BSc (Hons) Information Systems - E311M

1. Objectives

The field of Information systems (IS) focuses on technology-enabled business development whereby IS professionals require both technical and organisational expertise for systems analysis and design, business process management, systems implementation, and IS project management. Information systems facilitate and influence business operations and innovation, thus contributing to create new business models and services.

The programme of study will impart to prospective students the knowledge and analytical skills to develop and manage business information systems with adequate understanding of the required concepts, technology and the organisational environment. This course integrates business and information, as well as computing technology, to deal with analysis, design, implementation and management of information systems for enterprise solutions.

The programme is in line with international recommendations of computing curricula for Undergraduate Degree Programs in Information Systems and designed with Industry collaboration.

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 AND Credit in Mathematics at SC/O’ level

4. Minimum Requirements for Awards

(i) Degree Award

For the degree award in BSc (Hons) Information Systems, the student must obtain at least 105 credits including:

<table>
<thead>
<tr>
<th>Modules</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Credits for Core Modules (Departmental)</td>
<td>66</td>
</tr>
<tr>
<td>Minimum Credits for Electives (Departmental)</td>
<td>24</td>
</tr>
<tr>
<td>Minimum Credits for Core Modules (Non Departmental)</td>
<td>6</td>
</tr>
<tr>
<td>Final Year Project</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>105</td>
</tr>
</tbody>
</table>
(ii) Diploma Award

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 he/she satisfies the requirements, as per University regulations.

5. Programme Duration

<table>
<thead>
<tr>
<th>Degree:</th>
<th>Normal (Years)</th>
<th>Maximum (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

6. Credits per Year:

Maximum 48 credits, Minimum 6 credits, subject to section 5.

Yearly modules to be registered for only once at the start of the module, normally at the beginning of the academic year as specified by the Faculty. Semester modules to be registered for on a semester basis.

7. Assessment

7.1 Continuous and written assessment of modules

Each module will be assessed over 100 marks (expressed as %).

Assessment will be based on written examination and continuous assessment. The written examination will be of 3 hour duration for yearly modules carrying 6 credits and of 2 hour duration for semester modules carrying 3 credits. The continuous assessment will count for a range 30-40% of overall percentage mark of the module.

Continuous assessment may be based on laboratory work, seminars and/or assignments and should include at least one class test per semester.

For a student to pass a module, an overall minimum of 40% should be attained in that module, as per University regulations.

Written examinations for the yearly modules will be carried out at the end of the academic year. Semester module is examined at the end of the semester in which the module is run.

7.2 Final Year Project

The assessment of final year project CSE 3000(5) will be based on the written dissertation, software/system demo and presentation by the student.

7.3 Diploma Project

For a student exiting at Diploma Level, the assessment of Diploma project CSE 2000(3) will be based on project report, presentation and software/system demo, as per University regulations.
8. Specific Regulations

If Cumulative Point Average (CPA) of a student is less than 40%, s/he will have to repeat the entire academic year, and retake the modules as and when offered. However, s/he will not be required, if s/he wishes, to retake modules for which Grade C or above has been obtained. Students are allowed to repeat (a year) only once over the entire duration of the Programme of Studies.

Registration of a student will be terminated if:
1. the CPA is less than 40 at the end of an academic year and the student has already repeated one year of study; or
2. the maximum duration allowed for completion of the Programme of Studies has been exceeded.

9. List of Modules – BSc (Hons) Information Systems

**CORE MODULES**

<table>
<thead>
<tr>
<th>Departmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits</td>
</tr>
<tr>
<td>Hrs/Week</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>L+P</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 1025Y(1)</td>
<td>Foundations of Information Systems</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 1026Y(1)</td>
<td>Databases and Information Management</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 1027Y(1)</td>
<td>System Analysis and Design</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 1028Y(1)</td>
<td>Application Development</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 1029Y(1)</td>
<td>Mathematics for Information Systems</td>
<td>3+0</td>
<td>6</td>
</tr>
<tr>
<td>CSE 1016Y(1)</td>
<td>Communication and Business Skills for IT</td>
<td>3+0</td>
<td>6</td>
</tr>
<tr>
<td>CSE 2024Y(3)</td>
<td>Object-Oriented Programming</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 2025Y(3)</td>
<td>Enterprise Systems</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 2026Y(3)</td>
<td>Information Systems Innovations and Web Technologies</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 2027Y(3)</td>
<td>Information Systems Audit and Controls</td>
<td>3+0</td>
<td>6</td>
</tr>
<tr>
<td>CSE 2028Y(3)</td>
<td>Information Systems Project Management</td>
<td>3+0</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3000(5)</td>
<td>Final Year Project</td>
<td>-</td>
<td>9</td>
</tr>
</tbody>
</table>

