

FINANCE

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Master of Science in Applied Quantitative Finance

In the Master's in Applied Quantitative Finance program, you'll study leading-edge theories, models and applications across the major areas of finance. Take advantage of our quarter system to tailor your coursework as well as your internships. Develop your finance leadership and communication skills by participating in a variety of case studies and competitions, as well as hands-on money management. When you graduate, you'll be both a creator of finance knowledge and a disseminator who can grow to lead a finance enterprise.

The Master of Science in Applied Quantitative Finance is a STEM (Science, Technology, Engineering and Math) degree according to the Department of Homeland Security (DHS). The DHS expanded list includes designated degrees that qualify for up to 17 months Optional Practical Training (OPT) Extension for F-1 Nonimmigrant Students.

Daniels has been continuously accredited by the Association to Advance Collegiate Schools of Business International (AACSB) since 1923.

Master of Science in Applied Quantitative Finance

Degree and GPA Requirements

- Bachelor's degree: All graduate applicants must hold an earned baccalaureate from a regionally accredited college or university or the recognized equivalent from an international institution.
- Grade point average: The minimum undergraduate GPA for admission consideration for graduate study at the University of Denver is a cumulative 2.5 on a 4.0 scale or a 2.5 on a 4.0 scale for the last 60 semester credits or 90 quarter credits (approximately two years of work) for the baccalaureate degree. An earned master's degree or higher from a regionally accredited institution supersedes the minimum standards for the baccalaureate. For applicants with graduate coursework but who have not earned a master's degree or higher, the GPA from the graduate work may be used to meet the requirement. The minimum GPA is a cumulative 3.0 on a 4.0 scale for all graduate coursework undertaken.
- Program GPA requirement: The minimum undergraduate GPA for admission consideration for this program is a cumulative 2.5 on a 4.0 scale.

Standardized Test Scores

- GRE or GMAT scores are optional for admission to this program. Applications submitted without scores will receive full consideration. Every application undergoes a comprehensive evaluation, including a careful review of all application materials.

If you choose to submit test scores, you may upload your Test Taker Score Report PDF, which is considered unofficial. Official scores must be received directly from the appropriate testing agency upon admission to the University of Denver. The ETS institution code to submit GRE scores to the University of Denver is 4842. The code to submit GMAT scores for this program is MZR-GT-04.

Other Requirements

- Applicants may be contacted by a Daniels representative to schedule the admissions interview, which will be conducted on campus or via webcam.

English Language Proficiency Test Score Requirements

The minimum TOEFL/IELTS/C1 Advanced/Duolingo English Test score requirements for this degree program are:

- Minimum TOEFL Score (Internet-based test): 80
- Minimum IELTS Score: 6.5
- Minimum C1 Advanced Score: 176
- Minimum Duolingo English Test Score: 115

English Conditional Admission: No, this program does not offer English Conditional Admission.

Certificate or Specialized Certificate in Corporate Finance

Degree and GPA Requirements

- Bachelor's degree: All graduate applicants must hold an earned baccalaureate from a regionally accredited college or university or the recognized equivalent from an international institution.
- Grade point average: The minimum undergraduate GPA for admission consideration for graduate study at the University of Denver is a cumulative 2.5 on a 4.0 scale or a 2.5 on a 4.0 scale for the last 60 semester credits or 90 quarter credits (approximately two years of work) for the baccalaureate degree. An earned master's degree or higher from a regionally accredited institution supersedes the minimum standards for the

baccalaureate. For applicants with graduate coursework but who have not earned a master's degree or higher, the GPA from the graduate work may be used to meet the requirement. The minimum GPA is a cumulative 3.0 on a 4.0 scale for all graduate coursework undertaken.

- Program GPA requirement: The minimum undergraduate GPA for admission consideration for this program is a cumulative 2.5 on a 4.0 scale.

English Language Proficiency Test Score Requirements

The minimum TOEFL/IELTS/C1 Advanced/Duolingo English test score requirements for this degree program are:

- Minimum TOEFL Score (Internet-based test): 80
- Minimum IELTS Score: 6.5
- Minimum C1 Advanced Score: 176
- Minimum Duolingo English Test Score: 115

English Conditional Admission: No, this program does not offer English Conditional Admission.

Other Requirements

Applicants may be contacted by a Daniels representative to schedule the admissions interview, which will be conducted on campus or via webcam.

Certificate or Specialized Certificate in Investment Markets

Degree and GPA Requirements

- Bachelor's degree: All graduate applicants must hold an earned baccalaureate from a regionally accredited college or university or the recognized equivalent from an international institution.
- Grade point average: The minimum undergraduate GPA for admission consideration for graduate study at the University of Denver is a cumulative 2.5 on a 4.0 scale or a 2.5 on a 4.0 scale for the last 60 semester credits or 90 quarter credits (approximately two years of work) for the baccalaureate degree. An earned master's degree or higher from a regionally accredited institution supersedes the minimum standards for the baccalaureate. For applicants with graduate coursework but who have not earned a master's degree or higher, the GPA from the graduate work may be used to meet the requirement. The minimum GPA is a cumulative 3.0 on a 4.0 scale for all graduate coursework undertaken.
- Program GPA requirement: The minimum undergraduate GPA for admission consideration for this program is a cumulative 2.5 on a 4.0 scale.

