



Undergraduate Class Guide 2022-23

Preface

This guide is intended to act as a single source of essential and useful undergraduate information for the School of Computing Science. This document contains links to information that is available on Moodle, but generally does not duplicate such information. The document is divided into two sections as follows:

- Part I contains general information relevant to Undergraduate students at all levels and should be considered essential reading for all students.
- Part II provides level-specific information for each level of the different undergraduate programmes and explains the Progression Pathways which will be particularly useful for advisers and students considering their enrolment options.
- **Disclaimer:** although the information contained in this document is believed to be accurate, changes in circumstances may require modifications to the content and delivery of some courses during the year.

Revised August 2022

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Part I: General Information

1 The University of Glasgow & The School of Computing Science

The University of Glasgow, founded in 1451, is the second oldest university in Scotland and the fourth oldest in the English-speaking world. With over 25,000 students, it is also one of the largest and offers study in a wide range of subjects at all levels in four Colleges. The University is set in the West End of Glasgow, one of the world's outstanding cities confirmed by being European City of Culture 1990, City of Architecture 1999 and host of the Commonwealth Games 2014.

Computing Science is a young and exciting discipline which is rapidly evolving. It includes, amongst other things, theoretical studies, experimental investigations in areas ranging from human-computer interaction to network performance, and practical engineering challenges in designing and implementing safe, efficient and reliable software. Teaching is provided by computing scientists at the forefront of research. We are proud of the high standards in our programmes which are informed by our leading-edge research, 100% of our impact was judged as world-leading. Overall, 98% of our research was deemed to be either internationally excellent or world-leading in the 2021 <u>Research Excellence Framework</u>.

Our computing science students have reported high satisfaction levels in each year of the National Student Survey, we are ranked 5th and 6th in the UK for Computer Science in the Times Sunday Times Good University Guide 2022 and The Complete University Guide 2022 and are in the 100-150 in the <u>QS World University Rankings by Subject 2022</u>. Graduates are professional practitioners, equipped to embark on their careers with a solid foundation, breadth of knowledge, and be multi-lingual in programming languages. With over 80 academic staff, 6 Research Fellows, 29 research staff and more than 100 research students, we host over 130 externally funded research projects with a value of approximately £3m each year.

The School of Computing Science is in partnership with Singapore Institute of Technology to offer a joint Bachelor of Science (Honours) in Computing Science. This collaborative programme is a broad computing science programme whose main themes are connectivity, mobility and usability.

1.1 Acronyms Used in this Guide

	Level 3 Programmes:	Level 4 Programmes:	
CS3H/CS3M	Single Honours Computing Science	CS4H/CS4M	Single Honours Computing Science
SE3H/SE3M	Software Engineering Honours	SE4H/SE4M	Software Engineering Honours
SEWP3M	Software Engineering with Work Placement MSci	SEWP4M	Software Engineering with Work Placement MSci
INF3H/INF3M	Informatics Honours	INF4H/INF4M	Informatics Honours
CS3H/CS3M+	Combined CS Honours	CS4H/CS4M+	Combined CS Honours
ESE3H	Electronic Software Engineering Honours	ESE4H	Electronic Software Engineering Honours
CS3	Designated Computing Science		
CS3+	Combined CS Designated		

The suffixes 'H' and 'M' in these abbreviations indicate BSc and MSci degrees respectively.

The School of Computing Science is part of the College of Science and Engineering. It is located in the Sir Alwyn Williams Building (SAWB) together with the adjacent houses 10–17 of Lilybank Gardens (LBG).

Student Support and Enquiries Office

Helen Border, Mick Cullen, Una Marie Darragh, Karina Lee, Gail Reat, Beth Rooney and Graeme Shedden Ground Floor Sir Alwyn Williams Building Office Hours: 08.30 – 16.30 (Monday to Friday) Online queries: <u>SoCS Helpdesk</u>

I'm Una Marie, the Student Engagement Lead for the School of Computing Science.

I can provide advice, information and support in relation to your studies, wellbeing, and for any other difficulties you may encounter to help ensure that you have the best experience possible here at the University. I am also the School's Disability and Good Cause Co-ordinator.

You can contact me using the details below:

Email : <u>UnaMarie.Darragh@glasgow.ac.uk</u> Phone: 07929 184705

I am based in Room 330 of Sir Alwyn Williams Building on a Thursday & Friday.



1.2 Location of Computing Science Laboratories

Level	Laboratory
1	B0715
2	BO706
3, 4 & 5 honours lab	BO720, BO616, BO618 and BO620

1.3 Important Websites

https://glasgow.saasiteu.com/Login.aspx?Scope=SelfService&CommandId=Ne			
wServiceRequestByOfferingId =ServiceCatalog&Template=F6FAB22B95714			
9D291ED73FB569E9077			
https://studentltc.dcs.gla.ac.uk/			
moodle2.gla.ac.uk			
www.dcs.gla.ac.uk/ethics			
www.gla.ac.uk/students/myglasgow			
www.gla.ac.uk/services/library			
www.gla.ac.uk/services/senateoffice/programmesearch			
www.gla.ac.uk/services/senateoffice/studentcodes/students/complaints			
www.gla.ac.uk/services/senateoffice/policies/assessment/codeofassessment			
www.gla.ac.uk/services/it/regulationscommitteesandpolicies			
www.gla.ac.uk/services/senateoffice/policies/calendar			
www.gia.ac.uk/services/senateonice/policies/calendar			
www.gla.ac.uk/services/senateoffice/studentcodes/students/academicappeals			
www.gla.ac.uk/services/senateoffice/policies/			
www.glasgow.ac.uk/enrolment			
www.glasgow.ac.uk/exams			
www.glasgow.ac.uk/graduation			
www.glasgow.ac.uk/registration			
www.glasgow.ac.uk/tier4			
www.glasgow.ac.uk/registry/finance			
www.glasgow.ac.uk/registry/finance/funds			
www.glasgow.ac.uk/registry/finance/federalloans			
www.glasgow.ac.uk/registry/contact			
Sources of Help			
www.gla.ac.uk/myglasgow/students/azsearch/			
www.gla.ac.uk/services/counselling/			

International Students Adviser	www.gla.ac.uk/international/support/
Chaplaincy Centre	www.gla.ac.uk/services/chaplaincy
Student Disability Service	www.gla.ac.uk/services/disability/

2 Undergraduate Degrees

The School of Computing Science offers a variety of degrees. Students study a broad range of core topics, and will be encouraged to discover the connections among these topics and to understand their common theoretical foundations. Breadth is provided in the Honours programme by the semester 1 level 3 courses; depth by the semester 2 level 3 and level 4 courses; and practical experience by projects and coursework. The professional aim of the programme is to produce graduates fit to occupy responsible positions in the information technology industry.

Each programme is composed of a number of courses. Individual course descriptions, including pre- and corequisites, are published in the appropriate course description on Moodle and on MyCampus. To enter a particular course a student must either fulfil the requirements of the appropriate Computing Science programme, and fulfil all the pre- and co-requisites for the course.

CSH/CSM: Single Honours Computing Science. This is the most general Honours degree in Computing Science and attracts the largest number of students. The wide range of available courses enables a choice of specialisation in different aspects of computing in the levels 3 and 4. This programme will:

- provide you with a deep understanding of the theory and practice of computing;
- give you the opportunity to study a broad range of core computing science topics;
- encourage you to discover the connections among these topics and understand their theoretical foundations;
- prepare you to occupy responsible positions in the information technology industry
- enable you to study selected topics in considerable depth thereby equipping you to enter research programmes;
- emphasise unchanging principles in Computing Science;
- encourage independent study habits that will stand you in good stead throughout your professional career;
- enable you to enhance your transferable and interpersonal skills, particularly written and oral communication and team working.

This programme introduces the concept of a named strand, allowing the student, if they choose to specialise in their chosen area from level 3 onwards. You will be given guidance with respect to course choices for specialisms.

SEH: Single Honours Software Engineering. This is like the Computing Science degree, but specialised on software engineering principles, practices, methods and tools in the level 3 Team Project and subsequently in the choice of Level 4 Electives and Individual Project. It includes a formally supervised and assessed industrial summer placement between Level 3 and Level 4. Entry is competitive at the end of level 2 due to the limited availability of these placements.

INFH: Single Honours Informatics. This is like the Computing Science degree, but for students that study abroad, as such students cannot meet the accreditation requirements of compulsory courses when studying abroad.

ESEH: Joint Honours Electronic & Software Engineering. This degree combines study of both hardware and software and is taught jointly with the School of Engineering. Students come into this programme to achieve a BEng or MEng degree or to achieve a BSc degree. In level 3 students' study prescribed courses in software engineering and

electronics together with an integrated Team Project, and in level 4 take a choice of software engineering and electronics electives. BSc and BEng students undertake a level 4 project in software engineering or electronics. Students meeting the requirements may transfer to undertake the 5 year MEng.

CSH+: Combined Honours (with Computing Science). There are several Combined Honours degree programmes, each of which is contributed to equally by the two Schools concerned. Recent Combined Honours degrees include Mathematics, Statistics, Physics, Business & Management, French, Latin, History of Art, Politics, Music and Philosophy.

CS: Designated Degree in Computing Science. The Designated degree is taught over 3 years, as opposed to the 4 years for the Honours degree. The curriculum is similar to that taken by Honours students, but has less depth and breadth. During level 3, students must take a prescribed 80 credits of level 3 CS courses.

CS+: Combined Designated (with Computing Science). There are a few Combined designated degree programmes, each of which is contributed to equally by the two Schools concerned.

MSci in Computing Science, Software Engineering, Informatics or CS Combined. These are extensions to the current Honours programmes which: equip students with an advanced and systematic understanding of selected areas of Computing Science and Software Engineering; provide the skills necessary to pursue independent research; prepare students for an academic or industrial research career.

Students can transfer to the MSci up until the start of level 4 if they meet the progression requirements for an MSci degree. It is also possible to undertake a combined MSci degree with Mathematics or Physics.

SEYPM: MSci in Software Engineering with Work Placement. This degree is an enhancement of the Software Engineering degree which enables students to undertake an assessed full year work placement in Level 4. Students return in Level 5 to take an advanced programme of courses and graduate with an MSci Degree. Students are continually assessed while on placement and participate in skills development workshops.

3 Student Responsibilities

3.1 MyCampus

MyCampus is the University of Glasgow's student information system that is used by students throughout the year. You should have received the information required to log in to MyCampus. MyCampus provides the following functionality at different periods of the year.

3.1.1 Enrolling

- Formally register with the University of Glasgow.
- View and change your details. If any of your personal details change after you have registered with the University (i.e., change of permanent or term address, status, etc.); please remember to update this information.
- Choose courses and view your timetable. It is your responsibility to familiarise yourself with your timetable i.e., times and venues of your classes.
- Students in levels 3, 4 and 5 who have a choice of courses are required to register their choice in MyCampus by the second week of each semester. Courses cannot subsequently be changed without the approval of the Level Head.

3.1.2 During the Year

Submit or report your absence if your studies are affected by illness or personal difficulties. Please refer to Student Absence Policy.

3.1.3 After Exams

Overall course grades will be released by Registry following the exam boards.

Viewing your exam scripts. Since the exams are marked electronically, there are no marked exam scripts to view. To provide additional feedback, your marks for individual exam questions will be available through SocsOnline. This, together with model solutions and the generic exam feedback published on Moodle and your own copy of the script you submitted, should help you understand where you went wrong.

(In the case of exams where you only answer a subset of questions, you will see a zero for the questions you did not answer, please note that such zeros were not used in the computation of your exam grades.)

If you think that there has been an administrative error (e.g. a section of your script was not marked or marks were not added up correctly), you should contact the <u>SoCS Helpdesk</u>, who will investigate this. Note that only administrative errors will be investigated; contacting the Helpdesk does not mean that your script will be reviewed, or remarked, by an academic member of staff. **University Policy is that you cannot ask for the academic judgement on the quality of your work to be investigated**.

