# BSc (Hons) Banking and Finance - LM305 (Subject to Approval)

# 1. Objectives

This Programme is designed for those students seeking to embark on a career in the banking or financial services sector. Students will be provided with a sound theoretical and practical knowledge and skills base which are prerequisites to successfully embark on a career in the banking sector or within the larger finance environment. In addition, it will provide a stepping stone to students who are interested in enrolling on professionally recognised qualifications such as the Chartered Financial Analyst (CFA) programme.

# 2. General Entry Requirements

In accordance with General Entry Requirements for admission to the University for Undergraduate Degrees.

# 3. Programme Requirement

A Pass in Mathematics at Advanced Level.

## 4. Minimum Requirements for Awards

## (i) Degree Award

Core & Elective Structure	Credits
CORE MODULES	
Finance & Accounting	75
Economics and Statistics	3
Computer Science & Engineering	3
Law	9
Management	12
GEM	6
ELECTIVES	0
Total	108

# (ii) Diploma Award

The diploma is provided as a possible exit point in the programme at the end of Year 2. A student may opt for a **Diploma in Banking and International Finance** provided s/he satisfies the minimum requirements, as specified below.

Core Structure	Credits	
CORE MODULES		
Finance & Accounting	48	
Economics and Statistics	3	
Computer Science & Engineering	3	
Law	6	
Total	60	

# 5. Programme Duration

	Normai	Maximum
Diploma:	2 years	3 years
Degree:	3 years	5 years

**6. Credits per Year:** Maximum 48 credits, Minimum 18 credits subject to Regulation 5.

## 7. Minimum Credits Required for Degree Award: 108

For the award of the **BSc** (**Hons**) **Banking and Finance Degree**, the student must obtain at least 108 credits (see 4 above).

#### 8. Assessment

Each module will be assessed over 100 marks (i.e. expressed as %) with details as follows (unless otherwise specified):

Assessment will be based on written examination (of 2 to 3-hour duration, as specified) and continuous assessment carrying a range of 20% to 30% of total marks including the following modules:

Module	Continuous Assessment	Written Examination
DFA2222(3)- Research Methods for	30%	70%
Finance	(15% for class or lab-based test and	
	15% for individual assignment)	
DFA2034Y(3)-Investment and Security	30%	70%
Analysis	(includes 15% for a class or lab-	
	based test)	
DFA3012Y(5)– Options Strategies and	30%	70%
Financial Modelling	(includes 15% for a class or lab-	
	based test)	

Continuous assessment may be based on laboratory work and/or assignments and should include  $\underline{at}$  least one class test. For all modules taught in semester 1, there will be a compulsory class test at the end of semester 1 of the given academic year unless stated otherwise in the Programme Structure. This is applicable to modules examined at the end of the academic year.

For a student to pass a module, an overall total of 40% for combined continuous assessment and written examination components would be required without minimum thresholds within the individual continuous assessment and written examination.

Most modules in the structure are **yearly modules** which are taught over a period of two semesters but examined at the end of the second semester only. There are continuous assessments over the period of two semesters and the written examination will be of a duration of 3 hours for a yearly module of 6 credits.

Some modules in the structure are run over 15 weeks and carry 3 credits. The assessment of such modules will consist of continuous assessment and an examination of a duration of 2 hrs at the end of the semester in which the module is run.

Practical Training (ACF 3000) of at least 4 months' duration must be satisfactorily completed for the award of the degree. Such requirement may be waived for part-time students currently in employment.

## **Submission Deadline** for dissertation:

Final copy: End of March in the final year of the programme.

# 9. Termination of Registration

If the CPA of a student is < 40 for an academic year, s/he will have to repeat the entire academic year, and retake modules as and when offered. However, s/he will not be required, if s/he wishes, to retake module(s) for which Grade C or above has been obtained.

Students will be allowed to repeat only once over the entire duration of the Programme of Studies.

Registration of a student will be terminated if

- (i) the CPA < 40 at the end of an academic year and the student has already repeated one year of study; or
- (ii) the maximum duration allowed for completion of the Programme of Studies has been exceeded.

