N.B: In developing the module/course-unit, account should be taken of the Framework for Higher Education Qualifications, which can be found at: [http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp](http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp), relevant QAA Benchmarking Statements ([http://www.qaa.ac.uk/academicinfrastructure/benchmark/default.asp](http://www.qaa.ac.uk/academicinfrastructure/benchmark/default.asp)) and, where appropriate, the requirements of Professional and Statutory Bodies.

<table>
<thead>
<tr>
<th>1. Title (see footnote 1)</th>
<th>2. Value</th>
<th>3. Level</th>
<th>4. Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Systems Concepts</td>
<td>0.5 cu</td>
<td>Please see footnote 2</td>
<td>1 term</td>
</tr>
</tbody>
</table>

5. Programme(s) of which the module/course-unit forms part (insert * by the title for a new programme). Please indicate the total number of modules/course-units for each programme and specify to which programmes it is a core and to which programmes it is an option and in which year(s) of the programme it is offered.

<table>
<thead>
<tr>
<th>Programme(s)</th>
<th>Total no. of modules/course units in programme</th>
<th>Core/Option</th>
<th>Year(s) in which offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSc in Information Systems &amp; Management</td>
<td>11 full credits</td>
<td>Core</td>
<td>1</td>
</tr>
<tr>
<td>Foundation Degree in Information Technology</td>
<td>5 full credits</td>
<td>Option</td>
<td>2</td>
</tr>
</tbody>
</table>

6. School (or Department) responsible for this module/course-unit* 7. Date module/course-unit will commence 8. Maximum/minimum number of students per intake

| SCSIS | On-going (re-submission for amendment) | 180 (for all programmes together) |

9. Pre-requisites and/or Restrictions

Restrictions may include modules/course-units only being available to students studying a particular programme or modules/course-units which cannot be taken in conjunction with this one.

10. Teaching and Learning Methods

Indicate the total contact hours the student will spend in:

- **Lectures:** 24
- **Field Work:** (Please also state here: number of trips; group or independent; location and duration of; resources/equipment required)
- **Seminars:**
- **Tutorials:**
- **Practical Classes:** (labs, computers, languages)
- **Project Work:** 9
- **Other (please specify):**

---

1. Where a module/course-unit is being developed as part of a new programme, this form should be submitted with the Programme Proposal/Programme Specification Form.

2. This section should detail the level of the module/course-unit in accordance with the qualification levels which are described in the Framework for Higher Education Qualifications ([http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp](http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp), an extract of which can be found in the appendix to this form).

Modules/course-units on Masters degrees, Postgraduate Certificates and Postgraduate Diplomas should be designated as level M (Masters). Modules/course-units on Foundation degrees should be identified as either level C (Certificate) or level I (Intermediate) and those on Bachelors degrees with Honours should normally be designated as level C (Certificate) for modules/course-units usually taken in year 1, level I (Intermediate) for modules/course-units usually taken in years 1 and 2 and level H (Honours) for work in the final two years of the programme.
11. Main aims, special features and rationale

Main Aims
This module focuses on the basic concepts of information systems. On completion of this course a sound student will obtain a preliminary understanding of object oriented technology, know a process through which information systems are developed, and be able to build models of information systems requirements using UML.

Special Features
The students are required to apply their learned knowledge to a real-world case study so as to link theory with practice. The case study is organized as a group project to foster team-working spirit and skill.

Rationale for introducing the module/course-unit in the context of existing provision including statement of how this proposal meets student needs.

[a. If the proposal supersedes an existing module/course-unit please give the title and code of the superseded module(s)/course unit(s) and the reason for replacement.]

[b. If the proposal relates to an existing module/course-unit please give the title and code of the related module(s)/course unit(s) together with an explanation of how this relationship will work.]

This module, together with the following ISM (COIY038U), will introduce students to object-oriented systems analysis and design.

12. Learning Outcomes

Please note: The learning outcomes should relate to the overall aims of the programme(s) to which the module/course-unit forms part.

