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 (https://www.nyu.edu/students/student-information-and-resources/registration-records-and-graduation/forms-policies-procedures.html) in Albert to request cancellation of a CAS or cross-school minor.

Program Requirements

The Advanced Mathematical Methods minor consists of four courses (15 credits) completed with a grade of C or higher (courses graded Pass/Fail do not count), as outlined below. 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
Minor Requirements		
MATH-UA 140	Linear Algebra [1]	4
or MATH-UA 148	Honors Linear Algebra	
MATH-UA 352	Numerical Analysis	4
or MATH-UA 358	Honors Numerical Analysis	
or MATH-GA 2010	Numerical Methods I	
STAT-UB 14	Intro Theory of Probability [2]	3
Select one of the following:		4
MATH-UA 262	Ordinary Diff Equations	
or MATH-UA 268	Honors Ordinary Differential Equations	
MATH-UA 263	Partial Diff Equations	
MATH-UA 325	Analysis	
or MATH-UA 328	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/).