

**MASTER OF SCIENCE  
FINANCE  
Program code: 1012**

**INTRODUCTION**

The Department of Finance & Financial Institutions (College of Business Administration) offers a Master's degree in **Finance**. This program offers both thesis and non-thesis option, its designed in such a way as to provide the transmission of high-quality finance knowledge to students who want to work as finance practitioners, performing core functions in asset pricing, design of trading rules and financial forecasting

*According to the University Council decision dated 4/2/2007, Thesis students admitted with effect from September 2007 are exempted from the comprehensive examination.*

**PROGRAM REQUIREMENTS****30 (36) TOTAL COURSE CREDITS****12 (12) Basic Courses (3 credits each)**

- 1012-500 Corporate Finance
- 1012-502 International Finance  
**Equivalent to** 1015-522 International Corporate Finance
- 1012-503 Financial Risk Management  
**Equivalent to** 1015-525 Risk Management
- 1012-504 Research Methods in Finance

**9 (21) ELECTIVE COURSES (3 credits each)****Thesis Track:**

- 1012-501 Investment & Portfolio Management  
**Equivalent to** 1015-523 Investment Analysis & Portfolio Management
- 1012-505 Financial Econometrics **Equivalent to** 1030-504 Econometrics
- 1012-510 Behavioral Finance
- 1012-511 Financial Modeling
- 1012-512 Islamic Finance
- 1012-513 Case Studies in Finance
- 1012-518 Special Topics I
- 1012-519 Special Topics II

**Project (Non-Thesis) Track:**

- 1012-501 Investment & Portfolio Management  
**Equivalent to** 1015-523 Investment Analysis & Portfolio Management

- 1012-505 Financial Econometrics **Equivalent to** 1030-504 Econometrics
- 1012-510 Behavioral Finance
- 1012-511 Financial Modeling
- 1012-512 Islamic Finance
- 1012-513 Case Studies in Finance
- 1012-518 Special Topics I
- 1012-519 Special Topics II
- 1012-520 Real Estate Finance and Investment
- 1012-521 Fixed Income Instrument
- 1012-522 Equity Valuation
- 1012-523 Finance Markets
- 1012-524 Management Financial Institution
- 1012-525 Alternative Investment
- 1012-526 Merger and Acquisitions
- 1012-527 Fintech
- 1012-545 Advanced Financial Statement Analysis  
**Equivalent to** 1020-571 Advanced Financial Statements Analysis & valuation

**9 (3) COMPULSORY COURSES**

- 1012-593 Project (3) (for non-thesis option)
- 1012-597 Thesis (0)
- 1012-598 Thesis (0)
- 2000-599 Thesis (9)

**Foundation Courses**

Graduate of non-finance, non-business disciplines are required to take and pass, with an average of B, three foundation courses (3 credits each) out of the list of courses offered by the MBA program. Graduates of accepted area will be granted exemptions on a case-by-case basis as judged by the Program Director. A placement test may be required for this purpose. Foundation courses may be taken concurrently with core courses.

- 1015-521 Financial Management
- 1015-571 Financial and Managerial Accounting
- 1015-572 Survey of Economics
- 1030-509 Statistics

***COURSE DESCRIPTION*****1012-500: CORPORATE FINANCE  
CR: 3**

This course provides the knowledge and tools required to understand the financing and investment decisions of corporations. Topics include capital markets, capital budgeting, asset pricing models, capital structure, the cost of capital, dividend policy, working capital management, mergers, restructuring and corporate control.

**1012-501: INVESTMENT AND PORTFOLIO  
MANAGEMENT  
CR: 3**

The course is an in depth study of fundamental principles related to portfolio theory and investment analysis. Topics to be covered in this course are investment environment, financial markets, portfolio theory, equity, fixed income securities, option valuation, and other derivative securities.

**1012-502: INTERNATIONAL FINANCE  
CR: 3**

This course deals in detail with financial operations that encompass a foreign currency factor. These include arbitrage, hedging, speculation, investment and financing. These operations are studied by taking into account real world conditions, such as transaction costs and bid-offer spreads.

**1012-503: FINANCIAL RISK MANAGEMENT  
CR: 3**

The course is a study of financial hedging, which consists of taking an opposite position on another financial instrument, most commonly a derivative instrument. Emphasis is on the market risk arising from fluctuations in the prices of fixed income securities, equity and foreign exchange.

**1012-504: RESEARCH METHODS IN FINANCE  
CR: 3**

This course introduces students to quantitative and qualitative research methods in finance, including estimation, hypothesis testing and survey design. It is also about the philosophy of research in finance, including research design and the ethical issues of research. Another element of this course is the importance of concise writing and presentation of results using informative graphs and tables.

**1012-505: FINANCIAL ECONOMETRICS  
CR: 3**

This course provides knowledge of the econometric methods used to analyze financial data, with applications in all branches of finance, including investment and portfolio management and international finance. Topics include the conventional ordinary least squares (OLS) method, univariate analysis, co-integration, error correction modeling and general dynamic modeling. The use of econometric packages such as Eviews, Microfit and Shazam is an integral part of the course.

**1012-510: BEHAVIORAL FINANCE  
CR: 3**

The course deals with an alternative approach to the study of financial markets, an approach that incorporates the principles of psychology. This approach starts with an observation that the assumption of investor rationality and perfect arbitrage are inconsistent with psychological and institutional evidence and that it is indeed inconsistent with the observed behavior of financial market participants. It is demonstrated that behavioral finance models explain the available financial data better than the conventional efficient market hypothesis. The principles of behavioral finance are studied in reference to the stock market and the foreign exchange market.

