

BSc (Hons) Information Systems (P/T) - E311E

1. Aims and Objectives

The field of Information Systems is concerned with how organizations and societies use and exploit new technologies for information handling and transmission. Information Systems specialists focus on integrating information technology solutions and business processes so as to meet the information needs of enterprises, enabling them to achieve their objectives in an effective and efficient way.

This programme is intended for those who wish to become senior professionals and managers in the IT business. Graduates will be equipped with the necessary technical and organisational skills to manage information systems in the industry and perform a range of functions in businesses and government.

The programme is based on the recommendations of Computing Curricula 2005 proposed by a joint task force of the Association for Computing Machinery (ACM), the Association for Information Systems (AIS) and the IEEE Computer Society (IEEE-CS).

2. General Entry Requirements

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

3. Programme Requirements

At least 2 GCE 'A' Level Passes including Mathematics.

4. Minimum Requirements for Awards

(i) Degree Award

<u>MODULES</u>	<u>CREDITS</u>
GEM	6
Humanities & Management	6/12
Departmental (Including Final Year Project)	96/90
TOTAL	108

For the award of the **BSc (Hons) Information Systems**, the student must obtain at least 108 credits including 84 credits from all the core modules prescribed by the department and at least 24 credits from the elective modules.

(ii) Diploma Award

<u>MODULES</u>	<u>CREDITS</u>
GEM	6
Humanities & Management	6
Departmental	45
Diploma Project (CSE 2000(3))	6
TOTAL	63

The diploma is provided as a possible exit point in the programme. A student may opt for a Diploma in Information Systems, by making a written request, provided s/he satisfies the minimum requirements, as specified above. The Diploma project would normally be of 8 weeks duration for an input of at least 90 hours.

5.	Programme Duration:	Normal (Years)	Maximum (Years)
	Degree:	5	8

6. **Credits per Year:** Maximum 48 credits, Minimum 6 credits, subject to section 5.
Credits per Semester: Maximum 24 credits, Minimum 3 credits, subject to section 5.

Semester modules to be registered on a semester basis.

Yearly modules to be registered once only, normally at the beginning of academic year.

Note: For Yearly modules, for the purpose of calculation of minimum and maximum credits, the credits will be considered as half for each semester.

7. **Assessment**

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

Assessment will be based on written examination and continuous assessment. The written examination will be of 3-hour duration for yearly modules and of 2-hour duration for semester modules.

The continuous assessment will count for 20-30% of the overall percentage mark of the module(s), except for the following modules:

	Continuous Assessment	Exams
CSE 1041(1) – Web Technologies I	50%	50%
CSE 2041(3) – Web Technologies II	50%	50%
CSE 2046(3)– Multimedia Application Development	50%	50%

Continuous assessment may be based on laboratory work and/or assignments and should include at least two class tests/assignments per module.

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

Written examinations for the semester modules will be carried out at the end of the respective semester while for yearly modules they will be carried out at the end of the academic year.

