FINANCE

Financial executives are of central importance to the overall planning, control and success of an organization. There are financial implications in virtually all organizational decisions, whether the organization is a business firm, a non-profit organization, or a government. With each new innovation in the field of finance the importance of finance for all organizations has grown. Every decision-maker must have sufficient knowledge of finance to determine the financial implications of their decisions.

Finance has evolved from a descriptive discipline in the early 1900s to the analytical discipline we find today. Finance theoreticians use fundamental economic theory to develop valuation models and the tools of financial analysis and risk management that are used by finance practitioners to make financial decisions. Finance consists of three interrelated core areas: financial markets and institutions, investments and portfolio theory, and managerial (business) finance. Subsets of these core areas include, but are not limited to, personal finance, real estate finance, international finance, the management of financial institutions, insurance, energy finance, entrepreneurial finance, derivative securities, and risk management.

The primary objective of the undergraduate finance curriculum is to produce graduates who have a broad understanding of the financial aspects of their decisions and actions and who are capable of utilizing the fundamental tools of financial analysis. Toward these ends, the development of elementary mathematical and statistical skills and the study of economics, accounting and business administration are needed to accomplish the objective. The major in finance prepares students for positions that require special understanding of financial analysis, financial management, and financial systems in a wide variety of organizations.

A career in financial management can begin in one of several positions that may lead to a major executive position, including chief executive officer, chief financial officer, and chief risk officer. Initial positions in the managerial finance area include analyst, capital budgeting analyst, cash manager, credit analyst, financial analyst (who works closely with accountants), real estate officer, and risk manager. Alternatively, finance majors may choose to enter the financial services industries. Finance or as a member of the trust department; in the securities industry as a securities analyst, as an investment banker, as a stockbroker, wealth manager, or account executive, or as a financial planner or personal financial advisor; and in the insurance industry as an agent, financial representative, sales agent, or underwriter.

Courses

FIN 1101 Money 101

Description: Money 101 provides students a fun opportunity to learn basic money management skills. Students will learn about various ways to save for and pay for college and consumer loans. Students will also learn about credit scores, short and long-term savings options, smart spending, and risk management.

Credit hours: 1 Contact hours: Lecture: 1 Contact: 1 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 2121 Managing Revenues from Name, Image, and Likeness

Description: Managing Revenues from Name, Image and Likeness provides students an opportunity to learn basic financial knowledge and skills necessary to make financial decisions during college and over their lifetime. Students will also learn the technical aspects of money including debt, taxes, investing, credit, savings, smart spending, and risk management. The course will focus on basic money management with a special emphasis on navigating the potential financial ramifications of the Name, Image and Likeness (NIL) rights. No prior knowledge is required and no textbook is required to be purchased.

Credit hours: 1 Contact hours: Lecture: 1 Contact: 1 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 2123 Personal Finance

Description: A first course in the management of the individual's financial affairs. Budgeting, use of credit, mortgage financing, investment and estate planning. **Credit hours:** 3 **Contact hours:** Lecture: 3 Contact: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 2550 Selected Topics in Finance

Description: Basic topics in finance. Topics are updated each semester. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours. Credit hours: 1-3 Contact hours: Lecture: 1-3 Contact: 1-3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 2713 Real Estate Principles and Practices

Description: This class is a survey course designed to expose the student to the basics of buying, selling, management and investment in residential and commercial real estate. Excel training is crucial and will be provided. Topics include real estate marketing procedures, agency and brokerage management, property inspection and appraisal, leased and rental properties, and commercial real estate investment and property management. An overview of the 2007-2009 global financial crisis will illustrate the important role of the real estate, banking and investment industries in creating the crisis.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 3113 Finance

Prerequisites: ACCT 2003 (or ACCT 2103 and ACCT 2203) and ECON 2003 (or ECON 2103).

Description: Operational and strategic financial problems including allocation of funds, asset management, financial information systems, financial structure, policy determination and analysis of the financial environment.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 3613 General Insurance

Prerequisites: FIN 3113.

Description: Introduction to the theory and general principles of insurance. A broad analysis of the elements and operation of property, casualty, health and life insurance.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture

Department/School: Finance

FIN 3713 Real Estate Investment and Finance

Prerequisites: FIN 3113.

Description: An introductory course in real estate investment and finance. Financing real estate, financial leverage and financial planning, the institutional structure of mortgage lending, managing risks, investment strategies and decisions.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4003 Introduction to Energy Business

Prerequisites: Sophomore standing.