3.2 Communication

The internal web pages, accessible via Moodle, contain a range of useful information, including course descriptions and meetings and announcements of various kinds. Most course coordinators will use the web to make course information and materials available. Minutes of Staff/Student meetings can be found on <u>Student Voice</u>.

Email is the primary means of communication within the School in general and between the teaching administration office and students in particular. To avoid missing important information, students should ensure they check their University emails regularly.

Read your University email daily

The email facilities are also available for personal use but only if they are not abused. *Under no circumstances use the facilities for spam.* The University reserves the right to monitor data communications, as permitted by the relevant legislation and <u>University regulations</u>.

3.3 Advisers of Studies

Each student is allocated an Adviser of Studies who provides advice throughout the year. You can see who your adviser is on MyCampus. It is essential that students keep their Adviser of Studies fully informed of all academic problems as well as personal or medical problems which might possibly affect academic progress. Your Adviser will treat anything you tell them in complete confidence, and if necessary may refer you to one of the many student advice and counselling services available at your site.

If you do wish to see your Adviser at any point in the year, you should make an appointment by contacting them directly. It is also possible that your Adviser (or other officers) may need to contact you. **Please keep your contact details on MyCampus up to date** and check your emails regularly.

3.4 Staff-student committees

The *Staff–Student Committee* (SSC) at each level is a forum for discussion between staff and students on the structure, aims, objectives, content, assessment methods, and delivery of the programme, as well as related matters such as equipment. The detailed list of matters that are within the remit of the staff-student committee is called the <u>Terms of Reference</u>. Normally there will be one formal meeting of each SSC each semester.

The class representatives (class rep) will be informed, by email, of the scheduled times for these meetings, it will also be announced on Moodle. You should contact one of your class representatives before the meetings if you have any matters that you would like them to raise. Contact details will be provided on the relevant Moodle pages and on <u>Student Voice</u>.

During the early weeks of the academic year you will select class representatives who receive training from the SRC and represent your views on Staff-Student Liaison Committees. The role of these students is very important and it's imperative that you let them know when things are going well and not so well with your studies so that they can keep the School informed on everything from teaching to facilities, to help ensure that there is continuous improvement. You should think carefully about whether you would like to undertake the role of class rep. As well as providing valuable experience, including CV points, such participation will be recorded on your academic transcript, subject to the completion of SRC training (which lasts half a day). Further information both about becoming a class rep and what to expect from your class rep can be found on Student Voice.

The SRC Vice President (Education) oversees the whole class representative system, including providing the training, and also represents the views of all students to the University on a variety of Committees. If you have a matter relating to education, either within the University or beyond, which you feel requires attention, do not hesitate to get in touch via <u>vp-education@src.gla.ac.uk</u> or by dropping in to the SRC offices at McIntyre Building, University Avenue.

3.5 Courses & Lectures

You are strongly advised to attend **all** lectures for your courses. We have observed a strong correlation between lecture attendance and course pass rates. Merely attending lectures significantly increases your chances of passing. Do not be tempted to cut classes in order to complete assessed coursework or work on your project. In the long run you will lose out by having to spend extra time mastering the work. **Do not expect lecturers or tutors to explain material to you just because you have chosen not to attend the relevant lecture(s). International students on a student visa must attend classes regularly and maintain a minimum attendance requirement.**

Lecturers will sometimes provide copies of handouts at lectures, but these **do not** usually comprise a complete record of the course, and you should expect to take additional notes during lectures. The policy on availability of course materials, other than at the appropriate lecture, is at the discretion of individual course teams. PDF versions of the lecture notes will often be made available on the appropriate Moodle page after the lecture so that you can print it out should you miss a lecture due to ill health. The Student Support Office **does not** have copies of the handouts. The use of laptops in lectures is at the lecturer's discretion (aside from students with disabilities).

3.5.1 Lecture Recording and Materials

By default, all lecture sessions will be automatically recorded centrally using the Echo360 facility, and recordings will be automatically posted to the course Moodle page. If lectures are not recorded, the lecturer will make this known and should explain why recording is not appropriate.

Please note that lecture recordings and all course materials including any video lectures provided are for your own personal use and can only be used in relation to your studies. Any unauthorised distribution of course materials, including uploading them onto unauthorised web sites and social media sites, such as YouTube or Course Hero, will be considered in breach of the code of conduct and will be subject to disciplinary action.

3.5.2 Questionnaires

Towards the end of each course you will be asked to complete an electronic questionnaire. These provide the most comprehensive opportunity for both positive and negative feedback about a course, so please take this exercise seriously. This helps us to identify what is working well and what problems require to be addressed for the following semester.

3.5.3 Students with Disabilities

The Student Disability Service recommends that certain students who have registered with the Service receive lecture notes in advance of the lectures. In the case of courses where lecture notes are normally handed out, such students may request to receive the notes in advance; every reasonable effort will be made to satisfy such requests. Students should contact the Teaching Office about this.

3.5.4 Contact with Staff

You may wish to meet with a lecturer or tutor to discuss aspects of a course. Members of staff have their own policies for organizing meetings with students: some advertise office-hours for this purpose, whilst others are happy to meet with students by appointment. In the latter case, you are advised to avoid dropping in without an appointment unless there is no alternative. If it is not possible to speak to the staff member after a lecture or tutorial, the best solution may be to request a meeting by email. You should include times when you are available, together with a brief indication as to the nature of your query.

3.5.5 Moodle

Familiarise yourself as soon as possible with the online learning environment Moodle. Students should be automatically enrolled in Moodle they enrol for a course on MyCampus. However, enrolment to the relevant Moodle pages can take up to 48 hours from when you enrol for the course on MyCampus. If, after this time, you still cannot access your courses on Moodle you should contact the <u>SoCS Helpdesk</u>. It is very important to ensure that you are registered for your courses on Moodle as important information will be posted there (lecture notes, tutorial and laboratory sheets, course descriptors, deadlines, regulations, etc.). Information on the recommended texts for each course is available on the Moodle web page for that course.

It is **very important** that you find out how to access the <u>Moodle resources</u> as soon as possible – there is a chance that you will miss out on important information otherwise.

3.5.6 Teams

Many courses will use Microsoft Teams for communication and provide a means of communications and for you to ask questions.

3.5.7 Attendance Monitoring

The University requires us to monitor student attendance during teaching periods. This requirement is implemented in different ways at different levels – via laboratory attendance and/or lectures at Levels 1 and 2,

and via meetings with project supervisors at Levels 3, 4 and 5. Absences of two or more consecutive weeks without good cause will result in action being taken. The university also has a duty of care to students, which is monitored by attendance at lectures or laboratory sessions. The main aim of this procedure is to ensure that you are given an opportunity to provide an explanation for the absence. The ultimate sanction is withdrawal from the University by Registry if no acceptable explanation for continued absence is received. However, you should be aware that, as long as you keep the School informed of any legitimate absence, the Attendance Monitoring policy need not be a cause for concern. Students are required to submit an absence notification on MyCampus to cover any absence they have from their studies. If the absence is more than 7 days, or if you miss any coursework, examination or mandatory lecture/tutorial, you are required to submit a notification of good cause on MyCampus along with any appropriate supporting evidence within 7 days of the deadline/exam. Notifications of good cause submitted out with this time may not be considered. The procedures to follow in the case of absence and good cause are described in the University's <u>Academic policies, procedures, regulations & guidelines</u>.

Quizzes and other continuous assessment.

- The School policy is that students should be required to complete no more than 70% of quizzes or other types of continuous assessment.
- Students should not submit a Good Cause claim but notify the lecturer if they missed a quiz or other type of continuous assessment.

3.5.8 Tier 4 Attendance (for international students)

The University is required to monitor the attendance of its Tier 4 students to ensure compliance with the conditions of its Highly Trusted Sponsor (HTS) license to admit and teach international students. To ensure a consistent approach to providing evidence of student engagement in their studies, attendance will be captured for ALL students at a lab, tutorial or project supervision meetings (see the Attendance Monitoring document on School noticeboards for further details)

If you are a student at the University on a Tier 4 visa, you should be aware that failure to attend and sufficiently evidence engagement with your courses will lead to follow-up emails, potential withdrawal from studies and your permission to remain in the UK will, as a consequence, be withdrawn by the Home Office. Administrative staff within the school will follow up by email, in the first instance, before any action of this nature is taken.

Tier 4 visa students must have 70% of their attendances monitored and purely for Tier 4 purposes, lab attendance for levels 1 and 2 students is taken as follows:

Level 1: CS1CT and CS1P (semester 1) and CSIS or CS1P/CS1PX (semester 2) Level 2: IOOP2 (semester 1) and ADS2 (semester 2).

Students should **not** submit good cause claims for missed labs but instead notify the course coordinator.

3.6 Succeeding in Your Studies

We will do all we can to help you succeed in your chosen courses. However, in the end it's up to you. Make sure you know what you must do in order to gain the credits for a given course. It is important to keep track of your progress throughout the year. Keep your own record of your grades for assessed exercises.

It is important to develop the skill of managing your time effectively if you wish to realise your full potential during your period at the University. This is particularly true in studying Computing Science, where the nature

of the practical work is such that you may be tempted to spend much more time than is wise perfecting your solutions.

It is tempting to put in extra time on assessed exercises, perhaps a great deal of extra time, in an attempt to obtain maximum marks. Bear in mind that the time cost of doing so must be carefully balanced against the other things that you have to do. An over-emphasis on assessed exercises may leave you short of time for reading and understanding lecture notes, working on un-assessed tutorial exercises (which may be examinable), etc. It is up to you to find the right balance.

3.7 Safety

Make sure you know the procedure in case of fire or other emergency for evacuation of the Boyd Orr building and any other building where you may attend classes. Computer equipment that is not functioning properly may be a safety hazard. If you discover any equipment that is out of order, or in any other apparently unsafe condition, report this immediately to your tutor or another member of staff.

4 Assessments and Examinations

4.1 Credits

Each course, at each level, has its own requirements for completion. These requirements include submission of assessment components amounting to at least 75% of the overall weight of assessment, i.e. if you do not hand in at least something for each piece of assessed coursework you risk getting a fail for the course. Some courses have other specific requirements – see Moodle pages for details of courses at each level.

- If you complete a course, you will be awarded the appropriate number of credits and a band on the 22band scale. All results are released as bands. The nominal scale for translating marks to bands is available on Moodle. The Honours mapping is used for levels 1 to 5
- If you are ill, then you **may** be awarded an MV (subject to the provision of appropriate evidence), and you can take the resit exam as a first attempt
- To get credit for a course you must complete at least 75% of the assessments. If you fail to complete 75% of the assessments, you will be classed as:
 - CW (Credit Withheld) if the situation can be redeemed in a resit exam, or

CR (Credit Refused) if the situation is irredeemable. This means you will get no credit for the course.
 If you fail to complete coursework worth more than 25% of the assessments for a course you will get a
 CR and be unable to gain credit for the course which can prevent progression.

Formal decisions on course completion and grades awarded are made by the Board of Examiners at their end of year meeting in June (main diet). Grades are also awarded in both January (December exams) and August (resit diet).

4.2 Multiple-Choice Exams

- The School has a policy of negative marks for incorrect answers. For a question worth *m* marks with *k* possible answers, (i.e., a correct answer would result in *m* marks), the negative mark is *m/(k-1)*. For example, if a question is worth 6 marks with 4 possible answers, then a wrong answer results in -2 marks.
- The negative marks will be taken into account per question topic (typically an exam has 3 topics each marked out of 20), and the total for each question topic will be capped at 0 (i.e. it will never be negative).

Assessment of Coursework

You will be given a band for assessed exercises. Note that assessed coursework bands tend to be higher than examination marks. In line with the University's Data Protection Policy, coursework not collected by students will be destroyed at the end of June of each academic year.

