

# MASTER OF MANAGEMENT IN FINANCE AND INVESTMENT



WBS



**WBS** Wits  
Business  
School  
*Sculpting global leaders*

# MESSAGE FROM PROFESSOR OJAH



Finance is the lynchpin of taught-skills necessary for both navigating enterprises successfully, and ensuring stable economic activity nationally and globally. It is composed of several important facets and thus requires its practitioners to acquire a dedicated, focused and comprehensive set of training, to be appropriately qualified. The Master of Management in Finance & Investment Management (Master in Finance & Investment) at Wits Business School (WBS) is designed to fill this training need.

In fact, a specialization in graduate Finance is a hallmark of most renowned Business Schools globally. The reasons for this phenomenon are: (1) Finance is an indispensable unifying knowledge-area for success in both enterprise and the macro-economy. (2) Finance experts require a program-based training to garner the necessary breadth and depth of knowledge for its effective understanding and application.

Importantly, the WBS' Master in Finance & Investment program design is motivated by the special need for Finance in the Emerging market context. Gone are the days when Finance was most relevant in the developed market context, due to the fact that financial innovations emanated from this environment, with international finance transactions being essentially an "intra-developed markets" affair. With globalization, emerging markets have become inexorably connected to the dynamism of financial markets and their breathtaking paced innovations. The contagion of the Sub-prime mortgage market (developed markets) originated global financial crisis makes the case for why emerging markets must acquire the requisite capacity needed to understand the workings of financial markets, how to leverage their opportunities, and how to anticipate and mitigate their systemic threats.

The Master in Finance & Investment stands on three necessary pillars of Finance – quantitative/macro-environment foundation knowledge, firm grasp of the workings of financial markets and their evolutionary nature, and solid understanding of corporate finance and governance. The program is for high intelligence and motivated individuals with relevant undergraduate degrees (in e.g., business, economics, engineering, mathematics, statistics and law) who seek to pursue careers in specific areas of finance either as practitioners or researchers.

The Master in Finance & Investment requires a set of core courses, track-oriented courses, and a program thesis; with a 12-month, full-time completion period. Being a block-release based program, the duration is designed to equally accommodate students who are working and needing to tool-up quickly for career advancement in the finance field. The teaching staff is populated by top-rate Finance academics from both WBS and partnering reputed international graduate programs, and practitioners with rich finance industry experience.

Kalu Ojah, Ph.D.  
Professor of Finance  
Director: Master in Finance & Investment

# MMFI COURSE STRUCTURE

## STRUCTURE & DETAILS OF THE MASTER IN FINANCE & INVESTMENT

The programme is expected to be completed within a maximum of twelve months, including the completion of a programme thesis. The programme's time-tabling is based on a block-release formula.

The programme is comprised of three parts: core courses, elective courses and a programme thesis; with a total of eight units of courses and the programme thesis. The multiplicity of electives grouped under three streams of Finance is designed to permit students to decide upfront, the areas of Finance they seek to slant their expertise towards. Further, the numerous electives enhance the seamlessness of our students' ability to take courses from our collaborative partners. The programme is organised as comprising the three following components:

### A. CORE COURSES (4)

Completed in the 1st quarter (January-March)

1. Corporate Finance & Financial Statement Analysis
2. Investments
3. Finance Macro-environment Analysis (comprised of special topics in global, macro-economic and political environments)
4. Applied Financial Econometrics (a mélange of multivariate analysis & time-series specific to financial markets)

### B. ELECTIVE COURSES (4)

Completed in 2nd quarter (April-June) and 4th quarter (August-November)

1. Four from the pool of available electives (with 1-2 areas of specialisation in view)

### C. PROGRAMME THESIS

At the start of 2nd quarter (April) and completed by December

1. This thesis portion commences by the beginning of the 2nd quarter of the programme (April) and completed by December. The list of possible elective courses on offer at both WBS and partnering international graduate institutions is presented below, and arranged under three streams of specialisation.

