

Quantitative Methods and Modeling

Effective Spring 2018 - students entering in Fall 2017 may opt to follow this new curriculum. MS students following an earlier curriculum should contact their program advisor at ZicklinMSPPrograms@baruch.cuny.edu or review the appropriate bulletin for the year they entered.

For additional program information see the [Zicklin School website](#)

A high priority for many organizations today is the transformation of an enormous amount of available data into usable information. Consequently, many companies are looking for individuals who are well-versed in modeling, statistical analysis, and computer information systems as the job market for people who have the ability to deal effectively with information is expanding at a tremendous pace. The Master of Science in Quantitative Methods and Modeling 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 four-course quantitative sequence tailored to a student's professional and/or educational objectives. Students also have the option of doing a graduate internship. The MS program conforms with the DHS - STEM program so that international students who graduate from the MS/QMM program may be eligible for an additional 24-month extension on their optional practical training (OPT).

Preliminary Courses (7 credits)		
Students with appropriate academic background will be able to reduce the number of credits in preliminary requirements.		
MTH 2610	Calculus I*	4 credits
STA 9708	Applied Statistical Analysis for Business Decisions	3 credits
**MTH 2610 is an undergraduate course. Entering students are strongly encouraged to complete a minimum of three credits of calculus before starting the MS program in order to waive this math requirement.		
Courses in Specialization (31.5 credits)		
Required (16.5 credits)		
BUS 9551	Business Communication 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
OPR 9750	Basic Software Tools for Data Analysis (STA 9750)	3 credits
STA 9700	Applied Regression Analysis	3 credits
Electives (15 credits)		
Students can select any OPR, STA, CIS, or MTH course totaling 15 credits. With approval of the department advisor, students may select quantitatively-oriented courses in other areas. Students may select appropriate Graduate Internship courses BUS 9801 - BUS 9803.		

*Effective for all MS-QMM students admitted in spring 2016 or later. Students admitted prior to spring 2016 should consult their preliminary course evaluation and/or waiver exam results, since

other requirements and conditions may apply.