You are expected to spend 100 hours of your own time for each 10 credit course working on assignments and exam preparation (200 hours for a 20 credit course and so on). You should be aware that much of computing, particularly programming, involves problem-solving rather than assimilating factual knowledge. Therefore you cannot learn computing only by reading lecture notes and books; you **must also** work on problems and make full use of provided labs where an experienced person is available to guide and assist you.

Please note: Coursework can NOT be redone unless stated otherwise in the course catalogue

4.3.1. Submission of Coursework

The School operates a Policy of 1630 deadline for the submission of all assessment.

Each assignment will have a hand-in deadline. Course coordinators will provide detailed instructions on the submission of work for their course. Please note students must sign an "own work" form via <u>SocsOnline</u> before submitting. The only exception is when coursework is submitted via Moodle. In this case students will "sign" the own work form when submitting on Moodle. Students must ensure they press the submit button otherwise work may not be marked.

Assessed work that is submitted late is subject to a reduction in marks, per working day, unless appropriate dispensation has been obtained. The reduction will be equivalent to two bands per working day or part thereof. Coursework that is 5 or more days late will be awarded 0 (band H). Note that if coursework is returned to the class within 5 working days, then late coursework will be awarded 0 (band H).

Your final band for the assessed exercise may also be reduced by two bands if you do not follow the published submission instructions.

Your work will generally be returned to you within three teaching weeks (15 working days) of submission.

4.3.2. Returning of Coursework Marks

All coursework marks are returned through <u>SocsOnline</u>. This is to ensure that we can monitor when coursework marks are returned, and that the return is timely. In addition, it to allow us to keep track of the deadlines for all coursework and ensure that there are deadlines are spaced out when possible.

4.4 Ethics Approval Policy

The University requires students to obtain ethics approval prior to conducting projects or assessed exercises that involve people ('participants') other than the student or their supervisor. This applies for the collection of information from participants, for example in getting comments about a system or getting information about how a system could be used; if participants are used when conducting experiments to evaluate a working system; or for any other purpose where other people are involved.

Note that student projects are not covered by any prior ethical clearance that has been given for a similar project to another student or to supervisors. For student projects, ethical approval is given to the student, not to the project. The responsibility for obtaining ethical clearance, if necessary, falls jointly to both student and supervisor. The Moodle pages associated with the course in which you require ethical clearance will give guidance on obtaining ethical clearance.

4.5 Backups

No dispensation will be made for loss of electronic files relating to coursework or project work due to failure to keep adequate backups. Students should ensure that they store all coursework and project work on their filestore on the School's network, which is backed up nightly.

4.6 Examinations

The format of each exam paper will depend on the course. The exact rubrics of all papers will be posted on the relevant Moodle page during the session.

Most courses have an examination as a major component of their assessment. Examinations are generally in April/May, but some exams are held in December. All resit exams take place in July/August. Level 1 and 2 students can resit if they have achieved less than a D3 to allow them to meet university requirements of no more than 40 credits below a D3 to progress to honours. Level 3 designated students can resit any of their exams to improve their result enough to be eligible for a designated degree. Honours students (levels 3, 4 and 5) are **not** allowed to resit exams unless they have been ill or have other special circumstances during the April/May exam diet.

Copies of previous years' examination papers are available by accessing the University Library web pages.

Exchange students should note that credit cannot be awarded for a course unless the examination is taken. Exchange students must take any exams here in Glasgow during April/May diet. Arrangements to take exams in their home country can only be made by Registry for the August resit diet.

4.7 Feedback, and Exam Feedback Policy

Feedback is a key part of the learning process and **appears in many forms**. The most familiar form of feedback to students, usually, is the written comments returned with marked coursework. However, feedback occurs whenever you engage in any kind of dialogue, so be sure to recognise the following forms too:

Some lecturers give a whole-class feedback session after submission of an assessed exercise. While this may not seem personalised to you, you will find it contains a wide range of misconceptions as experienced right across the class – being aware of them all will give you a better picture of the subject area and pitfalls to you fully understanding it.

Any class discussion that comes up is a source of feedback on the class's understanding. If there's anything you do not understand, **speak out** – answers to your questions are direct feedback. Do your best to understand other students' questions – the ensuing discussion will most likely deepen your understanding. Always, **trust yourself** to speak up – you will be speaking for the silent majority most of the time.

Any short test in class gives you direct feedback. Assuming it is self-marked in class, or even if it is handed in and returned, marked, a few days later, being able yourself to see which questions you got right and which wrong is immediate feedback for you to act on. A raw mark is one thing, but targeting the exact areas that you do not understand will be much more beneficial. Based on discussion with students or staff, thinking or reading outside the class, the course coordinator may initiate in-class discussion or an email thread about topics already covered. You have an opportunity to engage in the discussion he or she has started and gain further feedback on your own thinking.

There is a policy on providing feedback on exams. Please see **Appendix E** for the details.

5 Appeals

It is hoped that consultation with tutors, course coordinators and/or the Level Head will resolve any difficulties or disputes that may arise. However, all students have the right of appeal against any School decision (except for academic decisions), in writing, to the Head of School.

A student may further appeal against a School decision to the College of Science and Engineering and then to the Senate. Details of the College and Senate appeals procedures are in the <u>University Regulations and Guidelines</u>.

5.1 Complaints

If you have a complaint, then please raise it with a member of staff in the area concerned. We aim to provide a response to the complaint within five working days. This is Stage 1.

- If your query relates to administration, then contact the teaching administrator.
- If your query relates to a specific course, then contact the course coordinator.
- If your query relates to your project, then contact your project supervisor.

If you are not satisfied with the response provided at Stage 1 you may take the complaint to Stage 2 of the procedure. Similarly, if your complaint is complex, you may choose to go straight to Stage 2. At this stage the University will undertake a detailed investigation of the complaint, aiming to provide a final response within 20 working days. You can raise a Stage 2 complaint in person to the Complaints Resolution Office (Gilbert Scott Building) in writing (Complaints Resolution Office, Gilbert Scott Building, University of Glasgow, Glasgow, G12 8QQ), by email (complaints@glasgow.ac.uk), or via the Complaint Form. Complaints do not have to be made in writing, but you are encouraged to submit the Complaint Form whether it is at Stage 1 or Stage 2. This will help to clarify the nature of the complaint and the remedy that you are seeking. For more details see the University's complaints webpages.

The <u>SRC Advice Centre</u> is available to provide advice and assistance if you are considering making a complaint.

6 Plagiarism Policy

Every award of the University of Glasgow is based on assessment of the student's learning, using evidence in the form of submitted work. Such evidence is valid only insofar as it represents the student's own work. If the student submits another person's work and represents it as his/her own work, the evidence is fraudulent. This is plagiarism, which undermines the University's academic standards and is therefore a serious disciplinary offence.

The University of Glasgow states:

"Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without acknowledgement of the sources. Special cases of plagiarism can also arise from one student copying another student's work or from inappropriate collaboration."

For advice on avoiding academic misconduct see the University's Avoiding Academic Misconduct – Quick Tips.

In Computing Science, there is potential for plagiarism in software development, essays, and project reports/dissertations, as explained in the attached guidelines. The guidelines also explain the circumstances in which it is legitimate to use another person's work and how that work should be acknowledged.

Plagiarism can be detected by a variety of means, including sophisticated software that is routinely used in the School.

It is the University's and School's policy to deal severely with all cases of plagiarism. The Head of School has the power to award a mark of zero for work shown to have been plagiarised, and to amend the student's record to reflect that decision. Serious and repeated offences are referred to the Senate Assessors for Discipline and the Senate Disciplinary Committee, who have the power to impose more severe penalties including suspension from the University.

At the start of each academic year, all students in Computing Science classes are required to familiarise themselves with the School's plagiarism policy and guidelines.

Along with each piece of submitted work, students are required sign an online own-work declaration confirming that he/she has complied with our plagiarism policy in that piece of work on <u>SocsOnline</u>.

Coursework marks may be withheld if the declaration has not been signed, and a penalty may be applied

Declaration

I hereby declare that I have read and understood the above plagiarism policy and the attached guidelines. I undertake to comply with this policy in all my submitted work, and to consult a lecturer or Level Head whenever I am uncertain about how the policy and guidelines are to be interpreted.

Detailed guidelines on Plagiarism, together with some example scenarios, appear in Appendix A of this document.

6.1 Blogs and Social Networks

Many students make use of blogs and/or social networking sites (e.g. Facebook, Twitter) to communicate with friends and family members. When you write comments on these online blogs bear in mind that they are open to the world at large, and that negative comments made about named people or institutions could lead to disciplinary, and possibly legal, action being taken against you. **Please be careful about what you write.**

6.2 Contract Cheating

Please note that the use of a service such as, for example, Chegg, Freelancer, VWorker, Getacoder or EssayBay to do your coursework for you is a disciplinary offence. It could even lead to expulsion. These websites are monitored and if any of our assignments are found we will investigate further. It is best to do your own coursework so that you can gain the full benefit from your learning experience here at Glasgow.

7 Laboratories And Equipment

During scheduled laboratory hours, members of the appropriate lab group have priority, but others may use the machines subject to availability and the approval of the supervising lecturer or tutor.

The Boyd Orr building is open from 08:00 until 21:30 Monday-Thursday, and until 20:30 on Friday, during semester. It is open 09:00-17:00 during vacations, but is closed on all public holidays. **The labs are not open at weekends to Level 1 and 2 students.** Details of opening and closing times are displayed in the building itself. The Boyd Orr building and the Computing Science buildings are kept locked outside normal working hours.

The school has several UG teaching labs in the Boyd-Orr building (the capacities of the labs will be reduced while social distancing measures are in place):

- Level 1: BO715 64 machines;
- Level 2: BO706 56 machines;
- Levels 3, 4 and 5: BO620 48 machines;
- Levels 3, 4 and 5: BO720 72 machines.

Some labs may also run in the Islay and Jura labs in the University Library (rooms 437g and 437h) – note that to access these labs, you will need to scan your University student card at the Library main entrance.

All machines run the University's windows Common Student Computing Environment (CSCE).

Students at level 3 and above can get their student card activated to give them out of hours access to the Boyd-Orr building and the school's teaching labs. Students should contact the Student Support Office, in the first instance. Please note that 24-hour access is a privilege and may be withdrawn if students misbehave.

Hardware faults should be noted in the hardware fault book in the lab. System software faults including networking or server issues should be emailed to <u>support@dcs.gla.ac.uk</u> with a copy to the relevant member of academic staff if the fault is affecting coursework. If faults that disrupt teaching persist for several working days, the Level Head should be informed.

You can access the campus wireless network from most of our labs in the Boyd-Orr. Information on this is available from the University's <u>IT services for students</u>. Finally, if you encountered any computer system faults, please email <u>support@dcs.gla.ac.uk</u>. The University provides wireless access points at various places on campus to allow students access to the University network. Information regarding wireless access can be found on the <u>IT Services web site</u>.

7.1 Pull Printing

The School uses the universities central <u>Pull Printing system</u>. There is one printer located in BO620 and two located in the corridor of BO Level 7. The printers also have functions for scanning and copying.

7.2 Conditions of Use

Appendix B of this document contains the detailed conditions of use of equipment in the Computing Science laboratories. All students are required to familiarise themselves with this document. It is also posted on the noticeboards in the labs in the Boyd Orr building and on the general Computing Science Moodle page.

8 Miscellaneous

8.1 Class Prizes

One or more class prizes will normally be awarded at the end of each academic year, as decided by the Board of Examiners. Other prizes may be awarded, depending on sponsors.

8.2 Phonetic Pronunciation of Names (Graduation)

If you think that your name may be mispronounced at the graduation ceremony, you can add a phonetic pronunciation of your name in the graduation section of MyCampus.

8.3 The University Library

Texts are held primarily in the Undergraduate Lending Library (ULL) and the Short Loan Collection (SLC) located on Level 2 of the Library. All the texts on your reading lists are available as multiple copies. Other texts that may be relevant to your courses can be found in the level 5 annex of the Library building.