#### CORPORATE FINANCE STREAM

- Advanced Corporate Finance & Corporate Governance
- Project Finance & Capital Budgeting Analysis
- Advanced Financial Statement Analysis & Disclosures

#### BANKING & CAPITAL MARKETS STREAM

- Banking Operations & Financial Institutions Management
- Investment Banking & Primary Markets
- Development & Entrepreneurial Finance
- International Finance & Globalisation
- Emerging Markets & Financial Market Development

#### INVESTMENTS & FINANCIAL ENGINEERING STREAM

- Trading & Securities Selection
- Asset Management & Portfolio Formation
- Derivatives, Debt & Structured Contracts
- Real-estate Markets & Mortgage Finance
- Models, Forecasting & Risk Management



## DESCRIPTION OF CORE COURSES

### CORPORATE FINANCE & FINANCIAL STATEMENT ANALYSIS

This core course places finance within the context of the goal of the firm, and as such dwells on measuring the firm's activities and performance in light of the firm's strategy and goal. Topics such as financial statement and analysis, accounting and economic profits, tax and retirement funds accounting, capital structure, agency issues, dividend policy, firm valuation and valuation methods, are covered.

### INVESTMENTS

It introduces the economics of how individuals and firms manage and grow their wealth (unconsumed earnings). Financial markets/institutions are discussed alongside their corresponding investable securities, with emphases on the valuation of debt securities, equity securities, and basic derivative securities. Overviews of background topics such as capital asset pricing models, market efficiencies (anomalies), and portfolio theory, are presented.

### FINANCE MACRO-ENVIRONMENT ANALYSIS

This core course acknowledges that the existence and nature of financial markets, firm's financing and investing strategies are influenced by the macroeconomic environment – whether due to government policy or international trend/shocks. It dwells on interest rate determination, inflation management policy; tax/spending policy, exchange rate policy, and their linkages to financial markets; and highlights stylised facts on the relationship between business cycles and financial markets.

### APPLIED FINANCIAL ECONOMETRICS

This course highlights the quantitative tools' applications that are common place in almost all finance areas. It introduces basic data describing statistical techniques, modern regression techniques, and various aspects of time-series econometrics that make sense of several financial data of varying frequencies. A major emphasis is placed on practical exercises with computer packages of Excel, E-Views and/or Matlab.

## DESCRIPTION OF ELECTIVE COURSES

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### CORPORATE FINANCE STREAM

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#### ADVANCED CORPORATE FINANCE & CORPORATE GOVERNANCE

This course deepens some of the topics introduced in the core corporate finance course, such as agency theory and the market for corporate control, models of corporate governance and how firms can optimise the cost of capital (operation) within a given model. Special topics on capital and debt structures of firms, ownership structure reorganisation and financial distress management (M&A, JV, Buy-out, etc.).

#### CAPITAL BUDGETING & PROJECT FINANCE

This course looks at how businesses and/or government units practically increase their value by effectively evaluating and selecting attractive long-term projects. It involves forecasting of cash flows and industry/macro-economic environments, determination of risk profiles and corresponding cost of capital. These budgeting tools, alongside risk-sharing arrangements, are then used to understand how firms and government finance manage large scale, long-live a projects that would ordinarily be difficult for one entity to handle exclusively. Case studies are generously employed.

## **ADVANCED FINANCIAL STATEMENT ANALYSIS & DISCLOSURES**

Basic knowledge on how firms measure and report their activities and performance is expanded in ways that equips a financial economist to extract the most from financial reports and disclosures. Consequently, special topics in financial accounting, managerial accounting and information economics are presented – earnings management, consolidation and special items accounting, harmonisation of accounting standards, asset impairment, legislations on disclosures, etc.

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## **BANKING & CAPITAL MARKETS STREAM**

### **BANKING OPERATIONS & FINANCIAL INSTITUTIONS MANAGEMENT**

This course introduces more comprehensively the plethora of financial institutions and markets that exist within most national confines, with a significant emphasis on the economics of financial intermediation and the dominance of thrift institutions in the performance of that function. More than one-half of the course is devoted to understanding core activities of commercial banks – including asset-liability management, capital adequacy and liquidity management, regulation, consolidation and reform, banking systems, capital arbitrage behavior and credit risk management.

### **INVESTMENT BANKING & PRIMARY MARKETS**

This is a course on the economics of how publicly traded firms and government units raise external funds for their activity. The forums by which these economic units access external funds – organised, private or over-the-counter markets – are introduced. Standard securities pricing and issuing procedures are presented, with significant readings and discussions on topics such as IPO, SEO, certification, conflict of interest, auctions and cornering of markets, and regulation of investment banking and intermediation.

