

BSc (Hons) Business Economics with Information Systems (P/T) - SHE430

1. Objectives

The programme is designed to provide knowledge and competence in Business Economics, and proficiency in information technology for a number of professions in the public and private sectors.

2. General Entry Requirements

In accordance with the University General Entry Requirements for admission to undergraduate degree Programmes.

3. Programme Requirements

Credit in Mathematics and English at 'O' Level and Either 'A' Level Mathematics or 'O' Level Additional Mathematics or HSC Subsidiary/ Advanced Subsidiary Mathematics.

4. Programme Duration

	Normal	Maximum
Degree:	4 years P/T	6 years P/T

5. Credits per Year

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

6. Minimum Credits Required for Degree Award: 100

Breakdown as follows:

	Credits from			
	Core Taught Modules	Dissertation	Electives	GEMs
Degree	60	10	21	9

Modules	Credits
Core	
Economics	33
Information Systems	27
Dissertation	10
Electives	
Economics & Others	21
GEMs	9
Total	100

7. Assessment

Each module can either be taught in semester 1 only or in semester 2 only or throughout the two semesters.

Modules wholly taught in one semester are termed semester modules whereas modules taught throughout two semesters are termed yearly modules.

Each module will be assessed over 100 marks with details as follows (unless otherwise specified):

Assessment will be based on a written examination of 2 to 3-hour duration (normally a paper of 2 hour duration for modules carrying less or equal to three credits, 2½ hour paper for modules carrying 3.5-4.5 credits and 3 hour paper for modules carrying five-six credits) and on continuous assessment done during the semester or year.

Written examinations for all modules, whether taught in semester 1 or in semester 2 or both, will be carried out at the end of the academic year except for GEMs and some semester modules (unless otherwise stated).

The continuous assessment will count for 10-40% of the overall percentage mark of the module(s), except for a Programme where the structure makes for other specific provision(s).

Continuous assessment may be based on laboratory work, seminars and/or assignments and should include at least 1 class test. There will be a compulsory class test for all modules taught in semester 1 at the end of semester 1 of the given academic year unless stated otherwise in the Programme Structure.

A minimum of at least 30% should be attained in each of continuous assessment and written examination, with an overall total of 40% for a candidate to pass a module.

Special examinations (e.g. class tests) will be arranged at the end of semester 1 or semester 2 for exchange students who have registered only for one semester. In case of yearly modules, credits will be assigned on a pro-rata basis.

8. Submission Deadline for Dissertation

Final copy: To be specified by the Department.

9. Repeat and 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. Modules of Special Nature

A student can take a maximum of 9 credits of Self-Study Subjects and Independent Study, subject to approval of the Department.

11. List of Modules - BSc (Hons) Business Economics with Information Systems

A. CORE MODULES - Economics

Code	Module Name	Hrs/Wk	Credits
		L+P	
ECON 1001Y(1)	Fundamentals of Economics	3+0	6
ECON 1003Y(1)	Quantitative Methods for Business	3+0	6
ECON 2008Y(3)	Business Economics	3+0	6
ECON 2252(3)	Business Finance	3+0	3
ECON 2171(3)	Fundamentals of Econometrics	3+0	3
ECON 3003Y(3)	Business Strategy & e-Commerce	3+0	6
ECON 3198(5)	Multinational Business and Finance	3+0	3
ECON 4000(5)	Dissertation	-	10

B. CORE MODULES - Information Systems

CSE 1004Y(1)	Structured System Development	2+2	6
CSE 1006Y(1)	Introduction to Information Systems	2+2	6
CSE 2002Y(3)	Database Systems	3+0	6
CSE 3207(5)	Information System Security	3+0	3
CSE 3003Y(5)	Information Systems - Advanced Concept	3+0	6