Description: This class covers topics related to energy business broadly defined, including financial decision making. The main focus will be on the oil and gas industry but will also cover renewable energy issues, historical events, geopolitics, and supply/demand in energy. May not be used for degree credit with FIN 5003.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4063 Applied Financial Studies

Prerequisites: Consent of the instructor. Description: Structured internship or field project with supporting academic study. Previously offered as FIN 4463. Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4113 Financial Markets and Institutions

Prerequisites: FIN 3113, and ECON 3313 or concurrent enrollment in ECON 3313.

Description: Money and capital markets, flow-of-funds, commercial banks and other financial intermediaries.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4213 International Financial Management Prerequisites: FIN 3113.

Description: Financial management topics unique to business firms operating in an international environment. Topics include global economic and business environments, international monetary system, foreign exchange markets, foreign exchange risk and management, foreign direct investment, and trade finance. Recent and current international financial events. **Credit hours:** 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4223 Investments

Prerequisites: FIN 3113 and STAT 2013, STAT 2023, or STAT 2053. Description: Various approaches to selecting and timing investment opportunities, e.g., common stocks, bonds, commodities and options. Modern concepts of portfolio theory. Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate

Schedule types: Lecture Department/School: Finance

FIN 4333 Financial Management

Prerequisites: FIN 3113 and STAT 2013, STAT 2023, or STAT 2053. Description: Theories and practice applicable to the financial administration of a firm. A variety of teaching methods used in conjunction with readings and cases to illustrate financial problems and techniques of solution. Credit hours: 3 Contact hours: Lecture: 3 Contact: 3

Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4343 Valuation and Financial Modeling

Prerequisites: FIN 3113, FIN 4333 with a "B" or better.

Description: This course focuses on valuing entire business enterprises. The major course topic is estimating corporate value via the comparable companies approach, the discounted cash flow (DCF) approach, and the precedent transactions approach. May not be used for degree credit with FIN 5343.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4363 Energy Finance

Prerequisites: FIN 3113.

Description: Introduction to basic terminology, industry structure, and supply and demand outlook in the oil, gas and power industries. A broad analysis of applications in the energy industry including financial statement analysis, valuation, risk analysis in capital budgeting, risk management, alternative energy topics and energy specific case studies. **Credit hours:** 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4443 Banking Strategies and Policies

Prerequisites: FIN 3113, and ECON 3313 or concurrent enrollment in ECON 3313.

Description: Theories and practices of bank asset management; banking markets and competition.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture

Department/School: Finance

FIN 4453 Bank Decision Simulation and Analysis

Prerequisites: FIN 3113 and FIN 4443.

Description: Student teams assume the roles of senior bank officers, making decisions regarding bank assets, funding, product pricing, financial leverage, profit enhancement, risk management, and staffing. Decisions implemented through computer simulation, incorporating the decisions into an environment where the decisions of competing management teams and the local economy determine bank profitability and shareholder value. Evaluation of students' abilities to create shareholder value and effectively communicate planning and analysis through written and spoken reports.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4550 Selected Topics in Finance

Prerequisites: FIN 3113 or consent of instructor. **Description:** Advanced topics in finance. Topics are updated each semester. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours. **Credit hours:** 1-6

Contact hours: Lecture: 1-6 Contact: 1-6 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4653 Bond Markets

Prerequisites: FIN 3113 and FIN 4113.

Description: Provides a broad introduction to treasury, corporate, municipal, mortgage backed, and asset backed bond markets. The analytical techniques for valuing bonds, quantifying their exposure to changes in interest rate and credit risk exposures and investment decision-making are explored. Concepts are applied through case studies and projects.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4763 Financial Futures and Options Markets Prerequisites: FIN 4223.

Description: Foundation in financial futures and options markets. A balance of institutional detail necessary to understand the structure of these markets and the theoretical developments necessary to apply the contracts to various uses. The use of financial futures and options to manage price risk.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4813 Portfolio Management

Prerequisites: FIN 3113 and FIN 4223 with a grade of "C" or better and consent of instructor.

Description: Overview of portfolio management from the point of view of a trust officer, mutual fund manager, pension fund manager, or other manager of securities. Emphasizes the need of financial managers for an understanding of problems, trends, and theory of portfolio management. **Credit hours:** 3

Credit nours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4833 Student Managed Investment Fund

Prerequisites: FIN 4223 with a grade of "B" or better AND consent of instructor.

