Statistics (MS)

For additional program information see the Zicklin School website

The Master of Science in Statistics is designed to train students in the design and application of quantitative models to decision making in business, finance, pharmaceutical and other industries, and government. The MS program provides students with the concepts and skills that form the fundamental base of knowledge essential to statistics professionals in today's sophisticated business environment including the technical background and capabilities required for the newer approaches to overall business analytics and data mining. The MS program is designed to provide a concentrated, in-depth study of the field for those who wish to be technical specialists in statistics. Students completing the MS degree successfully go on to careers as statisticians and sometimes continue to pursue a Ph.D. in statistics. The MS is a 30 credit program consisting largely of statistics courses and some related business courses which can be completed either part-time or full-time.

Required for all MS Students*		
BUS 9551	Business Communication I	1.5 credits
or		
Program specific, 1.5 credit equivalent business communication instruction approved by the Graduate Curriculum Committee.		
Preliminary Courses (9 credits) Students with appropriate academic background will be able to reduce the number of credits in preliminary requirements. Grades in undergraduate mathematics courses are not calculated in the grade point average. Non-credit-bearing English language courses 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 2610	Calculus I*	3 credits
MTH 3010	Calculus II*	3 credits
STA 9708	Applied Statistical Analysis for Business Decisions	3 credits
*MTH 2610 and MTH 3010 are undergraduate courses. Entering students are strongly adviced to complete a minimum of six credits of calculus before starting the MS programs in Statistics, in order to waive these math requirements. **Courses in Specialization (30 credits)** Required (12 credits)		
STA 9700	Applied Regression Analysis	3 credits
STA 9715	Applied Probability	3 credits
STA 9719	Foundations of Statistical Inference	3 credits
STA 9750	Software Tools for Data Analysis (OPR 9750)	3 credits
Choose four courses from: (12 credits)		
STA 9690	Advanced Data Mining for Business Analytics**	3 credits
STA 9701	Time Series: Forecasting and Statistical Modeling	3 credits
STA 9705	Multivariate Statistical Methods	3 credits

STA 9706	Analysis of Categorical and Ordinal Data	3 credits
STA 9710	Statistical Methods in Sampling and Auditing	3 credits
STA 9712	Advanced Linear Models	3 credits
STA 9713	Financial Statistics	3 credits
STA 9714	Experimental Design for Business	3 credits
STA 9783	Stochastic Processes for Business Applications (OPR 9783)	3 credits
STA 9791	Special Topics in Statistics	1 credit
STA 9792	Special Topics in Statistics	1.5 credits
STA 9793	Special Topics in Statistics	2 credits
STA 9794 (formerly STA 9772)	Special Topics in Statistics	3 credits
STA 9850	Advanced Statistical Computing (OPR 9850)	3 credits

Business Electives (6 credits)

Choose two 9000-level courses from the graduate offerings of the Zicklin School of Business, subject to the written approval of the Statistics graduate advisor. Student may take additional statistics courses as their business electives.

*Effective spring 2016.

**Effective spring 2016; students admitted prior to fall 2015 will receive credit for STA/CIS 9660.