Students who have taken the module/course-unit should be able to demonstrate the following knowledge, skills and understanding:

<table>
<thead>
<tr>
<th>Subject Specific</th>
<th>Practical</th>
<th>Intellectual</th>
<th>Personal and Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Obtain a preliminary understanding of object oriented technology</td>
<td>• Search for information</td>
<td>• Critically evaluate arguments and evidence</td>
<td>• Work under pressure</td>
</tr>
<tr>
<td>• Know a process through which information systems are developed</td>
<td>• Make decisions</td>
<td></td>
<td>• Work in teams</td>
</tr>
<tr>
<td>• Be able to build models of information systems requirements using UML</td>
<td>• Justify decisions</td>
<td></td>
<td>• Time management</td>
</tr>
<tr>
<td></td>
<td>• Define problems</td>
<td></td>
<td>• Take responsibility for own learning</td>
</tr>
<tr>
<td></td>
<td>• Build models</td>
<td></td>
<td>• Communicate using appropriate interpersonal skills</td>
</tr>
<tr>
<td></td>
<td>• Write reports</td>
<td></td>
<td>• Convince management through a written report</td>
</tr>
</tbody>
</table>
13. Syllabus

Please itemise the main topics of study.

- What Are Information Systems
- Problems in Information Systems Development
- Avoiding the Problems
- What Is Object-Orientation
- Modelling Concepts
- Requirements Capture
- Requirements Analysis
- Refining the Requirements Model
- Object Interaction

14. Scheme of Assessment

Assessment methods which enable the student to demonstrate the learning outcomes for the module.

Elements of assessment include: Coursework (essay, report, classroom exercises), Dissertation, Project, Written Paper (seen, unseen, take away, multiple choice, other), Presentation, Practical, Orals, Fieldwork.

<table>
<thead>
<tr>
<th>Element of assessment</th>
<th>Weighting</th>
<th>Characteristics (eg, word count, duration, date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination</td>
<td>80%</td>
<td>2 hours. Unseen.</td>
</tr>
<tr>
<td>In-Class Tests</td>
<td>10%</td>
<td>2 in-class tests that consist of multiple-choice questions</td>
</tr>
<tr>
<td>Group Project</td>
<td>10%</td>
<td>In groups, students investigate a small business system and build a requirements model embedded in a convincing report to management.</td>
</tr>
</tbody>
</table>

Total: 100%

Rationale:
The bulk (80%) of the assessment comes from an unseen examination in June. This allows as much time as possible for assimilation of the material and promotes an overall comprehension and engagement with the course. The contribution (20%) from coursework ensures that throughout the term students get practice, and are given feedback, in tackling and solving problems. The coursework, which consists of in-class tests and a group project, takes place along with the teaching because their purposes are more formative than summative.

Pass requirements (i.e. all elements have to be passed, some elements must be passed as well as a pass overall, or just a pass overall must be obtained?)

A student must participate in the group project and also get an overall mark of at least 35 (coursework + examination) to pass.

Will there be any special arrangements for re-assessment?

Makeup tests will be offered to those who are not able to attend normal in-class tests, given that they can produce evidence of their need to be absent.
15. Teaching Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>FT or PT</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module/Course-Unit Coordinator</td>
<td>Dr Dell Zhang</td>
<td>FT</td>
</tr>
<tr>
<td>Birkbeck teaching staff</td>
<td>Dr Dell Zhang (and 2 teaching assistants)</td>
<td></td>
</tr>
</tbody>
</table>

Sessional teaching staff
(Please supply an up to date c.v. of all sessional teaching staff)

Include details of any technical staff required

16. Additional Resources Required*

Please identify any additional resources required. Please note that the teaching and learning must be sufficiently flexible to enable all reasonable adjustments to be made in accordance with the Disability Discrimination Act (DDA).

* If new module/course-unit can be managed with existing resources, write ‘NIL’ against the appropriate headings.

