Finance

Program Director: Anthony Pennington-Cross
MS in Finance website (https://www.marquette.edu/business/finance/)

Degree Offered
Master of Science in Finance, Plan B Non-Thesis option only

Program Description
The Master of Science in Finance (MSF) is a 30-credit hour program offered fully online. The program offers unique finance electives such as commercial banking management and real estate finance and investments which could help broaden the student base and provide more career opportunities for MSF graduates. Quantitative classes (e.g., applied econometrics) and training on the use of widely accepted statistical software across industries (e.g., SAS, Stata and R), are offered to help students develop data management and analysis skills. Students are required to develop and complete a professional project with the aim of bridging the classroom knowledge and real world and exploring potential research ideas. The public oral defense of professional project helps students sharpen critical-thinking skills.

The following are the learning outcomes for the Master of Science in Finance:

1. Demonstrate strategies and behaviors that reflect knowledge of the industry, decision making, and effective and innovative methods to deliver financial solutions.
2. Apply ethical and data driven approaches to quantitative analysis of financial situations.
3. Critically analyze global and domestic financial and economic issues to provide financial value to the organization.
4. Conduct an independent empirical research project and effectively communicate the results of the empirical research both in written form and verbally.

The program can be completed in two years by part-time students and in three terms by full-time students. This program has an Accelerated Degree Program (ADP) option allowing Marquette undergraduate students to complete up to 9 credits of the program and apply the credits toward both degrees, if the student earns a grades of B or better and is accepted into the MSF program.

Admission Requirements
An applicant must have either (1) completed or be in the process of completing a four-year baccalaureate degree in business administration from an accredited college or university, or (2) completed a four-year baccalaureate degree in a non-business administration from an accredited college or university AND have accumulated at least 2 years of work experience in a finance-related position, or (3) completed a four-year baccalaureate degree in a non-business administration from an accredited college or university and have completed microeconomics, macroeconomics, at least 2 accounting courses, and at least one finance course having earned a B or above in each course.

In addition, the applicant must submit the following items to the Marquette University Graduate School of Management, Zilber Hall, Suite 205, P.O. Box 1881, Milwaukee, WI 53201-1881:

• A completed online application and application fee.
• Official transcripts from previously and currently attended colleges and universities, other than Marquette. The minimum GPA is 3.000 (B).
• Official test scores of the Graduate Management Admission Test (GMAT) or Graduate Record Examination (GRE). The GMAT examination is waived for M.S.F. applicants that have earned an overall quality point average of 3.250 or higher from an AACSB accredited school.
• Resume or job profile.
• Two letters of recommendation if applying for financial aid.
• International applicants whose native language is not English and who have not received a degree from an accredited academic institution in the United States must also submit official TOEFL (Test of English as a Foreign Language) or IELTS scores.

Master of Science in Finance

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSF 6500</td>
<td>Advanced Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>or FINA 5001</td>
<td>Advanced Financial Management</td>
<td></td>
</tr>
<tr>
<td>MSF 6511</td>
<td>Investments</td>
<td>3</td>
</tr>
</tbody>
</table>
## Courses

**MSF 6500. Advanced Financial Management. 3 cr. hrs.**

Covers the theory and practical applications of corporate investing and financing. Students perform quantitative and economic analysis that accompanies financial decision making. Students also review the current academic literature related to these management decisions and propose a research question that makes a significant contribution to the field. Prereq: Admitted to the graduate FINA program; or cons. of M.S.F. prog. dir.
MSF 6511. Investments. 3 cr. hrs.
Theory and applications of financial asset pricing. Specific topics include equity trading strategies, investment decision process and equity valuation. The objective is to provide a framework for security analysis and critical tools to analyze the value of stocks and companies. Prereq: Admitted to the graduate FINA program; or cons. of M.S.F. prog. dir.

MSF 6520. Financial Econometrics. 3 cr. hrs.
Covers a variety of economic, financial and investment models to make inferences and forecasts. Discusses how estimation techniques span from simple linear regression models to panel data estimation. Explores time series modeling techniques, ranging from ARIMA models to volatility and correlation modeling. Covers how to deal with qualitative variables and limited dependent variables, using both parametric and non-parametric techniques. Uses the statistical tools of Excel and R, though other tools may be used depending on the application. Offers practical use for all types of financial research where data must be examined, and relationships must be explained or predicted. Prereq: Admitted to the graduate FINA program; or cons. of M.S.F. prog. dir.

MSF 6530. Bank Management. 3 cr. hrs.
Overview and management of commercial banks in the U.S. economy. Includes an evaluation and assessment of current issues facing commercial banks, for implications for the future of the economy and the financial sector. Practice through problems and an online bank simulation to solidify key concepts and to organize and present an Earnings Release of actual results obtained. Students develop a sound understanding of the need for and application of commercial bank activities in the business sector. Prereq: Admitted to the graduate FINA program and MSF 6500; or cons. of M.S.F. prog. dir.

