UNIVERSITY OF LONDON

Programme Regulations
2021–2022

Computing and Information Systems Creative Computing

BSc
Certificate of Higher Education
Individual courses

Important document – please read
This document contains important information that governs your registration, assessment and programme of study

Contents

Important information regarding the Programme Regulations

Last revised: 06 December 2021

As a student registered with the University of London you are governed by the current General Regulations and Programme Regulations associated with your programme of study.

These Programme Regulations are designed and developed by Goldsmiths, University of London, which is responsible for the academic direction of the programme. The regulations take account of any associated arrangements at Goldsmiths, University of London. Programme Regulations, together with the Programme Specification, will provide the detailed rules and guidance for your programme of study.

In addition to Programme Regulations you will have to abide by the General Regulations. These regulations apply to all students registered for a programme of study with the University of London and provide the rules governing registration and assessment on all programmes; they also indicate what you may expect on completion of your programme of study and how you may pursue a complaint, should that be necessary. Programme Regulations should be read in conjunction with the General Regulations.

The relevant General Regulations and the Programme Regulations relating to your registration with us are for the current year and not the year in which you initially registered.

On all matters where the regulations are to be interpreted, or are silent, our decision will be final.

Further information about your programme of study is outlined in the Programme Specification which is available on the Virtual Learning Environment. The Programme Specification gives a broad overview of the structure and content of the programme as well as the learning outcomes students will achieve as they progress.

Terminology

The following language is specific to the Computing programmes:

Course: Individual units of the programme are called courses. Each course is a self-contained, formally structured learning experience with a coherent and explicit set of learning outcomes and assessment criteria.

Throughout the Regulations, 'we' 'us' and 'our' mean the University of London; 'you' and 'your' mean the student, or where applicable, all students.

If you have a query about any of the programme information provided, please contact us. You should use the '*ask a question*' button in the student portal.

Changes to Computing Programmes Regulations 2021-2022

> **Programme withdrawal**
>
> Notice has been served on the CIS and CC programmes. New registrations and transfers from other programmes will no longer be accepted.
>
> Current students may transfer their registration from the Certificates of Higher Education to the related Degree (subject to meeting the transfer requirements of the award). Transfers from CIS to CC, and CC to CIS will be considered by the Programme Director.
>
> The final assessments for this programme will be held in 2024-2025. Please ensure you plan your studies accordingly.

Alternative Assessments during the Coronavirus (COVID-19) Outbreak

In these unprecedented times, the University has and continues to respond quickly to the impact of COVID-19, which has resulted in changes to our assessment processes.

In line with our current General Regulations, the University may offer you alternative assessments where necessary. This includes holding online timed assessments in place of written examinations, which are usually held at examination centres. Please note that this statement replaces any published information relating to assessments or written examinations in any of our materials including the website. Previously published materials relating to examinations should therefore be read in conjunction with this statement.

The University of London continues to work towards supporting the academic progression of all its students. The University also continues to be mindful of the health and wellbeing of its students during this pandemic, whilst protecting the academic standards of its awards.

1 Structure of the programmes

Appendix A provides details of the programme structures and course titles.

Qualifications

1.1

The following named qualifications are awarded under the Computing programmes:

- BSc Computing and Information Systems

- BSc Creative Computing

- Certificate of Higher Education in Computing and Information Systems

- Certificate of Higher Education in Creative Computing

Qualification structure

1.2

BSc Computing and Information Systems consists of:

- Level 4 - four compulsory full courses (each 30 credits)

- Level 5 - four compulsory full courses (each 30 credits)

- Level 6 - six 15 credit courses chosen from a list of 15 credit course options plus a compulsory 30 credit Project, which is a core course.

1.3

BSc Creative Computing consists of**:**

- Level 4 - four compulsory full courses (each 30 credits)

- Level 5 - four compulsory full courses (each 30 credits)

- Level 6 - three 15 credit courses chosen from a list of 15 credit course options and three compulsory 15 credit courses plus a compulsory 30 credit Project, which is a core course.

1.4

CertHE Computing and Information Systems and **CertHE Creative Computing** consist of:

- Level 4 - four compulsory full courses (each 30 credits)

Additional requirements for Certificate of Higher Education (CertHE) students

1.5

You are required to attend a full or part-time course of instruction at a teaching centre that is recognised to offer that programme, and comply with the teaching centre's attendance requirements, except in the following circumstances:

- where we have used our discretion to waive the requirement in special cases, on grounds of illness or any other cause that has been judged adequate.

- when you are resitting a written examination.

1.6

Teaching centres are required to submit confirmation by 20 March each year that the attendance record (including the completion of coursework and study skills classes) of any student entering for assessment has been satisfactory. We may refuse you permission to sit written examination(s) if you have not satisfied these requirements.

1.7

CertHE students will take study skills classes until the teaching centre that you are attending considers that you have reached a satisfactory standard.

> If you are retaking the coursework element of a course, or retaking the _Study Skills in English_ course or study skills classes, you must attend the teaching centre.

1.8

If you are registered for the CertHE Computing and Information Systems or the CertHE Creative Computing, you may apply to transfer your registration to the other CertHE at any point prior to the final award of the CertHE.

> Find full details in [Section 9](#).

2   Registration

Effective date of registration

2.1

Your effective date of registration will be 30 November in the year that you initially registered. This allows you to sit your first written examinations in the following May.

Period of registration

2.2

The maximum and minimum periods of registration, from your effective date of registration, are:

BSc Computing and Information Systems and BSc Creative Computing

Entry route	Minimum	Maximum*
Direct entry	3 years	8 years
Direct entry (where maximum recognition of prior learning has been granted)	2 years	8 years
Progressing from CertHE	2 years	8 years, from effective date of registration for the CertHE
Transferring from Work Experience Entry Route	3 years	8 years, from effective date of registration for the BSc

CertHE Computing and Information Systems and CertHE Creative Computing

Minimum	Maximum*
1 year	4 years

Credit-bearing Individual courses

Minimum	Maximum*
1 year	2 years

*Please note that due to the programme withdrawal, the final opportunity to submit assessments will be during the 2024-2025 year. This means that all registration periods will end in 2024-2025, and cannot be extended beyond that period.

2.3

If you transfer from the CertHE to the BSc, you will have the maximum period to complete the BSc counted from the effective date of registration for the CertHE.

2.4

If you start by taking Individual courses and then register for the CertHE Computing and Information Systems or Creative Computing we will give you a new maximum period of registration for the CertHE.

