F2IT-ISD Bachelor of Science in Information Systems

PROGRAMME DETAILS
Programme Code: F2IT-ISD
Department: Computer Science
Main Award: BSCH - Bachelor of Science Honours
Full Award Title: Bachelor of Science in Information Systems
Level: Undergraduate

LOCATION OF STUDY
Edinburgh Y Scottish Borders N Orkney N
Dubai N Malaysia N Approved Learning Partner N
Independent Distance Learners N Collaborative Learning Partner N Other N

ASSOCIATED AWARDS
Programme Code | Award | Title
--- | --- | ---
F2IS-ZZZ | BSCO | Bachelor of Science in Information Systems
F2IT-ISD | BSCH | Information Systems and DIT

ACCREDITATION
None

LEARNING OUTCOMES – SUBJECT MASTERY
Understanding, Knowledge and Cognitive Skills

To develop knowledge and skills in the elicitation and analysis of user requirements, design and evaluation of solutions, and the implementation and quality assurance of the chosen solution.

- To develop skills in working with technology users and members of organisations to find tailored technological solutions.
- To know what general classes of problems are amenable to computer solution and be able to select the appropriate tools required for particular problems.
- To develop the knowledge and skills required to meet the challenges of emerging technologies and methodologies.
- To be aware of, and be able to respond to, statute law, directives, standards and emerging common law relating to the use of computers.
- To develop knowledge of the aspects of management required to understand the commercial and business contexts within which information systems are used.
- To develop the entrepreneurial skills required to identify and exploit opportunities which arise as a result of technological developments and new business paradigms.
- To relate theory to practice and practical application.
- To show knowledge and understanding of some major current issues in the industry in which the student is working during their work placement.
- To show knowledge and understanding of the business environment of the industry in which the student worked during their work placement.
- To undertake critical analysis, evaluation and/or synthesis of ideas, concepts, information and issues.
- To use a range of approaches to formulate evidence-based solutions/responses to defined and/or routine problems/issues.
• To critically evaluate evidence-based solutions/responses to defined and/or routine problems/issues

Scholarship, Enquiry and Research (Research Informed Learning)

• To be able to identify and exploit new opportunities; to analyse problem spaces and design creative solutions; to appraise material and ideas; to apply a methodical and innovative approach to problem solving; to integrate theory and practice.

LEARNING OUTCOMES – PERSONAL ABILITIES

Industrial, Commercial and Professional Practice

to maintain and update technical knowledge; to take responsibility for personal and professional development.
• To appraise the impact of computers on society and the influence of society on the development of the technology and use of computers.
• To assess aspects of the law related to computer-based information or the role of standards in safety, quality and security, of security issues and of the BCS Codes of Practice and Conduct.
• To be able to use a range of routine skills, techniques, practices and/or materials, a few of which are advanced or complex
• To be able to carry out routine lines of enquiry, development or investigation into professional-level problems and issues.
• To be able to understand the commercial aspect of the company in which the student is working

Autonomy, Accountability and Working With Others

• To apply subject-mastery outcomes to monitor, analyse, model, specify, design, communicate, implement, evaluate, control and plan.
• Exercise autonomy and initiative by planning and managing their own work; develop strategies for independently solving problems and taking the initiative.
• Take responsibility for their own and other's work by contributing effectively and conscientiously to the work of a group, actively maintaining good working relationships with group members, and leading the direction of the group where appropriate.
• Reflect on roles and responsibilities by critically reflecting on their own and others’ roles and responsibilities.
• Deal with complex professional and ethical issues including working with human subjects and wider issues relating to technology in society
• To be aware of, and be able to respond to, the social and legal implications and consequences of the use of computers.
• To exercise autonomy and initiative in some activities at a professional-level
• To manage resources within defined areas of work
• To take the lead on planning in familiar or defined contexts
• To take continuing account of own and others' roles, responsibilities and contributions in carrying out and evaluating tasks
• To work in support of current professional practice, under guidance