Description: Security valuation and portfolio management practicum course involving investing decisions using real money. Content includes applying financial theories and models to real world practice. Includes research-based fundamental analysis and valuations of current portfolio holdings and prospective holdings.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate

Schedule types: Lecture Department/School: Finance

Department/School: Finance

FIN 4843 Risk Management

Prerequisites: FIN 3113.

Description: Introduction to relevant analytical tools necessary for the effective management of risk. Previously offered as FIN 4613. **Credit hours:** 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4853 Student Managed Investment Fund II

Prerequisites: FIN 4833 with a grade of "B" or better and consent of instructor.

Description: Advanced security valuation and portfolio management practicum course involving investing decisions using real money. Content includes applying financial theories and models to real world practice. Includes research-based fundamental analysis and valuations of publicly traded companies. Increased emphasis on portfolio management and asset allocation.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture Department/School: Finance

FIN 4913 Advanced Risk Management

Prerequisites: FIN 3113, FIN 4223, FIN 4763, and FIN 4843 (with a grade of "C" or better).

Description: Applications of risk management concepts and skills for the development of programs to manage risk exposures.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Undergraduate Schedule types: Lecture

Department/School: Finance

FIN 5000 Masters Research and Thesis

Prerequisites: Good standing in Master of Science in quantitative financial economics program and consent of program coordinator. **Description:** Research and thesis for master's students. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours. **Credit hours:** 1-6

Contact hours: FO Contact hours: Contact: 1-6 Other: 1-6 Levels: Graduate Schedule types: Independent Study Department/School: Finance

FIN 5003 Introduction to Energy Business

Description: This class covers topics related to energy business broadly defined, including financial decision making. The main focus will be on the oil and gas industry but will also cover renewable energy issues, historical events, geopolitics, and supply/demand in energy. May not be used for degree credit with FIN 4003.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance

FIN 5010 Finance Projects and Independent Studies

Prerequisites: Good standing in graduate program and consent of project adviser and consent of department head.

Description: Graduate projects and independent study in finance. Offered for variable credit, 1-6 credit hours, maximum of 6 credit hours.

Credit hours: 1-6 Contact hours: Contact: 1-6 Other: 1-6

Levels: Graduate

Schedule types: Independent Study

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5013 Business Finance

Prerequisites: Admission to a SSB graduate program and ACCT 5183 or equivalent, or consent of MBA director or instructor.

Description: Introduction to the major areas of business finance: the financial environment in which business decisions are made and the institutions found therein, the financial management practices of a firm securing financing and allocating resources among competing alternatives, and the valuation of financial assets to the firm and individuals.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5053 Theory and Practice of Financial Management

Prerequisites: Admission to a SSB graduate program and FIN 5013 or equivalent and ACCT 5183 or equivalent or consent of the MBA director or instructor.

Description: Concepts and theories applicable to the financial administration of a firm. Cases, problems and readings to illustrate various financial problems and techniques of solution.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance

FIN 5153 Corporate Financial Strategy

Prerequisites: Admission to a SSB graduate program and FIN 5013 or equivalent and ACCT 5183 or equivalent or the consent of the MBA director or instructor.

Description: Strategic financial decisions and their implementation, including capital structure policy, capital budgeting, risk assessment and management, corporate restructuring, management performance assessment, cost of capital, financial resource planning, dividend policy, and capital raising. Familiarity with basic financial tools and techniques including time value of money, asset pricing and security valuation, and financial statement analysis.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance

FIN 5213 International Business Finance

Prerequisites: FIN 5013.

Description: Theories and financial management practices unique to business firms which operate in, or are influenced by, an increasingly global economy.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5223 Investment Theory and Strategy

Prerequisites: Admission to a SSB graduate program, 5013 or the consent of MBA director or the instructor. **Description:** Selected investment topics and advanced portfolio

management techniques.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5243 Innovations in Quantitative Finance

Prerequisites: FIN 5013.

Description: Concepts in this course will cover technical skills important for a quantitative analyst with emphasis on programming and application development. Topics include trading algorithms, energy demand modeling, risk measures, advanced portfolio optimization under constraints, among other topics. Special attention will be given to concepts and applications that investors, money managers, wealth managers, financial managers, and risk managers utilize in their decision making and risk management processes.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance

FIN 5333 Corporate Governance

Prerequisites: FIN 5013.

Description: The theoretical and applied analysis of the governance structure of a corporation. The interconnections of the board of directors, CEO, management and shareholders. Case problems and readings address the advantages and disadvantages of various corporate governance practices.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate

Schedule types: Lecture

Department/School: Finance

FIN 5343 Valuation and Financial Modeling

Prerequisites: FIN 5013.

