MASTER OF SCIENCE IN FINANCE (MSF)

600 Level Courses

**MSF 603: Managerial Economics and Decisions of the Firm.** 3 credits.
Provides fundamental understanding of applying microeconomics concepts to managerial decision making. Explores principles of microeconomic theory, including market supply and demand, production and cost functions, industry structure, and product and resource pricing. Due to the presentation and application of course material, this course can only be taken by students enrolled in the Master of Science in Finance program. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit. Equivalent to MBA 603.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**MSF 632: Statistical and Quantitative Methods for Finance.** 3 credits.
The purpose of this course is to acquaint students with basic econometric techniques which are applicable to financial data analysis. The following topics will be covered: (1) some basic probability concepts and return distributions; (2) A review of elementary statistical inference (3) Simple and multiple regression models: specification and estimations; (4) Inferences in regression models (5) Diagnostic checking on the regression residuals; (6) Regression models with time series data; (7) Estimation of index models and capital asset pricing model and (8) Measuring and modeling volatility, correlations and liquidity. Throughout the course, emphasis will be placed on the understanding the fundamental concepts of financial econometric techniques. R computer language will be used to analyze real world problems. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

Introduces theory and practice of finance within corporations. Topics include intertemporal choice, valuation, capital budgeting and structure, working capital management, and risk and return analysis. Due to the presentation and application of course material, this course can only be taken by students enrolled in the Master of Science in Finance Program. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

700 Level Courses

**MSF 705: Venture Capital, Private Finance, and Alternative Investments.** 3 credits.
This course will cover major corporate financial policy decisions. The topics include initial and seasoned stock issuances and buybacks, initial and seasoned corporate bond issuances and buybacks, convertible debts, intra-firm exchange offers, recapitalizations, tender offers, leveraged buyouts, the market for corporate control, proxy fights, divestitures, and spinoffs. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit.

**Registration Restrictions:**
Enrollment limited to students with a class of Advanced to Candidacy, Graduate, Junior Plus or Senior Plus.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)
Topics to be covered include exchange rate determination and parity

The primary focus of this course is international financial management.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**MSF 706: Investment Analysis.** 3 credits.
This course is designed to expose students to modern portfolio management and asset valuation. The focus is on institutional investing although the material is also relevant for individuals. The goal is to offer an unbiased presentation of different investment styles, present current empirical evidence in investments, and for students to use modern investment strategies and risk-management tools to manage equity and fixed income portfolios. In particular, students will learn the concepts of trading, risk and return, asset allocation, diversification, pricing models, portfolio performance evaluation, and market efficiency. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit.

**Registration Restrictions:**
Required Prerequisites: (MSF 632\(^B\) and 643\(^B\)).
\(^B\) Requires minimum grade of B.

Enrollment limited to students with a class of Graduate.
Enrollment limited to students with a major in Finance.
Enrollment limited to students in a Master of Science degree.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**MSF 707: Futures, Options and Other Derivatives.** 3 credits.
This course will focus on trading strategies and managing risks in financial products using derivative securities. It discusses the rationale behind the major pricing models and their application to derivative securities, arbitrage and pricing, hedging, common trading strategies with options, and the fundamental concepts of risk measures and risk management. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit.

**Registration Restrictions:**
Required Prerequisite: MSF 706\(^B\).
\(^B\) Requires minimum grade of B.

Enrollment limited to students with a class of Graduate.
Enrollment limited to students with a major in Finance.
Enrollment limited to students in a Master of Science degree.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**MSF 712: Fixed Income Securities.** 3 credits.
The course covers the valuation of a wide variety of fixed income securities and derivatives including pure discount bonds, coupon bonds, forwards and options on fixed income securities, interest-rate swaps, floating-rate notes, and mortgages. The course focuses on analytic tools used in bond portfolio management and interest rate risk management. These tools include yield curve construction, duration and convexity, and formal term structure models. Among relevant topics covered in the course are the relation between macroeconomic variables and interest rates, taxes, and multi-factor models of the term structure. Default risk and corporate bonds will also be discussed in depth. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit.

**Registration Restrictions:**
Required Prerequisites: (MSF 632\(^B\) and 643\(^B\)).
\(^B\) Requires minimum grade of B.

Enrollment limited to students with a class of Graduate.
Enrollment limited to students with a major in Finance.
Enrollment limited to students in a Master of Science degree.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)

**MSF 711: International Finance and Financial Markets.** 3 credits.
The primary focus of this course is international financial management. Topics to be covered include exchange rate determination and parity

conditions; currency futures, forwards, swaps and options; international portfolio theory; methods for managing exchange rate exposure; and capital budgeting for the multinational firm. Offered by Costello College of Business (http://catalog.gmu.edu/colleges-schools/business/). May not be repeated for credit.

**Registration Restrictions:**
Required Prerequisite: MSF 707\(^B\).
\(^B\) Requires minimum grade of B.
Enrollment limited to students with a class of Graduate.

Enrollment is limited to students with a major in Finance.

Enrollment limited to students in a Master of Science degree.

**Schedule Type:** Lecture

**Grading:**
This course is graded on the Graduate Regular scale. (http://catalog.gmu.edu/policies/academic/grading/)