Communication, Numeracy & Information and Communications Technology

• Use discipline appropriate software for data analysis, prototyping and learning.
• Present, analyse and interpret numerical and graphical data
• Communicate effectively, informally or formally, to knowledgeable or lay audiences.
• To convey complex information to a range of audiences and for a range of purposes
• To use a variety of forms of ICT effectively in the workplace

APPROACHES TO TEACHING AND LEARNING

Active group based classes, lectures, tutorials, practical classes, laboratories. Coursework, (assignments, individual projects, group projects, essays, reports, presentations, log/journals, dissertation). The course has been designed around a social constructivist approach to learning and will be based on active, experiential learning.

Approaches to teaching and learning are continually reviewed and developed with the aim of matching them to the abilities and experiences of students, with regard also for the subject area. Specific details about teaching and learning methods are provided in the appropriate course descriptors.

EDUCATIONAL AIMS OF THE PROGRAMME

The educational aim is to provide students with a unique blend of computer science, management and socio-technical systems. The course will prepare students with the technical, interpersonal, management and design skills required for IS management within organisations. They will also be provided with professional skills which will enable graduates to communicate clearly, work independently and co-operate effectively. The balance of skills will enable graduates to work effectively and efficiently in industry, commerce and the public sector, and will prepare them for postgraduate study. The industrial placement will encourage students to apply learning gained through their academic studies at the University to the workplace and enable students to gain work experience which will increase their employability and professional career readiness.

ASSESSMENT POLICIES
The following assessment methods are used:

*Understanding, knowledge and subject specific skills* are assessed through the range of methods reflected by written examinations, coursework assignments, software artefacts, group and individual projects, written reports and oral presentations. Diagnostic, formative, continuous and summative types of assessment aim to correlate with methods of assessment.

Approaches to assessment are continually reviewed. Specific details about methods of assessment are provided in the appropriate course descriptors.

## PROGRAMME STRUCTURE

### Mandatory Courses

<table>
<thead>
<tr>
<th>Edinburgh</th>
<th>SBC</th>
<th>Orkney</th>
<th>Dubai</th>
<th>HAVUM</th>
<th>IDL</th>
<th>Coll. Partner</th>
<th>ALP</th>
<th>Other</th>
<th>Stage</th>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>SCQF Cr</th>
<th>SCQF Lvl</th>
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<tbody>
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<td>F27IS</td>
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<td></td>
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<td>Interactive Systems</td>
<td>15</td>
<td>7</td>
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<td>Software Development 1</td>
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<td>C17EC</td>
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<td>Enterprise and its Business Environment</td>
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<td>Technology in Society</td>
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<td>7</td>
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<td>2</td>
<td>F27W</td>
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<td>Web Design and Databases</td>
<td>15</td>
<td>7</td>
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<td>X</td>
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<td>Management in a Global Context</td>
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<td>X</td>
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<td>Fundamentals of Marketing</td>
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<td>Creative Design Project</td>
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<td>Database Management Systems</td>
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<td>X</td>
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<td>Software Design</td>
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<td>8</td>
<td></td>
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<td>Human Resource Management</td>
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<td>8</td>
<td></td>
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<td>X</td>
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<td>F29CT</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Critical Thinking</td>
<td>15</td>
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</table>
## F2IT-ISD Bachelor of Science in Information Systems