# 10. List of Modules - BSc (Hons) Banking and Finance

# **CORE MODULES**

Code	Module Name	Hrs/Wk	<b>Credits</b>
		L+P	
ACF 2006(3)	Principles of Taxation	3+0	3
ACF 3000	Practical Training	-	0
ACF 3105(5)	International Banking	3+0	3
CSE 1010e(1)	Introduction to IT*	O.E.	3
DFA1005Y(5)	Fundamentals of Finance and Banking	3+0	6
DFA 1020Y(1)	Accounting and Financial Analysis	3+0	6
DFA1216(1)	Financial Markets and Intermediation	3+0	3
DFA1233(1)	Quantitative Finance I	3+0	3
DFA 2033Y(3)	Quantitative finance II	3+0	6
DFA2034Y(3)	Investment and Security Analysis	3+0	6
DFA2035Y(3)	<b>Business Finance Decision-making and</b>	3+0	6
	Applications		
DFA2038Y(3)	Banking Operations	3+0	6
DFA2137(3)	International Trade Financing	3+0	3
DFA2222(3)	Research Methods for Finance	3+0	3
DFA 3006Y(5)	International Finance	3+0	6
DFA 3099Y(5)	Dissertation	-	6
DFA3012Y(5)	Option Strategies and Applied Financial	3+0	6
	Modelling		
DFA3239(3)	Financial Reporting and Analysis for bankers	3+0	3
ECON 1194(1)	Economic Environment	3+0	3
LAWS 1108(1)	The Mauritian Legal System and its Legal	3+0	3
	Process		
LAWS XXXX	Financial Law and Regulations	3+0	6
MGT 1111(1)	Organisation & Management*	D.E.	3
MGT XXXX	Corporate Ethics and governance	3+0	3
MGT3110(5)	International Business	3+0	3
MGT XXXX	<b>Business Strategy</b>	3+0	3

# 11. Programme Plan - BSc (Hons) Banking and Finance

Note for modules carrying asterisk(s):

- These are 3-credit modules, which will be run during and examined at the end of the <u>first</u> semester.
- \*\* These are 3-credit modules, which will be run during and examined at the end of the second semester.

# YEAR 1

Code	Module Name	Hrs/Wk L+P	Credits
CORE		L+P	
DFA 1020Y(1)	Accounting and Financial Analysis	3+0	6
DFA1233(1)	Quantitative Finance I**	3+0	3
DFA1005Y(1)	Fundamentals of Finance and Banking	3+0	6
MGT 1111(1)	Organisation & Management*	D.E.	3
CSE 1010e(1)	Introduction to IT*	O.E.	3
ECON 1194(1)	Economic Environment*	3+0	3
LAWS 1108(1)	The Mauritian Legal System and its Legal Process	3+0	3
DFA1216(1)	Financial Markets and Intermediation**	3+0	3

# YEAR 2

Code	Module Name	Hrs/Wk	Credits
CORE		L+P	
DFA 2033Y(3)	Quantitative finance II	3+0	6
DFA2034Y(3)	Investment and Security Analysis	3+0	6
DFA2038Y(3)	Banking Operations	3+0	6
DFA2035Y(3)	Business Finance Decision-making and Applications	3+0	6
ACF 2006(3)	Principles of Taxation*	3+0	3
DFA2137(3)	International Trade Financing*	3+0	3
LAWS XXXX	Financial Laws and Regulations	3+0	6
DFA2222(3)	Research Methods for Finance **	3+0	3
MGT XXXX	Corporate Ethics and governance**	3+0	3

# YEAR 3

Code Module Name		Hrs/Wk L+P	Credits
CORE			
DFA 3006Y(5)	International Finance	3+0	6
DFA3012Y(5)	Option Strategies and Applied Financial Modelling	3+0	6
MGT3110(5)	International Business	3+0	3
ACF 3105(5)	International Banking*	3+0	3
MGT XXXX	Business Strategy	3+0	3
DFA3239(3)	Financial reporting and analysis for bankers**	3+0	3
DFA 3099Y(5)	Dissertation	-	6

**Note 1:** It is compulsory for students to complete a dissertation of 10,000 to 12,000 words. This dissertation should start in Year 3, carrying 6 credits.