English Language Proficiency Test Score Requirements

The minimum TOEFL/IELTS/C1 Advanced/Duolingo English Test score requirements for this degree program are:

- Minimum TOEFL Score (Internet-based test): 80
- Minimum IELTS Score: 6.5
- Minimum C1 Advanced Score: 176
- Minimum Duolingo English Test Score: 115

English Conditional Admission: No, this program does not offer English Conditional Admission.

Other Requirements

Applicants may be contacted by a Daniels representative to schedule the admissions interview, which will be conducted on campus or via webcam.

Master's Degree Program Master of Science in Applied Quantitative Finance

Degree Requirements

Coursework Requirements

Code	Title	Credits
Prerequisite Courses ¹		
ACTG 4610	Financial Accounting and Reporting	4
FIN 4630	Managerial Finance	4
STAT 4610	Business Statistics	4
Finance Core Courses		
Total Core requirements: 29		
FIN 4000	Financial Modeling and Databases Bootcamp	1
FIN 4500	Financial Modeling	4
FIN 4200	Financial Investments and Markets	4
FIN 4410	Financial Planning & Analysis	4

FIN 4830	Econometrics for Finance	4
FIN 4180	Global Finance	2
FIN 4110	Ethics in Finance	4
INFO 4140	Business Databases	4
Students can take either FIN 4740 or FIN 4750		2
FIN 4740	Managerial Microeconomics	
FIN 4750	Managerial Macroeconomics	

Elective requirements

16 credits required in 4000 level FIN courses, including: 16

Investments Track		
FIN 4860	Derivatives	
FIN 4320	Equity Analysis	
FIN 4330	Portfolio Management and Risk Analytics	
FIN 4710	Marsico Investment Fund I	
FIN 4720	Marsico Investment Fund II	
FIN 4730	Marsico Investment Fund III	
FIN 4890	Fixed Income Analysis	
FIN 4700	Topics in Finance (varies)	
Topics - Int'l Monetary Economics & Finance		
Topics - Finance Capitals (Travel Course)		
FIN 4800	An Organized Walk Down Wall Street	
FIN 4980	Finance Internship (varies)	
FIN 4991	Independent Study (varies)	
Corporate Track		
ACTG 4220	Financial Actg & Analysis	
FIN 4160	Treasury Management	
FIN 4420	Capital Expenditure Analysis	
FIN 4870	Strategic Finance	
FIN 4150	Advanced Business Valuation	
FIN 4885	Investment Banking and External Financing	
FIN 4700	Topics in Finance	
FIN 4800	An Organized Walk Down Wall Street	
FIN 4980	Finance Internship	
FIN 4991	Independent Study	
Investment Banking Track		
ACTG 4220	Financial Actg & Analysis	
FIN 4885	Investment Banking and External Financing	
FIN 4150	Advanced Business Valuation	
FIN 4870	Strategic Finance	
FIN 4320	Equity Analysis	
FIN 4700	Topics in Finance	
FIN 4800	An Organized Walk Down Wall Street	
FIN 4980	Finance Internship	
FIN 4991	Independent Study	

Total Credits 45-57

¹ Students may demonstrate competency in the three prerequisite courses in the following manner:

- Accepted to the MSAQF program through the University of Denver’s Undergraduate Master’s Accelerated Admissions Process (MAAP) and earned a B- or better in the undergrad equivalent course as part of their undergraduate degree program. Undergraduate degree must be in finance.
- Passing an on-campus waiver exam before the start of the MSAQF program.

Graduate Certificate Programs

Certificate in Corporate Finance

Coursework Requirements

Code	Title	Credits
Required Courses		4-12
ACTG 4610	Financial Accounting and Reporting	
FIN 4630	Managerial Finance	
FIN 4410	Financial Planning & Analysis	
Note: If ACTG 4610 and/or FIN 4630 are waived, by passing the waiver exam(s), then choose a substitute course or courses from the list of electives below.		
Chose THREE electives from the following classes:		12-20
FIN 4150	Advanced Business Valuation	
FIN 4160	Treasury Management	
FIN 4420	Capital Expenditure Analysis	
FIN 4500	Financial Modeling	
FIN 4870	Strategic Finance	
FIN 4885	Investment Banking and External Financing	
FIN 4800	An Organized Walk Down Wall Street	
Total Credits:		24

Certificate in Investments

Coursework Requirements

Code	Title	Credits
Required Courses		12
FIN 4630	Managerial Finance	
FIN 4200	Financial Investments and Markets	
FIN 4320	Equity Analysis	
Chose THREE electives from the following classes:		12
FIN 4330	Portfolio Management and Risk Analytics	
FIN 4700	Topics in Finance	
FIN 4710	Marsico Investment Fund I	
FIN 4860	Derivatives	
FIN 4890	Fixed Income Analysis	
Total Credits:		24

