Programme Specification
Postgraduate

Applicable to postgraduate programmes

Please click here for guidance on completing this specification template.

Part A: Programme Summary Information

1. Title of programme: Computer and Information Security

2. Programme Code: CAIS

3. Entry Award(s):

<table>
<thead>
<tr>
<th>Option</th>
<th>Award</th>
<th>Credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSc</td>
<td></td>
<td>180</td>
<td>7</td>
</tr>
<tr>
<td>PGDip</td>
<td></td>
<td>120</td>
<td>7</td>
</tr>
<tr>
<td>PGCert</td>
<td></td>
<td>60</td>
<td>7</td>
</tr>
</tbody>
</table>

☐ MA ☐ DPS ☐ CPS ☐ Other (please specify below:)

4. Exit Awards:

<table>
<thead>
<tr>
<th>Option</th>
<th>Credit</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGDip</td>
<td>120</td>
<td>7</td>
</tr>
<tr>
<td>PGCert</td>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>PGA</td>
<td>30</td>
<td>7</td>
</tr>
</tbody>
</table>

Exit awards will automatically bear the name of the entry award. If an exit award is to be unnamed (i.e. it will show only the qualification achieved) or if it is to have a different name from the entry qualification you must indicate this below:

See “Criteria for the award of an alternative qualification” under S37

5. Date of first intake: March 2009

6. Frequency of intake: 4-6 times per academic year depending on the demand

7. Duration and mode of study: Part-time 2.5 - 6 years by distance learning via the Internet
8. Applicable framework: University Framework for Postgraduate Modular Provision

Framework exemption required: ☒ No (please go to section 9)
☐ Yes (please provide a brief summary below)

Date exemption approved by AQSC:

9. Applicable Ordinance: General Ordinance for Modular Master's Degrees, Postgraduate Diplomas, Postgraduate Certificates and Postgraduate Awards.

New/revised Ordinance required: ☒ No (please go to section 10)
☐ Yes (please provide a brief summary below)

Date new/revised Ordinance approved by Council:

10. Faculty: Faculty of Science and Engineering

11. Level 2 School/Institute: School of Electrical Engineering, Electronics and Computer Science

12. Level 1 unit: Department of Computer Science

13. Campus:

14. Other contributors from UoL:

15. Teaching other than at UoL: Laureate Online Education

16. Director of Studies: Professor Frans Coenen

17. Board of Studies: Computer Science Board of Studies (On-Line)

18. Board of Examiners: Board of Examiners for Online Degrees in Computing

19. External Examiner(s):

   Name                      Institution                  Position
   1) Professor M Trucco, University of Dundee
   2) Professor H Petrie, University of York

20. Professional, Statutory or Regulatory body: British Computer Society (BCS)

21. QAA Subject benchmark: Master's degrees in computing (2011)
<table>
<thead>
<tr>
<th>Statements(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Other reference points:</td>
</tr>
<tr>
<td>QAA Code of Practice for the Assurance of Academic Quality and Standards in Higher Education: Collaborative Provision.</td>
</tr>
<tr>
<td>QAA Subject Benchmark Statement: Master’s Degrees in Computing 2011.</td>
</tr>
<tr>
<td>QAA Guidelines on the Quality Assurance of Distance Learning.</td>
</tr>
<tr>
<td>BCS Chartered Institute for IT Guidelines on Course Accreditation.</td>
</tr>
</tbody>
</table>

| 23. Fees: |
| Fees charged by Laureate Online Education, within the terms of the University/Laureate institutional agreement. |

| 24. Additional costs to the student: |
| Reliable internet connection, home email account, suitable computer with supporting software and textbooks (note that every effort is made to use electronically available text books). |