3   Recognition of prior learning and credit transfer

To be read in conjunction with the General Regulations, Section 3.

Recognition of prior learning

Recognition of prior learning is a generic term for the process by which we recognise and, where appropriate, award credit for learning that has taken place at the University of London, or elsewhere, before entry onto a programme of study.

Where the prior learning covered an equivalent syllabus to a course on the University of London programme, credit will be awarded as if you took the University of London course.

The qualifications that have been recognised may be found in Appendix C.

See the website for procedures and deadlines for applying for recognition of prior learning.

3.1

If you satisfy the entrance requirements for the BSc Computing and Information Systems or BSc Creative Computing, you may apply for recognition of prior learning mapped against courses to a total of 120 credits, of which not more than 60 credits may be at Level 5. There is no recognition of prior learning for courses at Level 6.

3.2

Applications for recognition of prior learning will not be considered for the CertHE.

4   Course selection

Appendix A provides details of the programme structures and course titles.

Changing courses

4.1

If you have a choice of course, you may apply to change your choice of course at any stage in your studies until you make a valid entry for the course concerned. Once assessment has been attempted, no change will be permitted. If you fail any course, you may **not** withdraw from that course and take an alternative.

Individual courses

4.2

The following credit-bearing courses are available for study on a stand-alone basis:

- Mathematics for computing [CO1102] (30 credits)

- Information systems: foundations of e-business [CO1108] (30 credits)

- Introduction to Java and object-oriented programming [CO1109] (30 credits)

- Introduction to computing and the internet [CO1110] (30 credits)

- Creative computing I: image, sound and motion [CO1112] (30 credits)

4.3

You may take a maximum of two individual courses (60 credits) on a stand-alone basis without being registered for an award.

5   Assessment for the programme

In line with our current General Regulations, the University may offer you alternative assessments where necessary. This includes holding online timed assessments in place of written examinations, which are usually held at examination centres. Please refer to Programme Specifications for details on equipment that may be required for alternative assessments.

Assessment methods for all courses with the exception of the Project

5.1

Assessment for most courses is by written examination and coursework. You must satisfy the Examiners in both elements of the assessment.

5.2

In order to pass a course which has coursework, you must:

- achieve an **average** mark of at least 35% for the coursework, and

- a mark of at least 35% for the written examination, and

- the overall weighted average for the course must be at least 40%.

If you do not achieve at least 35% in either coursework or written examination, and your overall weighted average is 40% or above, you will receive a mark of 39% (Fail) for the course.

In order to pass in a course assessed by written examination only, you must achieve a mark of 40% or above.

See Section 6 for information about compensated fails.

5.3

With the exception of the Project, the weighting of unseen written examinations and coursework is 80:20 for all courses that are assessed by written examination and coursework.

5.4

For a course assessed by a combination of written examination and coursework, when you enter a written examination for the first time, you must attempt both the coursework and written examination in the same academic year. All assignments must be submitted in accordance with the instructions and deadlines.

5.5

The result given for a course where coursework is required will be a combination of the mark for the written examination and the mark for the coursework. The mark for the coursework is obtained by totalling the marks obtained for each piece of coursework received, and dividing that figure by the number of courseworks set for that course.

Assessment methods for the Project

5.6

The assessment of the Project is by three elements: a preliminary written report, a final written report and an unseen written examination. All three elements must be attempted in the same academic year.

See Section 6 for further information on the Project.

Date of written examinations

5.7

Written examinations take place in May each year.

See General Regulations for rules for taking written examinations.

5.8

If the assessment for a course involves coursework, two pieces of coursework will be required. Coursework must be uploaded to the VLE by midnight GMT on the following dates:

For the **CertHEs**:

- **15 January** (first coursework) and **15 March** (second coursework)

For the **BSc** degrees:

- Levels 4 and 5 - **15 January** (first coursework) and **15 March** (second coursework)

- Level 6 - **15 February** (first coursework) and **8 April** (second coursework)

- See below for CO3320 Project submission deadlines.

You are responsible for uploading your coursework to the VLE. You must check the VLE for submission instructions.

5.9

You must submit at least one coursework assignment in order to sit the written examination. Submission of any assignment for a course will validate your examination entry for that course.

If you only submit one coursework assignment, you will need to gain a sufficiently high mark to pass the coursework element overall. This is because the mark received for the one assignment submitted will be divided by two to reach an overall coursework mark (see regulation 5.5 above).

5.10

Coursework submitted after the deadline normally receives a mark of zero but counts as an attempt.

See also Section 6.

The Project (BSc degrees only)

5.11

The Level 6 course, CO3320 Project, is a core course which you must pass in order to be awarded a BSc degree. It cannot be compensated.

5.12

The preliminary report for the Project must be uploaded to the VLE by midnight GMT on **15 January**. The final report for the Project must be uploaded to the VLE by midnight GMT on **15 May**.

You must check the VLE for submission instructions for your preliminary project report and the final project report.

Sitting written examinations

5.13

If you are registered for the CertHE Computing and Information Systems or the CertHE Creative Computing, you must also have completed, in the academic year in which the written examination will be sat, the relevant course of instruction for the course concerned.

5.14

If you are a CertHE student resitting a course that you have failed, you will normally be required to follow a further course of instruction for the relevant course unless you are resitting the written examination only, and are not resubmitting the coursework element.

6   Number of attempts permitted at an assessment element

6.1

The maximum number of attempts permitted for any assessment is **three.**

6.2

For a course assessed by a combination of written examination and coursework, if you do not submit at least one coursework assignment, your examination entry for that year will not count even if you attend the written examination. You will not receive a mark for the course. The examination

entry will not be considered an attempt and your next entry to the course will not be subject to a resit penalty.

6.3

For a course assessed by a combination of written examination and coursework, if you do not attend for a written examination, this will not count as an attempt and you will not receive a mark for the course. Any coursework that you have submitted will not be counted. You will be required to do both the coursework and the written examination set for the year that you next enter this course and will not be subject to a resit penalty.

6.4

For a course assessed by written examination only, if you enter an examination hall to attempt an examination, you will be considered to have made an assessment attempt. Absence from a written examination will not count as an attempt.

6.5

If you fail a course but achieve 40% or above in either written examination or coursework you may be credited with the element you have passed. You will be required to resit the failed element in order to pass the course.

6.6

If you are a BSc student and fail a course with a mark of between 35% and 39%, you may be compensated, and have credit awarded in the same way as for passed courses providing the mean average mark for the Level is 45% or above. Compensation may be applied if you are entering to complete an award. You may resit the course up until you become eligible for the final award.