Specialized Certificate Programs

Specialized Certificate in Corporate Finance

Code	Title	Credits
Required Courses		
ACTG 4610	Financial Accounting and Reporting	4
FIN 4630	Managerial Finance	4
FIN 4410	Financial Planning & Analysis	4
If ACTG 4610 and/or FIN 4630 are waived, by passing the waiver exam(s), then choose a substitute course or courses from these electives:		
Elective Requirements (Choose one course)		4
FIN 4150	Advanced Business Valuation	
FIN 4160	Treasury Management	
FIN 4420	Capital Expenditure Analysis	
FIN 4500	Financial Modeling	
FIN 4870	Strategic Finance	
FIN 4885	Investment Banking and External Financing	

FIN 4800

An Organized Walk Down Wall Street

Total Credits**16****Specialized Certificate in Investments****Coursework Requirements**

Code	Title	Credits
Required Courses		
FIN 4630	Managerial Finance	12
FIN 4200	Financial Investments and Markets	
FIN 4320	Equity Analysis	
Chose ONE elective from the following classes:		4
FIN 4330	Portfolio Management and Risk Analytics	16
FIN 4700	Topics in Finance	
FIN 4710	Marsico Investment Fund I	
FIN 4860	Derivatives	
FIN 4890	Fixed Income Analysis	
Total Credits:		16

FIN 4000 Financial Modeling and Databases Bootcamp (1 Credit)

This bootcamp is designed to introduce students to financial databases and to familiarize them with basic financial data analysis using Excel. The goal is for students to become comfortable with platforms such as Capital IQ and WRDS, which they will be using throughout their academic and/or professional careers. In addition, students will acquire a basic command of Excel functionality and efficiency in data analysis, together with modeling best practices and practical finance applications.

FIN 4030 Personal Finance (4 Credits)

This course provides an overview of topics which are critical to lifetime personal financial planning. The premise of the course is that personal financial planning starts early in life and especially as a new college graduate begins a professional career. The main topics in the course include Principles of Taxation, Basics of Estate Planning, Lifetime Asset Allocation, Principles of Insurance, Proper Debt Management, the Real Estate Housing Decision, and College Financial Planning for Children.

FIN 4060 Life Cycle/Financial Planning (4 Credits)

This course is designed for students who are interested in Financial Planning, possibly as a profession. We will cover six of the areas of financial planning: cash flows, protection (insurance), investments, goals (education and retirement), income taxation, and estate planning. This course is part of University of Denver CFP® Certification Financial Planning Education Program.

FIN 4090 Wealth Management (4 Credits)

Wealth Management offers students important skills to become a part of the growing wealth management industry. It includes such topics as the Financial Planning Process, Insurance Basics, Investment Basics and Strategies, Retirement Planning, and Estate Planning. We are pleased to work with the College for Financial Planning (CFFP), located in Denver, to provide instruction from their The Foundations in Financial PlanningSM program. This can lead to the Financial Paraplanner Qualified Professional™ or FPQP™ designation upon successful completion of an Examination. The Examination is administered through the CFFP. The FPQP™ will be a valuable addition to your resume.

FIN 4110 Ethics in Finance (4 Credits)

The objective of this course is to discuss the ethical issues facing financial institutions and professionals and apply ethical principles to the analysis of these issues.

FIN 4150 Advanced Business Valuation (4 Credits)

In this course, students will learn theoretical development, analytical tools and practical approaches to analyze and tackle business valuation issues at the core of the financial professions. The theoretical section of the course provides indepth coverage of the financial theories and models essential to value businesses. The application section provides students with opportunities to apply the valuation principles and techniques to assess business value and develop strategies to create value in a real-world context.

FIN 4160 Treasury Management (4 Credits)

The objective of the course is to provide students with a comprehensive understanding of how various treasury functions are managed in a corporation and build students' capabilities to assume the role of a proficient treasury manager. This course will cover techniques used by major corporations to manage cash, the capital structure, financial risk and working capital. Prerequisite: FIN 4630.

FIN 4180 Global Finance (2 Credits)

This course explores financial management in the international arena. Principal content elements include: The market for foreign exchange, interest rate parity, hedging currency risk, international portfolio management. Prerequisites: FIN 4630.

FIN 4200 Financial Investments and Markets (4 Credits)

Students will learn how households, institutions, firms, and governments interact in financial markets to channel funds from savers to productive uses of capital and provide firms with opportunities to hedge certain risks. This comprehensive understanding of how markets function is essential for anyone with a finance or high-level management role. We will begin by identifying the key institutions in financial markets and how securities come into existence and subsequently trade. We will then learn to measure the risk and return of financial assets while identifying techniques to improve and assess the performance of investment portfolios. Finally, we will introduce derivatives and techniques to wisely hedge firm risks. Prerequisite: FIN 4630.

