

# Statistics (MS)

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

The statistics specialization 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. An MS program and an MBA program are offered through the Department of Statistics and Computer Information Systems. Both provide students with the concepts and skills that form the fundamental base of knowledge essential to statistics professionals in today's sophisticated business environment. 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. The program consists of 30 credits of mostly statistics, and some related courses. This distinguishes it from the Statistics [MBA program](#), which requires general business courses and a larger number of credits for graduation. The MS is offered as a full-time and as a part-time program.

<b>Preliminary Courses (9 credits)</b>		
Students with 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. Non-credit-bearing 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.		
<a href="#">MTH 8001</a>	Calculus for Applications I	3 credits
<a href="#">STA 9707</a>	Mathematical Tools for Business	3 credits
<a href="#">STA 9708</a>	Applied Statistical Analysis for Business Decisions	3 credits
NOTE: MTH 8001 is no longer offered and is replaced by MTH 2610 Calculus I (4 hours, 4 credits). STA 9707 is no longer offered and is replaced by MTH 3010 Calculus II (4 hours, 4 credits). These are undergraduate courses to which graduate tuition applies.		
<b>Courses in Specialization (30 credits)</b>		
Required (12 credits)		
<a href="#">STA 9700</a>	Applied Regression Analysis	3 credits
<a href="#">STA 9715</a>	Applied Probability	3 credits
<a href="#">STA 9719</a>	Foundations of Statistical Inference	3 credits
<a href="#">STA 9750</a>	Software Tools for Data Analysis ( <a href="#">OPR 9750</a> )	3 credits
Choose four courses from: (12 credits)		
<a href="#">STA 9701</a>	Time Series: Forecasting and Statistical Modeling	3 credits
<a href="#">STA 9705</a>	Multivariate Statistical Methods	3 credits
<a href="#">STA 9706</a>	Analysis of Categorical and Ordinal Data	3 credits
<a href="#">STA 9710</a>	Statistical Methods in Sampling and Auditing	3 credits
<a href="#">STA 9712</a>	Advanced Linear Models	3 credits
<a href="#">STA 9713</a>	Financial Statistics	3 credits
<a href="#">STA 9714</a>	Experimental Design for Business	3 credits
<a href="#">STA 9772</a>	Special Topics in Statistical Analysis	3 credits

<a href="#">STA 9783</a>	Stochastic Processes for Business Applications ( <a href="#">OPR 9783</a> )	3 credits
<a href="#">STA 9850</a>	Advanced Statistical Computing ( <a href="#">OPR 9850</a> )	3 credits
<p>Business Electives (6 credits)</p> <p>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.</p>		