6.7

If, at the first attempt, you achieve a compensatable fail mark for a course and, in subsequent attempts to redeem the failure achieve further fail or compensatable fail marks, the highest mark obtained will be used for the purposes of classification.

6.8

The mark awarded for a course which you resit and pass will be subject to a resit penalty. The mark awarded will be the arithmetic mean of the mark achieved and the pass mark of 40%.

6.9

If you are registered for the CertHE Computing and Information Systems or CertHE Creative Computing, and you fail either the coursework element or written examination element for any course on the third and final attempt, your registration for the CertHE will end unless the Examiners recommend otherwise in exceptional circumstances.

The Project, relevant for the BSc Computing and Information Systems and the BSc Creative Computing

6.10

The Project is a core course which must be passed in order to obtain a BSc degree. A compensated fail is not permitted.

6.11

The assessment for the Project is by three elements: a preliminary written report, a final written report and an unseen written examination. You must obtain an overall weighted average mark of 40% or above for all the elements of assessment combined; pass the final project report and pass the written examination. The percentage value of the preliminary report is 10%, the final report is 65% and the written examination is 25%. If you fail the Project and are eligible to make a further

attempt, you will be required to submit a new preliminary report, a new final report and to resit the written examination the following academic year.

6.12

If you fail the preliminary written report, you may choose to continue with course CO3320 Project or decide to defer.

6.13

If you satisfy the Examiners in the preliminary report and the written examination and your final written report is otherwise satisfactory but requires minor amendments, you may be required to make corrections to the final written report, as specified and within a period prescribed by the Examiners. The submission of the corrected report will not count as an additional attempt at the Project.

6.14

If the corrected report is considered satisfactory, and you meet the requirement for the award given in Appendix D, you will be classified.

6.15

If the corrected report is considered unsatisfactory, or if you do not submit a corrected report within the time period specified, you will be considered to have failed the Project. This will count as an attempt and, unless you have exhausted the maximum number of attempts permitted, you will be entitled to make a further attempt at the Project.

6.16

If you have failed the Project and are entitled to make a further attempt, you must make the further attempt in the following academic year.

Reuse of assessed work

6.17

You may reuse work when developing your ideas for linked pieces of coursework, or when resubmitting coursework, or when you expand the work you have submitted in your preliminary project report for your final project report for CO3320 Project. Any repetition of work previously submitted must be referenced in accordance with the General Regulations and Study Support Section on the VLE, which includes "How to avoid plagiarism" and "Harvard Referencing Guide".

6.18

If you fail one or more elements of CO3320 Project, you may resubmit work included in your previously submitted preliminary or final reports.

Resits

6.19

Resits will not be available after the final assessments are held in 2024-2025.

7   Progression within the programme

See Section 5 for method of assessment.

BSc Computing and Information Systems and the BSc Creative Computing

7.1

You do not have to enter for assessment every year. In any year in which you choose to be assessed, you may attempt assessments in a minimum of one half course (15 credits) and a maximum of four courses (120 credits) excluding resits.

7.2

If you have passed, or have had your prior learning recognised for two Level 4 courses (a total of 60 credits), you will be permitted to attempt Level 5 courses providing you have either:

- previously attempted the assessment for all Level 4 courses not yet passed

or

- with your first Level 5 entry, enter the assessment for any Level 4 courses not yet attempted.

7.3

If you have not yet passed CO1109 *Introduction to Java and object-oriented programming*, you must take it before or concurrently with CO2220 *Graphical object-oriented and internet programming in Java.*

7.4

You may not normally attempt a course at Level 6 before passing, or gaining recognition of prior learning for, a minimum of 180 credits at Levels 4 and 5 combined.

7.5

You may not attempt the Project at Level 6 before passing or gaining recognition of prior learning for a minimum of 90 credits at Level 5.

> You are advised to consider carefully whether you should attempt courses at Level 6 if you have failed courses worth more than 30 credits at Levels 4 and 5. You are reminded that a BSc with Honours will only be awarded if you have passed courses to a value of 360 credits (including compensated fails for a maximum of 60 credits, with no more than 30 credits compensated at any one level).
>
> Section 1 contains information about the structure of the programmes and Section 6 contains information about compensated fails.

7.6

If you have failed one or more courses, you must attempt the failed element(s) of assessment for at least one course when you next choose to make an examination entry, or you may choose to take any number of resits without attempting the assessment for any new courses.

CertHE Computing and Information Systems and CertHE Creative Computing

7.7

You do not have to enter for assessment every year, or to enter on the date you indicate at the time of registration.

7.8

In your first year of study, you must take the study skills classes.

7.9

At your first entry for assessment, you may attempt a maximum of four courses.

7.10

If you have failed one or more courses, you must attempt the failed element(s) of assessment for at least one course when you next choose to make an examination entry, or you may choose to take any number of resits without attempting the assessment for any new courses.

Exit qualifications for the BSc Computing and Information Systems and the BSc Creative Computing

7.11

If you are registered for either of the BSc degrees and you are unable to, or choose not to, complete the requirements for the BSc, you may be eligible for the exit qualification of the Certificate of Higher Education in Computing Studies (if you have achieved 120 credits). Neither recognition of prior learning nor compensation is permitted.

7.12

If you are registered for either of the BSc degrees, you may be eligible for the exit qualification of the Diploma of Higher Education in Computing Studies (if you have achieved 240 credits with at least 120 credits at Level 5 or above). A maximum of 30 compensated credits and a maximum of 60 credits for Recognition of Prior Learning are permitted.

7.13

You may be eligible for the award of a CertHE Computing and Information Systems or a CertHE Creative Computing if you have successfully completed the four Level 4 courses (120 credits) that comprise the relevant CertHE. Neither recognition of prior learning nor compensation is permitted.

7.14

Once you have accepted an exit qualification, you will not normally be permitted to re-register for either of the BSc degrees or to register for the CertHE Computing and Information Systems or the CertHE Creative Computing.

8   Schemes of award

See Appendix D for full details on all schemes of award. See Appendix E for information on how to achieve a particular mark.

BSc Computing and Information Systems and the BSc Creative Computing

8.1

Courses are marked according to the following scale:

Mark range	Class equivalent
70 and over	First Class Honours
60–69	Second Class Honours (Upper Division)
50–59	Second Class Honours (Lower Division)
40–49	Third Class Honours
0–39	Fail

CertHE Computing and Information Systems and CertHE Creative Computing

8.2

Courses are marked according to the following scale:

Mark range	Class equivalent
70 and over	Distinction
60–69	Merit
50–59	Credit
40–49	Pass
0-39	Fail

9 Transfer of registration

Transfer between the BSc Computing and Information Systems and BSc Creative Computing

9.1

If you are registered for the BSc Computing and Information Systems or the BSc Creative Computing you may apply to transfer your registration to the other degree at any point prior to the final award of the degree.

