

BSc (Hons) Management with Information Systems - LME431

1. Objectives

The Programme is intended for persons willing to embark on a career in management within an e-Environment. The main objectives are to equip participants with the necessary concepts, tools and techniques of management and to expose them to information systems relevant to functional areas of management.

Participants will be expected to apply, in the business context, the managerial principles and software packages covered in the Programme. To facilitate the interaction with the business environment, participants will undertake an internship programme.

2. General Entry Requirements

As per General Entry Requirements for admission to the University for Undergraduate Degrees.

3. Programme Requirement

Mathematics at 'A' Level.

4. Programme Duration

| | | |
|---------|-----------------------|------------------------|
| | Normal (Years) | Maximum (Years) |
| Degree: | 3½ -year sandwich | 5½ -year sandwich |

5. Credits per Year

Minimum 18 credits, Maximum 48 credits subject to Regulation 4.

6. Minimum Credits Required for Award of Undergraduate Degree: 117 (including 6 credits for practicums).

Breakdown as follows:

| Degree | Core Taught Modules | Elective Taught (Min) Modules (including one GEM) | Dissertation | Practicums | Total |
|---------------|----------------------------|--|---------------------|-------------------|--------------|
| Credits | 90 | 15 | 6 | 6 | 117 |

7. Practicums

The 3½-year degree Programme includes a minimum of 6 months gaining practical experience outside the university at the end of Year 2. It will normally involve working as a management trainee in industry. The advantages of taking such a “sandwich” course are that it will improve students’ maturity and skills base and will give the opportunity to students to “test” in real-life situations what they have learnt in theory. It will also enhance students’ employability skills.

Practicums will be monitored by the Department. Two reports must be produced at the end of the training period: one by the student and one by the supervisor in the workplace. Practicums of at least 6 months’ duration, accounting for 6 credits, must be satisfactorily completed for the award of the degree. Such requirement may be waived for part-time students currently in employment.

8. List of Modules – BSc (Hons) Management with Information Systems

CORE MODULES

| Code | Module Name | Hrs/Wk | Credits |
|---------------|---|---------------|----------------|
| | | L+P | |
| DFA 1020Y(1) | Accounting and Financial Analysis | 3+0 | 6 |
| CSE 1002Y(3) | Programming Methodology | 3+0 | 6 |
| LAWS 2100Y(3) | Foundations of Information Technology Law | 3+0 | 6 |
| MGT 1226(1) | Economics for Managers | 3+0 | 3 |
| MGT 1111(1) | Organisation & Management | D.E. | 3 |
| MGT 1201(1) | Organisation Behaviour | D.E. | 3 |
| MGT 1203(1) | Marketing Fundamentals | 3+0 | 3 |
| CSE 1006Y(1) | Introduction to IS | 3+0 | 6 |
| CSE 2002Y(3) | Database Systems | 3+0 | 6 |
| CSE 1004Y(1) | Structured Systems Development | 3+0 | 6 |
| MGT 2060Y(3) | Marketing Management | 3+0 | 6 |
| MGT 2061Y(3) | Human Resource Management | 3+0 | 6 |
| MGT 2062Y(3) | Operations Management | 3+0 | 6 |
| STAT 1010(1) | Statistics I | D.E. | 3 |
| MGT 2217(3) | Research Methodology in Management | 3+0 | 3 |
| MGT 3099(5) | Practicums | 6 mths | 6 |
| CSE 3003Y(5) | Information Systems: Advanced Concept | 3+0 | 6 |
| MGT 3058Y(5) | Strategic Management | 3+0 | 6 |
| MGT 3059Y(5) | International Business and Management | 3+0 | 6 |
| MGT 3000Y(5) | Dissertation | - | 6 |