| 25. AQSC approval: |
| September 2014 |

**Part B: Programme Aims & Objectives**

**26. Aims of the Programme**

The MSc Computer and Information Security is designed to allow students to gain a specialist qualification in the rapidly expanding field of computer information security. More specifically it is aimed at providing students with the necessary high level skills and advanced technical knowledge required for them to take up a rewarding career within the computer information security sector of the IT industry. The programme will provide students with a comprehensive understanding of current issues at the forefront of computer science with a particular focus on the theory, practice and techniques of computer and information security. The individual aims are as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Aim:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>To enable graduate IT Professionals to build a solid theoretical and practical academic foundation augmented by knowledge of issues in Computer and Information Security.</td>
</tr>
<tr>
<td>2</td>
<td>To further expose students to current knowledge that is of relevance to their profession, particularly in the field of Computer and Information Security.</td>
</tr>
<tr>
<td>3</td>
<td>To develop the abilities of students to work independently and with others to research, design, implement and execute creative solutions to practical problems, and to subject their work and that of others to critical analysis and evaluation.</td>
</tr>
<tr>
<td>4</td>
<td>To underpin and enhance students’ current knowledge and understanding of subject matter relevant to their profession, bringing it up to date with current developments.</td>
</tr>
<tr>
<td>5</td>
<td>To augment students’ knowledge with specialised knowledge in the area of</td>
</tr>
</tbody>
</table>
Computer and Information Security.

### Learning Outcomes

#### No. Learning outcomes – Master’s degree

1. A high level, but comprehensive, understanding of current technical developments at the forefront of the discipline of Computer Science and Information Technology.

2. A systematic and critical understanding of the current theory and practice of computer and information security engineering including current paradigms, tools and techniques.

3. An in-depth understanding of the nature of internet programming and the associated security issues.

4. A critical awareness and comprehensive understanding of the importance of Legal, Social, Ethical and Professional Issues (LSEPI) within the domain of computer science.

5. A comprehensive and critical understanding of the theory and practice of computer forensics.

6. An in-depth understanding of computer communications and the associated security issues.

7. An in depth and systematic understanding of selected recent technological developments within the domain of Computer Science.

8. Experience of the process of planning and carrying out a major project within the domain of computer and information security, requiring original thought and substantial aspects of self-directed research, creative design and realisation.

9. Experience of the process of presenting reports concerning the progress and outcomes of computer and information security projects, including detailed and critical evaluation in the context of current knowledge and practice.

#### No. Learning outcomes – Postgraduate Diploma

1. A high level, but comprehensive, understanding of current technical developments at the forefront of the discipline of Computer Science and Information Technology.

2. A systematic and critical understanding of the current theory and practice of computer and information security engineering including current paradigms, tools and techniques.

3. An in-depth understanding of the nature of internet programming and the associated security issues.

4. A critical awareness and comprehensive understanding of the importance of Legal, Social, Ethical and Professional Issues (LSEPI) within the domain of computer science.

5. A comprehensive and critical understanding of the theory and practice of computer forensics.

6. An in-depth understanding of computer communications and the associated security issues.

7. An in depth and systematic understanding of selected recent technological developments within the domain of Computer Science.

8. Experience of the process of planning and carrying out a major project within the domain of computer and information security, requiring original thought and substantial aspects of self-directed research, creative design and realisation.

9. Experience of the process of presenting reports concerning the progress and outcomes of computer and information security projects, including detailed and critical evaluation in the context of current knowledge and practice.
<table>
<thead>
<tr>
<th>No.</th>
<th>Learning outcomes – Postgraduate Certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A high level, but comprehensive, understanding of current technical developments at the forefront of the discipline of Computer Science and Information Technology.</td>
</tr>
<tr>
<td>2</td>
<td>A systematic and critical understanding of the current theory and practice of computer and information security engineering including current paradigms, tools and techniques.</td>
</tr>
<tr>
<td>3</td>
<td>An in-depth understanding of the nature of internet programming and the associated security issues.</td>
</tr>
<tr>
<td>4</td>
<td>A critical awareness and comprehensive understanding of the importance of Legal, Social, Ethical and Professional Issues (LSEPI) within the domain of computer science.</td>
</tr>
</tbody>
</table>

27a. Mapping of subject-based learning outcomes:

<table>
<thead>
<tr>
<th>Learning outcome No.</th>
<th>Module(s) in which this will be delivered</th>
<th>Mode of assessing achievement of learning outcome</th>
<th>PSRB/Subject benchmark statement (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CKIT501,</td>
<td>Practical assessments/Reports/ Discussion Questions</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CKIT503</td>
<td>Practical assessments/Reports/ Discussion Questions</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CKIT511</td>
<td>Practical assessments/Reports/ Discussion Questions</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The concept of LSEPI percolates through the entire provision, but is specifically covered in CKIT501 and CKIT522</td>
<td>Practical assessments/Reports/ Discussion Questions</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>CKIT519</td>
<td>Practical assessments/Reports/ Discussion Questions</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>CKIT505</td>
<td>Practical assessments/Reports/ Discussion Questions</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Electives</td>
<td>Practical assessments/Reports/ Discussion Questions</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CKIT702</td>
<td>Dissertation</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CKIT702</td>
<td>Dissertation</td>
<td></td>
</tr>
</tbody>
</table>

28. Skills and Other Attributes

No. | Skills and attributes: |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A comprehensive and systematic understanding of the process of eLearning and its significance with respect to independent learning and continuing professional development.</td>
</tr>
</tbody>
</table>
2. An understanding of the importance of teamwork and cooperation in today’s IT global industry, and the essential practical and personal skills required to share knowledge and participate in teams.

3. The ability to present and communicate professional concepts to colleagues and clients.

4. Skills and experience in the techniques of research, acquisition of knowledge, and self-directed learning.

### 28a. Mapping of skills and other attributes:

<table>
<thead>
<tr>
<th>Skills and other attributes No.</th>
<th>Module(s) in which this will be delivered and assessed</th>
<th>Learning skills, research skills, employability skills</th>
<th>Mode of assessing achievement of the skill or other attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>eLearning features throughout the programme, but its significance is highlighted in CKIT501</td>
<td>Learning</td>
<td>Practical, Written</td>
</tr>
<tr>
<td>2</td>
<td>CKIT503, CKIT511, CKIT522</td>
<td>Employability</td>
<td>Practical, Written</td>
</tr>
<tr>
<td>3</td>
<td>CKIT503, CKIT505, CKIT511, CKIT519, Electives, CKIT702</td>
<td>Employability</td>
<td>Practical, Written</td>
</tr>
<tr>
<td>4</td>
<td>CKIT702</td>
<td>Learning, Research</td>
<td>Dissertation</td>
</tr>
</tbody>
</table>

### 29. Career opportunities:

The programme is aimed principally at graduates who are already in IT-related employment. The intention is that the programme will enhance the current knowledge and understanding of those enrolled while at the same time augmenting this knowledge with specialised knowledge in the area of Computer and Information Security. The expectation is that this enhancement, together with the skills they will exercise in the programme, will provide a basis for their further career development towards senior technical and managerial positions in the profession.

### Part C: Entrance Requirements

#### 30. Academic Requirements:

Either a first degree equivalent to a UK Bachelors degree, coupled with 2 years relevant IT professional experience; or such experience in employment as would be considered to be comparable with the award of a Bachelors degree.

Applications from students with a professional background, rather than a Bachelors degree, will be assessed in accordance with established practice for The University of Liverpool’s on-line programmes that are delivered in collaboration with Laureate On-line Education. The initial contact for applicants will be a representative of Laureate On-line Education. The final decision as to whether to admit an applicant to the programme lies with the Department of Computer Science at The University of Liverpool.

#### 31. Work experience:
For graduates (as noted above) normally two years’ work experience in IT-related employment is required; a significantly longer period of relevant employment is necessary for candidates lacking a first degree.

32. **Other requirements:**

English-language skills equivalent to at least IELTS 6.5.

### Part D: Programme Structure

33. **Programme Structure:**

Students can register for any of the following three entry awards: (i) MSc in Computer and Information Security, (ii) Postgraduate Diploma (PGDip) in Computer and Information Security, (iii) Postgraduate Certificate (PGCert) in Computer and Information Security.

#### 1. Programme Structure

**1.1 MSc in Computer and Information Security**

The modules in the MSc in Computer and Information Security programme are as follows:

- **Required modules:**
  1. CKIT501 Computer Structures (15 credit points).
  2. CKIT503 Programming the Internet (15 credit points).
  3. CKIT511 Information Security Engineering (15 credit points).
  4. CKIT522 Professional Issues in Computing (15 credit points).
  5. CKIT505 Computer Communications and Networks (15 credit points).
  6. CKIT519 Computer Forensics (15 credit points).
  7. CKIT702 Dissertation Project (60 credit points) on a topic relevant to the overall theme of the degree.