**1012-511: FINANCIAL MODELING  
CR: 3**

The course aims to provide practical relevance and real-world applications to finance concepts. Adopting a problem-solving approach, it focuses on computational issues in corporate finance, international finance, investment and portfolio management and financial risk management. The subject requires an intensive use of Excel spreadsheets.

**1012-512: ISLAMIC FINANCE  
CR: 3**

This course provides an introduction to Islamic banking, Shari`ah, Islamic economics, Islamic financial contracts and products development, accounting for Islamic financial transactions, risk management in Islamic financial markets and institutions, Islamic corporate governance and legal

and regulatory issues in Islamic banking and finance.

**1012-513: CASE STUDIES IN FINANCE**  
**CR: 3**

An examination of case studies in corporate finance, international finance, investment and portfolio management and financial risk management. The cases may involve quantitative and qualitative techniques. They describe business situations faced by financial managers, who must conduct thorough analysis for the purpose of decision making.

**1012-518: SPECIAL TOPICS I**  
**CR: 3**

This course deals with a current practical issue such as the global financial crisis. Otherwise, it may deal with a narrow but important topic, such as the Basel II & III Accord, or more focused topics in finance such as Operational Risk, Macro Finance, Financial Markets Microstructure, Financial Regulation, Financial Forecasting, Foreign Direct Investment, Development Finance, and Finance Applications of Monte Carlo Simulation.

**1012-519: SPECIAL TOPICS II**  
**CR: 3**

This course deals with a current practical issue such as the global financial crisis. Otherwise, it may deal with a narrow but important topic, such as the Basel II Accord, or more focused topics in finance such as Operational Risk, Macro Finance, Financial Markets Microstructure, Financial Regulation, Financial Forecasting, Foreign Direct Investment, Development Finance, and Finance Applications of Monte Carlo Simulation.

**1012-520: REAL ESTATE FINANCE AND INVESTMENT**  
**CR: 3**

Study of the setting and measurement of property values in real estate markets and an analysis of real estate as an investment vehicle. It mainly covers debt and equity financing of residential and commercial properties, the style of mortgages markets and instruments, lender and investor decisions in real estate financing.

**1012-521: FIXED INCOME INSTRUMENT**  
**CR: 3**

The course covers various aspects of fixed income securities. The topics covered should include, but

not limited to, features and risks of fixed income securities, understanding yield spreads, yield measures, forwards, and spots, interest rate risk measurement, term structure, valuation of bonds with embedded options, credit analysis, and bond portfolio management including portfolio risk measurement and management.

**1012-522: EQUITY VALUATION**  
**CR: 3**

The course analyses companies from a fundamental perspective in order to derive an intrinsic value for stock. The topics covered should include, but not limited to, estimating risk-free rates and risk premiums, estimating risk and costs of financing, measuring earnings and transforming them into cash flows, estimating growth, estimating the terminal value, the various valuation models ranging from the dividend discount model to the free cash flow models, and relative valuation. Students would have a hand-on application on real cases of these techniques.

**1012-523: FINANCIAL MARKETS**  
**CR: 3**

This course presents an overview of the structure and function of financial markets and their role in allocating capital. It will give students a broad understanding of the instruments traded in these markets and the mechanisms that facilitate their trading and issuance.

**1012-524: MANAGEMENT FINANCIAL INSTITUTIONS**  
**CR: 3**

Analyzes the management and operations of firms in the financial services industry, and studies the competitive money and capital markets in which they operate. Risk management in the financial institution is emphasized in detail using a variety of techniques. The functions of commercial banks, investment banks, and other financial intermediaries will be covered, and aspects of the regulation of these institutions will be examined.

**1012-525: ALTERNATIVE INVESTMENT**  
**CR: 3**

This course addresses a variety of applied topics in entrepreneurial finance and private equity (PE); issues related to measuring returns in private equity funds, valuing enterprises at different stages of development, and structuring deals using various forms of financing will be explored. In addition,

the course will cover topics of venture capital investing, finance of technological innovation, hedge funds, and managed funds.

**1012-526 MERGER AND ACQUISITIONS**

**CR: 3**

The objective of this course is to develop an understanding of mergers and acquisitions from the point view of corporate executive. Student will gain a well – rounded understanding of the major strategic, economic ,financial, and governance issues of mergers and acquisitions.

**1012-527: FINTECH**

**CR: 3**

This course is designed to equip students with the ability to identify opportunities for disruption in the financial services industry through studies of how financial technology transformed the financial sector. The course examines current and emerging technologies around money and payments, markets and consumer experience, and explores key ideas, principles, and frameworks around Fintech and Regtech. It covers topics of blockchain, crowdfunding and Robo-advisors.

**1015-545: ADVANCED FINANCIAL STATEMENT ANALYSIS**

**CR: 3**

This course provides an in-depth study of the concepts, skills and tools needed to interpret and analyze financial statements. Topics include: assessing the profitability and risk of healthy and distressed firms, analysis of corporate acquisition, analysis of multinational operations, derivatives and hedging activities, analyzing pro forma financial statements and their use in valuation and industry analyses.

**1012-593 PROJECT**

**CR: 3**

The student undertakes an independent project on a research topic of theoretical and/or experimental focus under the supervision of a faculty member listed in the supervisory list of the College of Graduate Studies. The objective is to provide the student with an opportunity to integrate and apply the knowledge gained throughout the course of study in a practical problem. The student must document the project in a scientific report following standard research writing guidelines and

give a public presentation to the project examination committee.

**1012-597: THESIS**

**CR: 0**

**1012-598: THESIS**

**CR: 0**

**2000-599: THESIS**

**CR: 9**