Description: This course focuses on valuing entire business enterprises. The major course topic is estimating corporate value via the comparable companies approach, the discounted cash flow (DCF) approach, and the precedent transactions approach, and the precedent transactions approach. May not be used for degree credit with FIN 4343. **Credit hours:** 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5363 Energy Finance

Prerequisites: FIN 5013 or equivalent.

Description: Introduction to basic terminology, industry structure, and supply and demand outlook in the oil, gas, and power industries. A broad analysis of applications in the energy industry including financial statement analysis, valuation, risk analysis in capital budgeting, risk management, alternative energy topics and energy specific case studies. **Credit hours:** 3

Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5550 Special Topics in Finance

Prerequisites: Consent of instructor.

Description: Theoretical and applied aspects of specialized financial areas. Evaluation of models, current trends and problems. Offered for variable credit, 1-6 credit hours, maximum of 12 credit hours. Credit hours: 1-6 Contact hours: Lecture: 1-6 Contact: 1-6 Levels: Graduate

Schedule types: Lecture Department/School: Finance

FIN 5633 Computational Finance

Description: This course covers applying quantitative financial methods using the computer programming language, Python. Finance topics are covered as a means of learning Python. Students will learn advanced Python programming topics including Monte Carlo simulation, partical differential equations, option valuation, data analysis, and other financial models.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5653 Bond Markets

Prerequisites: Consent of the instructor.

Description: This course provides a mathematically rigorous introduction to fixed income markets. Specific attention is given to 1-factor and 2-factor models, their theoretic foundations and how to calibrate them to market data.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5763 Derivative Securities and the Management of Financial Price Risk

Prerequisites: FIN 5013 or consent of instructor.

Description: Differing amounts of financial price risk for individuals and corporations in volatile financial environment. The development of arbitrage-based models for the pricing of derivative securities, and the use of a full range of derivative securities to manage exposure to financial price risk.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5773 Financial Engineering

Prerequisites: MATH 4513 and FIN 5763 or consent of instructor. **Description:** Techniques for the design, development and implementation of innovative financial instruments and processes to the formulation of creative solutions of problems in finance.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance

FIN 5833 Student Managed Investment Fund

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Prerequisites: Graduate standing AND consent of instructor. **Description:** Security valuation and portfolio management practicum course involving investing decisions using real money. Content includes applying financial theories and models to real world practice. Includes research-based fundamental analysis and valuations of current portfolio holdings and prospective holdings.

Credit hours: 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 5853 Student Managed Investment Fund II

Prerequisites: FIN 5833 with a grade of "B" or better "and" consent of instructor.

Description: Advanced security valuation and portfolio management practicum course involving investing decisions using real money. Content includes applying financial theories and models to real world practice. Includes research-based fundamental analysis and valuations of publicly traded companies. Increased emphasis on portfolio management and asset allocation.

Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance

FIN 5883 Quantitative Financial Applications

Prerequisites: FIN 5223 and consent of the head of the department. **Description:** Application of financial solution techniques through directed case work in appropriate business and public sector settings. Simulation, small group instruction and field-based experiences. **Credit hours:** 3

Contact hours: Lecture: 3 Contact: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Finance

Additional Fees: Business Graduate Program fee of \$6 per credit hour applies.

FIN 6053 Financial Theory and Corporate Policy

Prerequisites: Consent of the instructor. Description: Theoretical and empirical underpinnings of modern corporate finance. Credit hours: 3 Contact hours: Lecture: 3 Contact: 3 Levels: Graduate Schedule types: Lecture Department/School: Finance

FIN 6660 Seminar in Finance

Prerequisites: Consent of instructor.

Description: Advanced research with emphasis on theoretical problems and solutions. Selected topics covered. Offered for variable credit, 3-6 credit hours, maximum of 12 credit hours.

Credit hours: 3-6

Contact hours: Contact: 3-6 Other: 3-6 **Levels:** Graduate

Schedule types: Independent Study

Department/School: Finance

Undergraduate Programs

- Finance: Commercial Bank Management Option, BSBA (http:// catalog.okstate.edu/spears-business/finance/commercial-bankmanagement-option-bsba/)
- Finance: Financial Analyst Option, BSBA (http://catalog.okstate.edu/ spears-business/finance/financial-analyst-option-bsba/)
- Finance: General Option, BSBA (http://catalog.okstate.edu/spearsbusiness/finance/general-option-bsba/)

Graduate Programs

Concentrations in finance are offered through the Master of Business Administration, Master of Science in Quantitative Financial Economics and Doctor of Philosophy degrees.