8.4 Photocopying

There is no facility to photocopy in the School. There are photocopying facilities in the Queen Margaret Union.

8.5 Student Learning Development (SLD)

<u>Student Learning Development (SLD)</u> offers study skills advice, guidance and support to all students. If you would like to make your learning techniques more effective, you can attend workshops which take place regularly in the McMillan Reading Room or contact the College of Science and Engineering Contact Scott Ramsay. Popular topics for discussion include improving essay writing, revision techniques, exam techniques and note-making.

8.6 Part-Time Study

Part-time study, particularly at honours level, is considered on a case by case basis by the Senior Advisor. It has only been allowed in exceptional circumstances and any curriculum must be approved by the Clerk of Senate.

8.7 Studying Abroad

As a student of the University of Glasgow, you have the opportunity to enrich your academic experience, and explore different cultures and lifestyles by electing to spend a year at a university overseas at one of our exchange partner-institutions in Europe (Erasmus) and beyond (International Exchange Programme).

Level 1 students in any of the BSc and MSci degrees offered by the School of Computing Science (Computing Science, Software Engineering, Software Engineering with Year Placement, Electrical and Software Engineering, or a combined degree with Computing Science) may apply for a study abroad programme in level 2.

Level 2 students who are willing to change to the Informatics BSc/MSci degree or are completing a Combined Honours degree can apply to study abroad in level 3.

Accreditation requirements prevent Computing Science, Software Engineering, Software Engineering with Year Placement, and Electrical and Software Engineering students from studying abroad in level 3.

Note that because of the compulsory courses in all the degree programmes offered in the School of Computing Science, it is not possible to undertake a one-semester exchange: if you go on exchange, then you must go for the full year.

The exchange at the university overseas will be recognised as part of your Glasgow degree and must therefore be planned carefully to fit in with your programme of study. As you will continue to be a University of Glasgow student no additional tuition fees are payable to the university overseas.

If an exchange appeals to you, start planning early! Details on how to apply, including deadlines, can be found on the <u>Computing Science Moodle CS Study Abroad/Erasmus Moodle Page</u>.

8.8 Employment Courses

The College of Science & Engineering at the University of Glasgow has produced short optional 'Employability' courses for level 1 and level 2 science undergraduates that will help you to start thinking about and planning for work, including part-time and summer jobs, work placements, internships and eventually your career, **all of which are great for your CV!** The courses have no lectures nor labs, just 4 or 5 one-hour informal workshops in which groups of students will work with staff and student mentors on a series of activities and discussions. Students who wish to take advantage of these courses are required to register individually for each of the sessions on My Campus and early registration is advised to guarantee a place on the courses in semester 1.

Students who fulfil the requirements of the level 1 or level 2 Employability courses (by attending at least 4 out of 5 sessions in level 1, or 3 out of 4 sessions in level 2), will have successful completion of the course recorded permanently in their university record.

8.9 Accreditation

Honours graduates, except Informatics, are recognised by the British Computer Society (BCS), The Chartered Institute for IT, for the purposes of fully meeting the academic requirement for registration as a Chartered IT Professional and partially meeting the academic requirement for registration as a Chartered Scientist. Honours graduates are recognised by the BCS and the Institution of Engineering & Technology (IET) for partially meeting the requirement for a Chartered Engineer. The Computing Science and Software Engineering programmes have also been awarded the Euro-Info Bachelor label.

All MSci graduates, except Informatics, are recognised by the British Computer Society (BCS), The Chartered Institute for IT, for the purposes of fully meeting the academic requirement for registration as a Chartered IT Professional and partially meeting the academic requirement for registration as a Chartered Scientist. The Computing Science and Software Engineering programmes have also been awarded the Euro-Info Master Label.

9 Problems and Special Circumstances

Keep us informed: if for any reason you find yourself missing work or falling behind, consult with your adviser of studies, project supervisor, or either the Honours or Level Head to form a plan for catching up. Make sure you inform us while there is still time to deal with the problem effectively.

9.1 Illness and Other Personal Circumstances

It is important that you maintain awareness of how you are coping with your courses throughout the year, and that you take appropriate action if things are not going well. If you fall behind or are worried about your progress, seek help immediately! If for any reason you find yourself missing classes, failing to complete assessments, or generally falling behind, consult with your adviser of studies and/or Level Head to form a plan for catching up. Make sure you inform us while there is still time to deal with the problem effectively.

A period of ill health or other adverse personal circumstances could be a major threat to your degree. The School is anxious to offer as much support as it can to those who experience such problems, but we can only do so if we are aware of the problems at an early stage. *Please contact the Student Engagement Lead, your adviser of studies and the Level Head as soon as you feel that your work is being affected by health or other personal difficulties.*

The University has compiled a Student Absence Policy which indicates the procedures to be followed for

the notification of *absence* from your studies and/or a notification of *good cause*.

If a student is **absent** from the University they are required to provide an absence notification. We require this so that we are informed of the issue and can help if appropriate. Use the MyCampus absence reporting facility to notify us of absences.

If the absence is more than 7 days, **or** causes them to miss coursework deadlines, miss a compulsory class or miss exams **or** feels their performance in coursework or exams have been affected by illness or personal circumstances a student is also required to provide a notification of **good cause** – i.e., student performance that

has been negatively affected despite the best efforts of the student. Students are required to provide the notification of good cause within 7 days of the absence, coursework deadline or examination date.

The Board of Examiners will not necessarily take account of notifications of good cause reported after this deadline when considering a case for good cause.

9.2 Unforeseen Circumstances/Illness Affecting Assessed Coursework

If you are unable to submit an **assessed exercise**, or the quality of your submitted work has been affected, due to ill health or other personal circumstances, you should obtain appropriate documentary evidence as described in the <u>University Student Absence Policy</u>. You should then complete a notification of good cause on MyCampus and submit your evidence, explaining what the problem is. You may do this prior to the deadline, if appropriate, or no later than seven days after the published deadline.

The course coordinator will contact you to agree on an appropriate plan of action for the item of coursework. This could involve either granting an extension to the deadline, or "voiding" the item of coursework so that the remaining assessment on the course is scaled up to 100%.

For more detailed information please check the <u>moodle page</u> and the University's <u>frequently asked questions</u> for good cause.

9.3 Unforeseen Circumstances/Illness Affecting Assessed Examinations

As mentioned above, the <u>University Student Absence Policy</u> describes the procedures that must be followed in the case that an illness, or other personal circumstances, causes you to miss an exam. Similarly, if you believe that illness, or other personal circumstances, occurring prior to, or during, an exam has affected your performance at that exam; you should follow the same reporting procedures as described for missing an exam.

In particular, as mentioned above, the completed notification of good cause report on MyCampus must be received no later than 7 days after the date of the exam. The Board of Examiners will not necessarily take account of notifications of good cause reported after this deadline. Exceptions to this include the case where the illness itself prevents the student from submitting the notification any sooner.

The University regulations specify in detail what happens when a student misses part or all of the final examination due to illness. If at least 75% of the Honours assessment (i.e., over Levels 3 and 4) has been completed, the student may be awarded a classified Honours degree based on the completed exam papers and assessed coursework. (For these purposes, projects count as papers.) If less than 75% of the Honours assessment has been completed, then the student may be offered an unclassified Honours degree or a Designated degree (depending on the standard attained); but in that case the student has the right to repeat the entire final examination at the next exam diet.

If you miss an exam due to illness or adverse personal circumstances, you should submit any evidence via MyCampus in a notification of good cause as prescribed by the University's code of assessment. If you provide such recognised evidence, it is likely you will be given get an MV for the exam and be able to take the resit exam as your first attempt. See the good cause <u>frequently asked questions</u>

If you miss an exam for any other reason, for example if you have overslept, you write the wrong date or time in your diary, you forget, or your alarm fails, you will get CW (credit withheld) for the exam.

• Level 1 or 2 student, or a level 3 designated student, can then take the resit but the final grade will be capped at a D3.

• Level 3, 4 or 5 honours student cannot improve your mark and will get a CR for the course. This may prevent you from graduating.

We urge you as strongly as possible to ensure that you do indeed take all your exams.

9.4 Seeking Advice

You should make every effort to keep up to date with your understanding of the lectures and the practical work, since once you get behind it is difficult to catch up again. In some courses, there is a gradual build up to a major exercise whilst in others the practical work is spread throughout the course. Inevitably the pressure builds up towards the end of each semester so you are strongly advised to plan accordingly. If you do fall behind you should seek help immediately from the Student Engagement Lead, your Adviser of Studies, your lecturers, or the Programme Director. The best time to contact lecturers is at the end of a lecture, when an appointment can be arranged if necessary. We recommend that if you are having difficulties that you contact someone sooner rather than later. In our experience, this often leads to a more successful outcome. If you have medical or personal problems, you can also get confidential help from the University's <u>Counselling & Psychological Services</u>.

9.5 Sources of Help

Information and professional advice are also available via the Students' Representative Council (SRC). The SRC employs professional advisers to help you through any problems you might be having. These can range from welfare issues such as money and accommodation to representation in academic appeals and disciplinary matters. This is a free service and no appointment is necessary and their doors are open from 10–4 (Mon-Thurs) and 10–3 (Fri). It can be found at the SRC Student Welfare and Advice Centre. You can contact this service via.advice@src.gla.ac.uk. This and any other information about the SRC is available from www.glasgowstudent.net/ and www.gla.ac.uk/services/studentsrepresentativecouncil/.

9.6 Quality Assurance and Enhancement

The <u>Senate Office webpage</u> provides information about various aspects of quality assurance and enhancement.

Part II: Level-Specific Information

Detailed descriptions of all Computing Science courses can be found at the relevant Moodle pages.

The following description uses internal School mnemonics to describe individual courses rather than the official Registry and College codes.

The School of Computing Science has a set of rules for student progression from level to level. The Honours and Level Heads will apply the rules flexibly, taking account of any exceptional circumstances affecting a student's performance.

There are no guaranteed repeat years, although students may be permitted to repeat Computing Science courses at the discretion of the Head of School. If a student is granted permission to retake the year, they must take a full Computing Science curriculum. It is not possible to retake only part of the year.

Although Level 1 Mathematics is no longer a prerequisite for entry to single Honours Computing Science (CS), Software Engineering (SE) nor Software Engineering with Year Placement (SEWP), it is still strongly recommended, as it will be helpful for many courses and is a prerequisite for some level 3 and 4 courses. We advise that all students intending to take single Honours CS, SE or SEWP should take level 1 Mathematics unless they have a very good reason not to.

2 Level 1

Two sets of courses are currently offered by the School of Computing Science at Level 1. Either set enables students to continue to honours level in CS.

For students **with prior programming** experience, by which we mean that the student can solve unseen programming problems with little or no assistance, should take:

CS1F: An introduction to databases, human computer interaction, (semester 1, 10 credits); CS1P: An introduction to programming (semesters 1 and 2, 20 credits); CS1S computer systems (semester 2, 10 credits).

For students with **little or no prior programming experience**, we have three courses (students may also take CS1F in level 1 instead of level 2):

- CS1CT: An introduction to Computational Thinking and Programming (semester 1, 20 credits);
- CS1PX: Further Programming (semester 2, 10 credits. Joining up with the CS1P class above);
- CS1S: An introduction to Computer Systems (semester 2, 10 credits).

Students who have taken school-level programming courses, but do not feel confident in their programming skills (often the case, even with e.g., Scottish Highers), should take the second set of courses. How to judge "feeling confident"? If you solve *simple* problems by creating working programs in any language, then CS1P will be suitable for you. If you have had previous programming experience, but know that you struggle to get even quite simple programs working, then go for CS1CT.

