistics MPS Data Analysis Project) is a core course for all the MPS students doing MPS projects, which must be registered with student’s specific project advisor.

A grade of C- or better or S is required for a course to be used towards the MPS degree. A GPA of 2.5 or higher is required for graduation.

Electives:
MPS students take elective courses in statistics and closely related fields. Students should consult with their advisors about the selection of electives, and all electives must be approved by a student’s advisor. A student may take at most one non-statistical elective each semester, and the elective must be relevant to the MPS program and approved by the student’s advisor. Only 4000-level (or higher) courses, except ORIE 3120 (Industrial Data and Systems Analysis), STSCI 3510 (Introduction to Engineering Stochastic Processes I) and STSCI 3520 (Statistical Computing), or with prior program approval, certain other exceptions, will be counted toward the MPS degree. Below are examples of electives taken by MPS students.

Statistics and Mathematics Courses:
- **ORIE 3120** (Industrial Data and Systems Analysis)
- **STSCI 3510/ORIE 3510/5510** (Introduction to Engineering Stochastic Processes I)
- **STSCI 3520** (Statistical Computing)
- **BTRY/STSCI 4100** (Multivariate Analysis)
- **STSCI 4110/ BTRY 4110** (Categorical Data)
- **STSCI 4140** (Applied Design)
- **STSCI 4550** (Applied Time Series Analysis)
- **MATH 4740** (Stochastic Processes)

**ORIE 4740** (Statistical Data Mining I)
**BTRY 6020** (Statistical Methods II)

Economics Courses:
- **AEM 7100** (Econometrics I)
- **ORIE 4150** (Economic Analysis of Engineering Systems)

Financial Engineering:
- **ORIE 5610** (Financial Engineering with Stochastic Calculus II)
- **ORIE/STSCI 5640** (Statistics for Financial Engineering)