9.2

Marks achieved in courses that are common to both degrees will be carried over, with the exception of the Project. Common courses which have been passed will be credited to you. If you have failed a course at the first or second attempt, you will carry over the number of remaining attempts for that course.

9.3

Marks for courses which are not common to both degrees will not be carried over on transfer.

9.4

You must, on transfer, take any new courses required for the new degree which you have not previously completed.

Transfer between the CertHE Computing and Information Systems and the CertHE Creative Computing

9.5

If you are registered for the CertHE Computing and Information Systems or the CertHE Creative Computing, you may apply to transfer your registration to the other CertHE.

9.6

You may apply to transfer your registration to the other CertHE at any point prior to the final award of the CertHE.

9.7

You may only transfer subject to the agreement of a teaching centre which is recognised to teach the new programme that you wish to study.

9.8

Any common courses will be credited to you and the mark achieved carried over. If you have failed a course at the first or second attempt, you will carry over the number of remaining attempts for that course.

9.9

Marks for courses which are **not** common to both CertHEs will not be carried over on transfer.

9.10

You must, on transfer, take any new courses required for the new CertHE which you have not previously completed.

9.11

A student will not be awarded more than one CertHE qualification.

Transfer to the related degree from the CertHE Computing and Information Systems or from the CertHE Creative Computing

9.12

You may transfer from the CertHE to the related degree by transferring your registration.

9.13

If you have a choice of course, you may apply to change your choice of course at any stage in your studies until you make a valid entry for the course concerned. Once assessment has been attempted, no change will be permitted. If you fail any course, you may not withdraw from that course and take an alternative.

Transfer from a FHEQ Level 4 or 5 award to the degree

9.14

If you are a CertHE student who has obtained 90 credits at Level 4, you may progress to the relevant degree if you have attempted all of the courses that comprise the CertHE. By doing this, you will give up the right to gain the CertHE, although you may be eligible for an exit qualification at a later date. You will be required to make up to three attempts to pass the failed course if you progress to the relevant degree.

10   Individual courses offered under this programme

10.1

The following credit-bearing courses are available for study on a stand-alone basis:

- Mathematics for computing [CO1102] (30 credits)

- Information systems: foundations of e-business [CO1108] (30 credits)

- Introduction to Java and object-oriented programming [CO1109] (30 credits)

- Introduction to computing and the internet [CO1110] (30 credits)

- Creative computing I: image, sound and motion [CO1112] (30 credits)

10.2

You may take a maximum of two individual courses (60 credits) on a stand-alone basis without being registered for an award at FHEQ Level 4, 5 or 6.

10.3

The maximum number of attempts permitted at any assessment of an individual course taken on a stand-alone basis is two, provided your registration has not expired.

10.4

Transfer of credit for an individual course(s) may be considered provided that the application is made within three years of the completion of the relevant course or courses.

10.5

If you successfully complete the assessment for one or more of the individual courses available on a stand-alone basis, you may be considered, at our discretion, for progression to one of the following related awards:

- BSc or CertHE Computing and Information Systems
- BSc or CertHE Creative Computing

Appendix A – Structure of the programmes

A detailed outline of the course syllabus is provided in Appendix B.

BSc Computing and Information Systems

The **Computing and Information Systems** degree consists of 12 courses:

Level 4 - four compulsory 30 credit courses:

- Mathematics for computing [CO1102]
- Information systems: foundations of e-business [CO1108]
- Introduction to computing and the internet [CO1110]
- Introduction to Java and object-oriented programming [CO1109]

And

Level 5 - four compulsory 30 credit courses:

- Data communications and enterprise networking [CO2222]
- Graphical object-oriented and internet programming in Java [CO2220]
- Database systems [CO2209]
- Software engineering, algorithm design and analysis [CO2226]

And

Level 6 - six 15 credit courses chosen from the following:

- Artificial intelligence [CO3310]
- Neural networks [CO3311]
- Information systems management [CO3318]
- Electronic commerce [CO3323]
- Data compression [CO3325]
- Computer security [CO3326]
- Interaction design [CO3348]
- Software engineering project management [CO3353] ˣ
- Introduction to natural language processing [CO3354]
- Advanced graphics and animation [CO3355]

Plus

A compulsory 30 credit project:

- Project [CO3320] (**core** course)

Notes:

- Course codes are given after the course titles and these codes should be used when completing examination entry.

- Students taking courses only available as resits should refer to previous editions of the Regulations for details of those courses.

- ✗ Students attempting course *Software engineering project management* [CO3353] must have passed course *Software engineering, algorithm design and analysis* [CO2226].

BSc Creative Computing

The **BSc Creative Computing** degree consists of 12 courses:

Level 4 - four compulsory 30 credit courses:

- Mathematics for computing [CO1102]

- Introduction to Java and object-oriented programming [CO1109]

- Introduction to computing and the internet [CO1110]

- Creative computing I: image, sound and motion [CO1112]

And

Level 5 - four compulsory 30 credit courses

- Database systems [CO2209]

- Graphical object-oriented and internet programming in Java [CO2220]

- Software engineering, algorithm design and analysis [CO2226]

- Creative computing II: interactive multimedia [CO2227]

And

Level 6 - three compulsory 15 credit courses:

- Interaction design [CO3348]

- Sound and music [CO3346]

- Advanced graphics and animation (CO3355)

And

three 15 credit courses chosen from the following:

- Artificial intelligence [CO3310]

- Neural networks [CO3311]

- Information systems management [CO3318]

- Electronic commerce [CO3323]

- Data compression [CO3325]

- Computer security [CO3326]

- Software engineering project management [CO3353] ✗

- Introduction to natural language processing [CO3354]

Plus

A compulsory 30 credit project:

- Project [CO3320] (**core** course)

Notes:

- Course codes are given after the course titles and these codes should be used when completing examination entry forms.

- Students taking courses available as resits only should refer to previous editions of the Regulations for details of those courses.

- ✕ Students attempting course Software engineering project management [CO3353] are expected to have passed course Software engineering, algorithm design and analysis [CO2226].