FIN 4201 MS Management Managerial Finance (2 Credits)

FIN 4201 introduces concepts and analytical techniques to identify and solve financial management problems. The focus on Performance Metrics (Ratios and Du Pont Analysis), Time Value of Money and Opportunity Costs, and Project Analysis prepares managers to operate in an environment that can at times be driven by the financial performance of the company.

FIN 4320 Equity Analysis (4 Credits)

This course is an advanced finance course that focuses on the analysis of equity securities. The curriculum is primarily derived from the Candidate Body of Knowledge (CBOK) from the Chartered Financial Analyst® (CFA®) Program. The goal is to teach students how to implement objective, unbiased valuations through an understanding of the valuation process in theory and practice. Prerequisite: FIN 4200.

FIN 4330 Portfolio Management and Risk Analytics (4 Credits)

Case and project approach to foundation of investment portfolio management. This course emphasizes the application of modern portfolio management concepts and risk management principles. Prerequisite: FIN 4200.

FIN 4410 Financial Planning & Analysis (4 Credits)

Advanced course in financial planning and decision-making focusing on capital structure, working capital management, long-range and short-term financial planning, and other corporate events such as mergers and IPOs. Prerequisite: FIN 4630.

FIN 4420 Capital Expenditure Analysis (4 Credits)

Advanced course in capital budgeting examining capital allocation processes and procedures and the theory and applied techniques of capital spending and divestment under conditions of certainty and uncertainty. Related issues of cost of capital and leasing also included. Prerequisite: FIN 4630.

FIN 4500 Financial Modeling (4 Credits)

Use of various financial software applications to construct models from corporate finance, investments, and financial markets. In particular, the course will cover the application of Excel spreadsheet functions and R programming to various topics including the time value of money, investment projects analysis, financial statements analysis, capital budgeting, portfolio analysis, and data & pivot tables. Prerequisites: FIN 4630.

FIN 4610 Multinational Financial Management (4 Credits)

Financial analysis of multinational corporation operating in international markets, including exchange rates, international instruments, markets, institutions and futures. Prerequisite: MBA 4112.

FIN 4620 Financial Forecasting (4 Credits)**FIN 4630 Managerial Finance (4 Credits)**

This course covers analytical skills and tools of finance managers; theoretical concepts and practical applications are included. Topics include ratio analysis, breakeven analysis and leverage, securities valuation, capital budgeting, financial forecasting, and working capital management. Corequisite: ACTG 4610.

FIN 4700 Topics in Finance (0-4 Credits)

Topics vary each quarter. Course may be taken more than once if topics are different.

FIN 4701 Topics in Finance (1-10 Credits)

Topics vary. For new/experimental courses taught within the Reiman School of Finance.

FIN 4710 Marsico Investment Fund I (4 Credits)

A securities analysis and portfolio management practicum in which students manage a University endowment gift donated by Tom and Cydney Marsico. Prerequisite: FIN 4630 (or MBA 4285).

FIN 4720 Marsico Investment Fund II (4 Credits)

A securities analysis and portfolio management practicum in which students manage a University endowment gift donated by Tom and Cydney Marsico. Prerequisite: FIN 4710.

FIN 4730 Marsico Investment Fund III (4 Credits)

This course is an elective course that is the third in the series of classes involving the Graduate investment fund class: Marsico Investment Fund I & II. This course allows students to apply the investment, security analysis, and portfolio management tools and techniques that they have learned in their Finance classes. The students manage an actual portfolio, a portion of the University's endowment originally gifted by Tom and Cydney Marsico. The selection of students for this class is competitive. Students must agree to participate for 2 consecutive quarters, and they must be willing to address portfolio issues during the between-quarter periods if necessary. Because the course involves the application of tools and concepts learned in other classes, the best time to take the course is in the last year of a student's program. Prerequisites: FIN 4710 and FIN 4720.

FIN 4740 Managerial Microeconomics (2 Credits)

This course combines the standard tools of microeconomic analysis with a well-rounded appreciation of the important perspectives that form the business environment in the contemporary world. The goal is to provide students with the tools from microeconomics, game theory, and industrial organization that they need to make sound managerial decisions. The course uses case studies to develop practical insights into managing the firm's resources to achieve competitive advantage. The course is divided into two principle modules based on market structure: perfect competition and imperfect competition. Both modules cover optimal behavior and strategies.

FIN 4750 Managerial Macroeconomics (2 Credits)

This course covers the theory and practice of modern macroeconomics. It teaches students how private market forces and government policy decisions drive fluctuations in the global economy and affect the business environment. It explores issues related to inflation, interest rates, foreign exchange rate, business cycles, and monetary and fiscal policies. The course uses case studies to analyze real-life macroeconomic issues, and students are encouraged to investigate the potential and limitations of macroeconomic theory with real-world problems. The course is divided into two principle modules: the economy in the long run, and the economy in the short run. Both modules cover impacts of government policies on the business environment in a closed economy and an open economy.

