

# MS in Financial Engineering

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

The Baruch College Financial Engineering MS Program is a professional Masters Program which graduates competitive, high-quality individuals who successfully pursue careers in quantitative finance.

The Master of Science in Financial Engineering (MFE) requires the completion of 36 credits, including five 3-credit required courses, and a 1.5 credit internship course. The remaining 19.5 credits are to be completed from elective courses. Students entering the program with exceptional mathematical or financial skills may be permitted to replace one or more of the required courses with additional electives.

The curriculum of the MFE Program is designed to provide students with the background required for modeling and solving problems that arise in the financial services industry across various markets and asset classes. All courses are offered in the evening to accommodate students with work commitments.

<b>Courses in Specialization</b> (36 credits)		
Required Courses (16.5 credits)		
<a href="#">MTH 9814</a>	A Quantitative Introduction to Pricing Financial Instruments <i>Effective spring 2018 course title changes to:</i> Financial Markets and Securities	3 credits
<a href="#">MTH 9815</a>	Object Oriented Programming for Financial Applications	3 credits
<a href="#">MTH 9821</a>	Numerical Methods for Finance I	3 credits
<a href="#">MTH 9831</a>	Probability and Stochastic Processes for Finance I	3 credits
<a href="#">MTH 9902</a>	Internship Course	1.5 credits
<a href="#">MTH 9903</a>	Capstone Project and Presentation	3 credits
<b>Elective Courses</b> (19.5 credits)		
Choose courses from the following courses:		
<a href="#">MTH 9760</a>	Big Data Technologies	3 credits
<a href="#">MTH 9796</a>	Statistical Natural Language Processing	1.5 credits
<a href="#">MTH 9797</a>	Advanced Data Analysis	1.5 credits
<a href="#">MTH 9816</a>	Fundamentals of Trading	1.5 credits
<a href="#">MTH 9841</a>	Statistics for Finance	3 credits
<a href="#">MTH 9842</a>	Linear and Quadratic Optimization Techniques	1.5 credits
<a href="#">MTH 9845</a>	Market and Credit Risk Management	3 credits
<a href="#">MTH 9848</a>	Elements of Structured Finance	3 credits
<a href="#">MTH 9852</a>	Numerical Methods for Finance II	3 credits

<a href="#">MTH 9855</a>	Asset Allocation and Portfolio Management	3 credits
<a href="#">MTH 9862</a>	Probability and Stochastic Processes for Finance II	3 credits
<a href="#">MTH 9863</a>	Volatility Filtering and Estimation	1.5 credits
<a href="#">MTH 9864</a>	Model Review for Quantitative Models in Finance	1.5 credits
<a href="#">MTH 9865</a>	Commodities and Futures Trading	1.5 credits
<a href="#">MTH 9866</a>	Modeling and Market Making in Foreign Exchange	1.5 credits
<a href="#">MTH 9867</a>	Time Series Analysis and Algorithmic Trading	3 credits
<a href="#">MTH 9868</a>	Advanced Risk and Portfolio Management	3 credits
<a href="#">MTH 9871</a>	Advanced Computational Methods in Finance	3 credits
<a href="#">MTH 9873</a>	Interest Rate Models and Interest Rate Derivatives	3 credits
<a href="#">MTH 9875</a>	The Volatility Surface	3 credits
<a href="#">MTH 9876</a>	Credit Risk Models	3 credits
<a href="#">MTH 9878</a>	Interest Rate Models	3 credits
<a href="#">MTH 9879</a>	Market Microstructure Models	3 credits
<a href="#">MTH 9881</a>	Current Topics in Mathematical Finance	3 credits
<a href="#">MTH 9882</a>	Fixed Income Risk Management	1.5 credits
<a href="#">MTH 9883</a>	Structured Security Valuation in the Primary Market	1.5 credits
<a href="#">MTH 9886</a>	Emerging Markets and Inflation Modeling	1.5 credits
<a href="#">MTH 9887</a>	Blockchain Technologies in Finance	1.5 credits
<a href="#">MTH 9891</a>	Introduction to Applied Financial Econometrics	1.5 credits
<a href="#">MTH 9893</a>	Time Series Analysis	1.5 credits
<a href="#">MTH 9894</a>	Machine Learning	1.5 credits
<a href="#">MTH 9896</a>	Behavioral Finance	1.5 credits
<a href="#">MTH 9897</a>	Systematic Trading	1.5 credits
<a href="#">MTH 9898</a>	Data Science in Finance I: Big Data in Finance	1.5 credits
<a href="#">MTH 9899</a>	Data Science in Finance II: Machine Learning	1.5 credits
<a href="#">ECO 82100</a>	(Term I) Econometrics I	3 credits
<a href="#">ECO 82100</a>	(Term II) Financial Econometrics	3 credits
<a href="#">FIN 9770</a>	Financial Markets and Institutions	3 credits
<a href="#">FIN 9782</a>	Futures and Forward Markets	3 credits

<a href="#">FIN 9783</a>	Investment Analysis	3 credits
<a href="#">FIN 9786</a>	International Financial Markets	3 credits
<a href="#">FIN 9790</a>	Seminar in Finance	3 credits
<a href="#">FIN 9793</a>	Advanced Investment Analysis	3 credits
<a href="#">FIN 9797</a>	Options Markets	3 credits
<a href="#">STA 9700</a>	Modern Regression Analysis	3 credits
<a href="#">STA 9701</a>	Time Series: Forecasting and Statistical Modeling	3 credits