**Non-Departmental**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>L+P</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACF1002(1)</td>
<td>Principles Of Finance * (semester 1)</td>
<td>3+0</td>
<td>3</td>
</tr>
<tr>
<td>ACF 1000(1)</td>
<td>Accounting For Financial Decision Making ** (semester 2)</td>
<td>3+0</td>
<td>3</td>
</tr>
</tbody>
</table>

**ELECTIVE MODULES**

Students choose any 4 of the listed departmental electives.

<table>
<thead>
<tr>
<th>Departmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits</td>
</tr>
<tr>
<td>Hrs/Week</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>L+P</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE 3066Y(5)</td>
<td>Business Intelligence &amp; Analytics</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3067Y(5)</td>
<td>Data Warehouse &amp; Multidimensional Modelling</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3068Y(5)</td>
<td>Information Retrieval</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3069Y(5)</td>
<td>Knowledge Engineering &amp; Management</td>
<td>3+0</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3070Y(5)</td>
<td>Enterprise Architecture &amp; Integration</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3073Y(5)</td>
<td>Enterprise Application Development</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3074Y(5)</td>
<td>Enterprise Networking</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3075Y(5)</td>
<td>Security Systems &amp; Analytics</td>
<td>2+2</td>
<td>6</td>
</tr>
<tr>
<td>CSE 3076Y(5)</td>
<td>Semantic Web</td>
<td>2+2</td>
<td>6</td>
</tr>
</tbody>
</table>

*Note: The University reserves the right not to offer a given elective module if the critical number of students is not attained and/or for reasons of resource constraints.*
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Core Module Code</th>
<th>Module Name</th>
<th>Hrs/Week L+P</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1 &amp; 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Module Code</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 1025Y(1)</td>
<td>Foundations of Information Systems</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 1026Y(1)</td>
<td>Databases and Information Management</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 1027Y(1)</td>
<td>System Analysis and Design</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 1028Y(1)</td>
<td>Application Development</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 1029Y(1)</td>
<td>Mathematics for Information Systems</td>
<td>3+0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 1016Y(1)</td>
<td>Communication and Business Skills for IT</td>
<td>3+0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Core Module Code</td>
<td>Module Name</td>
<td>Hrs/Week L+P</td>
<td>Credits</td>
</tr>
<tr>
<td>Semester 1 &amp; 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Module Code</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 2024Y(3)</td>
<td>Object-Oriented Programming</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 2025Y(3)</td>
<td>Enterprise Systems</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 2026Y(3)</td>
<td>Information Systems Innovations and Web Technologies</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 2027Y(3)</td>
<td>Information Systems Audit and Controls</td>
<td>3+0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 2028Y(3)</td>
<td>Information Systems Project Management</td>
<td>3+0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>ACF1002(1)</td>
<td>Principles of Finance * (semester 1)</td>
<td>3+0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ACF 1000(1)</td>
<td>Accounting for Financial Decision Making ** (Semester 2)</td>
<td>3+0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>Module Code</td>
<td>Module Name</td>
<td>Hrs/Week L+P</td>
<td>Credits</td>
</tr>
<tr>
<td>Semester 1 &amp; 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CORE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 3000(5)</td>
<td>Final Year Project</td>
<td>-</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>ELECTIVES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose four (4) modules from:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSE 3066Y(5)</td>
<td>Business Intelligence &amp; Analytics</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3067Y(5)</td>
<td>Data Warehouse &amp; Multidimensional Modelling</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3068Y(5)</td>
<td>Information Retrieval</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3069Y(5)</td>
<td>Knowledge Engineering &amp; Management</td>
<td>3+0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3070Y(5)</td>
<td>Enterprise Architecture &amp; Integration</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3073Y(5)</td>
<td>Enterprise Application Development</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3074Y(5)</td>
<td>Enterprise Networking</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3075Y(5)</td>
<td>Security Systems &amp; Analytics</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>CSE 3076Y(5)</td>
<td>Semantic Web</td>
<td>2+2</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>