

MS in Finance Online (MSFO)

MSFO 6700 Career Strategy 1 Credit

This course provides a highly structured experience where students accelerate their readiness for career decision-making by focusing on establishing the processes, resources, and personal awareness necessary to effectively engage in the career management process.

Level: Graduate

Grading: Pass/Fail Default

Course registration restrictions:

Enrollment limited to students in the MS-FINC-O program.

Enrollment is limited to Graduate level students.

MSFO 6810 Financial Markets Residency 2 Credits

Level: Graduate

Grading: Pass/Fail Default

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6815 Global Financial Markets 3 Credits

This course begins with the building block concept of the time value of money, and quickly moves onto applying this concept to government bond valuation, Macauley and Modified duration, the shape of the yield curve, the relation between spot and forward rates of interest, and the relation between nominal and real returns. We then apply these skills to corporate bond and stock valuation with a deep dive on bond covenant provisions, the dividend discount model and the use of comparables in valuation. We next make a connection between these valuation approaches and the Markowitz efficient frontier method for constructing an optimal portfolio. The relation between the Markowitz method and the Capital Asset Pricing Model (CAPM) is our next topic followed by how to apply to CAPM for constructing an optimal portfolio and estimating a security's expected return. We conclude with a detailed explanation of how markets work—and consequently how investors should invest—according to the efficient market hypotheses and the competing hypothesis of behavioral finance.

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment limited to students in the MS-GFNC-O program.

MSFO 6816 Global Fincl Mrkts Residency 2 Credits

This course builds on the concepts and skills learned in the Global Financial Markets course through a deep dive into the investment industry, especially mutual funds and exchange-traded funds (ETFs). The course consists of lectures from industry experts and full-time faculty with extensive research records and industry experience. The cornerstone of the course is a case competition where the students will be assigned to teams. Besides spending much of the week gathering and analyzing data for their presentation, the students will receive coaching on their presentation skills. The course faculty will also advise the student teams in one-on-one sessions.

Level: Graduate

Prerequisites: MSFO 6815

Grading: Pass/Fail Default

Course registration restrictions:

Enrollment limited to students in the MS-GFNC-O program.

MSFO 6817 Global Financial Accounting 3 Credits

Financial accounting refers to translating a firm's economic activity into highly structured information about financial performance and condition. This information is highly structured because all firms apply the same GAAP standards to produce the information, yielding financial data that are comparable across firms and across time. This class focuses on how we can use financial information to gain insights into firms' financial performance and condition. This course seeks to teach you how to understand and communicate firm performance to outside stakeholders (e.g., current and prospective capital providers, business partners, employees, etc.) for your role as a future business leader.

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment limited to students in the MS-GFNC-O program.

MSFO 6820 Financial Markets 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6821 Financial Accounting 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6822 Corporate Finance 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6823 Corporate Valuation Modeling 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6824 Financial Econometrics 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6825 Principled Financial Leadership 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6828 Intro to Fincl Apps in Python 0 or 1.5 Credits

Finance professionals can write application software programs to perform analyses, aid decision-making, and drive competitive advantage. In this introductory course, students will learn how to develop practical financial applications in the Python programming language. After gaining familiarity with basic programming concepts, students will practice processing, analyzing and visualizing data, including real-time financial and market data from the Internet. Throughout the course, students will be immersed in hands-on Python programming exercises and should emerge with marketable technology skills.

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment limited to students in the MS-FINC-O program.

Enrollment is limited to Graduate level students.

MSFO 6829 Applied Data Science in Python 0-1.5 Credits

Data science is an emerging field which is being applied across a number of business contexts, including finance. In this course, students will build the skills necessary to effectively navigate and analyze financial data sets in Python, empowering them to make data-driven decisions. After gaining confidence in wrangling real-world financial datasets at scale, students will apply statistical techniques to financial data, to perform analyses such as calculating beta to the market. Through group project deliverables, students will perform their own real world financial analysis of interest, and practice communicating and presenting their analytical findings. Throughout the course, students will be immersed in hands-on Python programming exercises and should emerge with marketable technology skills.

Level: Graduate

Prerequisites: MSFO 6828

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment limited to students in the MS-FINC-O program.

Enrollment is limited to Graduate level students.