In the early weeks of Semester 1 if you find CS1P too challenging, you can switch to CS1CT to gain the additional time to develop your programming skills. To ensure adequate time to catch up, this should be done no later than week 3

of teaching. It is also possible to switch to CS1P if you find CS1CT not challenging enough. Again, this should be done no later than week 3 of teaching.

It is strongly recommended that Mathematics 1 is taken in level 1 or 2.

2.1 Tutorials and Laboratories

In addition to lectures, each course has weekly tutorial/lab teaching sessions. The comprehensive tutorial and laboratory system is designed to help you during the year, and you should try to use it well. You are expected to spend a considerable amount of your own time studying and working on exercises as well.

You are expected to attend all your scheduled laboratory sessions. If you cannot attend your normal lab time, you should contact the level 1 class secretary to arrange a suitable alternative time for you to attend another lab. Due to the high volume of students, it is not possible for you to attend other lab groups without express permission from the teaching office. If you are unable to attend a scheduled lab due to illness or other mitigating circumstances, you should follow the instructions outlined in the <u>University's absence policy</u>, ensuring you submitting a notification of good cause where applicable. Laboratory attendance will be carefully monitored in accordance with the University's policy.

In each course you will be assigned to a tutorial/lab group containing up to 16 students and supervised by one or more tutors.

- Assignments to tutorial and lab groups is through My Campus upon enrolment for the course. You might be
 moved lab groups in January to accommodate timetable clashes with other students or if the lab group is no
 longer running. We will always endeavour to give students their first choice of lab group, but this is not
 always possible.
- Each group will be allocated to a particular cluster of workstations for the face-to-face labs and a Teams chat group for the online labs. For the face-to-face labs, it is essential that you use a machine in the correct cluster during your scheduled lab session. The lab schedule can be found on the noticeboard in the level 1 lab (B0715) and on the level 1 general Moodle page.
- You are expected to attend the tutorials and laboratories for your group and to attempt and submit exercises according to the issued schedule.
- All students will be expected to attend a lab familiarisation session in week 1 of semester 1: details will be given at the welcome meeting in week 0, and in lectures. This session will last approximately 1 hour.
- Laboratory sessions will focus on practical exercises. Each exercise has a deadline. *These deadlines are non-negotiable; under no circumstances will work be accepted after the deadline and no extensions will be given.* If you miss coursework due to illness or other personal circumstances, you must submit a notification of good cause, along with any supporting evidence. You may then be awarded an MV.

The tutors undertake to help you as much as they can; the obligation on your side is **to come to labs and tutorials prepared**. Roughly speaking, during term time, you should expect to spend one hour outside class for each hour you spend in a lecture, tutorial, or lab. Additional work that you do during vacations and in the period leading up to examinations should bring the total study time per 20-credit course to about 200 hours.

1.2 Examinations and Class Tests

CS1P will have class tests in October and December, with a degree exam in April/May. Lab exams for CS1P are held in December and March. CS1F will have a degree exam in December. CS1CT has a class test in October as well as in-class quizzes for credit, a lab exam in December and a degree exam in December. CS1PX has a lab exam in March and a degree exam in May. CS1S has a degree exam in May. Resit examinations for all courses take place in July/August.

1.3 Early Exit

In CS1P it is possible to take an early exit route at the end of Semester 1 in order to obtain 10 credits for this course. If you wish to take the early exit, you must inform the class secretary **in writing** before the start of the Christmas vacation. For early exit students, the class test(s) become the examination(s). For early exit, the assessment weightings are 70% for the exam, 10% for the semester 1 class test, and 20% for the lab exam.

1.4 Students Intending to Progress to Level 2 Computing Science

Students intending to progress to Level 2 Computing Science must take either CS1P, CS1F & CS1S, CS1CT, CS1PX, and CS1 or CS1CT, CS1PX, CS1S and CS1F. The prerequisites for level 1 are a grade B or above in Higher Mathematics or passes at grade C in Higher Mathematics and grade B in Higher Computing or Information Systems (or an acceptable equivalent). Further information relating to entry requirements can be found in the undergraduate prospectus.

1.5 Level 1 Course Selection (All Routes) Available to All Students

The following level 1 routes are available for all Computing Science degrees.

Route 1 (for students with prior programming experience): CS1P, CS1F and CS1S

Route 2 (for students with no prior programming experience): CSICT, CS1PX and CS1S

For route 2 students if you want to take an additional 10 credits in level 1, then choose CS1F. All ESE students **must** take CS1F and CS1S in level 1.

3 Level 2

Current information on the organisation and delivery of the Level 2 courses is available on Level 2 Moodle page. Consult your adviser for advice about the courses you need to take for your intended degree. You should also consult Part III of this document. The following courses are offered by the School of Computing Science at Level 2:

- IOOP2: Introduction to Object-Oriented Programming 2 (formerly known as Java Programming 2, JP2)
- AF2: Algorithmic Foundations 2
- NOSE2: Networks & Operating Systems Essentials 2
- OOSE2: Object Oriented Software Engineering 2
- ADS2: Algorithms and Data Structures 2
- WAD2: Web Application Development 2

The following Level 1 Computing Science courses are also available in Level 2:

- CS1F (for students who took CS1CT, CS1PX and CS1S in level 1 and faster route students)
- CS1S (for faster route students)

3.1 LECTURES

Each course is taught for 11 weeks. There are also laboratory sessions, tutorials and examples classes as appropriate. You are expected to attend **all** lectures.

3.2 LABORATORIES

Laboratory and tutorial sessions focus on practical assignments. Your tutor will assume that you have done any preparatory work required *and will not make special provision for you if you have not*.

As well as working on problems, you should use the labs and tutorials to ask questions about any matters that you do not fully understand.

AF2 has weekly tutorials in semester 1 (starting in week 2); IOOP2 has a weekly labs in semester 1 (starting in week 2); NOSE2 & CS1F has weekly labs every in semester 1 1 (starting in week 2); ADS2, OOSE2 and WAD2 have weekly labs in semester 2 (starting in week 2).

3.2.1 LAB GROUPS

For laboratories the class will be divided into groups of about 22 students; groups will be assigned at the start of the year. You might be moved lab groups in January in order to accommodate timetable clashes with other students or if the lab group is no longer running. We will always endeavour to give students their first choice of lab group, but this is not always possible.

You are expected to attend all your scheduled laboratory sessions. If you cannot attend your normal lab time, you should contact the level 2 class secretary to arrange a suitable alternative time for you to attend another lab. Due to the high volume of students, it is not possible for you to attend other lab groups without express permission from the teaching office. If you are unable to attend a scheduled lab due to illness or other mitigating circumstances, you should follow the instructions outlined in the <u>University's absence policy</u>, ensuring you submitting a notification of good cause where applicable. Laboratory attendance will be carefully monitored in accordance with the University's policy.

3.2.2 SCHEDULE

Most lab sessions will be held in the Level 2 Laboratory or the Islay/Jura labs in the Library; the level 1 lab may also be used when additional space is required. The schedule of lab sessions will be posted on the noticeboard in the level 2 lab and on the level 2 general Moodle page.

It is your responsibility to ensure that you know the day, time, and location of your group's lab session(s).

3.2.3 EQUIPMENT AND SOFTWARE

The Level 1 and 2 Laboratories are equipped with PCs running the University's windows Common Student Computing Environment (CSCE). All practical work will be done on these machines. Level 2 Computing Science students have priority access to the machines in the level 2 laboratory. However, you are also allowed to use the machines in the Level 1 Laboratory, but Level 1 students have priority on these machines.

During scheduled lab sessions, members of the appropriate lab groups have priority, but other students in the class *may* use the machines subject to availability and the approval of the supervising tutor. You might be asked to leave the lab if there is teaching taking place.

3.3 Assessment and Examination

Specific completion criteria for the various courses are as follows:

IOOP2 and OOSE2: Submission of at least 6 out of 8 laboratory exercises and attendance at degree exam; **NOSE2 and ADS2**: submission of at least one of the two assignments, attendance at three or more lab sessions and attendance at degree exam;

AF2: submission of at least one of the two assignments and attendance at degree exam;

WAD2: completion of the group project and attendance at degree exam;

CS1F: submission of at least one of the assignments (either IM or HCI) and attendance at degree exam. **CS1S:** submission of at least one of the assignments and attendance at degree exam.

3.4 FASTER ROUTE COURSES

In addition to the courses listed above, above (AF2, ADS2, CS1F, CS1S, IOOP2, NOSE2, OOSE2 and WAD2), there is a mandatory course called <u>Succeeding in University Study in Computing Science</u>, run by Student Learning Development. This induction is radically different from typical study skills programmes, in that the support you will receive interleaves directly with the schedule of work you will be undertaking in Computing Science. It focuses more strongly on the transferable skills you will need throughout your degree and also to prepare you for the workplace. **Sessions are timetabled fortnightly, and attendance is mandatory for 9 out of 10 sessions.**

3.5 LEVEL 2 PROGRESSION PATHWAYS

Pathway 1: ADS2, AF2, IOOP2, NOSE2, OOSE2 and WAD2 (60 credits of computing science).

Pathway 2: ADS2, AF2, CS1F, IOOP2, NOSE2, OOSE2 and WAD2 (70 credits of computing science). *If the student took CS1F in Level 1, then only the 60 credits of Pathway 1 are required.*

Pathway 3: ADS2, AF2, CS1F, CS1S, IOOP2, NOSE2, OOSE2, and WAD2 (80 credits of computing science).

Pathway 4: ADS2, IOOP2, OOSE2, and at least one of AF2, NOSE2 and WAD2 (at least 40 credits of computing science). *If the student did not take CS1F in Level 1, then CS1F is also required in Level 2.*

Pathway 5: ADS2, IOOP2, NOSE2, OOSE2 and WAD2 (50 credits of computing science).

Level 2 entry is:

- guaranteed with a minimum GPA of 15.0 (B3) over all Level 1 Computing Science courses at first attempt;
- at the School's discretion with a minimum GPA of 12.0 (C3) over all Level 1 Computing Science courses at first attempt.

The following lists the pathway to follow in Level 2:

- CS, SE and SEWP students who took CS1P, CS1F, and CS1S (route 1) in level 1 should follow **pathway 1**;
- CS, SE and SEWP students who took CS1CT, CS1PX, and CS1S (route 2) in Level 1 should follow pathway 2;
- Faster route students should follow pathway 3;
- CS+ students should follow **pathway 4**;
- ESE students should follow pathway 5.

3.6 **RESIT EXAMINATIONS**

Each course has a resit examination in July/August, which can only be taken to improve your overall grades and GPA. Resit grades are capped at D3 by the university. Recent changes to degree regulations mean that it is important to take resit exams, if necessary, to achieve at least a grade D3 in your courses. This applies even to courses in subjects that you do not intend to pursue after the current session. If you have more than 40 credits below grade D3 then this can prevent progression to Honours, even if you have high grades in your main subject. **You are strongly advised to attempt resit exams where appropriate.** Your adviser of studies can discuss this with you in more detail. If you miss an exam due to medical reasons, you will also take the resit exam, which will be uncapped.

4 Level 3

The degree programmes offered comprise a series of taught courses and, for most students, a team project. The courses and project run throughout the year. Not all courses are taken by all students. Part II lists the compulsory and optional courses for each of the degree programmes.

4.1 TUTORIALS AND LABORATORIES

Each course has tutorials or laboratory sessions, usually once a week, at which attendance is compulsory, unless advised otherwise by the lecturer. Teaching in the labs will usually take place either in BO720 or online.

Students should notify the Level 3 Head and the Teaching Administrator immediately if you spot any timetable clash, but be aware that for combined degree students it may not be possible to resolve a clash and it may be necessary to choose different courses. Attendance at labs will be recorded electronically.

4.2 PROJECTS

All CS3, CS3H/M+, CS3H/M, CS3H/M+, SE3H/M, SEWP3M and ESE3H students are required to undertake a team project in level 3. Students in the CS3+ and CS3H/M+ cohorts will undertake a 10 credit team project. The remaining cohorts will undertake a more substantial 30 credit team project.