The Master of Science in Quantitative Finance (MSQF) Degree

(See "Business Administration (http://catalog.okstate.edu/spearsbusiness/business-administration/#graduateprogramstext).")

The Master of Science in Quantitative Finance Degree. The discipline of quantitative finance continues to evolve, spurred by business and financial institution demand for quantitative skills where more emphasis is on quantitative methods from regulatory authorities. Oklahoma State University offers a Master of Science Degree in Quantitative Finance (MSQF) to meet this demand. The objective of the MSQF is to produce graduates with quantitative skill sets necessary to support advanced financial and economic decision-making that includes rigorous financialmodeling, mathematical, and statistical skills.

The MSQF is a Spears School of Business degree program that draws on the combined expertise of five OSU departments—Finance, Economics, Mathematics, Statistics and Agricultural Economics. The program is designed to produce graduates with the skills necessary to participate in critical decision making processes at all levels of the organization. The program focuses on the analytical methods necessary for effective participation in the fields of financial management, investment management, risk management, and financial engineering. The program provides students the opportunity to apply their knowledge and skills to projects that utilize quantitative financial tools and techniques. Quantitative finance embraces the role of advanced mathematics in applied finance. There is extensive use of mathematics, probability theory and financial economics, and the OSU program trains students not to become employees with just quantitative skills but financial managers who are equipped with a thorough understanding of quantitative finance.

The MSQF is a 33 credit-hour program. The core 27 hours consists of classes required of all students in the program.

The admission requirements include an earned undergraduate degree from a college or university of recognized standards. In addition to the Oklahoma State University Graduate College's standard requirements, the program's Curriculum Committee will consider the applicant's letters of recommendation, GMAT or GRE score, previous academic performance and financial/statistical modeling experience.

Additional information about the program is available on the Internet at https://go.okstate.edu/graduate-academics/programs/masters/ quantitative-financial-economics-ms.html.

The Doctor of Philosophy Degree

A PhD in business administration with concentration in finance prepares the student for careers in academia, business, or government.

The program is designed to meet the needs and objectives of individual students but all students will seek an in-depth understanding of the theoretical foundations of financial economics, and develop research competency and teaching skills. The small class size provides a supportive environment conducive to the exchange of ideas and the development of new insights by both faculty and students.

Students will select finance as their major area of study. Two areas of concentration are also to be selected. As support for the major field of study, each student is required to attain graduate-level competence in economic theory and quantitative methods.

Prerequisites for admission to the program are appropriate basic courses in accounting, calculus, economics, finance, and statistics.

Competence in planning and executing research is demonstrated by a dissertation. In addition, each candidate must pass comprehensive qualifying examinations and a final oral examination on the dissertation itself.

Outstanding students with degrees in any field of study may apply. Applications for admission are evaluated on the basis of the following:

- 1. undergraduate and graduate grade-point averages,
- 2. score on the Graduate Management Admissions Test (GMAT) or Graduation Record Examination (GRE),
- a two- or three-page statement describing goals and academic interests,
- 4. at least three letters of recommendation,
- 5. evidence of research potential, and
- 6. a personal interview when feasible.

It is the applicant's responsibility to see that all materials related to these criteria are received by the Department of Finance. Additional information about the program is available on the internet at https://go.okstate.edu/graduate-academics/programs/doctoral/business-administration-option-in-finance-phd.html.

Minors

- Energy Finance (EFIN), Minor (http://catalog.okstate.edu/spearsbusiness/finance/energy-finance-minor/)
- Finance (FIN), Minor (http://catalog.okstate.edu/spears-business/ finance/minor/)

Faculty

Betty Simkins, PhD-Regents Professor and Head

Professors: David A. Carter, PhD; Ramesh P. Rao, PhD

Associate Professors: Louis Piccotti, PhD; Shu Yan, PhD; Qin "Emma" Wang, PhD; Jun Zhang, PhD

Assistant Professors: Brian Roseman, PhD; Carina Cuculiza, PhD Professors of Professional Practice: Amit Bansal, MBA and MSEE; Joe Byers, PhD; Eric Sisneros, PhD; Allissa Lee, PhD

Other Faculty: Chas Craig; Jared Pawelka; Nancy Titus-Piersma; Jacob Walters