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCQF Cr</th>
<th>SCQF Lvl</th>
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</thead>
<tbody>
<tr>
<td>F2KM</td>
<td>Knowledge Management</td>
<td>15</td>
<td>9</td>
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<tr>
<td>F2SO</td>
<td>Software Engineering</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>C18OB</td>
<td>Organisational Behaviour</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>C19MC</td>
<td>Marketing Communications</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>F29PD</td>
<td>Professional Development</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>F29SS</td>
<td>Sociotechnical and Soft Systems</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>F28IA</td>
<td>Industrial Training Placement A</td>
<td>60</td>
<td>8</td>
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<tr>
<td>F28IB</td>
<td>Industrial Training Placement B</td>
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<td>8</td>
</tr>
<tr>
<td>F20PA</td>
<td>Research Methods &amp; Requirements Engineering</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>F20PB</td>
<td>Design &amp; Implementation</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>F20PC</td>
<td>Project Testing and Presentation</td>
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<td>10</td>
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### Optional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCQF Cr</th>
<th>SCQF Lvl</th>
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</thead>
<tbody>
<tr>
<td>C10CW</td>
<td>The Contemporary Workforce</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>C10RS</td>
<td>Retail Marketing</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>F20CL</td>
<td>Computing in the Classroom</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>F20IF</td>
<td>Information Systems Methodologies</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>C10DM</td>
<td>Digital Marketing</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>C10SM</td>
<td>Marketing and Management of SMEs</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>F20AD</td>
<td>Advanced Interaction Design</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>F20DE</td>
<td>Digital and Knowledge Economy</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>F20EC</td>
<td>e-Commerce Technology</td>
<td>15</td>
<td>10</td>
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</tbody>
</table>

### ELECTIVES (UG)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Any SCQF Level 7 course, which must be approved by the Board of Studies</td>
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<tr>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>N/A</td>
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<tr>
<td>4</td>
<td>N/A</td>
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<tr>
<td>5</td>
<td>N/A</td>
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## COMPOSITION AND STAGE NOTES (UG)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Courses Description</th>
<th>Mandatory Credits</th>
<th>Optional Credits</th>
<th>Elective Credits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>8 taught courses, 7 mandatory plus one elective</td>
<td>105</td>
<td></td>
<td>15</td>
<td>120</td>
</tr>
<tr>
<td>Stage 2</td>
<td>8 taught courses, all mandatory. Direct entrants to Stage 2 and internal transfers from other degrees will be expected have an appropriate background in programming and database technology</td>
<td>120</td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>Stage 3</td>
<td>8 taught courses, all mandatory. Direct entrants to Stage 3 will be expected have appropriate programming experience and background knowledge. Candidates shall pursue a group project throughout the year, which shall be synoptically assessed in conjunction with material from the associated courses (F29SO and F29PD).</td>
<td>120</td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Industrial placement (at least 9 months duration)</td>
<td>120</td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>Stage 5</td>
<td>8 taught courses, 3 mandatory and 5 optional. In any one year not all optional courses may be offered. Guidance in course choice will be given by academic mentors. Students must apply to take F20CL Computing in the Classroom prior to the end of Stage 3 to allow for placements in Year 5 to be organised.</td>
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</tbody>
</table>
Candidates are required to undertake an individual dissertation project (F20PA, F20PB, and F20PC) which shall run throughout the year.

<table>
<thead>
<tr>
<th>Credits Type</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Mandatory Credits</td>
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<td>Optional Credits</td>
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<tr>
<td>Elective Credits</td>
<td>5</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

**ASSESSMENT AND PROGRESSION (UG)**

**Reassessment Opportunities**

1. A student who has been awarded a Grade E or a Grade F in a course may be re-assessed in that course.
2. A student shall be permitted only one re-assessment opportunity to be taken at the Resit diet of examination following the first assessment of the course.
3. A student shall not be re-assessed in any qualifying course taken in the final stage of a course of study.
4. The Progression Board may permit a student to be re-assessed in any qualifying course not taken in the final stage in order to gain credits for the course, provided that the mark or grade obtained in the first assessment of any such course is used in determining the classification of the degree to be awarded.