C. ELECTIVES

ECON 2009Y(3)	Principles and Practices of Banking	3+0	6
ECON 2233(5)	Applied Econometrics for Business	3+0	3
ECON 3181(5)	Risk Management	3+0	3
ECON 3004Y(5)	Business Ethics and Governance	3+0	6
ECON 3279(5)	Financial Markets and Institutions	3+0	3
CSE 3006Y(5)	Operations Research and Simulation	3+0	6
MGT 1200(1)	Introduction to Marketing	D.E.	3
LAWS 1205(1)	Droit Commercial et Droit de Sociétés	3+0	3
MGT 3059Y(5)	International Business and Management	3+0	6
PSYC 3103(5)	Industrial/Organisational Psychology	3+0	3
ECON 4111(5)	Internet Economics	3+0	3
ECON 4113(5)	Government and the Business Environment	3+0	3
	General Education Modules		

Note: Offering of electives would be subject to availability of resources and critical mass. The Department reserves the right to offer additional electives).

12. Programme Plan - BSc (Hons) Business Economics with Information Systems

YEAR 1

Code	Module Name	Hrs/Wk	Credits
		L+P	
CORE			
ECON 1001Y(1)	Fundamentals of Economics	3+0	6
ECON 1003Y(1)	Quantitative Methods for Business	3+0	6
CSE 1004Y(1)	Structured System Development	2+2	6
CSE 1006Y(1)	Introduction to Information Systems	2+2	6
GEM			
	One General Education Module	-	3

YEAR 2

Code CORE	Module Name	Hrs/Wk L+P	Credits
ECON 2008Y(3)	Business Economics	3+0	6
ECON 2171(3)	Fundamentals of Econometrics ²	3+0	3
ECON 2252(3)	Business Finance ¹	3+0	3
CSE 2002Y(3)	Database Systems	3+0	6
GEM	One General Education Module	-	3
ELECTIVES	CHOOSE AT LEAST 6 CREDITS		
ECON 2009Y(3)	Principles and Practices of Banking	3+0	6
MGT 1200(1)	Introduction to Marketing ¹	D.E.	3
LAWS 1205(1)	Droit Commercial et Droit de Sociétés ¹	3+0	3
PSYC 3103(5)	Industrial/Organisational Psychology ²	3+0	3

YEAR 3

Code CORE	Module Name	Hrs/Wk L+P	Credits
CSE 3003Y(5)	Information Systems - Advanced Concept	3+0	6
ECON 3003Y(3)	Business Strategy & e-Commerce	3+0	6
GEM	One General Education Module	-	3
ELECTIVES	CHOOSE AT LEAST 12 CREDITS WITH A MINIMUM OF 6 CREDITS FROM ECON MODULES		
ECON 2233(5)	Applied Econometrics for Business ¹	3+0	3
ECON 3181(5)	Risk Management ²	3+0	3
ECON 3004Y(5)	Business Ethics and Governance	3+0	6
ECON 3279(5)	Financial Markets and Institutions ¹	3+0	3
CSE 3006Y(5)	Operations Research and Simulation	3+0	6
MGT 3059Y(5)	International Business and Management	3+0	6

YEAR 4

Code CORE	Module Name	Hrs/Wk L+P	Credits
ECON 4000(5)	Dissertation	-	10
ECON 3198(5)	Multinational Business and Finance ¹	3+0	3
CSE 3207(5)	Information System Security ¹	3+0	3
ELECTIVES	CHOOSE AT LEAST 3 CREDITS		
ECON 4111(5)	Internet Economics ²	3+0	3
ECON 4113(5)	Government and the Business Environment ²	3+0	3

Note : (1)¹ – Modules taught in semester 1.
(2)² – Modules taught in semester 2.
(3) D.E. modules would be examined at the end of the semester they are taught.

13. Outline Syllabus

CSE 1004Y(1) - STRUCTURED SYSTEMS DEVELOPMENT

Introduction to SSAD; Software life cycles, Components in a system, Preliminary investigation, Requirements Gathering, Requirements Modelling, 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 INFORMATION SYSTEMS

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

DBMS functions/Components, Database Abstractions, Relational Model ERD, Relational algebra, Normalization, Query language - SQL, DB design issues, Optimisation, Security Issues, Transactions, Distributed Computing, Synchronization, Overview of Distributed Databases, Distribution Transparency, Distributed Database Design, Commit Protocols and Concurrency Control, Query Processing.

