Financial Mathematics Certificate

The Financial Mathematics certificate is designed to give students knowledge of mathematical finance in preparation for a career in the financial services industry. Students are trained in mathematical techniques used to analyze problems arising from finance. Examples include application of stochastic processes and partial differential equations to study stock markets and to price financial derivatives.

Program Requirements

(12 credit hours)

- All courses must be taken for a grade.
- A grade point average of 3.0 or above is required for the completion of the certificate.
- All four courses must be taken at Miami University.
- Credit toward the certificate will be given only for one of FIN 402, FIN 403, and FIN 404.

Prerequisites:

- For mathematics courses: MTH 222, 245 (or 347), 251, 252, and 331 (MTH 252 and 331 are only required for MTH 432).
- For finance courses: FIN 301, FIN 303, ISA 225, STA 261, STA 301 or STA 368.

Code	Title	Credit Hours
Required Course		
MTH 447	Topics in Mathematical Finance	3
Select three of the following:		**9**
FIN 401	Principles of Investments and Security Markets	
FIN 402	Fixed-Income Portfolio Management	
or FIN 403	Portfolio Management	
or FIN 404	Forward, Futures and Derivatives	
MTH 432	Optimization	
MTH 433	Applied Linear Algebra	
MTH 455	Introduction to Partial Differential Equations	
Total Credit Hours		**12**