- **Recommended Elective modules (choice of two):**
  1. CKIT504 Designing and Managing Databases (15 credit points).
  2. CKIT507 Software Engineering (15 credit points).
  3. CKIT515 Systems Analysis & Design Using an Object-Oriented Approach (15 credit points).
  4. CKIT518 Software Quality Assurance (15 credit points).
  5. CKIT521 Managing the Software Enterprise (15 credit points).
  6. CKIT523 Cloud Computing (15 credit points).
  7. CKIT524 Social Computing (15 credit points).

- **Additional Elective modules (can be used to replace recommended electives):**
  1. CKIT510 Object Oriented Programming in Java (15 credit points).
  2. CKIT514 Information Technology Project Management (15 credit points). (pre-requisite for CKIT554).
  3. CKIT525 Big Data (15 credit points).
  4. CKIT551 People, Technology and Management (15 credit points).
  5. CKIT552 Managing Organisational Resource (15 credit points).
6. CKIT553 Marketing Management (15 credit points).
7. CKIT554 Successful Management of IT Projects (15 credit points). (Pre-requisite CKIT514)

All modules are at level M. Under special circumstances students can apply to the director of studies for the programme to take an alternative module available within the on-line Computer Science provision. A sequence diagram indicating the modules in the programme is presented in Figure 1. There are exit points for: (i) PGA after 30 credits have been successfully completed (which may not include any dissertation credit), (ii) a PGCert after 60 credits have been successfully completed (which may not include any dissertation credit), and (iii) a PGDip after 120 credits have been successfully completed (the 120 credits may include dissertation credits to the value of 60 credits).
1.2 PGDip in Computer and Information Security (Entry Award)

The modules in the PGDip in Computer and Information Security (entry award) programme are identical to those prescribed for the MSc in Computer and Information Security with the exception of the 60 credit dissertation module (CKIT702). Students following the PGDip in Computer and Information Security programme do not undertake a final dissertation project. All modules are at level M. Under special circumstances students can apply to the director of studies for the programme to take an alternative module available within the on-line Computer Science provision. There are exit points for: (i) a PGA after 30 credits have been successfully completed, and (ii) a PGCert after 60 credits have been successfully completed (which may not include any dissertation credit).

1.3 PGCert in Computer and Information Security (Entry Award)

The modules in the PGCert in Computer and Information Security (entry award) programme include:

**Required modules:**
1. CKIT501 Computer Structures (15 credit points).
2. CKIT503 Programming the Internet (15 credit points).
3. CKIT511 Information Security Engineering (15 credit points).
4. CKIT522 Professional Issues in Computing (15 credit points).

All modules are at level 7. Under special circumstances students can apply to the director of studies for the programme to take an alternative module available within the on-line Computer Science provision. There is an exit point for a PGA after 30 credits have been successfully completed.

34. **Industrial placement/work placement/year abroad:**

   Not applicable

35. **Liaison between the Level 2 Schools/Institutes involved:**

   Delivery of the programme is undertaken by the Department of Computer Science at the University of Liverpool in partnership with Laureate On-line Education. Staff within The Department of Computer Science liaise regularly with colleagues at Laureate who are responsible for the day-to-day management of the programme. The University retains authority over all academic aspects of the programme and its delivery. Appropriate Laureate personnel are represented on the Board of Studies and Board of Examiners, together with representatives of the Department of Computer Science.
Learning, Teaching and Assessment Strategies:

The mode of delivery of taught modules is by distance learning over the Internet. This mode of study enables students to pursue modules via home study while continuing in employment.

Module delivery involves the establishment of a virtual classroom in which a relatively small group of students (usually 15-20) work under the direction of the course instructor, using an internet-based distance learning package. Module delivery proceeds via a series of one-week online seminars, each of which typically includes:

1. An online lecture, and other learning materials, posted electronically to a public folder in the virtual classroom.
2. Coursework assignments, which may include both reading assignments and practical work, results from which are posted to closed folders in the virtual classroom.
3. Class discussions and group assignments, facilitated and moderated by the class instructor, carried out within open folders.