CertHE Computing and Information Systems

The **CertHE Computing and Information Systems** consists of four compulsory courses:

- Mathematics for computing [CO1102] (30 credits)

- Information systems: foundations of e-business [CO1108] (30 credits)

- Introduction to computing and the internet [CO1110] (30 credits)

- Introduction to Java and object-oriented programming [CO1109] (30 credits)

Students must also take study skills classes offered by their teaching centre (not credit bearing)

Notes:

- Course codes are given after the course titles and these codes should be used when completing examination entry forms.

CertHE Creative Computing

The **CertHE Creative Computing** consists of four compulsory courses, as follows:

- Mathematics for computing [CO1102]

- Introduction to Java and object-oriented programming [CO1109] (30 credits)

- Introduction to computing and the internet [CO1110] (30 credits)

- Creative computing I: image, sound and motion [CO1112] (30 credits)

Students must also take study skills classes offered by their teaching centre (not credit bearing)

Notes:

- Course codes are given after the course titles and these codes should be used when completing examination entry forms.

Appendix B – Course outlines

Course codes are given after the course titles below and these should be used when completing your examination entry.

BSc Computing and Information Systems and/or the BSc Creative Computing – Level 4

Mathematics for computing [CO1102]

(30 credits)

Number systems; sets and subsets; set algebra; symbolic logic and logic gates; sequences; summations; elementary counting principles; probability; relations and functions; matrix algebra; systems of linear equations; introduction to the theory of graphs and digraphs.

Assessment: One three-hour unseen written examination.

Information systems: foundations of e-business [CO1108]

(30 credits)

For students registered for the BSc in CIS only

The challenge of applying IT successfully; basic concepts for understanding systems commerce; business processes; information and databases; communication, decision making, and different types of information systems; product, customer and competitive advantage; human and ethical issues; computer hardware; software, programming and artificial intelligence; networks and telecommunications; information systems planning; building and maintaining information systems; information system security and control; the future of information systems; customer relationship management.

Assessment: One three-hour unseen written examination and coursework.

Introduction to Java and object-oriented programming [CO1109]

(30 credits)

Basic Types and Expressions; Assignment Statements; Loops and Conditionals (Simple and Nested); Handling Simple I/O; Objects and Classes; Methods with and without parameters; Inheritance; Constructor Methods (and the use of 'new'); Method Overloading; Method Overriding; Arrays and simple sorting; Basic File Handling; Try and Catch (Simple Exception Handling); Implementing Simple Graphical User Interfaces; Incorporating Applets in a Web page; Simple built-in Dynamic Structures - Vectors; Types vs. Classes; Scope of Variables; Code Layout and Documentation.

Assessment: One three-hour unseen written examination and coursework.

Introduction to computing and the internet [CO1110]

(30 credits)

Basic computing and communication skills. Fundamentals of computing - hardware, software, architecture, operating systems. Data storage, representation and transmission. Fundamentals of networking and the Internet/WWW: technology, protocols, standards and applications. Professional, legal and social issues relating to the Internet and WWW.

Assessment: One three-hour unseen written examination and coursework.

Creative computing I: image, sound and motion [CO1112]

(30 credits)

For students registered for the BSc in Creative Computing only

The Bauhaus; History of mathematics and computing in creativity; Multimedia; Point, Line, Plane; Trigonometry 1; Animation 1; Bits and Pixels; Motion 2; Perspective, Projections and Affine Transformations; Open GL; Genetic programming; Simulation; Filters and Special Effects.

Assessment: One three-hour unseen written examination and coursework

BSc Computing and Information Systems and/or the BSc Creative Computing – Level 5

Database systems [CO2209]

(30 credits)

Introduction to Database Systems (motivation for database systems, storage systems, architecture, facilities, applications). Database modelling (basic concepts, E-R modelling, Schema deviation). The relational model and algebra, SQL (definitions, manipulations, access centre, embedding). Physical design (estimation of workload and access time, logical I/Os, distribution). Modern database systems (extended relational, object-oriented). Advanced database systems (active, deductive, parallel, distributed, federated). DB functionality and services (files, structures and access methods, transactions and concurrency control, reliability, query processing).

Assessment: One three-hour unseen written examination and coursework.

Graphical object-oriented and internet programming in Java [CO2220]

(30 credits)

The course aims to give students an insight into the object-oriented approach to the design and implementation of software systems. The course also considers specific features of the programming language Java, in particular, graphical interfaces and event driven applications. The second part of the course is intended to give students the necessary background to understand the technical software aspects of how computers communicate across the internet. Students will be introduced to the underlying principles of client-server computing systems and will gain the required conceptual understanding, knowledge and skills to enable them to produce simple web-based computing systems in Java.

Assessment: One three-hour unseen written examination and coursework.

Data communications and enterprise networking [CO2222]

(30 credits)

For students registered for the BSc Computing and Information Systems only.

An introduction to data communications and computer networks with different types of networks, their associated technology, protocols and standards. An introduction to the use of enterprise networks in meeting business requirements and in the design and management of these networks.

Assessment: One three-hour unseen written examination and coursework.

Software engineering, algorithm design and analysis [CO2226]

(30 credits)

This course provides an introduction to software engineering, algorithm design and analysis. The main topics include: Software design in UML: use cases, class modelling, objects and links, aggregations and dependencies, activity diagrams, state-charts; Principles of good software design, software development lifecycle, the role of design and modelling in software development; Software verification and validation; Project management and planning; Case studies and software horror stories. Abstract data types, design patterns, algorithmic issues, complexity theory, the application and implementation of common data structures in Java.

Assessment: One three-hour unseen written examination and coursework.

Creative computing II: interactive multimedia [CO2227]

(30 credits)

For students registered for the BSc Creative Computing only.

Signals and systems; perception; audio and image signal processing (including convolution, filters, the Fast Fourier Transform); image techniques (such as texture mapping, transparency. Blending); advanced computer graphics for scene description and rendering; animation (techniques and concepts); user interface issues (such as advanced mouse control, keyboard control, text input/text output); creative development; visual literacy; multimedia manipulation; action scripting.

Assessment: One three-hour unseen written examination and coursework.

BSc Computing and Information Systems and/or the BSc Creative Computing – Level 6

Artificial intelligence [CO3310]

(15 credits)

Knowledge representation, propositional and predicate calculus; problem solving: state-space search; breadth-first and depth-first search; planning; natural language; expert systems; philosophy of AI.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Neural networks [CO3311]

(15 credits)

The artificial neuron; network architecture; perceptrons. Single layer networks; supervised training in batch and individual mode. Multilayer feedforward networks; backpropagation; momentum. Counterpropagation networks; unsupervised training; initialisation of weights. Statistical methods; Boltzmann training. Feedback networks; Hopfield nets; energy; training. Applications.