FIN 4760 Managerial Economics (4 Credits)

This course presents the fundamental concepts of microeconomics and macroeconomics and approaches them from a managerial decision-making perspective. The first half of the course emphasizes applying microeconomic theory to decision-making to help achieve a firm's objective – increasing profit, market share, or growth. In contrast to traditional economics course, this course emphasizes practical implementation AND how economics affects business decision making. The second half of the course discusses macroeconomics and factors that affect the economy. The goal is to develop an understanding of macro-economic concepts such as GDP, inflation, and government policy such as Federal Reserve actions and government spending, to obtain a framework to model a firm's behavior according to an informed understanding of what the economy is doing. Armed with an understanding of the cycle of economic activity, one can formulate a firm understanding of policy alternatives by both the Federal Reserve and Congress.

FIN 4800 An Organized Walk Down Wall Street (4 Credits)

After four class sessions in Denver, participants will spend five days in New York visiting exchanges, brokerage firms, investment bankers, commercial banks, asset managers, and other institutions.

FIN 4830 Econometrics for Finance (4 Credits)

Econometrics for Finance is designed to teach applied statistical tools relevant to understanding financial and economic data. It is designed to cover essential tools for working with financial data, including return forecasting, volatility and econometrics of asset pricing, such as testing market models. The emphasis is on empirical techniques which are used in the analysis of financial markets and how they are applied to actual data. It teaches how to use and apply techniques using R, a free software that is used by many finance professionals. The course is intended to prepare students to possess the quantitative tools to evaluate and implement in the finance arena. Prerequisite: STAT 4610 and FIN 4500 (If no experience in R).

FIN 4835 Executive Education - Finance for Non-Financial Managers (2 Credits)

This Executive Education workshop introduces you to the essential finance skills any business professional needs to know. You will learn the language, tools and techniques to become a more intelligent user of financial reports. Through hands-on learning exercises, you will learn how to simplify, understand and apply data from financial reports and budgets. You will gain the confidence to ask better questions and make more informed financial decisions. *This short-form workshop does not follow the traditional quarter schedule. Please check daniels.du.edu/executive-education for class dates and formats.

FIN 4860 Derivatives (4 Credits)

This course provides a theoretical foundation for the pricing of contingent claims and for designing risk-management strategies. It discusses more advanced material in financial derivatives and is intended for students who have a quantitative background and are interested in enhancing their knowledge of the way in which derivatives can be analyzed. This course covers option pricing models, hedging techniques, and trading strategies. It also includes portfolio insurance, value-at-risk measure, multistep binomial trees to value American options, interest rate options, and other exotic options. Prerequisite: FIN 4200.

FIN 4870 Strategic Finance (4 Credits)

Addresses theory, concepts, and techniques associated with asset management and creation of value from a strategic orientation. Links financial theory and practice to strategic and operational objectives of the firm, prepares student to incorporate risk and uncertainty into analytical decision-making process and to analyze divestiture, restructuring, and liquidation decisions. Prerequisite: FIN 4410.

FIN 4875 Executive Education – Strategic Finance (2 Credits)

Today's leading organizations require executives to use rigorous financial analysis in order to make strategic decisions that affect growth, profitability and competitive market advantage. Strategic Finance is a multidimensional Executive Education workshop that uses real simulations and an acquisition case study to map the connections between business strategy, finance and enterprise value creation. The goal of the course is to make you a more intelligent user of finance and strategy. It will enable you to ask better questions and to make better decisions. You will become a more sophisticated manager, particularly when focusing on the interplay and interdependence of strategy, finance & management. *This short-form workshop does not follow the traditional quarter schedule. Please check daniels.du.edu/executive-education for class dates and formats.

FIN 4885 Investment Banking and External Financing (4 Credits)

This course is an advanced Corporate Finance course, focusing on the decisions by companies related to external sources of financing. There will be a mix of theory and practice, with outside speakers providing insight into the practice component. Topics will include business valuation, mergers and acquisitions, startup financing, angel investing and venture capital, bank loans, private equity, stock issuance and going private. Prerequisite: FIN 4410.

FIN 4890 Fixed Income Analysis (4 Credits)

Emphasizes valuation and management of fixed income securities in prevailing environment of complex and innovative financial arrangements. Study of the nature of evolving markets, both domestically and internationally. Prerequisite: FIN 4200.

FIN 4980 Finance Internship (0-10 Credits)

Daniels College of Business's graduate curriculum is designed to be experiential and build upon practical experience. To gain the full benefit of this curriculum, students are encouraged to expand their experiential learning beyond the short term experiences required in the classroom. Internships that allow students to apply newly learned skills and theories in the workplace are considered an integral to the curriculum and all students are strongly encouraged to seek such opportunities. Permission of instructor required. Hours and times arranged by student.

FIN 4991 Independent Study (1-10 Credits)

Individual study and report. Hours and times arranged by student.