CSE 3003Y(5) - INFORMATION SYSTEMS: ADVANCED CONCEPT (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 3006Y(5) - OPERATIONS RESEARCH AND SIMULATION

Linear programming; Simplex Algorithm; Transportation Problems; Network Techniques; Game Theory; Markov's Chains; Queuing Theory; Simulation.

CSE 3207(5) - INFORMATION SYSTEM SECURITY

Basic Concepts such as Authentication, Cryptographic Sealing and Certification. Security Planning. Analysis of Security Threats. Security Controls. Design Issues of Security Systems. Implementation of Security Systems.

ECON 1001Y(1) - FUNDAMENTALS OF ECONOMICS

Price Mechanism. Revenue and Elasticity. Consumer Choice. Theory of Production. Analysis of Costs. Market Structures. Factor Market Analysis. Market Failures and Externalities. National Income Determination. Consumption, Savings and Investment. Monetary Policy and Theories of Inflation. Unemployment. Fiscal Policy. IS-LM Model. International Trade, Balance of Payments and Exchange Rate Regimes.

ECON 1003Y(1) - QUANTITATIVE METHODS FOR BUSINESS

Differential and Integral Calculus with Business Applications. Optimisation, Constrained and Unconstrained. Series and Financial Mathematics. Linear Algebra. Linear Programming. Introduction to Differential Equations. Descriptive Statistics: Introduction, Data Presentation, Measures of Location, Measures of Dispersion. Probability and Probability Distributions. Statistical Inference: Introduction, Sample Distribution of Sample Statistics, Estimation, Hypothesis Testing. Index Numbers.

ECON 2008Y(3) - BUSINESS ECONOMICS

Demand analysis. Consumer Choice. Production and Costs. Decision Analysis. Uncertainty and Information: Adverse Selection, Moral Hazard, Principal-Agent Problems, Design of Optimal Incentive Plans. Externalities and Public Goods. Market Structures. Pricing Practices. Product Differentiation. Strategic Behaviour. Industry Structure and Performance. Risk Analysis and Capital Budgeting. Regulation. Managerial Economics: Taking a Global View.

ECON 2009Y(3) - PRINCIPLES AND PRACTICES OF BANKING

Types, Characteristics and Functions of Money. Demand for Money. Role of Banks and Non-banking Institutions. The Money Supply Process. Financial Intermediation. Banking Regulation. Bank Management. Interest Rates. Money and Capital Markets. Central Banking. Monetary Policy. International Financial System. Eurocurrency Markets. Currency Risk Exposure and Management. Global Financial Services. International Banking Centers. Offshore Banking. Harmonisation of Central Banks' Operations. Banking Crises and Contagion. Regulation of International Banking.

ECON 2171(3) - FUNDAMENTALS OF ECONOMETRICS

Linear Regression Model: Hypothesis Testing and Inference; Dummy Variables; Multicollinearity, Heteroscedasticity and Autocorrelation; Introduction to Time Series Models. Introduction to Simultaneous Equation Models.

ECON 2233(5) - APPLIED ECONOMETRICS FOR BUSINESS

Model Specification, Evaluation and Selection; Modelling Seasonality and Structural Change; ARIMA Modelling; Unit Root and Co-integration; Applications to Business: Demand Estimation; Investment Functions; Production Functions and Technological Change; Econometrics of the Stock Market; Business Forecasting.

ECON 2252(3) - BUSINESS FINANCE

Sources of Finance for Business: Banks and Non-bank Financial Institutions. Corporate Bonds. Bond Ratings and Risk. Financial Leverage. Microcredit. Venture Capital. Leasing. Informal Finance. Stock Market. Partnerships and Mergers.