Additional software requirements: recommended that some neural nets software is obtained (e.g. MATLAB).

Assessment: One 2 ¼-hour unseen written examination and coursework.

Information systems management [CO3318]

(15 credits)

An introduction to the various facets of Information System Management to help students understand the importance of non-technical issues. The importance of close integration between business and IS planning will be stressed. The following topics are included: information security and safety critical systems; data protection legislation; Computer Misuse Act and other relevant legislation. Ethical and professional issues. Strategic planning of IS; evaluation of IS investments.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Project [CO3320]

(30 credits, core course)

Each student is required to undertake an individual project. Project work can be expected to take up at least 300 hours of a student's time.

Additional software requirements: Internet access is required to widen the scope of information sources. This will also aid in obtaining some free- and share-ware.

Assessment: One preliminary report, one final report and one 2 ¼ -hour unseen written examination.

Electronic commerce [CO3323]

(15 credits)

This course is designed to familiarise students with current and emerging electronic commerce, technologies using the internet. Subject areas will include 'Internet Technology for Business Advantage', 'Web-based Tools for Electronic Commerce', 'Electronic Payment Systems', 'Strategies for Marketing', 'Sales and Promotion', 'Internet Security', 'International, Legal, Ethical and Tax Issues'.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Data compression [CO3325]

(15 credits)

Minimum redundancy coding; data compression and information theory; adaptive Huffman coding; arithmetic coding; statistical modelling; dictionary-based compression; sliding window compression; LZ278 compression; speech compression; graphics compression; fractal image compression.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Computer security [CO3326]

(15 credits)

Passwords; access controls; symmetric and asymmetric encryption; confidentiality; authentication; integrity; nonrepudiation; availability; hash functions. Security for electronic mail, IP, Web, databases, distributed systems. Standards.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Sound and music [CO3346]

(15 credits)

For students registered for the BSc in Creative Computing only

Sound synthesis and manipulation; computer systems and models in music; multimedia and music information retrieval; computer music creativity (machine-led, human-led and machine/human interaction).

Assessment: One 2 ¼-hour unseen written examination and coursework.

Interaction design [CO3348]

(15 credits)

This course examines the notion of 'interaction with technology' with a focus on the design concepts of modern user experience design and production. It begins with a grounding in the specification, design, prototyping and evaluation of advanced interactive systems, with an introduction to HCI and a short history of the field. An overview of design approaches follows. Human/user attributes and requirements, and interaction paradigms, looks at the human in HCI and available types of interaction.

Usability requirements/usability engineering are discussed in the context of a number of specific design approaches and techniques, requirements and issues. Design guidelines and standards, accessibility requirements, and issues involved in designing for specific populations (globalization and internationalism) follows. Finally, information on current interaction design questions and approaches for new and emerging technologies and paradigms provides an exposition of real-world applications and sectors where Interaction Design is relevant.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Software engineering project management [CO3353]

(15 credits)

(Prerequisite: Software engineering, algorithm design and analysis CO2226)

The course examines software process and engineering concepts such as the software lifecycle, object oriented programming, design for re-use and user-centred design, together with contemporary approaches such as Agile methods of software and project management (for which a grounding in traditional development methodologies is necessary). It focuses on selection of tools and methodologies for specific purposes, and explores a variety of contexts, ranging from embedded systems, to the inherently parallel distributed environments of cloud computing to the multidisciplinary design of advanced interactive and web-based technologies.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Introduction to natural language processing [CO3354]

(15 credits)

This course combines a critical introduction to key topics in theoretical linguistics with hands-on practical experience of developing applications to process texts and access linguistic resources. The main topics covered are accessing text corpora and lexical resources; processing raw text; categorizing and tagging; extracting information from text; analyzing sentence structure.

Assessment: One 2 ¼-hour unseen written examination and coursework.

Advanced graphics and animation [CO3355]

(15 credits)

This course covers major contemporary graphics and animation techniques. Students are given the mathematical foundations of the subject as well as other theoretical foundations such as perceptual theories. These theoretical aspects are taught in the context of their practical use. Students are introduced to some industry standard graphics software tools so that they are familiar with how they work, but the main focus is on programming the graphical software. The material covered in the course is chosen to reflect the research carried out at Goldsmiths, University of London. The course covers advanced 2D and particularly 3D techniques, including a range of topics such as 3D modelling and texturing; rendering; lighting; animation; hardware acceleration in graphics; applications areas such as recreating historical environments. Students are expected to implement basic graphics software.

Assessment: One 2 ¼-hour unseen written examination and coursework.

CertHE Computing and Information Systems and/or the CertHE Creative Computing

The course codes follow the course titles and these codes should be used when completing examination entry forms.

The course outlines for those courses which are now available only to re-entry students have been omitted from this Schedule. Students permitted to take these courses should refer to previous editions of the Regulations for details of the course outlines.

Mathematics for computing [CO1102]

(30 credits)

Number systems; sets and subsets; set algebra; symbolic logic and logic gates; sequences; summations; elementary counting principles; probability; relations and functions; matrix algebra; systems of linear equations; introduction to the theory of graphs and digraphs.

Assessment: One three-hour unseen written examination.

Information systems: Foundations of e-business [CO1108]

(30 credits)

For students registered for the CertHE in Computing and Information Systems only

The challenge of applying IT successfully; basic concepts for understanding systems commerce; business processes; information and databases; communication, decision making, and different types of information systems; product, customer and competitive advantage; human and ethical issues; computer hardware; software, programming and artificial intelligence; networks and telecommunications; information systems planning; building and maintaining information systems; information system security and control; the future of information systems; customer relationship management.

Assessment: One three-hour unseen written examination and coursework.

Introduction to Java and object-oriented programming [CO1109]

(30 credits)

Basic types and expressions; assignment statements; loops and conditionals (simple and nested); handling simple I/O; objects and classes; methods with and without parameters; inheritance; constructor methods (and the use of 'new'); method overloading; method overriding; arrays and simple sorting; basic file handling; try and catch (simple exception handling); implementing simple graphical user interfaces; incorporating applets in a web page; simple built-in dynamic structures - vectors; types vs. classes; scope of variables; code layout and documentation.

Assessment: One three-hour unseen written examination and coursework.

