

# ADVANCED MATHEMATICAL METHODS (FOR STUDENTS IN STERN) (MINOR)

Department Website (<http://math.nyu.edu>)

## Program Description

The purpose of the Advanced Mathematical Methods Minor is to provide 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. Please note that this minor is open only to Stern undergraduate students.

## Minor Declaration

To request declaration of a minor, CAS students should visit the host department. To request declaration of a cross-school minor, CAS students should complete the online Minor Application available in their Albert Student Center. Students may also use the Minor Application (<http://www.nyu.edu/students/student-information-and-resources/registration-records-and-graduation/registration.html>) in Albert to request cancellation of a CAS or cross-school minor.

## Program Requirements

The advanced mathematical methods minor consists of four courses (typically 15 credits) completed with a grade of C or higher. It provides students with mathematical tools to handle complex business problems.

All students must take at least one Stern course in order to meet the minor requirements.

Course	Title	Credits
<b>Minor Requirements</b>		
MATH-UA 140 or MATH-UA 148	Linear Algebra <sup>1</sup> Honors Linear Algebra	4
MATH-UA 252 or MATH-UA 258 or MATH-GA 2010	Numerical Analysis Honors Numerical Analysis Numerical Methods I	4
STAT-UB 14	Intro Theory of Probability <sup>2</sup>	3
Select one of the following:		4
MATH-UA 262 or MATH-UA 268	Ordinary Diff Equations Honors Ordinary Differential Equations	
MATH-UA 263	Partial Diff Equations	
MATH-UA 325 or MATH-UA 328	Analysis Honors Analysis I	
STAT-UB 15	Stat Infer/Regress.Analy	

STAT-UB 21	Introduction to Stochastic Processes	Total Credits
		15

1

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

2

If a student has completed a CAS course in probability, STAT-UB 14 Intro Theory of Probability should not be taken. Either STAT-UB 15 Stat Infer/Regress.Analy or STAT-UB 21 Introduction to Stochastic Processes should be substituted.

## Policies NYU Policies

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

## College of Arts and Science Policies

A full list of relevant academic policies can be found on the CAS Academic Policies page (<https://bulletins.nyu.edu/undergraduate/arts-science/academic-policies/>).