### **DEVELOPMENT & ENTREPRENEURIAL FINANCE**

This course is largely eclectic and explorative, bringing together various areas of finance and development economics in search of optimal ways of providing funding to entrepreneurs, particularly small and medium enterprises that generally have limited or no access to traditional funding sources. Emphasis is placed on special issues of venture capital and private equity, and the nexus between non-government credit institutions, government credit schemes and banks.

### **INTERNATIONAL FINANCE & GLOBALISATION**

This course puts financial management analysis of firms in its international context. The following major topics are covered via lectures and case presentations: international monetary systems and global capital markets, currency value determination and exchange risk management, multinationality, wealth effects of cross border M&A and strategic alliances, globalisation and risk diversification potentials.

### **EMERGING MARKETS & FINANCIAL MARKET DEVELOPMENT**

The structural and institutional differences between emerging and highly developed economies are shown to throw up significantly different financial markets between these two national market types. Opportunities and/or obstacles of operating in emerging markets are illustrated in topics such as financial market liberalization and market development, sovereign debt management, contagion, cross-border investment flows and diversification, and emerging market asset valuations.

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## **INVESTMENTS AND FINANCIAL ENGINEERING STREAM**

### **TRADING AND SECURITIES SELECTION**

This course dwells on two main planks of the investments sub-area: securities selection (with emphasis on equity, bond and currency), and the mechanics and procedures for securities trading and settlement. Valuation techniques, markets microstructures, and trading models

are further emphasised. A great deal of guest-lectureship is used here as to enhance gaining knowledge of real-time trading practices.

#### **ASSET MANAGEMENT & PORTFOLIO FORMATION**

It provides a broad coverage of popular investment funds – equity funds, fixed income funds, mutual funds, pension/retirement funds, and hedge funds – with emphasis on motivation, institutional underpinnings and management of each of these funds. A significant portion of the course dwells on a hands-on portfolio formation and optimisation exercises that draws from various computational models.

#### **DERIVATIVES, DEBT & STRUCTURED CONTRACTS**

This course focuses on breaking down the conceptual and theoretical underpinnings of contingency claims/contracts and their valuation models. Key topics here are options, futures, swaps; and how they are used as investment assets as well as portfolio hedge instruments. Special attention is also given to models of fixed income and structured contracts, with a highlight of their linkage to derivatives.

#### **REAL-ESTATE MARKETS & MORTGAGE FINANCE**

This course surveys the real-estate markets locally and internationally, and highlights these markets increasing influence on financial markets and the macro-economy. It focuses on institutions that have been set up to address the special features of these huge mortgage (housing credit) markets, the mortgage loan based derivatives (securitisation, pass-throughs, spvs, etc.) and modeling and valuing of these often complex credit contracts.

#### **MODELS, FORECASTING & RISK MANAGEMENT**

This eclectic course combines topics from statistics, calculus and modelling, to provide more in-depth skills for computational financial analysis. It covers time-series analysis including autocorrelation, causality, co-integration, and volatility forecasting. These time-series techniques are combined with stochastic calculus to engineer contracts which permits hedging of various kinds of financial risks.

### **HOW TO APPLY AND OTHER RELEVANT INFORMATION**

#### **ADMISSION REQUIREMENTS**

- Undergraduate degree in business, economics, engineering, mathematics, statistics or law
- Work experience is a plus, but not required
- Individuals with limited numeracy will need additional mathematics training

#### **APPLICATION PROCESS**

1. MM Application form from faculty office.
2. Brief synopsis or profile of your qualifications, work background and why you wish to do the qualification.
3. Transcript letter of your last qualification.

#### **SUBMISSION DEADLINE FOR APPLICATIONS: 30 SEPTEMBER 2011**

Details of this road-map/application process, and the contact details of the programme managers are:

**Lerato Moepye - MM Coordinator**

**Tel:** +27 (0)11 717 3510

**Email:** Theresa.Moepye@wits.ac.za

# MASTER SERIES

FOR THOUGHT LEADERS WHO WANT TO SEE THE BIGGER PICTURE.

- Master of Business Administration (MBA)
- Master of Management in Finance and Investment (MMFI)
- Master of Management in Entrepreneurship and New Venture Creation (MMENVC)
- Master of Management by Research (MMR)
- Master of Management in Business and Executive Coaching (MMBEC)



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