At the beginning of Semester 1 the class will be divided into teams of 5-6 students. The team project (TP(H)) is run in conjunction with the Professional Software Development course (PSD(H)) and the problem domain (and real-world customers) will be introduced early in Semester 1. Each project team will be responsible for negotiating a software project with one of the customers and working with them throughout the year. A final release of the project must be demonstrated to the customer in week 27 at the end of Semester 2.

All projects count towards the final degree classification. Each team will receive an overall band for their project based both on the final product, but also on the conduct of the team software process during the year. Each member of the team will receive a rating from their peers based on their perceived contribution to the project. This rating will be used to compute a positive or negative *delta* to be applied to the group band for each student. The TP(H) team will use both the peer assessment and their own judgement and experience in awarding a delta.

We anticipate that you will learn a great deal from your project and that you will enjoy working as part of a team. This requires a certain level of commitment from you. You are responsible for ensuring that you make a contribution to the project and you should be aware that failure to contribute could negatively affect your final grade and even, in the direst of cases, prevent you from graduating. If you have a genuine problem you should speak to the TP(H)/PSD(H) team, the Level Head, or your adviser so that any issues can be resolved as soon as possible. All students are *required* to meet with TP(H) team during the two teaching semesters.

Please note that non-participation in a team project can lead to a student being awarded a mark of CR (Credit Refused).

4.3 SUMMER PLACEMENTS (SE3H/M AND ESE3H)

All SE3H/M and ESE3H students are required to undertake an approved work experience placement, of at least 10 weeks duration, in the summer vacation between levels 3 and 4. The School provides extensive support for every student looking for a placement but cannot guarantee a placement for any individual. A student may propose their own placement but the Placements Coordinator must approve this before it is accepted as qualifying for credit. The placement is assessed and the grade is incorporated into the overall assessment for SE4H/M and ESE4H.

4.4 YEAR PLACEMENTS (SE3WPM)

All SEWP3M students are required to undertake an approved work experience placement over 12 months duration over level 4. Students are responsible for securing their placement with a suitable employer that has been approved by the Placements Coordinator However, the School provides extensive support for every student. The placement is assessed throughout the year and the grade is incorporated into the overall assessment for SEWP4M.

4.5 FINAL DEGREE CLASSIFICATION

For all BSc and MSci programmes the level 3 marks are carried forward to the final degree classification with performance in the different levels weighted as follows

Class	Level 3	Level 4	Level 5
CSH, CSH+ and SE (Hons)	40%	60%	-
ESE (Hons)	35%	65%	-
CSM, SEM and CSM+ (MSci)	24%	36%	40%
SEWP (MSci)	30%	20%	50%

Note that there is a resit diet of examinations for Level 3 courses held in August/September **only** for non-Honours students and those with approved absences from April/May exams. **For progression to Level 4 you must attain the required standard at your first sitting of the Level 3 exams.**

4.6 ENTRY TO LEVEL 3

Entry to Level 3 is ultimately at the discretion of the Head of School, but students in Computing Science will normally be admitted if they meet the requirements identified below.

In order to obtain entry to an Honours degree programme in Level 3, students must satisfy the requirements in the <u>Generic Undergraduate Regulations</u> and the <u>Supplementary Regulations for the Degree of Bachelor of Science and Master in Science or Supplementary Regulations for the Degree of Master of Engineering, Bachelor of Engineering, and Bachelor of Science in Engineering and must also satisfy the additional requirements of the School of Computing Science. Note that, amongst other things, the generic and supplementary undergraduate regulations require that Honours students in Science must achieve a grade point average of 12.0 over 60 credits of Level 2 courses in the subject of their Honours Programme at the first attempt.</u>

The additional requirements of the School of Computing Science are as follows, where *all Level 2 Computing Science courses* corresponds to ADS2, AF2, IOOP2, NOSE2, OOSE2 and WAD2. These requirements are expressed

at two levels: what is required for guaranteed entry and what is required to be considered at the discretion of the School.

- CS3H/M, SE3H/M, SEWP3M. Guaranteed: minimum GPA of 15.0 (B3) over all Level 2 Computing Science courses at first attempt. At School discretion: minimum GPA of 12.0 (C3) over all Level 2 Computing Science courses at first attempt. Entry to the SE3H/M and SEWP3M classes are competitive, and only a limited number of places are available for the best students.
- **CS3H/M+. Guaranteed**: minimum GPA of 15.0 (B3) over 40 credits of Level 2 Computing Science courses at first attempt. **At School discretion**: minimum GPA of 12.0 (C3) over 40 credits of Level 2 Computing Science courses at first attempt. **In addition**, the student must fulfil the requirements for the other subject.
- **ESE3H. Guaranteed**: minimum GPA of 15.0 (B3) over the five pre-requisite Level 2 Computing Science courses (ADS2, IOOP2, NOSE2, OOSE2 and WAD2) at first attempt. **At School discretion**: minimum GPA of 12.0 (C3) over the same five courses at first attempt. **In addition**, the student must meet the requirements of the School of Engineering.

Electronic and Software Engineering Students who achieve a minimum GPA of 15.0 (B3) over the pre-requisite level 2 Computing Science courses may transfer to CS3H, SE3H or SEWP3M. Those with a GPA of 12.0 (C3) may transfer to CS3H, SE3H or SEWP3M at the discretion of the School.

Students who do not meet the requirements for entry to our Honours degree programmes may be eligible for entry to the single or combined Designated Degree in Computing Science (CS3). Such students must satisfy the progression requirements given in the <u>Generic Undergraduate Regulations</u> and the <u>Supplementary Regulations</u> for the Degree of Bachelor of Science and Master in Science. In addition, students must also meet the following additional requirement from the School of Computing Science:

- **CS3:** To guarantee entry to the Designated Degree, students must achieve a minimum GPA of 9.0 (D3) over all Level 2 Computing Science courses.
- **CS3+:** To guarantee entry to the Combined Designated Degree, students must achieve a minimum GPA of 9.0 (D3) over 50 credits of Level 2 Computing Science.
- Electronic and Software Engineering Students who achieve a GPA of 9.0 (D3) over the five pre-requisite level 2 Computing Science courses, but who are not permitted to transfer at the School's discretion to CS3H, SE3H, or SEWP3M, may transfer to CS3.

4.7 Level 3 Curriculum

The level 3 curriculum for each degree programme is given below.

CS3H/M

The CS3H/M level 3 curriculum in Glasgow has compulsory courses in the first semester and optional courses in the second semester. The Team Project (30 credits) and Professional Software Development (10 credits) are compulsory and run together over both semesters. The structure of the two semesters is given below.

Professional Software Development PSD(H)	Algorithmics I ALGI(H)	Systems Programming SP(H)	Interactive Systems IS(H)	Data Fundamentals DF(H)	Team Project TP(H)
Professional Software Development PSD(H)	Optional Course	Optional Course	Optional Course	Optional Course	Team Project TP(H)

Additional requirements:

- Professional Skills and Issues (semester 1 of level 4);
- at least one security course (semester 2 of level 3 or level 4): Cyber Security Fundamentals, Cyber Security Forensics, Human-Centred Security, or Secured Software Engineering;
- Individual 40 credit project (level 4).

The remaining credits (30/40 in level 3 and 70/60 in level 4) are taken from available optional courses as long as you meet the pre-requisites and timetabling constraints.

It is possible to add a **strand** (or specialism) to the CSH degree in one of the following areas:

- Data Management;
- Human Computer Interaction;
- Information Security;
- Parallel and Distributed Systems;
- Theoretical Computer Science.

If a strand is chosen, then the strand will appear on your transcript and only one strand can appear on your transcript. Each strand has requirements on the optional courses that are taken and the individual project in level 4 must be in the area of the strand. The required and optional courses are listed in the table below:

Advice if you want to choose a strand. In semester 2 of level 3 you must choose:

Operating Systems OS(H) and Network Systems NS(H) for the Parallel and Distributed Systems strand; Database Systems DB(H) for the Data Management strand;

Cyber Security Fundamentals CSF(H) for the Information Security strand.

To keep you options open choose these four courses in semester 2 of level 3 this will leave all five strands open to you in level 4, however it will prevent you from taking certain courses due to prerequisite requirements. On the other hand, if you are sure of the strand you want to take, then choose as many strand courses in level 3 as possible, then what you learn can be used in your level 4 individual project.

Strand	Compulsory Courses	Optional Courses
Data	DB(H) (semester 2, level 3)	Choose at least 4 from:
Management		AI(H/M) (semester 1, level 4)
		BD(H/M) (semester 2, level 4) ¹
		CVMA(H) (semester 1, level 4)
		DL(M) (semester 2, level 4)
		IR(H/M) (semester 2, level 4)
		ML(H/M) (semester 1, level 4)
		RF(H) (semester 2, level 3/4)
		RS(H/M) (semester 2, level 4)
		TD(H/M) (semester 2, level 3/4)
		WS(H/M) (semester 2, level 4)
Human		Choose at least 3 from:
Computer Interaction		CI(M) (semester 2, level 3/4)
interaction		CSI(H) (semester 1, level 4)
		HCI(H/M) (semester 1, level 4)
		HCS(M) (semester 2, level 3/4)
		MobHCI(H/M) (semester 2, level 3/4)
Information	CSF(H) (semester 2, level 3)	Choose at least 3 from:
Security		FOR(M) (semester 2, level 3/4)
		CSD(M) (semester 2, level 4)
		HCS(M) (semester 2, level 4)
		SSE(M) (semester 2, level 4)
Parallel	NS(H) (semester 2, level 3)	Choose at least 3 from:
And Distributed	OS(H) (semester 2, level 3)	ASEP(H/M) (semester 1-2, level 4)
Systems		ANS(H) (semester 1, level 4)
		ASP(H/M) (semester 2, level 4)
		CA(H) (semester 1, level 4)
		DPT(H/M) (semester 1, level 4)
		FP(H) (semester 1, level 4)
		SSE(M) (semester 2, level 4)

Theoretical	Choose at least 4 from:
Computer Science	ALGII(H) (semester 1, level 4)
	CP(M) (semester 1, level 4)
	FP(H) (semester 1, level 4)
	ML(H/M) (semester 1, level 4)
	MRS(H/M) (semester 1, level 4)
	PL(H) (semester 2, level 3/4)
	TC(H) (semester 2, level 3/4)

SE3H/M and SEWP3M

SE3H/M and SEWP3M have the same options as CS3H described above but with different additional requirements.

For SE3H/M the requirements are:

- summer placement (between levels 3 and 4);
- at least one from Advanced Software Engineering Practices and Secured Software Engineering (level 4);
- at least one security course: Cyber Security Fundamentals (semester 2 of level 3 or level 4), Forensics (semester 2 of level 3 or level 4), or Human-Centred Security (semester 2 of level 4);
- Professional Skills and Issues (semester 1 of level 4).

For SEWP3M there are the following additional requirements:

- full year industrial placement (level 4);
- Software Engineering Individual Project (level 5);
- Software Engineering Full Year Placement Review (level 5);
- at least one from Advanced Software Engineering Practices and Secured Software Engineering (level 5);
- at least one security course: Cyber Security Fundamentals (semester 2 of level 3 or level 5), Cyber Security Forensics (semester 2 of level 3 or level 5), or Human-Centred Security (semester 2 of level 5);
- Professional Skills and Issues (semester 1 of level 5).

ESE3H

The ESE3H level 3 curriculum is fixed and has the following structure.

Professional Software Development PSD(H)	Systems Programming SP(H)		Team Project TP(H)
Professional Software Development PSD(H)	Network Systems NS(H)	Operating Systems OS(H)	Team Project TP(H)

The remaining (non-computing science) courses in level 3 for Electronic and Software Engineering are: Communication Systems 3; Control EE 3; Electronic Systems Design 3; Real-time Computer Systems 3; Either Digital Circuit Design 3 or Engineering Mathematics 3.