ECON 3003Y(5) - BUSINESS STRATEGY AND e-COMMERCE

The Firm and its Environment. Strategy Formulation. Managerial Incentives: Theory and Practice. Industry Analysis. Positioning. Competitive Analysis and Sustainable Advantage. Learning Curve. Coordination and Complementarity at Firm Level. Diversification and Economies of Scope. Case Studies. Globalisation and Electronic Business. Networking. Growth. Risk. Costs and Efficiency. Impact of Financial and Banking Activities. Financial services and e-Marketing. Security of Information and Transactions. Development of e-Business in Mauritius.

ECON 3004Y(5) - BUSINESS ETHICS AND GOVERNANCE

Historical Evolution of the Mauritian Economy. Structural Change and Economic Diversification. Employment and Manpower Policy. International Trade Policy. Labor Law and Industrial Dispute Settlement Mechanisms. Industry Structure and Performance. Public-Private Partnership. Welfare State. Environment Policy. Regional Cooperation and Prospects. Horizontal v/s Vertical Governance. Profit Maximisation v/s Other Corporate Objectives. Social Responsibility of Business, Labour-Management Participation. International Labour Standards. Business and the Environment. Challenges of Globalisation. Regulation of Business Practices.

ECON 3181(5) - RISK MANAGEMENT

Sources and Types of Risk: Hedging Techniques. Foreign Exchange Markets. Foreign Exchange Exposure. International Techniques of Managing Forex Risk: Forward and Futures Markets. Swaps. Interest Rate Currency and Commodity Swaps. Commodity Futures. Options and Risk Management.

ECON 3198(5) - MULTINATIONAL BUSINESS AND FINANCE

The MNE. Environment of International Business and Trade. MNEs and Global Enterprises. Modes of Entry in International Marketing. Exports, Joint Ventures, Wholly Owned Subsidiaries. Multinational Production/Operations Management, Financial Management. Contemporary Issues in International Business.

ECON 3279(5) - FINANCIAL MARKETS AND INSTITUTIONS

Financial systems. Banks v/s Capital Market. Capital Markets and Resource Allocation. National and International Financial Markets, Instruments and Institutions. Structure of Financial Markets and Trading Techniques. Interest Rate Linkages. International Liquidity. Financial Stability and Capital Flows. Financial Crisis and Contagion. Regulatory Framework.

ECON 4000(5) - DISSERTATION

At the end of the fourth year of the programme, the students will be required to submit a project dissertation. The title of the dissertation has to be approved by the Department of Economics and Statistics and a Project Supervisor identified by the Programme Co-ordinator. The dissertation length should be in the range of 10000-12000 words.

ECON 4111(5) - INTERNET ECONOMICS

Internet and Information Systems. Economics of Digital Networks. Internet Resource Allocation and Pricing Models. Requirements for Pricing Internet Services. Network Interconnectivity and Pricing of Internet Products. Piracy and Intellectual Property Rights.

ECON 4113(5) - GOVERNMENT AND THE BUSINESS ENVIRONMENT

Industrial and Financial Policy. Human Resource Planning. Environmental Management. Taxation and Business Policy. Public Services and Privatisation Policy. Government Incentives. SMEs.

LAWS 1205(1) - DROIT COMMERCIAL ET DROIT DE SOCIÉTÉS

Acte de commerce; statut de commerçant; le commissionnaire; le gage commercial; les critères de la société et les sociétés commerciales de personnes (société en nom collectif et en commandité simple); le droit de la faillite.

MGT 1200(1) - INTRODUCTION TO MARKETING

Origins and Development of the Concept of Marketing. Customer Satisfaction at a Profit. Market Structures. Marketing Activities and Functions in Industry. The Bridge Between Production and Consumption. Social, Cultural, Economic and Political Factors and their Impact on Marketing Operations. The Marketing Mix. Ethics.

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.

PSYC 3103(5) - INDUSTRIAL/ORGANISATIONAL PSYCHOLOGY

Introduction to Industrial/Organisational Psychology. Foundations of Individual Behaviour in Organisations. Motivation. Group Dynamics. Conflict. Power and Politics. Leadership. Communication. Organisational Culture. Organisational Change and Development. HRM Issues.