**Progression Requirements**

**Part A.** The minimum number of credits required to progress through each stage are as follows

<table>
<thead>
<tr>
<th>Stage 1 to 2</th>
<th>120 credits (8 courses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2 to 3</td>
<td>240 credits (16 courses)</td>
</tr>
<tr>
<td>Stage 3 to 4</td>
<td>360 credits (24 Courses) and an overall average of 60% or above at the first attempt</td>
</tr>
<tr>
<td>Stage 4 to 5</td>
<td>Students who meet the criteria to progress to Stage 4 will automatically be allowed to progress to the final year.</td>
</tr>
</tbody>
</table>

**Part B.** The minimum grade of D is required in the following courses

**Stage 1**
- Software Development (F27SA), Interactive Systems (F27IS), Web Design & Databases (F27WD), Introduction to Computer Systems (F27CS), Enterprise and its Business Environment (C17EC)

**Stage 2**
- Interaction Design (F28IN), Database Management Systems (F28DM), Software Design (F28SD), Management in a Global Context (C17EB), Project management (C19PT), Operations Management (C18OM), Fundamentals of Marketing (C18FM)

**Stage 3**
- 6 courses including Software Engineering (F29SO) & Professional Development (F29PD). Re-assessment in Stage 3 is available for credit only and not to improve overall average
Stage 4  
Industrial Training Placement A (F28IA) and Industrial Training Placement B (F28IB) must be passed for the award of Diploma in Industrial Training

**AWARDS, CREDITS AND LEVEL (UG)**

### Part A. Credit Requirements

<table>
<thead>
<tr>
<th></th>
<th>Overall Credits</th>
<th>Specific Requirements</th>
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<tbody>
<tr>
<td>Integrated Masters</td>
<td>600</td>
<td>600 SCQF credits including a minimum of 120 credit at Level 11</td>
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<tr>
<td>Honours Degree (inc.MA)</td>
<td>480</td>
<td>480 SCQF credits including a minimum of 180 credit at Level 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and 10 of which at least 90 credits at Level 10</td>
</tr>
<tr>
<td>Ordinary or General Degree</td>
<td>360</td>
<td>360 SCQF credits including a minimum of 60 credit at Level 9</td>
</tr>
<tr>
<td>Diploma of Higher Education</td>
<td>240</td>
<td>240 SCQF credits including a minimum of 90 credit at Level 8</td>
</tr>
<tr>
<td>Certificate of Higher Education</td>
<td>120</td>
<td>120 SCQF credits including a minimum of 90 credit at Level 7</td>
</tr>
</tbody>
</table>

### Part B. Mark/Grade Requirements

<table>
<thead>
<tr>
<th></th>
<th>Overall Mark</th>
<th>Overall Grade</th>
<th>Basis of Overall Mark/Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Masters</td>
<td>&gt;=50%</td>
<td>C</td>
<td>Credit Weighted Average &gt;=50% over all qualifying courses at Grades A-D</td>
</tr>
</tbody>
</table>
| Honours Degree (inc.MA)                           | >=40%        | D             | 1st: Credit Weighted Average >=70% Over all qualifying courses at grades A-D.  
|                                                   |              |               | 2.1: Credit Weighted Average >=60% Over all qualifying courses at grades A-D.  
|                                                   |              |               | 2.2: Credit Weighted Average >=50% Over all qualifying courses at grades A-D.  
|                                                   |              |               | 3rd: Credit Weighted Average >=40% Over all qualifying courses at grades A-D.  |
| Ordinary or General Degree                        | >=40%        | D             | Minimum of grade D in all pre-requisite courses.                 |
| Diploma of Higher Education                        | >=40%        | D             | Minimum of grade D in all pre-requisite courses.                 |
| Certificate of Higher Education                    | >=40%        | D             | Minimum of grade D in all pre-requisite courses.                 |

**DURATION OF STUDY**

<table>
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<tr>
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<td>Integrated Masters</td>
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<tr>
<td>Honours Degree</td>
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<tr>
<td>Ordinary or General Degree</td>
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<tr>
<td>Diploma of Higher Education</td>
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<tr>
<td>Certificate of Higher Education</td>
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