ELECTIVE MODULES

| | | | |
|--------------|-------------------------------------|-----|---|
| CSE 2009Y(3) | Web Technologies with Multimedia | 3+0 | 6 |
| CSE 3013Y(5) | Management Support Systems | 3+0 | 6 |
| MGT 3075Y(5) | Call Centre Management | 3+0 | 6 |
| MGT 3061Y(5) | Managing Quality | 3+0 | 6 |
| MGT 2067Y(3) | Business Ethics and Good Governance | 3+0 | 6 |
| MGT 3066Y(5) | e-HR and Knowledge Management | 3+0 | 6 |
| MGT 3076Y(5) | Strategic Internet Marketing | 3+0 | 6 |

9. Programme Plan - BSc (Hons) Management with Information Systems

YEAR 1

| Code | Module Name | Hrs/Wk L+P | Credits |
|--------------|--------------------------------------|-----------------------|----------------|
| CORE | | | |
| DFA 1020Y(1) | Accounting and Financial Analysis | 3+0 | 6 |
| CSE 1002Y(3) | Programming Methodology | 2+2 | 6 |
| MGT 1111(1) | Organisation & Management* | D.E. | 3 |
| MGT 1201(1) | Organisation Behaviour** | D.E. | 3 |
| STAT 1010(1) | Statistics I* | D.E. | 3 |
| MGT 2217(3) | Research Methodology in Management** | 3+0 | 3 |
| MGT 1226(1) | Economics for Managers* | 3+0 | 3 |
| MGT 1203(1) | Marketing Fundamentals** | 3+0 | 3 |
| CSE 1006Y(1) | Introduction to IS | 2+2 | 6 |

YEAR 2

| Code | Module Name | Hrs/Wk L+P | Credits |
|---------------|---|-----------------------|----------------|
| CORE | | | |
| CSE 2002Y(3) | Database Systems | 2.5+1 | 6 |
| CSE 1004Y(1) | Structured Systems Development | 2+2 | 6 |
| LAWS 2100Y(3) | Foundations of Information Technology Law | 3+0 | 6 |
| MGT 2060Y(3) | Marketing Management | 3+0 | 6 |
| MGT 2061Y(3) | Human Resource Management | 3+0 | 6 |
| MGT 2062Y(3) | Operations Management | 3+0 | 6 |

YEAR 3

| Code | Module Name | Credits |
|-------------|--------------------|----------------|
| CORE | | |
| MGT 3099(5) | Practicums | 6 |

YEAR 3 + YEAR 4

| Code | Module Name | Hrs/Wk L+P | Credits |
|------------------------|---------------------------------------|-----------------------|----------------|
| CORE | | | |
| CSE 3003Y(5) | Information Systems: Advanced Concept | 3+0 | 6 |
| MGT 3058Y(5) | Strategic Management | 3+0 | 6 |
| MGT 3059Y(5) | International Business and Management | 3+0 | 6 |
| MGT 3000Y(5) | Dissertation | - | 6 |
| ELECTIVES | | | |
| CHOOSE TWO FROM | | | |
| CSE 2009Y(3) | Web Technologies with Multimedia | 2+2 | 6 |
| CSE 3013Y(5) | Management Support Systems | 2+2 | 6 |
| MGT 3075Y(5) | Call Centre Management | 3+0 | 6 |
| MGT 3061Y(5) | Managing Quality | 3+0 | 6 |
| MGT 2067Y(3) | Business Ethics and Good Governance | 3+0 | 6 |
| MGT 3066Y(5) | e-HR and Knowledge Management | 3+0 | 6 |
| MGT 3076Y(5) | Strategic Internet Marketing | 3+0 | 6 |

NOTES:

Submission Deadline for dissertation:

Final copy: Mid October in the final year of the programme.

Modules carrying asterisk(s):

*These are 3-credit modules, which will be run and examined at the end of the first semester.

**These are 3-credit modules, which will be run and examined at the end of the second semester.

One General Education Module (GEM), 3 credit-module, to be completed over the duration of the programme.

10. Outline Syllabus

CSE 1002Y(3) - PROGRAMMING METHODOLOGY (L/P 2/2 - 6)

Pseudocode; Structured Programming Techniques; Program Structure; Simple Data Type; Control Structures; Modularity; Structured Data Types; Introduction to Object Oriented Programming; Programming Style and Testing, Abstract Data Types, Arrays, Linked Lists, Stacks, Queues, Trees, Graphs, Operations on Trees and Graphs.

