

# Finance (FINN)

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## Degrees Conferred:

M.S. in Finance (FINN)  
Ph.D. in Business Administration (BADM)

**Master's Program Description:** The Master of Science in Finance is designed for early- to mid-career students who seek advanced education in Finance. The program will guide students through evolving innovations in financial markets through the extensive use of descriptive, predictive, and prescriptive data analytics on the practice of finance. Graduates of this program are expected to achieve competencies in financial modeling and proficiency in computational methods involving machine learning, optimization, and advanced computing languages. These finance skills together with deep subject matter knowledge enable graduates to identify, assess, and seize opportunities for value creation in a dynamic, digital, and rapidly changing economy. Students focus on financial data analytics, the digital transformation of finance, and innovations in markets and venture finance.

**Ph.D. Program Description:** The Ph.D. program in Business Administration with an area of study in Finance prepares students for faculty positions at academic institutions or for professional careers in private industry and government. During their course of study, students receive specialized instruction in the areas of corporate finance, investments, and financial institutions. The conceptual knowledge and methodological skills necessary to conduct independent research are acquired through courses and individual apprenticeships with faculty.

## Requirements for M.S. in Finance

**Admission Requirements:** Students must apply to and meet the admission requirements (<http://catalog.uark.edu/graduatecatalog/business/>) of the Graduate School of Business and be admitted by the departmental admissions committee. Successful completion of a Master of Science in Finance from the University of Arkansas will qualify a student to take relevant professional examinations.

**Academic Standing and Dismissal:** Please see the Graduate School of Business dismissal policy for more information.

### Core Courses (15 hours)

FINN 52403	Digital Innovation in Financial Markets	3
FINN 53203	Financial Data Analytics I	3
FINN 54503	Advanced Financial Modeling	3

FINN 5100V	Special Topics in Finance (May be repeated for up to 6 hours)	3
FINN 51203	Valuing New Ventures	3
Choose 5 from the following courses <sup>1</sup>		15
FINN 52203	Financial Markets & Valuation	
FINN 53103	Advanced Commercial Banking	
FINN 53303	Investment Theory and Management	
FINN 5410V	Shollmier Investment Project	
FINN 52103	New Venture Finance	
FINN 53003	Advanced Corporate Financial Management	
FINN 51703	Energy Finance and Risk Management, Financial Data Analytics II	
FINN 54303	Real Estate Finance and Investment	
FINN 51303	Advanced Investments	
FINN 51403	Impact Investing	
FINN 53403	Financial Data Analytics II	
<b>Total Hours</b>		<b>30</b>

<sup>1</sup> Non-finance courses and courses in graduate microcertificates may be taken as electives with the approval of the Program Director.

**Additional Degree Requirements:** In addition to 30 hours of required coursework, students must take a comprehensive exam. The comprehensive exam will take the form of the final project in FINN 54503 Advanced Financial Modeling. An individual's grade of B or above in the project will be considered a pass on the comprehensive exam.

**Master of Science in Finance (Part-Time):** The Walton College also provides an opportunity for professionals in the workplace to complete the program by taking 6 hours per semester over 5 semesters. Approval of the Master of Science in Finance Program Director is required to enroll in more than six credit hours per semester.

## Ph.D. in Business Administration (Finance)

**Admission Requirements:** Students must apply to the Graduate School of Business (GSB) and meet the requirements (<http://catalog.uark.edu/graduatecatalog/business/>) of both the Graduate School (<http://catalog.uark.edu/graduatecatalog/admissions/>) and the GSB. Students must be admitted by the departmental admissions committee.

**Program of Study:** The nature of the program of study will vary somewhat depending upon the objective of the prospective candidate, but it will consist of a minimum of 72 graduate semester credit hours beyond the bachelor's degree and 42 graduate-only semester hours beyond the master's degree. Program requirements must balance credit hours for required coursework, research, and dissertation preparation.

The Ph.D. program in Finance requires 43 credit hours of coursework. Five seminars (15 credit hours) in financial theory and research are required in addition to 1 hour of BUSI 61101 Seminar in Business Administration Teaching I. The remaining credit hours, distributed across two supporting areas, economics and research, are customized in consultation with the department doctoral program adviser along with 18 hours of dissertation. In addition, students must complete a research paper requirement, pass a written and an oral comprehensive exam, as well as successfully defend a dissertation.