Accommodation
NIL

Library (Please attach a list of the core texts and a short indicative reading list as a guide (max. half a page))

Have you discussed library provision for the module/course-unit with your subject librarian? Yes

Computing
Have you discussed any requirements for the use of specific software packages with CCS technical support staff? NIL

CCS

School
A UML modeling tool has been installed in the school labs.

Please state requirements for any other resources.

17. Agreement

<table>
<thead>
<tr>
<th>Author of this proposal</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dell Zhang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module/Course-Unit Coordinator</td>
<td>Dell Zhang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dean of Faculty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Librarian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCS Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CLOSING DATE: 1 MARCH PRECEDING THE SESSION IN WHICH TEACHING WOULD BEGIN. YOU MUST ALSO OBTAIN ALL OF THE ABOVE SIGNATURES BEFORE YOU SUBMIT THE FORM.

Please return the form to the Assistant Registrar (Registration and Regulations).
Extracts from the QAA Framework for Higher Education Qualifications (FHEQ)

For further details of the FHEQ see: http://www.qaa.ac.uk/academicinfrastructure/FHEQ/EWNI/default.asp

**A brief guide to academic qualifications**

The higher education qualifications awarded by universities and colleges in England, Wales and Northern Ireland are at five levels. In ascending order, these are the Certificate, Intermediate, Honours, Masters and Doctoral levels.

**Certificate level**

The holder of a Certificate of Higher Education will have a sound knowledge of the basic concepts of a subject, and will have learned how to take different approaches to solving problems. He or she will be able to communicate accurately, and will have the qualities needed for employment requiring the exercise of some personal responsibility.

*The Certificate may be a first step towards obtaining higher level qualifications.*

**Intermediate level**

Holders of qualifications at this level will have developed a sound understanding of the principles in their field of study, and will have learned to apply those principles more widely. Through this, they will have learned to evaluate the appropriateness of different approaches to solving problems. Their studies may well have had a vocational orientation, enabling them to perform effectively in their chosen field.

They will have the qualities necessary for employment in situations requiring the exercise of personal responsibility and decision-making.

*The intermediate level includes ordinary (non-Honours) degrees, the Foundation degree, Diplomas of Higher Education, and other higher diplomas.*

**Honours level**

An Honours graduate will have developed an understanding of a complex body of knowledge, some of it at the current boundaries of an academic discipline. Through this, the graduate will have developed analytical techniques and problem-solving skills that can be applied in many types of employment. The graduate will be able to evaluate evidence, arguments and assumptions, to reach sound judgements, and to communicate effectively.

An Honours graduate should have the qualities needed for employment in situations requiring the exercise of personal responsibility, and decision-making in complex and unpredictable circumstances.

*Honours degrees form the largest group of higher education qualifications. Typical courses last for three years (if taken full-time) and lead to a Bachelors degree with Honours, having a title such as Bachelor of Arts (BA(Hons)) or Bachelor of Science (BSc(Hons)). Also at this level are short courses and professional 'conversion' courses, based largely on undergraduate material, and taken usually by those who are already graduates in another discipline, leading to Graduate Certificates or Graduate Diplomas.*

**Masters Level**

Much of the study undertaken at Masters level will have been at, or informed by, the forefront of an academic or professional discipline. Students will have shown originality in the application of knowledge, and they will understand how the boundaries of knowledge are advanced through research. They will be able to deal with complex issues both systematically and creatively, and they will show originality in tackling and solving problems.

They will have the qualities needed for employment in circumstances requiring sound judgement, personal responsibility and initiative, in complex and unpredictable professional environments.

*Masters degrees are awarded after completion of taught courses, programmes of research, or a mixture of both. Longer, research-based programmes often lead to the degree of MPhil. Most Masters courses last at least one year (if taken full-time), and are taken by persons with Honours degrees (or equivalent degrees) in a related discipline.*
Some Masters degrees in science and engineering are awarded after extended undergraduate programmes that last, typically, a year longer than Honours degree programmes. Also at this level are advanced short courses, often forming parts of Continuing Professional Development programmes, leading to Postgraduate Certificates and Postgraduate Diplomas.

(Note: the MAs granted by the Universities of Oxford and Cambridge are not academic qualifications.)

