

# ADVANCED MATHEMATICAL METHODS (MINOR)

## Program Description

The Advanced Mathematical Methods minor provides students with mathematical tools to handle complex business problems. Most advanced mathematics courses offered in mathematics departments require as prerequisites a complete coverage of calculus up to and including calculus of several variables as well as linear algebra. In today's business world, the most quantitatively demanding projects require not only this level of mathematics, but also a thorough grounding in probability and statistics.

This joint minor between CAS and Stern serves these needs by requiring courses in mathematics and numerical methods offered within the Mathematics Department at CAS and courses in probability theory and statistical analysis offered within the Statistics & Actuarial Science Department at the Stern School of Business.

## Minor Declaration

Students can apply for the minor via NYU Albert (<http://albert.nyu.edu/>) in the My Academics section of the Student Center.

## Program Requirements

Course	Title	Credits
<b>Minor Requirements</b>		
MATH-UA 140 or MATH-UA 148	Linear Algebra <sup>1</sup> Honors Linear Algebra	4
STAT-UB 14	Intro Theory of Probability	3
MATH-UA 252 or MATH-UA 2010	Numerical Analysis	4
<b>Advanced Courses</b>		
Select one of the following:		3-4
STAT-UB 15	Stat Infer/Regress.Analy	
STAT-UB 21	Introduction to Stochastic Processes	
MATH-UA 262	Ordinary Diff Equations	
MATH-UA 263	Partial Diff Equations	
MATH-UA 325	Analysis	
<b>Total Credits</b>		<b>15</b>

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Students who have the equivalent of MATH-UA 140 Linear Algebra or MATH-UA 148 Honors Linear Algebra should substitute a more advanced course from the list of advanced courses above.

**Note:** All students must take at least one Stern course in order to meet the minor requirements. Students who have completed MATH-UA 233 Theory of Probability or equivalent should not take STAT-UB 14 Intro Theory of Probability, and should substitute one of the advanced courses in its place.

## Policies NYU Policies

University-wide policies can be found on the New York University Policy pages (<https://bulletins.nyu.edu/nyu/policies/>).

## Stern Policies

Additional academic policies can be found on the Stern Undergraduate academic policies page (<https://bulletins.nyu.edu/undergraduate/business/academic-policies/>).