Introduction to computing and the Internet [CO1110]

(30 credits)

Basic computing and communication skills. Fundamentals of computing - hardware, software, architecture, operating systems. Data storage, representation and transmission. Fundamentals of networking and the Internet/WWW: technology, protocols, standards and applications. Professional, legal and social issues relating to the Internet and WWW.

Assessment: One three-hour unseen written examination and coursework.

Creative computing I: image, sound and motion [CO1112]

(30 credits)

For students registered for the CertHE in Creative Computing only

The Bauhaus; History of mathematics and computing in creativity; Multimedia; Point, Line, Plane; Trigonometry 1; Animation 1; Bits and Pixels; Motion 2; Perspective, Projections and Affine Transformations; Open GL; Genetic programming; Simulation; Filters and Special Effects.

Assessment: One three-hour unseen written examination and coursework.

Appendix C – Recognition of Prior Learning

The University gives notice that it reserves the right to review its recognition of prior learning policy each year. The rulings below relate only to applications submitted within the period 1 September 2020 to 31 August 2021 (but see paragraph 3 below).

This Schedule should be read together with section 3 these Regulations.

Students must note that prior learning will not be recognised unless specific application has been made in accordance with the instructions given in the prospectus and the Student Guide.

BSc Computing and Information Systems and BSc Creative Computing

1. Under section 3, students holding the qualifications detailed in the table overleaf may apply for Recognition of Prior Learning and may be credited with a pass for courses to the value of a maximum of 120 credits at Levels 4 and 5, on the basis of academic studies which they have previously followed. Applications for recognition of prior learning will be considered only from students who satisfy the entrance requirements for registration on the BSc in Computing and Information Systems or the BSc in Creative Computing. Recognition of prior learning may be awarded to a maximum of 60 credits at Level 5. There is no provision for recognition of prior learning at Level 6.

2. Students who have other relevant qualifications may also apply for recognition of prior learning. The University will consider such qualifications individually in the light of the course outline, the level of assessment performance and the equivalence of the course to the Level 4 and 5 courses for which recognition is sought. The granting of recognition of prior learning by other higher educational or professional institutions will be noted but does not bind the University of London.

3. In order for an application to be considered a student must normally have successfully completed the **whole** of the qualification on the basis of which they are applying for recognition of prior learning and have already received the final award for that qualification. An application from a student who has not yet received his or her award will be considered under the rules governing recognition of prior learning at the time that the award is finally made and **not** at the time that they apply for recognition of prior learning. The award must have been received not later than **17 September** if the student is applying from outside the European Union, or **17 October** for a student applying from within a member country of the EU, in the year that the application for recognition of prior learning is submitted.

4. Where recognition of prior learning is awarded automatically, no fee is payable. A fee is payable for all applications which are given individual consideration. This non-refundable fee is payable for each full course for which recognition of prior learning is requested.

5. Recognition for the courses specified in the table below is awarded automatically **provided that the qualification has been obtained in the five years preceding the application for recognition of prior learning**. There is no application fee for awards under this category.

CertHE Computing and Information Systems and CertHE Creative Computing

There is no provision for recognition of prior learning at this level.

Further information on eligibility criteria for Recognition of Prior Learning can be found on the website.

Appendix D – Schemes of award

Scheme of award – BSc degree Computing and Information Systems and BSc degree Creative Computing

Courses are marked according to the following scale:

Mark range	Class equivalent
70 and over	First Class Honours
60–69	Second Class Honours (Upper Division)
50–59	Second Class Honours (Lower Division)
40–49	Third Class Honours
0–39	Fail

See below for detailed information.

Scheme of award – CertHE Computing and Information Systems and CertHE Creative Computing

Courses are marked according to the following scale:

Mark range	Class equivalent
70 and over	Distinction
60–69	Merit
50–59	Credit
40–49	Pass
0–39	Fail

See below for detailed information.

Scheme of award – DipHE Computing Studies (exit qualification)

Courses are marked according to the scale used for the degree. The scale used for classification of the award is:

Mark range	Classification
40 and above	Pass
0–39	Fail

Scheme of award – CertHE Computing Studies (exit qualification)

Courses are marked according to the scale used for the degree. The scale used for classification of the award is:

Mark range	Classification
40 and above	Pass
0–39	Fail

See below for detailed information.

Scheme of award – BSc degrees (including the Diploma of Higher Education and Certificate of Higher Education exit qualifications)

Students registered for the BSc degree Computing and Information Systems or the BSc degree Creative Computing on or after 30 November 2014

Degree requirements

1. Pass mark and compensation

    1.1   A student must achieve a mark of at least 40% to pass a course. Compensation may be permitted, as shown in 1.2 below.

    1.2   Where the student is entering to complete the award, but has failed a non-core course with a minimum mark of between 35% and 39% for that course, the failure may be compensated by an overall mean mark of 45% or above achieved at that Level, on the condition that:

    (a)   courses to a value of not more than 30 credits may be compensated at any Level;

    (b)   the total credit value of courses for which a compensated fail may be awarded may not exceed the amount specified for the programme in the following table:

Qualification	Maximum credit value of compensated fails that may be permitted
Certificate of Higher Education	0
BSc	60 (no more than 30 at any one level)

    1.3   Except as provided in paragraph 1.4 below, to be admitted to an honours degree under these regulations a student must:

    a.   have completed to the satisfaction of the University courses (including any recognition of prior learning) valued at a minimum of 360 credits;

    b.   have been assessed in all parts of the assessment prescribed for each course;

    c.   have achieved all the learning outcomes specified for the programme;

    d.   have passed the core CO3320 Project course;

    e.   have passed, or received a compensated fail as set out in paragraph 1.2 above, in courses to a value of 360 credits at least 120 of which must have been at Level 6.

    1.4   A student who meets the criteria set out in paragraph 1.3 (a-d) above but has passed, or received a compensated fail as set out in paragraphs 1.1 and 1.2 above, in courses to a value of 300 to 345 credits, at least 60 of which must have been at Level 6, will be eligible for the award of a pass degree.

2. **Classification of Degrees**

   2.1. Final degree classification will be calculated on the basis of a student's best marks obtained for courses to a value of 90 credits at Level 4, plus the best marks obtained for courses to the value of 90 credits at Level 6, plus the best marks obtained for courses to a value of 120 credits of those remaining at Levels 5 and 6 combined but all weighted as for Level 5 courses. If necessary, marks obtained for courses to a value of 30 credits for which a fail or compensated fail has been awarded shall be included.

   2.2 The mark for the CO3320 Project course will be included in the consideration for the award of the degree, even if higher marks for courses to a value of 30 credits have to be excluded.