MSF 6540. International Financial Management. 3 cr. hrs.
In-depth examination of financial issues faced by multinational firms. Analysis of a variety of multinational business topics, including hedging currency and interest rate risk, multinational capital budgeting, direct foreign investment and managing a global business firm. Integrates empirical financial literature to practical applications. Prereq: Admitted to the graduate FINA program and MSF 6500; or cons. of M.S.F. prog. dir.

MSF 6550. Financial Derivatives. 3 cr. hrs.
Focuses on the mechanics, pricing, use of financial derivatives and use of programming language to price financial derivatives. Financial derivatives covered include futures, options, swaps, collateralized securities, Treasury Bond and Eurodollar. Discusses important pricing models, including Black-Scholes and the Binomial Option Pricing Model. Emphasizes risk management using these instruments. Uses programming language to understand and replicate the pricing of financial derivatives. Prereq: Admitted to the graduate FINA program and MSF 6511; or cons. of M.S.F. prog. dir.

MSF 6560. Real Estate Finance and Investments. 3 cr. hrs.
Provides an in-depth knowledge of real estate finance, mortgage valuation, real estate investment, real estate investment trusts (REITs) and the operation of the real estate capital markets. The objective is to understand the many sources and uses of capital in the commercial real estate industry. Begins with the mechanics of mortgage finance, followed by a detailed presentation of mortgage underwriting, lender ratios and discounted cash flow analysis, and an application to REIT valuation. Prereq: Admitted to the graduate FINA program and MSF 6500; or cons. of M.S.F. prog. dir.

MSF 6563. Fixed Income Securities. 3 cr. hrs.
Focuses on the concepts and tools that are useful to managers and investors who want to use fixed income securities, such as bonds, whether for investing, hedging, market-making or speculating. While the cash flows of fixed income securities are contractually specified, which makes the payoffs relatively easy to quantify, the subtleties of interest rate movements and credit risk make the valuation of bonds particularly challenging. Emphasis is placed on linking the theoretical and practical aspects of fixed income investing. Prereq: Admitted to the graduate FINA program and MSF 6511; or cons. of M.S.F. prog. dir.

MSF 6570. Sustainable Finance. 3 cr. hrs.
Ethics, finance and sustainability are studied as integrated subjects, beginning with an introduction of ethical principles of investment management, accounting and corporate governance, and moving through concepts of the circular economy, financial analysis, financing and valuation. Covers diverse aspects of sustainable investments and offers tools for effective financial valuation, opportunity and risk assessment. Prereq: Admitted to the graduate FINA program and MSF 6511; or cons. of M.S.F. prog. dir.

MSF 6575. FinTech Foundations and Applications. 3 cr. hrs.
Covers the theory and practical applications of financial technology topics as well as FinTech applications within banking, investments, insurance, and other financial sectors. Introduces the technical underpinnings, including basic programming, data analytics, artificial intelligence, cybersecurity and blockchain. Emphasizes ethics and explores digital privacy and security. Objective is to understand the impact of the convergence of technology, finance, regulation and ethics. Prereq: Admitted to the graduate FINA program and MSF 6500; or cons. of M.S.F. prog. dir.

MSF 6581. Investment Banking. 3 cr. hrs.
Emphasizes essential skills and decision-making principles employed globally within investment banking, private equity and corporate development/M&A contexts. Reviews principles and quantitative techniques employed in mergers, acquisition and divestitures, and debt and equity capital markets activities. Also covers the historical evolution of the investment banking industry and considers possible future implications for the industry. Prereq: Admitted to the graduate FINA program and MSF 6500; or cons. of M.S.F. prog. dir.

MSF 6931. Topics in Finance. 1-3 cr. hrs.
Topics vary. Prereq: Admitted to the graduate FINA program; or cons. of M.S.F. prog. dir.

MSF 6995. Independent Study in Finance. 1-3 cr. hrs.
Faculty-supervised, independent study/research of a specific area or topic in finance. Prereq: Admitted to the graduate FINA program; and cons. of M.S.F. prog. dir.
MSF 6998. Professional Project. 1-3 cr. hrs.
Provides direct supervision of the research that constitutes the core of the professional project. Students submit a proposal and then drafts of various sections of their final project as they are completed. The sections of the proposal (1-credit component) are: literature review, development of the theoretical model, and specification of the empirical model of theory. The sections of the final project (2-credit component) are: literature review, development of the theoretical model, specification of the empirical model of theory, creation of the necessary data set, and execution of the empirical model. The final output is a complete draft of the project that meets the project director’s approval and an oral presentation of the project. S/U grade assessment. Prereq: Admitted to the graduate FINA program; or cons. of M.S.F. prog. dir.