CSE 1004Y(1) - STRUCTURED SYSTEMS DEVELOPMENT (L/P 2/2 - 6)

Introduction to SSAD; Software life cycles, Components in a system, Preliminary investigation, Requirements Gathering, Requirements Modeling, Data flow analysis, DFD, Data Dictionary, Systems Design, ERD, State Transition Diagram, systems implementation, software design, flowcharts, review methods, managing the development process, estimation and management of development time, Testing, Maintenance Fundamentals of computer applications development, Application Architectures, Databases, Implementation of databases, User interface development, Query By Example, Queries using SQL, Database Access, Forms and Controls, Reports.

CSE 1006Y(1) - INTRODUCTION TO IS (L/P 2/2 - 6)

Computer history - hardware - software- data and information - files and databases- Operating software - applications packages - communications technologies – networks - the Internet - programming concepts - information systems life cycle –development methodologies - roles in systems development - management of change - information storage and display - information handling, Information systems in organisations, information technology at a national policy level - social and organisational aspects of systems development.

CSE 2002Y(3) - DATABASE SYSTEMS (L/P 2.5/1 - 6) (PQ: CSE 1004Y(1))

DBMS functions/Components, Database Abstractions, Relational Model ERD, Relational algebra, Normalization, Query Language – S QL, DB design issues, Optimization, Security Issues, Transactions, Distributed Computing, Synchronization, Overview Of Distributed Databases, Distribution Transparency, Distributed Database Design - Commit Protocols And Concurrency Control, Query Processing.

CSE 2009Y(3) - WEB TECHNOLOGIS WITH MULTIMEDIA (L/P 2/2 - 6) (PQ: CSE 1002Y(3))

Overview of Internet, Internet Protocols and Network Components; HTML; XML; Scripting languages; Client-side scripting; Server-side scripting, Hypermedia; Data processing on a web server (ASP, Asp.NET, PHP, Cold Fusion); Concepts of Web-based applications; Integrating applets; Administration of web servers; Principles of E-Commerce; Administration of web servers; Web site related issues; Web site design issues, Multimedia fundamentals.

CSE 3003Y(5) - INFORMATION SYSTEMS: ADVANCED CONCEPT (L 3 - 6) (PQ: CSE 1006Y(1))

Overview of MIS; Planning and Control, Influences on Design, Strategic Planning for IT, Systems Theory, TPS, EIS, DSS, Abstracts and Models, Systems Investigation, Systems Development Methodologies, BPR, Analysis and Design Techniques, User Involvement, Software Development, Systems Implementation, Network Security, Systems Maintenance. Nature & Importance of IS Management; Roles of IS Managers; Measurement of the IS Functions; Information Infrastructures; Strategic Alignment of IT with Business;

Planning for Information Systems; Enterprise Resource Planning, Contract & Procurement Strategies, Financial Aspects of IS, Outsourcing Techniques, Security & Control; Audit, Evaluation, & Assessment.

CSE 3013Y(5) - MANAGEMENT SUPPORT SYSTEMS (L/P 2/2 - 6) (PQ: CSE 1002Y(3))

KBS Architecture, Knowledge Representation, Inference, heuristics, Knowledge acquisition, Explanation facilities, KBS life-cycle, KBS, development tools, Uncertainty, Case Based Reasoning, Data Warehousing, KDD Applications, Data pre-processing, Data Mining Techniques, Web mining , OLAP, Decision Support Systems, DSS Architecture and life cycle, Planning, Trends.

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.

LAWS 2100Y(3) - FOUNDATIONS OF INFORMATION TECHNOLOGY LAW

Introduction to Law: Mauritian Legal Framework. Overview of the law regulating the Internet. Hardware and software contracts. Electronic Evidence. Digital Signatures. Intellectual Property Rights. Electronic transactions and online payments. Cyber crimes. Electronic commerce and WTO.