Qualifications, volumes of learning, and credit
The framework is a qualifications framework, based upon the outcomes represented by the main qualification titles. It is not a credit framework, nor is it dependent on the use of credit.

Providers of higher education programmes need to be able to demonstrate how the design of curricula secures academic and intellectual progression. However, it is for providers to decide how this is best demonstrated, whether by a credit structure or otherwise.

Qualification descriptors

Descriptor for a qualification at Certificate (C) level: Certificate of Higher Education

Certificates of Higher Education are awarded to students who have demonstrated:

i knowledge of the underlying concepts and principles associated with their area(s) of study, and an ability to evaluate and interpret these within the context of that area of study;

ii an ability to present, evaluate, and interpret qualitative and quantitative data, to develop lines of argument and make sound judgements in accordance with basic theories and concepts of their subject(s) of study.

Typically, holders of the qualification will be able to:

a evaluate the appropriateness of different approaches to solving problems related to their area(s) of study and/or work;

b communicate the results of their study/work accurately and reliably, and with structured and coherent arguments;

c undertake further training and develop new skills within a structured and managed environment;

and will have:

d qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility.

Descriptor for a qualification at Intermediate (I) level: Degree (non-Honours)

Non-Honours degrees are awarded to students who have demonstrated:

i knowledge and critical understanding of the well-established principles of their area(s) of study, and of the way in which those principles have developed;

ii ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context;

iii knowledge of the main methods of enquiry in their subject(s), and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study;

iv an understanding of the limits of their knowledge, and how this influences analyses and interpretations based on that knowledge.

Typically, holders of the qualification will be able to:

a use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis;

b effectively communicate information, arguments, and analysis, in a variety of forms, to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively;
c undertake further training, develop existing skills, and acquire new competences that will enable them to assume significant responsibility within organisations;

**and will have:**
d qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and decision-making.

**Descriptor for a qualification at Honours (H) level: Bachelors degree with Honours**

**Honours degrees are awarded to students who have demonstrated:**

i a systematic understanding of key aspects of their field of study, including acquisition of coherent and detailed knowledge, at least some of which is at or informed by, the forefront of defined aspects of a discipline;

ii an ability to deploy accurately established techniques of analysis and enquiry within a discipline;

iii conceptual understanding that enables the student:

- to devise and sustain arguments, and/or to solve problems, using ideas and techniques, some of which are at the forefront of a discipline; and
- to describe and comment upon particular aspects of current research, or equivalent advanced scholarship, in the discipline;

iv an appreciation of the uncertainty, ambiguity and limits of knowledge;

v the ability to manage their own learning, and to make use of scholarly reviews and primary sources (eg refereed research articles and/or original materials appropriate to the discipline).

**Typically, holders of the qualification will be able to:**
a apply the methods and techniques that they have learned to review, consolidate, extend and apply their knowledge and understanding, and to initiate and carry out projects;

b critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem;

c communicate information, ideas, problems, and solutions to both specialist and non-specialist audiences;

**and will have:**
d qualities and transferable skills necessary for employment requiring:

- the exercise of initiative and personal responsibility;
- decision-making in complex and unpredictable contexts; and
- the learning ability needed to undertake appropriate further training of a professional or equivalent nature.

**Descriptor for a qualification at Masters (M) level: Masters degree**

**Masters degrees are awarded to students who have demonstrated:**

i a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study, or area of professional practice;

ii a comprehensive understanding of techniques applicable to their own research or advanced scholarship;

iii originality in the application of knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline;

iv conceptual understanding that enables the student:

- to evaluate critically current research and advanced scholarship in the discipline; and
- to evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.
Typically, holders of the qualification will be able to:

a deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences;
b demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level;
c continue to advance their knowledge and understanding, and to develop new skills to a high level;

and will have:

d the qualities and transferable skills necessary for employment requiring:

- the exercise of initiative and personal responsibility;
- decision-making in complex and unpredictable situations; and
- the independent learning ability required for continuing professional development.