### Required Courses (34 hours)

BUSI 61101	Seminar in Business Administration Teaching I	1
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**Finance**

FINN 60403	Finance Theory	3
FINN 61303	Seminar in Investment Theory	3
FINN 62303	Seminar in Financial Management	3
FINN 63303	Empirical Research in Finance	3
FINN 67303	Seminar in Financial Markets and Institutions	3

**Economics**

ECON 61303	Mathematics for Economic Analysis	3
ECON 62103	Microeconomic Theory I	3
ECON 62203	Microeconomic Theory II	3
ECON 66103	Econometrics I	3
ECON 66203	Econometrics II	3
ECON 66303	Econometrics III	3

**Research Requirements (9 hours)**

Students may take up to one research tool course approved by the department doctoral program adviser when the research tool course is not listed above.

FINN 6830V	Contemporary Issues in Doctoral Colloquium	3
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Select two of the following: 6

STAT 51033	Introduction to Probability Theory	
STAT 51133	Statistical Inference	
STAT 53533	Methods of Multivariate Analysis	
STAT 53333	Analysis of Categorical Responses	
STAT 53833	Time Series Analysis	
STAT 54133	Spatial Statistics	

<b>Dissertation</b>		<b>18</b>
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<b>Total Hours</b>		<b>61</b>
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**Candidacy Exam:** The comprehensive exam has written and oral elements. The written segment consists of two questions from each of the five doctoral seminars. Students must answer a total of seven questions with at least one question from each of the five doctoral seminars. Contingent on satisfactory performance on the written exam, students progress to the oral segment. In the oral segment, students are asked to clarify and/or expand on their answers to questions on the written exam. Students can also be asked to address questions on the written exam which were not selected. Students who successfully pass the comprehensive exam advance to the dissertation stage.

Students must complete a minimum of 72 graduate credit hours beyond the bachelor's degree and 42 graduate credit hours beyond the master's degree. For students who apply to the degree program without a master's degree, a minimum of 11 additional credit hours in consultation with the department doctoral program adviser will be required to fulfill the full degree requirements to include approved graduate courses or a Master of Arts in Economics. Additional hours may be assessed in individual cases to meet specific coursework deficiencies.

Go to a complete list of the university's Graduate School degree requirements (<http://catalog.uark.edu/graduatecatalog/objectivesandregulations/>).

**Graduate Faculty**

**Acrey, Cash**, Ph.D., M.B.A. (University of Arkansas), B.A. (University of Arkansas at Little Rock), Clinical Assistant Professor, 2013.

**Hsu, Hung-Chia Scott**, Ph.D. (University of North Carolina-Chapel Hill), M.A. (University of Southern California), B.A. (National Taiwan University), Associate Professor, 2015, 2021.

**Jandik, Tomas**, Ph.D. (University of Pittsburgh), M.S., B.S. (Czech Technical University), Professor, Dillard Chair in Corporate Finance, 2000, 2016.

**Lee, Wayne Y.**, Ph.D. (University of California-Los Angeles), M.B.A. (Santa Clara University), B.S.M.E. (De La Salle College, Philippines), Professor, Alice L. Walton Chair in Finance, Garrison Chair in Finance, 1998.

**Li, Xi**, Ph.D. (Vanderbilt University), M.A. (Tulane University), B.S. (Hunan University), Associate Professor, 2018.

**Liu, Pu**, Ph.D., M.B.A. (Indiana University at Bloomington), B.S. (National Cheng Kung University), Professor, Harold Dulan Chair in Capital Formation, Robert E. Kennedy Chair in Finance, 1984, 2009.

**Lynch, Andrew**, Ph.D., M.A. (University of Missouri), B.S. (Southwest Baptist University), Assistant Professor, 2020.

**Malakhov, Alexey**, Ph.D. (Northwestern University), Ph.D. (University of North Carolina at Charlotte), M.S. (Moscow State University), Associate Professor, Edward W. Reed Endowed Professorship in Finance, 2006, 2013.

**Rennie, Craig**, Ph.D. (University of Oregon), M.B.A. (Dalhousie University), B.A. (University of Toronto), Associate Professor, Clete and Tammy Brewer Professorship in Business, 2001, 2007.

**Riley, Timothy B.**, Ph.D., M.B.A., B.S.S. (University of Kentucky), Assistant Professor, 2016.

**Wang, Yu**, Ph.D. (Rutgers University, Boston College), M.S., B.S. (Wuhan University), Assistant Professor, 2020.

**Yeager, Timothy J.**, Ph.D., M.A. (Washington University in St. Louis), Professor, Arkansas Bankers Association Chair in Banking, 2006, 2016.

