

# 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 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. Initial positions in the managerial finance area include capital budgeting analyst, cash manager, credit analyst, financial analyst (who works closely with accountants), and risk manager. Alternatively, finance majors may choose to enter the financial services industries. Finance majors could enter the workforce in the banking industry as a loan officer or as a member of the trust department; in the securities industry as a securities analyst, as an investment banker, as a stockbroker or account executive, or as a financial planner; and in the insurance industry as an agent or underwriter.

## Courses

### 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

**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

**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

**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

**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

**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

**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

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Finance

**FIN 4213 International Financial Management**

**Prerequisites:** FIN 3113 or consent of instructor.

**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

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Finance

**FIN 4223 Investments**

**Prerequisites:** FIN 3113 and STAT 2023.

**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

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Finance

**FIN 4333 Financial Management**

**Prerequisites:** FIN 3113 and STAT 2023.

**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

**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

**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

**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

**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:** 1-9

**Contact hours:** Lecture: 1

**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

**Levels:** Undergraduate

**Schedule types:** Lecture

**Department/School:** Finance

**FIN 4763 Financial Futures and Options Markets****Prerequisites:** FIN 3113 and 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**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**Contact hours:** Lecture: 3**Levels:** Undergraduate**Schedule types:** Lecture**Department/School:** Finance**FIN 4843 Risk Management****Prerequisites:** FIN 3113 and FIN 4223.**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**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**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:** Other: 1**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**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:** Other: 1**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Finance**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**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Finance**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**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

**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

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Finance

**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

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Finance

**FIN 5243 Financial Markets**

**Prerequisites:** FIN 5013.

**Description:** An analysis of the structure of financial markets, the determination and behavior of interest rates, the functioning of and the flow of funds.

**Credit hours:** 3

**Contact hours:** Lecture: 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

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Finance

**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

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Finance

**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

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Finance

**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

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Finance

**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

**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

**Levels:** Graduate

**Schedule types:** Lecture

**Department/School:** Finance

**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**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:** Other: 3**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Finance

## Undergraduate Programs

- Finance: Two Options, BSBA (<http://catalog.okstate.edu/spears-business/finance/two-options-bsba>)
- Energy Finance (EFIN), Minor (<http://catalog.okstate.edu/spears-business/finance/energy-finance-minor>)
- Finance (FIN), Minor (<http://catalog.okstate.edu/spears-business/finance/minor>)

## 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 Financial Economics (MSQFE) Degree

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

The Master of Science in Quantitative Financial Economics Degree. The discipline of quantitative finance has evolved tremendously in recent years, spurred by business and financial institution demand for quantitative skills. Oklahoma State University offers a Master of Science Degree in Quantitative Financial Economics (MSQFE) to meet this demand. The objective of the MSQFE is to produce graduates with mathematical, statistical and financial-modeling skills necessary to support advanced financial and economic decision-making.

The MSQFE 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 investment management, risk management and financial engineering. Significant coursework is devoted to the development of mathematical and statistical skills. These skills are necessary to evaluate the uncertain outcomes found in financial decision-making. The program provides students the opportunity to apply their knowledge and skills to projects that utilize quantitative

financial tools and techniques. The MSQFE program seeks to develop student competencies in risk evaluation methods, empirical estimation techniques, valuation theory and techniques, mathematical solution methods, capital budgeting, demand analysis and risk management.

The MSQFE is a 33 credit-hour program. The core 24 hours consists of classes required of all students in the program. Students may elect to complete a master's thesis. This option would reduce the number of elective hours from nine to three.

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. The background necessary to complete the program with only 33 hours of coursework includes ten hours of calculus, differential equations, statistical methods, intermediate microeconomics and principles of finance.

Additional information about the program is available on the Internet at <http://watson.okstate.edu/msqfe/>.

## 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, statistics and econometrics.

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),
3. 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 [Watson.okstate.edu/financephd/](http://Watson.okstate.edu/financephd/) (<http://Watson.okstate.edu/financephd/>).

## Faculty

Betty Simkins, PhD—Professor and Head

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

**Associate Professors:** William H. Dare, PhD; Shu Yan, PhD

**Assistant Professors:** Greg Eaton, PhD; Louis Piccotti, PhD; Qin "Emma" Wang, PhD; Jun Zhang, PhD

**Other Faculty:** Amit Bansal; Joe Byers, PhD; Mark Poole; Eric Sisneros, PhD; Nancy Titus-Piersma; Liying Xu, PhD