FIN 6305 Applied Quantitative Methods in Finance (4 Credits)

"Applied Quantitative Methods in Finance" is a PhD-level seminar designed to immerse students in the techniques essential for quantitative research in Finance and other disciplines. This course offers a journey through the application of empirical methods and analytical frameworks using the Python programming language and key analytical packages. The examples and assignments cover topics including corporate governance, executive compensation, risk/return analysis, and the exploration of decentralized finance. Students will gain hands-on experience working with real-world data sets and get an introduction to the Finance literature. Structured around hands-on student research assignments, presentations and immersive sessions, the course covers a broad spectrum of quantitative methods including cross-sectional linear regression, two-stage least squares, forecasting and machine learning techniques such as variable selection. Each module is crafted to further the understanding of financial theories through empirical research and data analysis.

Courses**FIN 4000 Financial Modeling and Databases Bootcamp (1 Credit)**

This bootcamp is designed to introduce students to financial databases and to familiarize them with basic financial data analysis using Excel. The goal is for students to become comfortable with platforms such as Capital IQ and WRDS, which they will be using throughout their academic and/or professional careers. In addition, students will acquire a basic command of Excel functionality and efficiency in data analysis, together with modeling best practices and practical finance applications.

FIN 4030 Personal Finance (4 Credits)

This course provides an overview of topics which are critical to lifetime personal financial planning. The premise of the course is that personal financial planning starts early in life and especially as a new college graduate begins a professional career. The main topics in the course include Principles of Taxation, Basics of Estate Planning, Lifetime Asset Allocation, Principles of Insurance, Proper Debt Management, the Real Estate Housing Decision, and College Financial Planning for Children.

FIN 4060 Life Cycle/Financial Planning (4 Credits)

This course is designed for students who are interested in Financial Planning, possibly as a profession. We will cover six of the areas of financial planning: cash flows, protection (insurance), investments, goals (education and retirement), income taxation, and estate planning. This course is part of University of Denver CFP® Certification Financial Planning Education Program.

FIN 4090 Wealth Management (4 Credits)

Wealth Management offers students important skills to become a part of the growing wealth management industry. It includes such topics as the Financial Planning Process, Insurance Basics, Investment Basics and Strategies, Retirement Planning, and Estate Planning. We are pleased to work with the College for Financial Planning (CFFP), located in Denver, to provide instruction from their The Foundations in Financial PlanningSM program. This can lead to the Financial Paraplanner Qualified Professional™ or FPQP™ designation upon successful completion of an Examination. The Examination is administered through the CFFP. The FPQP™ will be a valuable addition to your resume.

FIN 4110 Ethics in Finance (4 Credits)

The objective of this course is to discuss the ethical issues facing financial institutions and professionals and apply ethical principles to the analysis of these issues.

FIN 4150 Advanced Business Valuation (4 Credits)

In this course, students will learn theoretical development, analytical tools and practical approaches to analyze and tackle business valuation issues at the core of the financial professions. The theoretical section of the course provides indepth coverage of the financial theories and models essential to value businesses. The application section provides students with opportunities to apply the valuation principles and techniques to assess business value and develop strategies to create value in a real-world context.

FIN 4160 Treasury Management (4 Credits)

The objective of the course is to provide students with a comprehensive understanding of how various treasury functions are managed in a corporation and build students' capabilities to assume the role of a proficient treasury manager. This course will cover techniques used by major corporations to manage cash, the capital structure, financial risk and working capital. Prerequisite: FIN 4630.

FIN 4180 Global Finance (2 Credits)

This course explores financial management in the international arena. Principal content elements include: The market for foreign exchange, interest rate parity, hedging currency risk, international portfolio management. Prerequisites: FIN 4630.

FIN 4200 Financial Investments and Markets (4 Credits)

Students will learn how households, institutions, firms, and governments interact in financial markets to channel funds from savers to productive uses of capital and provide firms with opportunities to hedge certain risks. This comprehensive understanding of how markets function is essential for anyone with a finance or high-level management role. We will begin by identifying the key institutions in financial markets and how securities come into existence and subsequently trade. We will then learn to measure the risk and return of financial assets while identifying techniques to improve and assess the performance of investment portfolios. Finally, we will introduce derivatives and techniques to wisely hedge firm risks. Prerequisite: FIN 4630.

FIN 4201 MS Management Managerial Finance (2 Credits)

FIN 4201 introduces concepts and analytical techniques to identify and solve financial management problems. The focus on Performance Metrics (Ratios and Du Pont Analysis), Time Value of Money and Opportunity Costs, and Project Analysis prepares managers to operate in an environment that can at times be driven by the financial performance of the company.

FIN 4320 Equity Analysis (4 Credits)

This course is an advanced finance course that focuses on the analysis of equity securities. The curriculum is primarily derived from the Candidate Body of Knowledge (CBOK) from the Chartered Financial Analyst® (CFA®) Program. The goal is to teach students how to implement objective, unbiased valuations through an understanding of the valuation process in theory and practice. Prerequisite: FIN 4200.