**Zhang, Xinde**, Ph.D. (University of North Carolina-Charlotte), M.S. (Youngstown State University), B.S. (Jilin University, China), Visiting Assistant Professor, 2020.

**Courses****FINN 5100V. Special Topics in Finance. 1-6 Hour.**

Explore current events, concepts and new developments relevant to practitioners of Finance not available in other courses. Topics vary depending on the instructor. Prerequisite: Graduate standing. (Typically offered: Fall and Spring) May be repeated for up to 6 hours of degree credit.

**FINN 51103. Corporate Financial Management. 3 Hours.**

Financial analysis, planning and control; decision making and modeling for financial managers; and financial policies for management. (Typically offered: Spring)

**FINN 51203. Valuing New Ventures. 3 Hours.**

This course is for students who wish to begin careers in valuing new ventures with VCs and Angel funds, for investors interested in new ventures as an asset class, for members of startup teams who focus on acquiring and managing capital, and for R&D and innovation teams within existing large firms. The course will also add valuable techniques to those performing private equity valuations of growing firms or firms facing large strategic options, even if those firms are not technically startups. (Typically offered: Fall and Spring)

**FINN 51303. Advanced Investments. 3 Hours.**

Sound training in the principles of security analysis and portfolio management and certain advanced techniques of financial management. Modern portfolio theory and its application to portfolio management practices will be emphasized. Graduate degree credit will not be given for both FINN 41303 and FINN 51303. Prerequisite: FINN 30603. (Typically offered: Fall and Spring)

**FINN 51403. Impact Investing. 3 Hours.**

Students will gain skills for investing for social impact such as the ability to source, screen, and structure investment deals. Students will engage with industry leaders and explore areas of socially responsible investing, strategic or venture philanthropy, social enterprise and social entrepreneurship, and the history of social finance and microfinance. (Typically offered: Spring)

**FINN 51703. Energy Finance and Risk Management. 3 Hours.**

This course provides an advanced introduction to energy finance, defined as the application of finance principles to energy, energy service, and related industries, concerning all aspects of the energy value chain. Topics include: (1) physical fossil fuel markets; (2) physical electricity markets; (3) financially traded energy products; and (4) credit, counterpart, country, and enterprise risk. It also introduces students to business valuation and investment banking applications in the energy industry vertical. Prerequisite: FINN 51103 or FINN 52203. (Typically offered: Fall)

**FINN 52103. New Venture Finance. 3 Hours.**

The course is a deep dive into the legal contracting and governance issues around early stage financing. This course provides students with exposure to the startup finance ecosystem. Students will learn about the forms of early stage funding and the players offering those funding sources, how to prepare for due diligence when seeking funding, and the issues that arise about governance and control when seeking funding. (Typically offered: Irregular)

**FINN 52203. Financial Markets & Valuation. 3 Hours.**

Analysis of financial information by capital markets in the determination of security values with specific applications to retail and logistics companies. This course views these and other companies from the point of view of the capital markets. (Typically offered: Spring) May be repeated for degree credit.

**FINN 52303. Advanced Corporate Finance. 3 Hours.**

Addresses complex and multifaceted issues and problems in financial decision-making. Graduate degree credit will not be given for both FINN 42303 and FINN 52303. Prerequisite: FINN 36003. (Typically offered: Irregular)

**FINN 52403. Digital Innovation in Financial Markets. 3 Hours.**

The evolving role and operations of financial markets and institutions in an increasingly digital-oriented economy. The impact of technological innovations such as blockchain, nonbank financial technology firms, and machine learning on markets as it relates to investors, firms raising capital, and financial entrepreneurs. (Typically offered: Irregular)

**FINN 53003. Advanced Corporate Financial Management. 3 Hours.**

Focus on financial policy issues using real situational cases. Topics include cost of capital, capital budgeting and long-term planning, value-based management, real options, as well as project financing and valuation. Prerequisite: FINN 52203. (Typically offered: Irregular)

**FINN 53103. Advanced Commercial Banking. 3 Hours.**

This course focuses on advanced risk management strategies commonly implemented at regional and large commercial banks. Topics include financial statement analysis of banks and holding companies, credit analysis of global cash flow, Basel III capital requirements and stress testing, interest rate risk measurement and management, and interest rate hedging with derivatives. (Typically offered: Fall and Spring)