Communication within the virtual classroom is asynchronous, preserving the requirement that students are able to pursue the course in their own time, within the weekly time-frame of each seminar.

Two broad principles inform the teaching and learning strategy: constructivism and collaborative enquiry. Constructivism describes a view of learning in which students construct their own unique understanding of a subject, through a process which includes social interaction so that the learner can explain understandings, receive feedback from teachers and other students, clarify meanings, and reach a group consensus. Collaborative enquiry via Internet-mediated communication provides a framework for this mode of learning. The aim is to use the medium to foster the creation of a learning community which will enable dialogue between participants, sharing of information, and collaborative project work. This mode of learning is particularly appropriate when, as in this case, the students themselves will often bring to the class knowledge and expertise that is outside the experience of the course teacher, and which can be shared with the group.

A key feature of the approach is the use of moderated discussions of material introduced in the virtual classroom. Every taught module includes, each week, a discussion of topics specified by the instructor. Participation in these discussions is a requirement for students attending, and forms part of the basis for assessment. This requirement ensures a continuing commitment from the students to the learning process.

Project-based modules, including in particular the concluding major dissertation project, are also carried out on-line, normally via individual supervision.

All communications that take place within the virtual classroom, including all assignments carried out by students and assessments by instructors, are recorded and are available for scrutiny by staff with appropriate access permissions. This enables two aspects of quality control:

1. Module delivery is monitored by staff at The Department of Computer Science to ensure that defined syllabuses, procedures, and assessment processes are followed, appropriate standards are maintained, and to check for plagiarism.
2. All assessments are subject to the Universities moderating procedures.
3. All assessment is subject to inspection by the external examiner.

36a Learning, Teaching and Assessment methods:

Assessment is entirely based on work carried out in the virtual classroom, including contribution to discussions, weekly assignments, and longer individual or group-based projects. The weighting assigned to each component is prescribed separately for each module. The main aim of the assessment strategy is to verify the achievement of learning outcomes within the broad framework of the degree classification, thus at Pass, Merit and Distinction levels.

37. Assessment information for students:

Code of Practice on Assessment

The University has a Code of Practice on Assessment which brings together the main institutional policies and rules on assessment. The Code is an authoritative statement of the philosophy and principles underlying all assessment activities and of the University’s expectations in relation to how academic subjects design, implement and review assessment strategies for all taught programmes of study.

The Code of Practice includes a number of Appendices which provide more detail on the regulations and rules that govern assessment activity; these include:

- The University marks scale, marking descriptors and qualification descriptors;
- The framework for modular, postgraduate programmes;
- Information about students’ progress, including guidance for students;
- The procedure for assessment appeals;
- Regulations for the conduct of exams;
- The University’s policy on making adjustments to exam arrangements for disabled students.
- The code of practice relating to external examining (see also below)
- The Academic Integrity Policy, which covers matters such as plagiarism and collusion and includes guidance for students;
- The policy relating to mitigating circumstances which explains what you should do if you have mitigating circumstances that have affected assessment; and
- The policy on providing students with feedback on assessment.

Please click here to access the Code of Practice on Assessment and its appendices; this link will also give you access to assessment information that is specific to your cohort:

A summary of key assessment information is also available in the ‘Your University’ handbook.

Marking criteria:

Taught modules are typically eight weeks in duration. Typically students receive grades for several units of assessment carried out each week. Grading is founded on a six-point scale: A* A B C D F. The grade descriptors to be used in association with this six-point scale are presented in Table 1 below. These grades are converted into a weighted average final mark (expressed as a percentage) for each module. These final module marks will then be used to determine the degree award and for inclusion in transcripts. The weightings given to each component making up individual modules are specified in the module specifications. Major projects (such as the final dissertation) will be assessed directly using a numeric scale (as prescribed in the appropriate module specification).
<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Numerical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>High Distinction-level work: Factually almost faultless; authoritative coverage of topic; strong evidence of outside reading/research; substantial elements of originality and independent thought. Perceptive; aptly focused; very well written and directed. <em>Exceeds requirements.</em></td>
<td>84%</td>
</tr>
<tr>
<td>A</td>
<td>Distinction-level work: Displays in-depth understanding of material; comprehensive coverage of topic; good evidence of outside reading/research; originality of thought or approach. Enlightening; well-focused; very well written and directed. <em>Exceeds most expected requirements.</em></td>
<td>74%</td>
</tr>
<tr>
<td>B</td>
<td>Merit-level work: Factually sound (few, if any, minor factual errors); thorough understanding of material; evidence of relevant outside reading/research; some originality of thought or approach. Regular use of effective logical thinking, critical analysis and judgment. Suitably focused; well written and directed. <em>Meets all expected requirements.</em></td>
<td>64%</td>
</tr>
<tr>
<td>C</td>
<td>Pass-level work: Essentially correct, possibly missing important points, but no serious errors; good understanding of material but tending to be descriptive in approach; limited evidence of outside reading/research. Competently structured and reasonably well focused, but some weaknesses in expression/presentation. Possibly using large amounts of quotations. <em>Meets most expected requirements.</em></td>
<td>54%</td>
</tr>
<tr>
<td>D</td>
<td>Marginal work: Displays only limited understanding of material; incomplete coverage of topic; some significant factual errors and/or irrelevancies. Entirely descriptive in approach. Poorly structured; lack of coherent argument; difficult to follow. Substantially above or below the word limit. Possibly using excessive amounts of quotations. <em>Meets some of the expected requirements but not all.</em></td>
<td>44%</td>
</tr>
<tr>
<td>F</td>
<td>Unsatisfactory work: Evidence of inadequate effort. Many serious errors / misconceptions / omissions / irrelevancies. Poorly directed at targets. Poorly structured; lack of coherent argument; difficult to follow. Substantially above or below the word limit. Possibly using excessive amounts of quotations.</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Table 1: Grade Descriptors**

**Pass marks**
The pass mark for each module is 50%.

**Compensation**
A mark in the range 40 – 49% shall be deemed compensatable in ‘taught’ modules totalling up to 20 credits. Compensation shall not be applied to any credit contributing to a PGA.

Re-sits
Students who fail modules may re-sit those modules on one further occasion only. The mark achieved will be capped at 50% and flagged on the transcript to indicate that it was achieved at second attempt.

Final awards
A MSc in Computer and Information Security will be awarded to students who achieve a minimum of 180 credit points and successfully complete a dissertation/research project worth 60 credits (included within the 180 credits).

A Postgraduate Diploma in Computer and Information Security (Entry Award) will be awarded to students who achieve a minimum of 120 credit points as per the prescribe programme of study detailed in this programme specification.

A Postgraduate Certificate in Computer and Information Security (Entry Award) will be awarded to students who achieve a minimum of 60 credit points as per the prescribe programme of study detailed in this programme specification.

A mark of Merit or Distinction will be awarded according to the criteria below. Marks achieved in modules which are passed under the compensation rule may be counted towards a Merit or Distinction. It should also be noted that students who register on a Master’s or Postgraduate Diploma, but who exit with a lower award, will be eligible for a Merit or Distinction with respect to the lower award, provided the student meets the criteria outlined below:

(i) For a Master’s Degree with Merit a student must achieve:
- a mark of at least 60% for the dissertation; and
- marks of at least 60% in modules accounting for at least half of the credit of the overall award; and
- an overall average mark of at least 60%.

(ii) For a Postgraduate Diploma with Merit a student must achieve:
- marks of at least 60% in modules accounting for at least half of the credit of the overall award; and
- an overall average mark of at least 60%.

(iii) For a Postgraduate Certificate with Merit a student must achieve:
- marks of at least 60% in modules accounting for at least half of the credit of the overall award; and
- an overall average mark of at least 60%.

(iv) For a Master’s Degree with Distinction a student must achieve:
- a mark of at least 70% for the dissertation; and
- marks of at least 70% in modules accounting for at least half of the credit of the overall award; and
- an overall average mark of at least 70%.