Requirements for Electronic and Software Engineering in level 4 are:

Engineering or CS ESE Project (40 credits); at least one from Advanced Software Engineering Practices and Secure Software Engineering; Professional Skills and Issues.

CS3+H/M

In level 3 CS3+H/M students must take 60 credits in Computing Science including:

- PSD(H) and TP(H) (both 10 credits run over both semesters);
- choose at least two of the following four first semester options: ALGI(H), DF(H) and IS(H), SP(H);
- in the second semester choose remaining course(s) from the optional courses (subject to timetabling constraints and pre-requisites).

Additional requirements for level 4 are:

60 credits in Computing Science;

individual project (20 credits);

40 credits from optional courses (subject to timetabling constraints and pre-requisites).

CS3 and CS3+ (Designated)

The CS3 designated level 3 curriculum is fixed with the following structure.

Professional Software Development PSD(H)		Systems Programming SP(H)	Interactive Systems IS(H)	Data Fundamentals DF(H)	Team Project TP(H)
Professional Software Development PSD(H)	Database Systems DB(H)				Team Project TP(H)

The remaining 40 credits are to be chosen from other non-computing subjects. In the case of the CS3+ designated curriculum, students must choose any two of the above courses; take 40 credits in other non-computing subjects and meet requirements for designated degree in other subject.

4.8 Optional Courses in Levels 3 and 4

Most courses consists of about 20 lectures with supporting tutorials and/or workshops, scheduled via three 1hour classes per week either in Semester 1 or Semester 2. CSC(H) runs in both semesters where most of the contact time will involve small-group sessions organised to suit the students' timetables. Occasionally, lectures, tutorials or seminars may be delivered by research assistants, research students or external speakers – their specialist knowledge and expertise often adds a great deal of value to the course in question. Their use will however be limited. This may not apply in the case of ASEP(H) and PSI(H) as these courses are specifically designed to involve external speakers to a greater extent.

Students are encouraged to consult your adviser of studies if you are in any doubt about your level 3 or 4 optional course choices. The Level Heads and the Honours Head are also available to provide advice.

In Level 4 we recommend you take 40 credits in each semester of level 4 do not overload semester 2 of level 4, given the importance of the individual project (40 credits).

If a course is offered at level H and M, choose level H advisory guideline: choose at most one course at level M. Further information about each course can be found on the respective Moodle course pages.

5 Level 4

The Level 4 curriculum consists of a project course that is compulsory for all students and a range of electives. The number of electives that you will take depends on the class you belong to.

All students (except CS4H+, INF and SE4WPM students) must take Professional Skills and Issues H in semester 1 of level 4. All MSci students (except SE4WPM students) must take Research Methods and Techniques M in semester 1 of level 4.

5.1 ENTRY TO LEVEL 4

Progression to level 4 for BSc students requires a GPA of 9.0 in level 3 and for MSci students a GPA of 12.0 in level 3. Students who do not obtain a GPA of 9.0 in level 3 can switch to a designated degree and MSci students with a GPA between 9.0 and 11.9 in level 3 can switch to a BSc programme.

5.2 Flexible Working Space

There is a separate flexible working space for study needs and interaction located in the centre area of BO618. Consumption of food and drink in this designated area is permitted, but please be considerate to others who may be working nearby, and please remember to put all rubbish in the bin.

5.3 Projects

All students (except ESE and SWYP students) are required to undertake an individual Computing Science project in Level 4. ESE students are required to undertake an individual project which may be supervised by either CS or E&EE staff, depending upon the emphasis of the project work. SWYP students complete a similar software engineering project in level 5 which is required to have a research focus. <u>Guidelines for the Conduct of Projects</u> are posted on the web. The weighting of the project depends on the class you belong to.

The deadline for the project dissertation to be submitted is **in the final week of the second teaching period** – the exact date will be found on Moodle. You should therefore ensure that any development of the product is completed by the middle of Semester 2 at the latest, to allow plenty of time for the dissertation write-up. You must submit an electronic copy of your project. You should also retain a copy for your own use (e.g., to show to prospective employers). Each project is assessed by the supervisor and an assigned *reader*, normally a member of academic staff.

Any project that is submitted late without reasonable justification (such as medical circumstances, for which appropriate supporting documentation must be provided) will incur a penalty of two bands per working day, or part thereof, beyond the submission deadline. Projects handed in 5 days late will be awarded an H band. Late submissions based on medical or other mitigating circumstances should be approved by the projects co-ordinator before the project submission deadline.

It is vital to make as much progress as possible on project work prior to the Christmas vacation, since you will find in Semester 2 that you will be very busy with writing the project dissertation and with coursework deadlines. Be sure to make good use of the two dedicated weeks for project work at the end of Semester 1. At the end of Semester 1 you will be required to write a short project summary (describing the project aims, work carried out to date and work planned for the next semester).

This will be assessed by your supervisor and his/her impression of the summary will form part of the professional conduct component of the overall project assessment.

During the penultimate week of Semester 2, you will be expected to demonstrate any software arising from your project to your supervisor and reader, and during the following week (i.e., the same week as the hand-in deadline), you will be required to make a short oral presentation on your project to your supervisor, reader, and other interested staff and students.

PLEASE NOTE: The main section (excluding appendices) of the project report must not exceed 40 pages for 40-credit projects and 30 pages for 20 credit projects.

Your project will be marked independently by your supervisor and reader. The precise marking scheme will depend on the nature of the project. Your supervisor will discuss the details of the marking scheme for your own project with you. However, the professional conduct and presentation skills components, each with a 5% weighting, cannot be altered.

University regulations and accreditation by BCS and IET require that a student should obtain an overall pass (i.e., D3 or above) for the Level 4 individual project to graduate with an Honours degree.

If your project involves the participation of other people, for example in an evaluation, then you should complete an ethics checklist form, and you may also need to apply for approval from the School Ethics Committee. See <u>www.dcs.gla.ac.uk/ethics</u> for more details.

5.4 Assessment and Examination

Typically, students tend to achieve higher bands for their assessed coursework than for examinations.

А	1st class standard (70-100%)
В	upper 2nd class standard (60-69%)
С	lower 2nd class standard (50-59%)
D	3rd class standard (40-49%)
E	narrow fail (30-39%)
F	clear fail (20-29%)
G	clear fail (10-19%)
Н	clear fail (0-9%)

5.4.1 Final Examination

Most courses are examined by a paper of 90 minutes' duration. The format of the paper will depend on the course. The exact rubrics of all papers will be posted during the session.

Within Level 4, single honours students complete a 40 credit individual project and eight 10 credit elective courses. Combined honours students complete a smaller 20 credit individual project and four 10 credit elective courses. Note that for SE and ESE students, the summer placement is counted as part of level 3, and the score for the placement is incorporated, retrospectively, into the Level 3 component of the assessment.

5.5 Conversion of Final Aggregation Scores into Honours Class

Each course and project in Levels 3 and 4 is assigned a band and associated score based on the notional mapping to percentages indicated in the table on <u>Moodle</u>. The degree classification is based on a student's overall performance in levels 3 and 4. The relating weightings of Level 3 and Level 4 used in computing a student's final degree classification are shown in the following table:

	CS, SE and INF, CS+	ESE
Level 4, including Project (if applicable)	60%	65%
Level 3, including Team Project and Placement (if applicable)	40%	35%

After aggregating grades, we follow the University policy for determining degree classification.

6 Level 5

6.1 Aims and Objectives

Level 5 is the final element in programmes leading to the Master in Science (MSci) in Computing Science, Software Engineering, Informatics, Computing Science combined with another subject. These programmes are extensions to the Honours programmes each providing a full five-year Masters programme offered as a first degree. They are designed as research-oriented programmes and thus feature a research project in level 5, as well as other research-related taught material. Full specifications of all the MSci programmes, including detailed aims and objectives, can be found on the <u>Senate website</u>.

6.2 Programme Structure and Calendar

For details of the content and organisation of the MSci in Computing Science combined with another subject, please consult the Programme Specification or contact the MSci Programme Director.

6.2.1 Computing Science, Software Engineering and Informatics

The Level 5 curriculum consists of 120 credits:

- MSci Research Project (80 credits) completed over semesters 1 and 2;
- Project Research Readings in Computing Science (10 credits) in semester 2;
- Three elective courses (10 credits each) in either semester 1 or 2.

Students must also take at least 120 credits at level M (including the project, PRRCS and RMT), and these can be taken over levels 3, 4 and 5.

6.2.2 Software Engineering with Work Placement

The Level 5 curriculum consists of 130 credits:

- Software Engineering Individual Project (40 credits) completed over semesters 1 and 2;
- Professional Skills and Issues (10 credits) in semester 1;
- Software Engineering Full Year Placement Review (10 credits) in semester 1;
- Seven elective courses (10 credits each) in either semester 1 or 2.

The electives must include one security-related course (if not taken in level 3) and at least one from Advanced Software Engineering Practices and Secured Software Engineering.

Students can take at most 30 credits at level H in their fifth year, and therefore at least 90 M level credits.

6.3 MSci Project

The following applies to Computing Science, Software Engineering and Informatics Projects. Details of the arrangements for MSci in Computing Science combined with another subject can be obtained from the MSci Programme Director. Details of the 40 credit SEWP project can be found on the moodle page for this project.

The MSci Project is the single most important element in Level 5, making up 80 out of 120 credits. All MSci students must undertake the MSci Project in Level 5. Students are expected to decide on a project topic and find a suitable supervisor. A short project outline and the name of the supervisor must be sent to the MSci Project Coordinator before the start of the academic session. Students will be notified of project allocations as soon as possible at the start of the academic session. Full details of the MSci project and the conduct of projects, including deadline dates, can be found on Moodle.

6.3.1 Interim Report Stage

First you will work on a one-to-one basis with your supervisor to develop the project and the feasibility of the approach at the same time you should survey the relevant research literature. The interim report is the first milestone of the project which should be submitted before the end of semester. The problem must be related to your specialism if you have chosen one and must be of a suitable level of difficulty. The interim report should include a clear statement of the research problem; a literature survey; and a proof of concept, feasibility study, or appropriate prototype to demonstrate you are capable of completing the proposed project.

Assessment of the interim report is performed out by the Project supervisor.

6.3.2 Research Project stage

After submitting the interim report in semester 1, over the remainder of semester 1 and all of semester 2, you will carry out an investigation of the research problem agreed in the report. This investigation will include regular meeting with your supervisor. By the end of the project you will submit a scientific paper (14 pages) that presents the results of your investigation. Your paper should reflect work of Masters character and quality, including a well-defined thesis and argument; evidence of a substantial literature review; research using appropriate methods and presenting valid results; and critical evaluation of the results, their significance, and their relationship to other relevant work. In addition to the scientific paper, you will give an Oral Presentation of your investigation to the relevant research group.

PLEASE NOTE: The Hand in for the Project is in the form of 1 Page Academic Paper. You must use the provided Latex template The Research Project and Oral Presentation will be assessed by the project supervisor and nominated reader, using a marking scheme appropriate to the project. More details of the assessment scheme are on Moodle.

6.4 Examinations and Assessments

The final MSci degree classification is based on a student's overall performance in levels 3, 4 and 5. The Board of Examiners shall have discretion to decide which of the alternative awards to recommend.

Students who fail to achieve a passing result for the MSci will be considered for the award of a BSc Hons degree, based on their results in levels 3 and 4, using the normal weighting for the relevant BSc Hons degree.

If a student has taken a Software Engineering summer placement prior to joining the MSci programme, that placement will be treated as a component of level 3 for purposes of assessment and credit allocation.

If a student has taken a Software Engineering year placement and there are issue with the placement, then the student may re-enter level 4 of the standard BSc (Hons) Computing Science programme.

