## **Quantitative Methods and Modeling**

• For additional program information see the Zicklin School website

The MS in quantitative methods and modeling (QMM) is a 30-credit program. The QMM program is designed to provide a broad spectrum of basic quantitative skills; thus, the required specialization courses span the areas of operations research, statistics, and computer information systems. The flexible elective requirements permit the creation of a five-course quantitative sequence tailored to a student's professional and/or educational objectives. Students also have the option of doing a graduate internship. The list of preliminary and specialization courses is given below.

| Preliminary Courses (   | 7.5 - 9 credits)  |             |
|---|---|-------------|
| Students with an appropriate background will be able to reduce the number of credits in preliminary requirements. Grades in 8000-level courses are not calculated in the grade point average. English language modules offered by the Division of Continuing and Professional Studies are required for non-native English speakers, and may be waived based on a waiver exam. |   |             |
|   |   |             |
| *MTH 8001   | Calculus for Applications I*                                | 3 credits   |
| ACC 9110  | Financial Accounting  | 3 credits   |
| or  |   |             |
| ECO 9730  | Fundamentals of Microeconomics                              | 1.5 credits |
| STA 9708  | Applied Statistical Analysis for Business Decisions         | 3 credits   |
| Courses in Specialization (30 credits)  |   |             |
| Required (16.5 credits)   |   |             |
| CIS 9001  | Information Systems for Managers I                          | 1.5 credits |
| CIS 9340  | Principles of Database Management Systems                   | 3 credits   |
| OPR 9721  | Introduction to Quantitative Modeling                       | 3 credits   |
| OPR 9730  | Simulation Modeling and Analysis                            | 3 credits   |
| STA 9000  | Regression and Forecasting Models for Business Applications | 3 credits   |
| STA 9750  | Basic Software Tools for Data Analysis<br>(                 | 3 credits   |
|   | OPR 9750  |             |
|   |   |             |

Electives (13.5 credits)

Five courses to be selected with approval of the department advisor. It is recommended that the student select at least one course in each of the three areas: OPR, STA, and CIS. A maximum of three courses may be selected from any one area. Students may select

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or an approved quantitatively oriented course offered outside the department.

\*Students may substitute MTH 2207 Applied Calculus and Matrix Applications on a space-available basis.