(v) For a Postgraduate Diploma with Distinction a student must achieve:
- marks of at least 70% in modules accounting for at least half of the credit of the overall award; and
- an overall average mark of at least 70%.
(vi) For a Postgraduate Certificate with **Distinction** a student must achieve:
- marks of at least 70% in modules accounting for at least half of the credit of the overall award; and
- an overall average mark of at least 70%.

### Criteria for the award of an alternative qualification

If a student fails to meet the criteria for the award of a Master’s degree, a Postgraduate Diploma or a Postgraduate Certificate, or is unable to complete the programme he or she registered for, he or she will be eligible for the award of one of the following as an exit qualification:

**Postgraduate Award (exit award)** – this will be awarded to students who have previously registered for either the Master’s degree or Postgraduate Diploma or Postgraduate Certificate provided that the student has achieved a minimum of 30 credits; the credit may **not** include any dissertation credits and compensation shall not be applied.

**Postgraduate Certificate (exit award)** – this will be awarded to students who have previously registered for either the Master’s degree or Postgraduate Diploma provided that the student has achieved a minimum of 60 credits; the credit may **not** include any dissertation credits.

**Postgraduate Diploma (exit award)** – this will be awarded to students who have previously registered for the Master’s degree provided that the student has achieved a minimum of 120 credits; the 120 credits may include dissertation credits to the value of 60 credits.

In the case of the PGDip and PGCert exit awards, whether the award should be named or unnamed will be at the discretion of the board of examiners. In this regard the board of examiners will be guided by the combination of modules prescribed in this specification with respect to the PGDip and PGCert entry awards.

PGA exit awards will always be unnamed.

When selecting modules whose credit is to be counted towards a particular exit award this will be done in a manner so as to best advantage the student.

### 38. Student representation and feedback:

Because of the nature of the delivery of the programme, and the world-wide distribution of the student body enrolled on the programme, physical participation in a Liverpool-based Staff-Student Liaison Committee (SSLC) is impracticable. Instead SSLCs, run on the same lines as on-campus SSLCs, are conducted in the form of teleconferences. SSLCs are held three times a year prior to each Board Of Studies (BOS) meeting. Each BOS receives a report from its associated SSLC, these reports are also posted on-line.

The principal channel for students to communicate with their colleagues and with staff, in keeping with the medium for programme delivery, is the Internet. Each module delivered establishes a virtual classroom within which the module instructor will communicate with students to deliver module materials, receive coursework assignments, and facilitate class discussions. This mechanism automatically provides a framework for students to share concerns with their colleagues and with staff, either privately or publicly within the class. Other
concerns can be raised privately via the student’s Support Manager. Each student is assigned, for the duration of his/her studies, to a Student Support Manager at Laureate; whose role includes that of acting as a personal tutor.

Feedback on the delivery of individual modules is provided through the completion of a questionnaire issued to all students taking part in the module. A summary of the questionnaire returns is given to the module instructor, who is asked to comment on this, and any other issues arising in the delivery of the module, in the form of a report with prescribed headings. This report may be further augmented by comments from a member of UoL staff (the module monitor). Each module delivery is reviewed by the Board of Studies, which is provided with the composite module report, including the questionnaire summary. An overall summary of student feedback is also presented for consideration at each meeting of the Board of Studies. These reports are also made available to the Board of Examiners.

Part F: Status of Professional, Statutory or Regulatory Body Accreditation

39. Status of Professional, Statutory or Regulatory Body Accreditation:

British Computer Society accreditation

Part G: Diversity & Equality of Opportunity and Widening Participation

40. Diversity & Equality of Opportunity and Widening Participation:

The programme design, structure and content are consistent and compliant with the University’s Diversity and Equality of Opportunity Policy.

ANNEX 1

Annex Of Modifications Made To The Programme

Please complete the table below to record modifications made to the programme.

<table>
<thead>
<tr>
<th>Description of modification (please include details of any student consultation undertaken or confirm that students’ consent was obtained where this was required)</th>
<th>Minor or major modifications</th>
<th>Date approved by FAQSC</th>
<th>Date approved by AQSC (if applicable)</th>
<th>Cohort affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translation into new programme specification template with consequent minor rewriting of learning outcomes.</td>
<td>Minor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>