**FINN 53203. Financial Data Analytics I. 3 Hours.**

This course introduces programming for financial data analysis, data representation and visualization using a modern programming language. The objective is to provide students a broad understanding of (1) the general principles and techniques of programming, (2) familiar with financial data and manipulation, (3) financial data processing, analyzing and visualization and (4) the computational applications of in financial data. The course concludes with a project in which students apply their knowledge to implement and evaluate an algorithmic trading strategy. (Typically offered: Fall and Spring)

**FINN 53303. Investment Theory and Management. 3 Hours.**

Integration of theory, practice of investments with solution of individual and institutional portfolio management problems; risk management; Institute of Chartered Financial Analysts' Problems. Prerequisite: FINN 52203. (Typically offered: Fall and Spring)

**FINN 53403. Financial Data Analytics II. 3 Hours.**

Exploring the cutting edge of financial analytics, this course focuses on the application of Artificial Intelligence (AI) and Machine Learning (ML) technologies to enhance the gathering, analysis, and utilization of financial information. It presents an intensive study of the latest tools and methodologies driving change in financial decision-making processes, preparing students to innovatively apply these advancements in the finance sector. Prerequisite: FINN 53203. (Typically offered: Fall)

**FINN 5410V. Shollmier Investment Project. 1-3 Hour.**

Provide students with the opportunity to design and apply complex investment strategies used in institutional portfolio management on the Shollmier MBA Fund that can involve fixed income and equity securities as well as derivatives. Students will use top down asset allocation models, bottom up security selection, and hedge fund strategies. Prerequisite: FINN 52203 and FINN 53303. (Typically offered: Fall and Spring) May be repeated for up to 9 hours of degree credit.

**FINN 54303. Real Estate Finance and Investment. 3 Hours.**

Consideration of professional aspects of the real estate field. Emphasis is placed upon finance techniques and investment analysis. The focus is on commercial real estate. Brokerage, property management, appraisal, property development and current problems are also addressed. Students prepare a feasibly study on a commercial development project. Graduate degree credit will not be given for both FINN 44303 and FINN 54303. Prerequisite: FINN 39303. (Typically offered: Spring)

**FINN 54503. Advanced Financial Modeling. 3 Hours.**

The course applies Business Intelligence (BI), Cloud, Artificial Intelligent (AI) tools to business data for financial analysis and modeling. Data handling and modeling make use of the latest BI platforms such as Microsoft Power BI and Tableau. (Typically offered: Fall and Spring)

**FINN 5500V. Independent Study. 1-3 Hour.**

Permits students on an individual basis to explore selected topics in finance, with the consent of instructor. Graduate degree credit will not be given for both FINN 4500V and FINN 5500V. (Typically offered: Irregular)

**FINN 60403. Finance Theory. 3 Hours.**

Provides a conceptual understanding of key theoretical developments in the field of financial economics, including firm decisions under risk within a world of uncertainty. (Typically offered: Irregular)

**FINN 61303. Seminar in Investment Theory. 3 Hours.**

Study advanced literature in field investments, with special reference to theory of random walks, stock valuation models, portfolio management. (Typically offered: Spring)

**FINN 62303. Seminar in Financial Management. 3 Hours.**

Financial management of firm with emphasis on financial theory or firm, quantitative methods used in financial analysis, planning. (Typically offered: Irregular)

**FINN 63303. Empirical Research in Finance. 3 Hours.**

A study of recent empirically based research in finance. (Typically offered: Irregular)

**FINN 67303. Seminar in Financial Markets and Institutions. 3 Hours.**

Recent developments in the literature of financial markets and institutions. Participants will be involved in the extensive study of existing theories and empirical tests of the theories. (Typically offered: Irregular)

**FINN 6830V. Contemporary Issues in Doctoral Colloquium. 1-3 Hour.**

To explore and evaluate contemporary research issues in finance. Course content to reflect the most recent developments in theory and empirical research methodologies. Prerequisite: Doctoral student status and instructor consent. (Typically offered: Fall, Spring and Summer) May be repeated for up to 18 hours of degree credit.

**FINN 7000V. Doctoral Dissertation. 1-18 Hour.**

Doctoral Dissertation. Prerequisite: Candidacy. (Typically offered: Fall and Spring) May be repeated for degree credit.