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 1201(1) - ORGANISATION BEHAVIOUR

Introduction to Organisational. Foundations of Individual Behaviour. Designing Motivating Jobs. Job Satisfaction. Power and Politics. Foundations of Group Behaviour. Communication and Decision Making. Conflict Management. Organisational Culture. Organisational Change and Development.

MGT 1203(1) - MARKETING FUNDAMENTALS

Introduces the foundation of marketing and its key concepts: the Marketing Concept, Customer Satisfaction and Customer Value. Topics covered will include: evolution in Marketing Management philosophy; the marketing environment (Internal and External environment); the marketing research process; Consumer and Organisational buying behaviour; Market segmentation, positioning and targeting; The Marketing mix: product, price, promotion and distribution strategy of firms; Social Responsibility and green marketing.

MGT 1226(1) - ECONOMICS FOR MANAGERS

Basic tools of Economics; Microeconomics: Scarcity and Allocation, Demand and Supply, Elasticity, Long and short run costs, Labour & Factor Markets, Market Mechanisms, Economic Systems; Macroeconomics: Introduction and Measurement of National Income, Long run macro, short run macro, Money and Monetary Policy, Fiscal policy. International Economics; Microeconomics of Trade, Macroeconomics of Trade.

MGT 2060Y(3) - MARKETING MANAGEMENT

Nature and Scope of Marketing, the Marketing Environment, Marketing Research and Marketing Information Systems, Buyer Behaviour – the buying behaviour of consumers and organizations, Segmentation, Targeting and Positioning Framework, Marketing Mix – the 4P's, Product and Services, Place (channel decisions and channel intermediaries), Price (pricing considerations and pricing methods), Promotion (Advertising, Personal Selling, Public Relations, Sales Promotion, Direct Marketing & Sponsorship), The extended marketing mix, Services Marketing, Broadening the Scope of marketing, Social Responsibility, Green Marketing, Ethics, Customer Relationship Management, Marketing Plan, Marketing Audit, Analysing Industry Attractiveness, BCG Model, Strategic Planning & Control, Review of Marketing Mix Strategies.

MGT 2061Y(3) - HUMAN RESOURCE MANAGEMENT

Evolution of HRM, HRM policy goals, SHRM - HRM and organizational performance, Individual performance - attitudes and behaviour, Organisational citizenship behaviour and organisational culture, Psychological contracts, Organisational justice, Job redesign and team working, Human resource planning, Recruitment and selection, Performance appraisal and management, Reward management, Training and development, Employee relations. International human resource management - management of expatriates, cross cultural management, Comparative human resource management (US, EU, Japan, Asia-Pacific, etc.), Public sector HR (New public management), Criticisms of HRM, Case Study and seminars.

MGT 2062Y(3) - OPERATIONS MANAGEMENT

Introduction to Operations Management. Types and characteristics of manufacturing and service systems. Production planning and control – Forecasting, Capacity planning and operations scheduling, Inventory Management, MRP I and MRP II. Project scheduling – Network Analysis. Quality Control. Layout designs. Location selection. Work study. Just-In-Time. Supply-Chain Management. People and work systems. Types of Maintenance.

MGT 2067Y(3) - BUSINESS ETHICS AND GOOD GOVERNANCE

Compatibility between business and ethics – why moral questions arise (communitarians versus individualists) – morality and human nature – the moral law of duty – philosophies of ethics (teleology, deontology, justice theories) – Socratic ethics – Aristotle and commonsense ethics – the social contract – Marx and economic determinism – notions of absolutism versus relativism – moral relativism – cultural relativism – individual ethics versus corporate ethics – dimensions to social responsibility (economic, legal, ethical, philanthropic) – codes of ethics – ethical decision-making – stakeholder and stockholder theory – the social duty of business – profit maximisation v/s other corporate objectives – implications of Friedman's theory – personal v/s corporate ethics – whistle blowing – impact of poor governance on business – bribery in the context of business.