MSFO 6830 Real Estate Private Equity 0-1.5 Credits

Level: Graduate

Prerequisites: (FINC 550 or FINC 6500) or (MSFO 820 or MSFO 6820)

Grading: Main Campus (UGrad, Grad)

Mutual exclusion: FINC 558, FINC 6560

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6831 Investments and Fixed Income 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6832 Derivatives Risk Management 0 or 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6833 Adv Fincl Modeling in Python 0 or 1.5 Credits

Finance professionals can elevate their modeling skills to drive strategic decision-making in dynamic markets. This course provides an overview of fundamental concepts and techniques for building predictive models in Python. After gaining an understanding of machine learning problem formulation and evaluation metrics, students will train predictive models, focusing on regression for time-series forecasting. Throughout the course, students will be immersed in hands-on Python programming exercises and should emerge with marketable technology skills. Applied Data Science for Finance in Python—or a course the professor judges to be comparable—is a prerequisite for this course.

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6834 Big Data Mining Analytics 0 or 1.5 Credits

Big data is a relative term—data today are “big” compared with the past and with the methods and devices we have to handle them. The challenge is often summarized by the Four V’s: volume (how much), velocity (how fast data arrives and changes), variety (types and formats such as currency, dates, numbers, text), and veracity (quality and trustworthiness when data is generated organically at scale).

Most organizations now generate and retain data from routine processes that can, in principle, be analyzed. To visualize scale: if a traditional statistical study (e.g., 15 variables and 5,000 records) were the size of a period at the end of a sentence, a modern retail database would be the size of a football field—and that still leaves out unstructured sources like social media text.

When tackled with the right tools, the rewards are real. For example: a telecom reduced churn by targeting customers most likely to leave; an insurer significantly improved injury#liability predictions by enriching vehicle#level information. In finance and business contexts, data mining and big data go hand in hand—from credit scoring and fraud detection to demand forecasting, CLV, and portfolio signals.

, This course equips you to turn large, complex data into clear, defensible business decisions. You’ll practice the full analytics lifecycle—problem framing, data preparation, modeling, validation, and communication—using real finance and business cases.

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6835 Financial Statement Analysis 0 or 1.5 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.

MSFO 6836 Small Data Modeling Analytics 0 or 1.5 Credits

This course explores how small data—structured, limited, and often context-rich datasets—can drive powerful insights in finance and business decision-making. While big data gets attention, small data remains essential when samples are modest, information is noisy, or interpretability is critical. We focus on techniques that work with small and medium-scale datasets and on turning concise evidence into clear managerial action. The course also addresses real-world constraints highlighted in SME research—budget limitations, missing data, organizational barriers, and short data horizons—and examines the strategic use of alternative and synthetic data sources (e.g., geolocation) that are increasingly valued in finance and business for forecasting and risk modelling, along with their adoption challenges. By the end, you’ll know when and how to leverage small data effectively and how to combine domain expertise with analytics to create value in real business settings. In practice, “small data” has two complementary meanings: 1. Consulting-scale datasets: It is common to face samples as small as $n \approx 30$ when tackling practical business problems. These datasets may be non-normal and may include quantitative or qualitative variables—e.g., categories (political party), ordinal rankings (customer preferences), or continuous measures (wait time on a credit-card hotline). 2. Business-intelligence small data: The “opposite” of big data, highlighting the digital tidbits people generate in daily life—credit-card payments, location pings, newsletter sign-ups, social likes, tweets, web searches, and signals from wearables/IoT. These individual digital traces are often small-sample, messy, and non-normal, yet they drive personalization and timely action. “Small data connects people with timely, meaningful insights (derived from big data and/or ‘local’ sources), organized and packaged to be accessible, understandable, and actionable for everyday tasks.” You will learn to turn such modest datasets into clear, defensible recommendations. We emphasize transparent models, careful validation under small-sample constraints, and effective communication to finance and business leaders.

Level: Graduate

Prerequisites: (OPIM 550 or OPAN 6500) or (MSFO 820 or MSFO 6820)

Grading: Main Campus (UGrad, Grad)

Mutual exclusion: OPAN 6557, OPIM 563

Course registration restrictions:

Enrollment limited to students in the MS-FINC-O program.

Enrollment is limited to Graduate level students.

MSFO 7500 Global Consulting Project 3 Credits

Level: Graduate

Grading: Main Campus (UGrad, Grad)

Course registration restrictions:

Enrollment is limited to Graduate level students.