8. List of Modules - BSc (Hons) Information Systems

<u>CORE MODULES</u>		Hrs/Wk	Credits
		L+P	
Humanities and Management (including GEMs)			
	GEM	3 + 0	3
	GEM	3 + 0	3
DFA 1XXX(1)	Introduction to Business Accounting and Finance	3 + 0	3
COMS1010(1)	Communication Skills	D.E.	3
Departmental			
CSE 1003(1)	Computer Programming	2 + 2	3
CSE 1005(1)	Database Systems I	2 + 2	3
CSE 1041(1)	Web Technologies I	2 + 2	3
CSE 1107(1)	Computer System Organisation	3 + 0	3
CSE 1131(1)	Mathematics for Computing	3 + 0	3
CSE 1146(1)	Introduction to Information Systems	2 + 2	3
CSE 1242(1)	Human Computer Interaction	2 + 2	3
CSE 1246(1)	Applied Data Structures and Algorithms	2 + 2	3
CSE 1247(1)	E-Business and Cyber Laws	3 + 0	3
CSE 2031Y(3)	Object-Oriented Software Development	2 + 2	6
CSE 2041(3)	Web Technologies II	2 + 2	3
CSE 2046(3)	Multimedia Application Development	2 + 2	3
CSE 2142(3)	Software Engineering	3 + 0	3
CSE 2144(3)	Decision Support Systems	3 + 0	3
CSE 2145(3)	Information Systems: Strategy and Management	3 + 0	3
CSE 2244(3)	Software Project Management	3 + 0	3
CSE 2245(3)	Information Security	3 + 0	3
CSE 2246(3)	Enterprise Software Development	2 + 2	3
CSE 2247(3)	Network Computing	2 + 2	3
CSE 2255(3)	Database Systems II	2 + 2	3
CSE 3000(5)	Project		9
<u>ELECTIVES</u>			
Departmental			
CSE 3019(5)	Software Testing and Quality Assurance	3 + 0	3
CSE 3024(5)	Advanced Java Programming	2 + 2	3
CSE 3027(5)	Information Engineering	2 + 2	3
CSE 3028(5)	Information Retrieval	2 + 2	3
CSE 3029(5)	Knowledge Based Systems	2 + 2	3
CSE 3030(5)	Management Information Systems	3 + 0	3
CSE 3031(5)	Mobile Application Development	2 + 2	3
CSE 3032(5)	Semantic Web	2 + 2	3
CSE 3035(5)	Image Processing Applications	2 + 2	3
CSE 3045(5)	Data Mining	2 + 2	3
CSE 3048(5)	Enterprise Resource Planning	2 + 2	3
Humanities and Management			
MGT3111(5)	Operations Management I	3 + 0	3
MGT3211(5)	Operations Management II	3 + 0	3
CORE MODULE FOR DIPLOMA			
CSE 2000 (3)	Diploma Project		6

Note: The offer of electives would be subject to availability of resources and existence of a critical mass of demand for the modules.

9. Programme Plan

Year 1							
Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
CSE 1131(1)	Mathematics for Computing	3 + 0	3	CSE 1242(1)	Human Computer Interaction	2 + 2	3
CSE 1146(1)	Introduction to Information Systems	2 + 2	3	CSE 1003(1)	Computer Programming	2 + 2	3
CSE 1107(1)	Computer System Organisation	3 + 0	3	CSE 1247(1)	E-Business and Cyber Laws	3 + 0	3
COMS 1010(1)	Communication Skills	D.E.	3	CSE 1005(1)	Database Systems I	2 + 2	3
Total Credits			12	Total Credits			12
Year 2							
Semester 1				Semester 2			
CSE 1041(1)	Web Technologies I	2 + 2	3	DFA 1XXX(1)	Introduction to Business Accounting and Finance	3 + 0	3
CSE 1246(1)	Applied Data Structures and Algorithms	2 + 2	3	CSE 2255(3)	Database Systems II	2 + 2	3
CSE 2031Y(3)	Object-Oriented Software Development					2 + 2	6
GEM							3
GEM							3
Total Credits			6 + 6	Total Credits			6 + 6
Year 3							
Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
CSE 2046(3)	Multimedia Application Development	2 + 2	3	CSE 2244(3)	Software Project Management	3 + 0	3
CSE 2041(3)	Web Technologies II	2 + 2	3	CSE 2245(3)	Information Security	3 + 0	3
CSE 2142(3)	Software Engineering	3 + 0	3	CSE 2246(3)	Enterprise Software Development	2 + 2	3
CSE 2144(3)	Decision Support Systems	3 + 0	3	CSE 2247(3)	Network Computing	2 + 2	3
Total Credits			12	Total Credits			12
Year 4							
Semester 1				Semester 2			
CSE 2145(3)	Information Systems: Strategy and Management	3 + 0	3		Elective 4		3
	Elective 1		3		Elective 5		3
	Elective 2		3		Elective 6		3
	Elective 3		3		Elective 7		3
Total Credits			12	Total Credits			12
Year 5							
Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
CSE 3000(5)	Elective 8		3		Project		9

Total Credits	3 + 4.5	Total Credits	4.5
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10. Outline Syllabus

Note: PQ – Pre-requirement and **PR** – Pre-requisite

- (i) A student will be allowed to follow module **y** of which module **x** is a *pre-requisite* (PR) provided the student has passed module **x** (i.e. obtained at least Grade D in the Pre-requisite), unless decided otherwise by the Faculty/ Centre/ Cluster Board and Senate.

- (ii) A student will be allowed to follow module **y** of which module **x** is a *pre-requirement* (PQ) provided s/he has followed module **x** and sat for the examinations in module **x** unless decided otherwise by the Faculty/ Centre/ Cluster Board and Senate.

March 2010