MGT 2217(3) - RESEARCH METHODOLOGY IN MANAGEMENT

Nature of research-literature review and secondary sources-observation and diaries-development hypotheses and variables focus groups-content analysis surveys and sampling methods-descriptive and inferential statistics-questionnaire design-data analysis and presentation using SPSS-presentation and writing of report.

MGT 3058Y(5) - STRATEGIC MANAGEMENT

The international environment from 1890 to now: a critical analysis; An assessment of the evolution of the Mauritian economy since 1968; History of strategy since the 19th century: from industrial capitalism to financial capitalism; Strategic segmentation: The different levels of decision making in the Strategy Management Process, SWOT analysis: The Resourced Based Theory of the Firm and the definition of competitive advantage; Clusters and the new economics of competition; Decision tools; Growth strategies, competitive strategies & functional strategies.

Strategy implementation and the organisational structure; Conflict management; The benchmarking process: Implementing change & gaining commitment; Identity of the firm, The Agency Theory, Corporate Governance, Social Responsibility & Ethics, Leadership, Crisis management; Evaluation & control, Case study techniques.

MGT 3059Y(5) - INTERNATIONAL BUSINESS AND MANAGEMENT

The International Business Environment - Introduction to International Business, The Emerging Global Economy, The Role of Technological Forces in the Globalisation Process, Differences in Political Economies The Concept of National Competitiveness, Emerging Markets in the Global Economy.

Cross-Border Management - The International Marketing environment as influenced by Political, Legal and Cultural dimensions. Foreign Market Analysis, Selecting and Managing Entry Modes to Foreign Markets, Assessing the Impact of Exporting, Importing and Counter-Trade. International Market Research and Multinational Marketing Information Systems. International Marketing Mix decisions Managing Diversity and Cross Cultural Differences. Current Issues in International Business and Management.

MGT 3061Y(5) - MANAGING QUALITY

Introduction to Quality. Total Quality Management concept and philosophies. Kaizen. Total Quality Culture. Leadership for Quality. Planning for Quality. Organising for Quality. Business Excellence Model – MBNQA, EFQM, Deming Prize. Quality Management Systems: ISO 9000. Quality System Audit. Quality tools and techniques for process improvement. Quality of Services. Teamwork for Quality. Communications and training for Quality. Benchmarking. Cost of Quality. Statistical Process Control. Implementing TQM.

MGT 3066Y(5) - e-HR AND KNOWLEDGE MANAGEMENT

e-HR and the eWorkplace, HRM policy goals, Evolution of HRM and IT, IT enabled HR, New HR paradigm – IT effects on HR, Virtual Organisation and remote management, HR shared services, HR Call Centre Management, Web-based HR (Recruitment and Selection, HRD, Employee Relations, etc.), Criticisms of Computer mediated workplace and HR outsourcing, Case study and Seminars.

Knowledge management and intellectual capital, Business strategy and KM strategy, KM infrastructure, People – HRM and KM link, Processes – GODD and knowledge transfer, Enabling technology, Sharing culture, implementing KM, Case study and seminars.

MGT 3075Y(5) - CALL CENTRE MANAGEMENT

Evolution of call centres, Call centre production models, Emotional labour and tensions in call centres (people and organisation in call centres), ICT and CRM, Call centre management skills, HRM and service quality (human resource strategy wheel), Building a learning and sharing culture, Cost management, Quality control, seminars and case studies.

MGT 3076Y(5) - STRATEGIC INTERNET MARKETING

Emergence of e-marketing and e-business models, e-marketing environment and technology, Ethical and legal issues in e-marketing, Consumer behaviour and internet, Targeting online market segments, differentiation and positioning strategies, e-marketing product and pricing strategies, e-marketing communication, Customer Relationship Management and CRM benefits – CRM vision, processes, information and technology, e-marketing in emerging economies, technological readiness and the digital divide.

STAT 1010(1) - STATISTICS I

Introduction to problems involved in the handling of data; Collection of data including Sample Design; Organisation and Presentation of Data; Measures of Central Tendency; Measures of Dispersion; Measures of Skewness; Introduction to Probability Theory.