FIN 4330 Portfolio Management and Risk Analytics (4 Credits)

Case and project approach to foundation of investment portfolio management. This course emphasizes the application of modern portfolio management concepts and risk management principles. Prerequisite: FIN 4200.

FIN 4410 Financial Planning & Analysis (4 Credits)

Advanced course in financial planning and decision-making focusing on capital structure, working capital management, long-range and short-term financial planning, and other corporate events such as mergers and IPOs. Prerequisite: FIN 4630.

FIN 4420 Capital Expenditure Analysis (4 Credits)

Advanced course in capital budgeting examining capital allocation processes and procedures and the theory and applied techniques of capital spending and divestment under conditions of certainty and uncertainty. Related issues of cost of capital and leasing also included. Prerequisite: FIN 4630.

FIN 4500 Financial Modeling (4 Credits)

Use of various financial software applications to construct models from corporate finance, investments, and financial markets. In particular, the course will cover the application of Excel spreadsheet functions and R programming to various topics including the time value of money, investment projects analysis, financial statements analysis, capital budgeting, portfolio analysis, and data & pivot tables. Prerequisites: FIN 4630.

FIN 4610 Multinational Financial Management (4 Credits)

Financial analysis of multinational corporation operating in international markets, including exchange rates, international instruments, markets, institutions and futures. Prerequisite: MBA 4112.

FIN 4620 Financial Forecasting (4 Credits)**FIN 4630 Managerial Finance (4 Credits)**

This course covers analytical skills and tools of finance managers; theoretical concepts and practical applications are included. Topics include ratio analysis, breakeven analysis and leverage, securities valuation, capital budgeting, financial forecasting, and working capital management. Corequisite: ACTG 4610.

FIN 4700 Topics in Finance (0-4 Credits)

Topics vary each quarter. Course may be taken more than once if topics are different.

FIN 4701 Topics in Finance (1-10 Credits)

Topics vary. For new/experimental courses taught within the Reiman School of Finance.

FIN 4710 Marsico Investment Fund I (4 Credits)

A securities analysis and portfolio management practicum in which students manage a University endowment gift donated by Tom and Cydney Marsico. Prerequisite: FIN 4630 (or MBA 4285).

FIN 4720 Marsico Investment Fund II (4 Credits)

A securities analysis and portfolio management practicum in which students manage a University endowment gift donated by Tom and Cydney Marsico. Prerequisite: FIN 4710.

FIN 4730 Marsico Investment Fund III (4 Credits)

This course is an elective course that is the third in the series of classes involving the Graduate investment fund class: Marsico Investment Fund I & II. This course allows students to apply the investment, security analysis, and portfolio management tools and techniques that they have learned in their Finance classes. The students manage an actual portfolio, a portion of the University's endowment originally gifted by Tom and Cydney Marsico. The selection of students for this class is competitive. Students must agree to participate for 2 consecutive quarters, and they must be willing to address portfolio issues during the between-quarter periods if necessary. Because the course involves the application of tools and concepts learned in other classes, the best time to take the course is in the last year of a student's program. Prerequisites: FIN 4710 and FIN 4720.

FIN 4740 Managerial Microeconomics (2 Credits)

This course combines the standard tools of microeconomic analysis with a well-rounded appreciation of the important perspectives that form the business environment in the contemporary world. The goal is to provide students with the tools from microeconomics, game theory, and industrial organization that they need to make sound managerial decisions. The course uses case studies to develop practical insights into managing the firm's resources to achieve competitive advantage. The course is divided into two principle modules based on market structure: perfect competition and imperfect competition. Both modules cover optimal behavior and strategies.

FIN 4750 Managerial Macroeconomics (2 Credits)

This course covers the theory and practice of modern macroeconomics. It teaches students how private market forces and government policy decisions drive fluctuations in the global economy and affect the business environment. It explores issues related to inflation, interest rates, foreign exchange rate, business cycles, and monetary and fiscal policies. The course uses case studies to analyze real-life macroeconomic issues, and students are encouraged to investigate the potential and limitations of macroeconomic theory with real-world problems. The course is divided into two principle modules: the economy in the long run, and the economy in the short run. Both modules cover impacts of government policies on the business environment in a closed economy and an open economy.

FIN 4760 Managerial Economics (4 Credits)

This course presents the fundamental concepts of microeconomics and macroeconomics and approaches them from a managerial decision-making perspective. The first half of the course emphasizes applying microeconomic theory to decision-making to help achieve a firm's objective – increasing profit, market share, or growth. In contrast to traditional economics course, this course emphasizes practical implementation AND how economics affects business decision making. The second half of the course discusses macroeconomics and factors that affect the economy. The goal is to develop an understanding of macro-economic concepts such as GDP, inflation, and government policy such as Federal Reserve actions and government spending, to obtain a framework to model a firm's behavior according to an informed understanding of what the economy is doing. Armed with an understanding of the cycle of economic activity, one can formulate a firm understanding of policy alternatives by both the Federal Reserve and Congress.