**Note 2:** Students will have to complete a 6-credit General Education Module (GEM) over the three years of Programme of Studies. List of GEMs will be posted on Faculty Notice Boards at the start of every semester.

Total Number of Core Yearly Modules:

11 (6 credits per module)

Total Number of Core Semester Modules:

12 (3 credits per module)

GEM:

1 (6 credit module)

As follows:

	CORE		ELE	ELECTIVE	
	Yearly	Semester	Yearly	Semester	
Year 1	2	6	-	-	-
Year 2	5	4	-	-	-
Year 3	3	4	-	-	-
TOTAL	10	14	-	-	1

Note: Electives are subject to: (i) Availability of resources & (ii) minimum critical mass of students for the elective.

# 12. Outline Syllabus

## **ACF 2006(3) - PRINCIPLES OF TAXATION**

Principles & Practice of Income Tax relating to individuals; Societies and Companies; Value Added Tax; Administration and procedures in relation to assessments; Objections and appeals.

## **ACF 3105(5) - INTERNATIONAL BANKING**

History of international banking; Banking systems around the world; International Commercial Banking; International Investment banking; International Retail and Private banking; Emerging trends in global banking.

### CSE 1010e(1) - INTRODUCTION TO INFORMATION TECHNOLOGY

IT and Computers; Stepping in the Computer; Input and Output Devices; Secondary Storage; Programming; Systems Software; Applications Software; Systems Development; Computer Networks; The Internet; Computer Security; Software Utilities; Issues and Trends in IT.

## DFA 1005Y(5) - FUNDAMENTALS OF BANKING AND FINANCE

The financial system; Capital markets; An Analysis of the Mechanisms of the Financial System in the economy: Time value of money; Capital Budgeting: an introduction; Valuation of Financial Assets; Bond analysis: an introduction; Risk, Return and Diversification; Efficient Market Hypothesis; Multinational Finance: an introduction; The role of banks within an economy; Banks and other financial institutions; Types of Banking; Banking Services; The role of the central bank; Introduction to Banking Regulations and Supervision: Types of regulations and their limitations; Introduction to Banking Risks; International banking environment

### DFA 1020Y(1) - ACCOUNTING AND FINANCIAL ANALYSIS

The Role of Accounting Information; Recording and Summarising Transactions; Accounting Concepts & Preparing Final Accounts; Adjustments to Final Accounts; Capital v/s Revenue Expenditure; Bank Reconciliation Statement; Accounting Ratios & interpretation Techniques; Introduction to Group Accounting & related issues; Accounting for Internal Decision Making Techniques; Elements of Cost; Costing Methods & Techniques; Decision Making Techniques; Accounting for Manufacturers; Budgets; Regulatory Framework for Company financial Reporting; Understanding Published Annual Reports; Corporate Failures Prediction; Forecasting & Valuing Businesses; Earnings Management.

# **DFA1216(1)** FINANCIAL MARKETS AND INTERMEDIATION

Consumption, Investment and the Capital Markets; Financial Systems. Banks v/s Capital Markets. Market structure and structure of financial markets; Financial Intermediary Structure: Bank Size, Organisation and Lending policies; Equity Markets, Types of Market Orders; Clearing and Depository Systems; Equity Trading; Bond Markets; Foreign Exchange Markets; National and International Financial Markets; Financial Crisis and Regulatory Framework.

#### DFA 1233(1)- OUANTITATIVE FINANCE I

Principles of Calculus; Matrix Algebra; Concepts of Probability; measures of location and spread; correlation analysis; Index numbers; Time series analysis of data: Exponential smoothing; Applications of Term Structure of Interest Rate; Applications of Market Prediction; Utility Functions; Annuities: future and present values; Amortization and Mortgage payments; Money-market securities; Yield calculations; Risk and return measures.

### DFA 2033Y(3) - QUANTITATIVE FINANCE II

Simple and Multiple Regression Models: Assumptions, Estimation and Inference; Alternative Functional Forms; Breakdown of Classical Assumptions: Multicollinearity, Autocorrelation, Heteroscedasticity; Dummy Variables; Introduction to forecasting using Time Series Models, crosssectional and panel data model; Applications include: Business Projections, Seasonality in Business, CAPM, volatility of share returns, quality of earnings, capital structure and dividend policy and EMH testing.

