

# Quantitative Finance, MSF

The quantitative finance MSF program is designed to prepare students for careers requiring analytical rigor in the financial industry. The curriculum for this track integrates economics, mathematics, statistics, and computer science with the theories and applications of finance. Students will study advanced modeling techniques and data analytics applied to financial markets. The rigorous program combines in-depth study of quantitative techniques with practical business problem solving. Elective courses will draw content from computer science, econometrics, and mathematics. Courses include quantitative portfolio management, computational methods in finance, foundations of artificial intelligence, database management systems, and applied econometrics.

## Program Requirements

Complete all courses and requirements listed below unless otherwise indicated.

### Core Requirements

Code	Title	Hours
FINA 6203	Investment Analysis	3
FINA 6331	Corporate Finance	3
FINA 6332	Fundamentals of Financial Math and Financial Markets	3
FINA 6333	Data Analytics in Finance	3
FINA 6334	Empirical Methods in Finance	3
FINA 6335	Derivatives and Risk Analysis	3

### Electives

Code	Title	Hours
Complete four of the following:		12
CS 5100	Foundations of Artificial Intelligence	
CS 5200	Database Management Systems	
ECON 5140	Applied Econometrics	
FINA 6207	Financial Modeling	
FINA 6204	International Finance Management	
FINA 6214	Mergers, Acquisitions, and Private Equity	
FINA 6216	Valuation and Value Creation	
FINA 6217	Real Estate Finance and Investment	
FINA 6219	Portfolio Management	
FINA 6260	Entrepreneurial Finance and Venture Capital	
FINA 6336	Derivatives and Fixed-Income Securities	
FINA 6337	Computational Methods in Finance	
FINA 6338	Alternative Investments	

### Program Credit/GPA Requirements

30 total semester hours required

Minimum 3.000 GPA required