FIN 4800 An Organized Walk Down Wall Street (4 Credits)

After four class sessions in Denver, participants will spend five days in New York visiting exchanges, brokerage firms, investment bankers, commercial banks, asset managers, and other institutions.

FIN 4830 Econometrics for Finance (4 Credits)

Econometrics for Finance is designed to teach applied statistical tools relevant to understanding financial and economic data. It is designed to cover essential tools for working with financial data, including return forecasting, volatility and econometrics of asset pricing, such as testing market models. The emphasis is on empirical techniques which are used in the analysis of financial markets and how they are applied to actual data. It teaches how to use and apply techniques using R, a free software that is used by many finance professionals. The course is intended to prepare students to possess the quantitative tools to evaluate and implement in the finance arena. Prerequisite: STAT 4610 and FIN 4500 (If no experience in R).

FIN 4835 Executive Education - Finance for Non-Financial Managers (2 Credits)

This Executive Education workshop introduces you to the essential finance skills any business professional needs to know. You will learn the language, tools and techniques to become a more intelligent user of financial reports. Through hands-on learning exercises, you will learn how to simplify, understand and apply data from financial reports and budgets. You will gain the confidence to ask better questions and make more informed financial decisions. *This short-form workshop does not follow the traditional quarter schedule. Please check daniels.du.edu/executive-education for class dates and formats.

FIN 4860 Derivatives (4 Credits)

This course provides a theoretical foundation for the pricing of contingent claims and for designing risk-management strategies. It discusses more advanced material in financial derivatives and is intended for students who have a quantitative background and are interested in enhancing their knowledge of the way in which derivatives can be analyzed. This course covers option pricing models, hedging techniques, and trading strategies. It also includes portfolio insurance, value-at-risk measure, multistep binomial trees to value American options, interest rate options, and other exotic options. Prerequisite: FIN 4200.

FIN 4870 Strategic Finance (4 Credits)

Addresses theory, concepts, and techniques associated with asset management and creation of value from a strategic orientation. Links financial theory and practice to strategic and operational objectives of the firm, prepares student to incorporate risk and uncertainty into analytical decision-making process and to analyze divestiture, restructuring, and liquidation decisions. Prerequisite: FIN 4410.

FIN 4875 Executive Education – Strategic Finance (2 Credits)

Today's leading organizations require executives to use rigorous financial analysis in order to make strategic decisions that affect growth, profitability and competitive market advantage. Strategic Finance is a multidimensional Executive Education workshop that uses real simulations and an acquisition case study to map the connections between business strategy, finance and enterprise value creation. The goal of the course is to make you a more intelligent user of finance and strategy. It will enable you to ask better questions and to make better decisions. You will become a more sophisticated manager, particularly when focusing on the interplay and interdependence of strategy, finance & management. *This short-form workshop does not follow the traditional quarter schedule. Please check daniels.du.edu/executive-education for class dates and formats.

FIN 4885 Investment Banking and External Financing (4 Credits)

This course is an advanced Corporate Finance course, focusing on the decisions by companies related to external sources of financing. There will be a mix of theory and practice, with outside speakers providing insight into the practice component. Topics will include business valuation, mergers and acquisitions, startup financing, angel investing and venture capital, bank loans, private equity, stock issuance and going private. Prerequisite: FIN 4410.

FIN 4890 Fixed Income Analysis (4 Credits)

Emphasizes valuation and management of fixed income securities in prevailing environment of complex and innovative financial arrangements. Study of the nature of evolving markets, both domestically and internationally. Prerequisite: FIN 4200.

FIN 4980 Finance Internship (0-10 Credits)

Daniels College of Business's graduate curriculum is designed to be experiential and build upon practical experience. To gain the full benefit of this curriculum, students are encouraged to expand their experiential learning beyond the short term experiences required in the classroom. Internships that allow students to apply newly learned skills and theories in the workplace are considered an integral to the curriculum and all students are strongly encouraged to seek such opportunities. Permission of instructor required. Hours and times arranged by student.

FIN 4991 Independent Study (1-10 Credits)

Individual study and report. Hours and times arranged by student.

FIN 6305 Applied Quantitative Methods in Finance (4 Credits)

"Applied Quantitative Methods in Finance" is a PhD-level seminar designed to immerse students in the techniques essential for quantitative research in Finance and other disciplines. This course offers a journey through the application of empirical methods and analytical frameworks using the Python programming language and key analytical packages. The examples and assignments cover topics including corporate governance, executive compensation, risk/return analysis, and the exploration of decentralized finance. Students will gain hands-on experience working with real-world data sets and get an introduction to the Finance literature. Structured around hands-on student research assignments, presentations and immersive sessions, the course covers a broad spectrum of quantitative methods including cross-sectional linear regression, two-stage least squares, forecasting and machine learning techniques such as variable selection. Each module is crafted to further the understanding of financial theories through empirical research and data analysis.