   2.3 If a student, at the first attempt, achieves a compensatable fail mark for a course or half course and, in subsequent attempts to redeem the failure achieves further fail or compensatable fail marks, the highest mark obtained will be used for the purposes of classification.

   2.4 The mark awarded for resit assessments will be the arithmetic mean of the best mark achieved and the pass mark of 40%.

   2.5 Except as provided in paragraph 2.1, when calculating a candidate's final degree classification, a relative weighting of 1:3:5 will be applied to courses at Levels 4, 5 and 6 respectively.

   2.6 Candidates who have completed the requirements for a degree, and who have achieved a sufficient standard in the assessments above that for a Pass may, on the recommendation of the Board of Examiners, be awarded either (a) First Class Honours, or (b) Second Class Honours, or (c) Third Class Honours. The Second Class of Honours shall be divided into an Upper and Lower Division.

   2.7 Candidates whose final weighted average falls within 2% below the borderline between two classes of Honours or the borderline between a classification and a fail degree shall be considered, and those who have obtained marks in the higher classification in courses totalling **at least** 120 credits in value at Levels 5 and 6, must be awarded the higher classification.

   2.8 Where a student meets the conditions specified in paragraph 2.7 but has only obtained marks in the higher classification in courses totalling at least 90 credits in value at Levels 5 and 6, the Board of Examiners may consider mitigating circumstances not previously taken into account by examiners in respect of the student's profile, the higher classification may be awarded.

3. **Recognition of prior learning**

   3.1. Any recognition of prior learning awarded will be included in the total value of courses passed.

   3.2 Any recognition of prior learning awarded will not adversely affect the classification of the degree.

4. **Exit qualifications**

   4.1 A student who obtains a minimum of 240 credits may be awarded a Diploma of Higher Education in Computing Studies as an exit qualification, as long as at least 120 credits are obtained at Level 5 or above. A maximum of 30 compensated credits and a maximum of 60 credits for recognition of prior learning are permitted.

   4.2 A student registered for the BSc in Computing and Information Systems or the BSc in Creative Computing who has passed 120 credits at Level 4 or above may be awarded a

   CertHE in Computing Studies. They may be eligible for the award of a CertHE in Computing and Information Systems or a CertHE in Creative Computing if they have

successfully completed the four Level 4 courses (120 credits) that comprise the relevant CertHE. Neither recognition of prior learning nor compensation is permitted.

5. **Calculation of final class of degree**

5.1 A student's overall mark is calculated as $\dfrac{X + 3Y + 5Z}{n + 54}$ where

> n = min {m, 6}
>
> m = 8 - (the number of 15 credit courses for which prior learning has been awarded at Level 4)
>
> X = total marks on best n 15 credit courses at Level 4
>
> Z = total marks on best six 15 credit courses at Level 6
>
> Y = total marks on remaining best eight 15 credit courses at Levels 5 and 6

5.2 The Project **will** contribute to Y or Z or both, according to its value relative to other courses, even if its mark is lower than those of omitted courses.

5.3 In calculating Y, the mark for each course at Level 5 for which recognition of prior learning has been awarded will be recorded as the maximum of 40 and the simple mean of the other marks obtained at Level 5 at the first attempt.

5.4 In calculations each full 30 credit course is recorded as two 15 credit courses each with the same mark as the full 30 credit course.

Scheme of award – CertHEs Computing and Information Systems and Creative Computing

In order to be considered for the award of the CertHE, a student must have passed the relevant courses to the value of 120 credits at Level 4.

A student passing an assessment at the second or third attempt will receive a final mark that is the arithmetic mean of the mark actually achieved on that occasion and the pass mark of 40%.

No compensation is allowed for a course that has been failed three times and neither credit nor recognition of prior learning is permitted.

The final mark is determined by an average of all four marks obtained from each of the four courses studied.

Appendix E – Assessment criteria

Examination scripts and coursework are marked according to the following scales:

BSc Computing and Information Systems and the BSc Creative Computing

Mark range	Class equivalent
70 and over	EXCELLENT Demonstration of a deep understanding of relevant concepts, methodology and content appropriate to the subject discipline; indication of originality in application of ideas; ability to develop original creative works or synthesise existing ideas; ability to critique material and concepts; insight reflects depth and confidence of understanding of material; an ability to engage with academic publications in the area; an ability to communicate technical or academic ideas effectively.
60–69	VERY GOOD Demonstration of a comprehensive level of understanding based on a competent grasp of relevant concepts, methodology and content; display of skill in interpreting complex material; appropriate organisation of material; ability to write and communicate ideas effectively.
50–59	GOOD Demonstration of a sound level of understanding of relevant concepts, methodology and content; display of sufficient skills to tackle some complex problems; ability to respond to critique; appropriate organisation of material and an ability to communicate concepts.
40–49	ACCEPTABLE Demonstration of a limited level of understanding of relevant concepts, methodology and content; clear if limited attempt to tackle problems; display of some skills in organisation of material and communication of concepts.
0–39	FAIL Poor understanding of concepts, methodology and content; work is deficient in many respects, revealing insufficient grasp of material and poor organisation; limited ability to identify and address the tasks required; limited ability to communicate ideas. NOTE: course marks in the range 35-39 are potentially compensatable.

CertHE Computing and Information Systems and CertHE Creative Computing

Mark range	Class equivalent
70 and over	EXCELLENT Demonstration of a deep understanding of relevant concepts, methodology and content appropriate to the subject discipline; indication of originality in application of ideas; ability to develop original creative works or synthesise existing ideas; ability to critique material and concepts; insight reflects depth and confidence of understanding of material; an ability to engage with academic publications in the area; an ability to communicate technical or academic ideas effectively.
60–69	VERY GOOD Demonstration of a comprehensive level of understanding based on a competent grasp of relevant concepts, methodology and content; display of skill in interpreting complex material; appropriate organisation of material; ability to write and communicate ideas effectively.
50–59	GOOD Demonstration of a sound level of understanding of relevant concepts, methodology and content; display of sufficient skills to tackle some complex problems; ability to respond to critique; appropriate organisation of material and an ability to communicate concepts.
40–49	ACCEPTABLE Demonstration of a limited level of understanding of relevant concepts, methodology and content; clear if limited attempt to tackle problems; display of some skills in organisation of material and communication of concepts.
0–39	FAIL Poor understanding of concepts, methodology and content; work is deficient in many respects, revealing insufficient grasp of material and poor organisation; limited ability to identify and address the tasks required; limited ability to communicate ideas.