## DFA 2034Y(3) – INVESTMENT AND SECURITY ANALYSIS

Introduction to Portfolio Management: Market Indices, Uses of Indices, Mutual Funds, Growth Funds, Index Funds, Hedge Funds, Equity- Traded Funds, Closed-ended Funds versus Open-ended Funds; Different tools for risk and return measurements; Optimal Portfolio Theory: Risk and Return, Correlation structure and diversification; Portfolio management and Efficient Market Hypothesis: Technical and Fundamental Analysis and its implications on investment; Active and Passive Portfolio Management; Asset Allocation framework; Types of performance measurement tools; Applied Portfolio Models using Excel; Overview of Fixed income securities; Bond pricing and return measures; Risks associated with investing in Fixed Income Securities; Price volatility characteristics of fixed income securities; Convexity; Bond Immunisation Strategies

#### DFA 2035Y(3) - BUSINESS FINANCE DECISION MAKING AND APPLICATIONS

The business Finance Environment: The role of business finance, business organisation and role of directors, agency problem between shareholders and managers; Investment appraisal methods and risks; Risks and Return; Asset Pricing Models: APT and CAPM and Empirical Evidence; Capital Market Efficiency; Stock Market Anomalies; Gearing, Cost of Capital and Shareholder's wealth; Leasing; The dividend decision: Theory and Empirical Evidence; Corporate Restructuring (Mergers, Takeovers and Divestment); Bonds and the term structure of interest rates; Introduction to Derivatives: Forwards, Futures, Swaps and Options; International issues in business finance.

#### **DFA2038Y(3) - BANKING OPERATIONS**

Bank Business and Bank Capital; Income Statements and Balance sheet exposure of banks; Bank Performance and Ratio Analysis; Credit Evaluation Process: Credit Ratings and Scoring; Bank Treasury and Asset-liability Management: Duration Gap Analysis, Interest Rates Risk Management and Profitability; Bank Liquidity Management; Repo Instruments and Money market derivatives; Credit Risk and credit risk derivatives; Value at Risk and Capital; Securitisation and Structured Credit Vehicles; Bank Regulatory Capital and the Basel Accords;

# **DFA2137(3) -INTERNATIONAL TRADE FINANCING**

Trade financing instruments: Documentary credit, courier trade, factoring, pre-shipping financing, post-shipping financing, buyers credit, suppliers credit; Export credit insurance; export credit guarantees; the role of government in trade financing: Central Bank refinancing schemes, EXIM Bank, Export credit insurance agencies, support from trade promotion organizations, export development corporations and state owned enterprise.

### DFA 2222(3) - RESEARCH METHODS FOR FINANCE

The research proposal and issues; Plagiarism; Referencing; Validity and Cause and Effect Relationships in research; Questionnaire Designs: Contend, Wording, Placement issues; Sampling Methods: Probability and Non-Probability Sampling; The Use of Software in Research: Coding, Data Preparation, Input, Descriptive Statistics (Mean, etc.), Frequencies and Charts, Cross Tabulations, Correlations, Parametric testing and Non-parametric testing; Regression Analysis; Empirical Studies in Finance.

## DFA 3006Y(5) - INTERNATIONAL FINANCE

The International Monetary System; Using Balance of Payments Data; The Foreign Exchange Market; International Parity Conditions; Foreign Currency Options; Measuring and managing foreign exchange exposure; Internal and external techniques of exposure management; Interest rate exposure; Capital and Ownership structure; Global cost of capital; Capital markets and other sources of funding for the global firm; Corporate strategy and Foreign Investment Decisions; Taxation issues; Political Risk Management; Managing Multinational Operations; Working Capital Management; Import and export Financing; issues in International Finance.

#### DFA 3099Y(5) - DISSERTATION

The assessment of final year project will be based on the implementation of a computerised solution to a real-life or research-oriented problem and the submission of a report. The length of the report should be in the range of 10,000–12,000 words.

## DFA 3012Y(5) - OPTION STRATEGIES AND APPLIED FINANCIAL MODELLING

The markets for options; Put-Call Parity Relationships; Theoretical Pricing Models: The bionomial Model and the B-S Model; Index options; Stock options, Currency options; Option Values and Changing Market conditions (delta, theta, gamma, vega, rho); Hedging with options; Protective calls and puts; portfolio insurance; Forward and Futures Markets and their use for hedging; Currency and Interest Rate Swaps; Value at Risk; Applied Financial Modelling: Options modelling and Value at Risk using Excel.

#### DFA3239(3) – FINANCIAL REPORTING AND ANALYSIS FOR BANKERS

Regulatory Framework for Company Financial Reporting; Understanding Published Annual Reports of corporate entities and the specificities relating to banks; Interpretation Techniques; Corporate Failures & Credit Evaluation; Forecasting Financial Information; Valuing Businesses; Earnings Management; International Financial Reporting framework and standards; presentation of financial statements; accounting for financial instruments, impairments, provisions and contingent liabilities, leases

# **ECON 1194(1) - ECONOMIC ENVIRONMENT**

Demand and Supply. Production and Costs. Market Structures and Pricing of Financial Services. Regulation and Efficiency. Financial Market Failures. Information. Growth of Financial Services Industry. Macroeconomics Objectives and Policies. Money and Inflation. Monetary Policy and Financial Policy. Balance of Payments and Exchange Rate. Regional and Financial Integration.

# LAWS 1108(1) - THE MAURITIAN LEGAL SYSTEM & ITS LEGAL PROCESS

Law as a normative system. Sources of law. Legislation and the legislative process. Statutory interpretation. Droits subjectifs and legal personality. Other aspects of Substantive Mauritian Law. The Judicial Process.

## LAWS XXX FINANCIAL LAW AND REGULATIONS

Financial Risks, , regulation and compliance, Evolution of the international financial regulation, capital adequacy ratios, issues in capital regulation, internal models ,recent development in capital requirements, Basel accord on capital adequacy, regulation of financial services, Regulation of Investment market, Practical issues in Banking and Security. Laws relating to Banking, Banking Act, The Financial services Act, The Financial Reporting Act, The code of Corporate governance, legal dimension of Insurance, Money laundering, international standards for combating money laundering and terrorist financing-FATF, AML/CFT framework, Money Laundering offences,

## MGT 1111(1) - ORGANISATION & MANAGEMENT

Management Concepts and Functions. Development of Management Theories. The Internal and External Environments of the Organisation. Social Responsibility and Ethics in Management. Managerial Decision Making. The planning process. The nature of Organisation Structure. Organisational Control. Contemporary issues in Management. Management in Future.

## MGT XXXX - CORPORATE ETHICS AND GOVERNANCE

Brief overview of ethics philosophies (teleology, deontology, justice theories, ethical relativism – what constitutes good governance in the corporate world – stakeholder and stockholder theory – the social duty versus the economic duty of business – implications of Friedman's theory – individual ethics versus

corporate ethics – difference between codes of ethics and the legislation – how to distinguish between right and wrong behaviour – why moral questions arise in the business corporation – bribery in the context of business – gifts versus bribes – implications of gifts in the corporate world – why there is an ongoing debate on whether ethics can or should be taught - profit maximisation v/s other corporate objectives - personal v/s corporate ethics – whistle blowing – impact of poor governance on business.

#### MGT3110(5)- INTERNATIONAL BUSINESS

Globalisation; Differences in Political Economy; International Trade Theory; Foreign Direct Investment; Regional Economic Integration; Foreign Exchange; International Monetary system; Strategy of International Business; Entry Strategy and Strategic Alliance; Global Marketing and R & D; Financial Management in International Business; International Relations.

## MGT XXXX - BUSINESS STRATEGY

Understanding Strategic Management concepts and applications, The Strategic Management Process, Mission and vision statement, Environmental scanning: SWOT analysis, Resource based view of the firm, Competitive Analysis, Porters five forces model; Identification of core competences and critical success factors; Growth strategies, competitive strategies & functional strategies; Strategic Analysis and choice; Strategy implementation (organisation structure, employee empowerment, reward systems, culture, leadership); Strategic control and continuous improvement, Case study techniques.

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