We follow the <u>University policy for determining degree classification</u>, using the following weights for the three years of the programme:

	CS, SE and INF	SEYP
Level 5 (including project)	40%	50%
Level 4 (including project and placement if applicable)	36%	20%
Level 3 (including team project)	24%	30%

APPENDIX A - Plagiarism Guidelines

The guidelines for preparing submitted work can be summarised simply as follows:

Do your own work; do not expect anyone else to do any part of it for you. Whenever you have good reason to include or summarise another person's work, acknowledge it clearly. Take care not to allow any other student to copy your work.

See also the University's Avoiding Academic Misconduct – Quick Tips.

You should of course discuss your work with your lecturers, supervisors, tutors, and demonstrators, and seek help when needed. You may also discuss your work with other students in order to share ideas (provided that you do not share code, plans, or designs). Such discussions are a normal and healthy part of higher education.

Guidelines for software development (programs, spreadsheets, databases, etc.)

In the context of software development, plagiarism arises if you submit code written by another person, presenting it as your own work.

Copying another student's code is never acceptable, whether the code is typed in from a hand-written draft, typed in from a discarded printout, or copied electronically.

If you allow another student to copy your code, you are party to plagiarism; note that this includes making your code available to the public on websites such as GitHub. If you attempt to disguise copying by, for example, changing identifiers or comments, that does not change the fact of plagiarism.

If you collaborate with another student on what was meant to be an individual piece of programming work, and if you conceal the collaboration, that is plagiarism. If you clearly acknowledge the collaboration, that is not plagiarism, but you will be assessed based on your share of the work only.

If you reuse program code obtained from any source (such as a web site or textbook), that is plagiarism unless you clearly acknowledge the source. In larger programming assignments and projects, it is legitimate to reuse code with acknowledgement, but you will be assessed based on your own code.

Examples

Acceptable: Student A reminds student B where to find a file of source code provided by the lecturer.

Acceptable: Students A and B, discussing a programming assignment, decide that the quick-sort algorithm would be a suitable choice; each student then goes away and codes that algorithm independently.

Acceptable: Student A refers student B to a textbook example that illustrates a programming technique relevant to the current assignment.

Acceptable: Student A shows student B how to use a compiler feature.

Unacceptable: Student A tells student B how to do the current assignment.

Unacceptable: Student A finds a discarded printout of a program, retypes it, perhaps changing identifiers and comments in an attempt to disguise the source.

Unacceptable: Student A shows student B part of a solution to the current assignment.

Deprecated: As above, but student B clearly acknowledges the help from student A. Although this is not plagiarism, student B will lose marks for not completing the assignment individually.

Unacceptable: Student A reuses code from a textbook, without acknowledgement.

Deprecated: Student A reuses code from a textbook, but acknowledges its source by a comment prominently placed beside the code. Although this is not plagiarism, the student will not receive marks for the reused code unless the assignment clearly encourages such reuse.

Unacceptable: Students A and B collaborate on the design of a large program; each student then goes away and implements that design.

Acceptable: Students A, B, C, and D work together on a team programming assignment, stating clearly who did what.

A.1 Guidelines for Essays

In the context of an essay (whether coursework or examination), plagiarism arises if you include any text, diagrams, images, or even ideas generated by another person, presenting these as your own work. Occasionally it may be appropriate for you to quote another person's words verbatim, provided that you enclose the words in quotation marks and immediately acknowledge their source. For example:

"Testing can prove the presence of errors, but can never prove their absence." [Dijkstra]

Even where your essay summarises or paraphrases another person's work, you must still explicitly acknowledge it. If you copy another student's essay (or any part of it), that is plagiarism. If you allow another student to copy your essay, you are a party to plagiarism. If your essay includes diagrams, images, etc., taken from other sources, you must cite these sources. Failure to cite a source would amount to presenting another person's work as your own, which would be plagiarism.

Examples.

- Acceptable: Students A and B discuss the issue that is to be the subject of an essay assignment; both students then go away and write their essays independently.
- **Unacceptable**: Students A and B write an essay together; each student then goes away and makes changes.
- **Unacceptable**: Student A downloads an essay from an essay bank, perhaps making changes.
- **Unacceptable**: Student A asks a friend to write an essay for him/her.

A.2 Guidelines for writing project reports and dissertations

Every project culminates in a report or dissertation. This is a full account of the project work and may include code and/or documentation.

In the context of a report/dissertation, plagiarism arises if you include any text, diagrams, images, data, code, documentation, or even ideas generated by another person, presenting these as your own work.

A report/dissertation is expected to review relevant previous work. For example, every software development project should be influenced by ideas from previous projects; and every research project should be informed by relevant previous research. Your report/dissertation must therefore include a bibliography, which lists all books, articles, web sites, etc. that you consulted in the course of your project. In the text of your report/dissertation, wherever you mention previous work, you must explicitly cite the appropriate bibliographic item(s). Failure to cite the source would amount to an attempt to present another person's ideas as your own, which would be plagiarism.

Occasionally it may be appropriate for you to quote another person's words verbatim, provided that you enclose the words in quotation marks and immediately acknowledge their source. For example:

A.3 Use of Plagiarism Software

We are very good at spotting plagiarism in Essays and Dissertations. Therefore, it is in your best interest to eliminate plagiarised sections from your writing before submitting it. To help you with this, we will give you access to on-line plagiarism software (Turnitin) through moodle.

Briefly, you can upload a piece of writing for an exercise and it will compare it with a range of online and student materials, identifying sections in common. We would regard as plagiarism the inclusion of large sections of identical material and so you should use the software before submission, to ensure that you do not have a problem.

A.4 Contract Cheating

Please note that the use of a service such as Chegg, Freelancer, VWorker, Getacoder or EssayBay to do your coursework for you is a disciplinary offence. It could even lead to expulsion. These websites are monitored and if any of our assignments are found we will investigate further. It is best to do your own coursework so that you can gain the full benefit from your learning experience here at Glasgow.

A.5 The University of Glasgow Plagiarism Statement

The following is an extract from the University of Glasgow Plagiarism Statement. The full statement can be found in the <u>University Regulations and Guidelines</u>.

31.1 The University's degrees and other academic awards are given in recognition of a student's **personal achievement**. All work submitted by students for assessment is accepted on the understanding that it is the student's own effort.

31.2 Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without **acknowledgement of the sources**. Special cases of plagiarism can also arise from one student copying another student's work or from inappropriate collaboration.

31.3 The incorporation of material without formal and proper acknowledgement (even with no deliberate intent to cheat) can constitute plagiarism.

Work may be considered to be plagiarised if it consists of:

a direct quotation; a close paraphrase; an unacknowledged summary of a source; direct copying or transcription.

With regard to essays, reports and dissertations, the rule is: if information **or ideas** are obtained from any source, that source must be acknowledged according to the appropriate convention in that discipline; and **any direct quotation must be placed in quotation marks** and the source cited immediately. Any failure to acknowledge adequately or to cite properly other sources in

submitted work is plagiarism. Under examination conditions, material learnt by rote or close paraphrase will be expected to follow the usual rules of reference citation otherwise it will be considered as plagiarism. Schools should provide guidance on other appropriate use of references in examination conditions.

31.4 Plagiarism is considered to be an act of fraudulence and an offence against University discipline. Alleged plagiarism, at whatever stage of a student's studies, whether before or after graduation, will be investigated and dealt with appropriately by the University.

31.5 The University reserves the right to use plagiarism detection systems, which may be externally based, in the interests of improving academic standards when assessing student work.

If you are still unsure or unclear about what plagiarism is or need advice on how to avoid it

SEEK HELP NOW!

You can contact any one of the following for assistance:

Lecturer Course Leader Dissertation Supervisor Adviser of Studies <u>Student Learning Development (SLD)</u>

APPENDIX B – Conditions Of Use

	Prohibited						
\bigcirc	Using Equipment for Commercial Purposes		Game Playing				
	Food and Drink in labs		Mobile Phones with Activated Ring Tone				
XXX	Accessing Offensive Material	Install	Unapproved Installation of Software				
Cory	Copying Software without Approval	Tamper	Tampering with Equipment				
	Use of Unapproved Software	\bigcirc	Use another level's lab				
	Sharing your password		Storing Excessive amounts of non- teaching material				
	Lock the machine for more than 10 minutes while you are away		Listening to music during lab sessions				
\bigcirc	Data must not be stored or manipulated in or if you store other people's personal da coursework) you must anonymise it.						

	Permitted	
1 USB°	Connect Memory Stick	U
	Storing your address book	
	Email (Note that the privacy of your email is not guaranteed)	U
	Connect your personal devices (e.g. laptops, phones etc.) to the university wireless network	U
	Listening to music outside lab times with earphones	C
WW	Excessive Web Browsing	Discouraged

	Abide by University Email Regulations
	http://www.gla.ac.uk/services/it/regulationscommitteesandpolicies/
Always	http://www.gla.ac.uk/myglasgow/it/regulationscommitteesandpolicies/email//
	Follow Instructions given by staff members
Always	



The privacy of files in your filestore is **not guaranteed**. Support staff may, in the course of their duties, be required to explore and read files in your file store.

Appendix C – Code of Assessment (Honours Students)

The University Assessment Code subdivides grade A into 5 bands. Grades B-F are sub-divided into three bands, and grade G into two bands. For each band, there is a corresponding "aggregation-score" (in the range 1-22), which will be used for aggregation purposes and the award of classifications. The fourth row of the table below shows an example of a Computing Science mapping of percentages to each Band/Grade – this may differ from School to School.

The Descriptors associated with Honours classifications in the University Assessment Code are:

Primary verbal descriptors for attainment of Intended Learning Outcomes	Primary Honours classification	Aggregation scores (aggregated over course bands)
Exemplary range and depth of attainment of intended learning outcomes, secured by discriminating command of a comprehensive range of relevant materials and analyses, and by deployment of considered judgement relating to key issues, concepts and procedures	First	22 21 20 19 18
Conclusive attainment of virtually all intended learning outcomes, clearly grounded on a close familiarity with a wide range of supporting evidence, constructively utilised to reveal appreciable depth of understanding	Upper Second	17 16 15
Clear attainment of most of the intended learning outcomes, some more securely grasped than others, resting on a circumscribed range of evidence and displaying a variable depth of understanding	Lower Second	14 13 12
Acceptable attainment of intended learning outcomes, displaying a qualified familiarity with a minimally sufficient range of relevant materials, and a grasp of the analytical issues and concepts which is generally reasonable, albeit insecure	Third	11 10 9
Attainment deficient in respect of specific intended learning outcomes, with mixed evidence as to the depth of knowledge and weak deployment of arguments or deficient manipulations	Weak	8 7 6
Attainment of intended learning outcomes appreciably deficient in critical respects, lacking secure basis in relevant factual and analytical dimensions	Poor	5 4 3
Attainment of intended learning outcomes markedly deficient in respect of nearly all intended learning outcomes, with irrelevant use of materials and incomplete and flawed explanation	Very Poor	2 1
No convincing evidence of attainment of intended learning outcomes, such treatment of the subject as is in evidence being directionless and fragmentary		0

Appendix D – Important Information Regarding Examinations and Assessments

It is **YOUR** responsibility to bring any factors that may have affected your academic performance to the attention of the University and you must do this **as soon as possible**.

The Code of Assessment which is published in the <u>University Regulations and Guidelines</u> covers incomplete assessment and good. 'Good Cause' means illness or other adverse personal circumstances affecting you and resulting in you missing an examination, or failing to submit coursework on time, or your performance in the assessment being clearly prejudiced. [Chronic illness is not covered unless there has been a short-term worsening of the condition which specifically affects an assessment. If you have a long term chronic medical or mental health condition you are encouraged to register with the <u>Disability Services</u> if you have not already done so.

If it is accepted that your assessment was affected by good cause, the work in question will be set aside and you will (as far as is practicable) be given another opportunity to take the assessment with the affected attempt discounted. Please note that Boards of Examiners are not permitted to award marks based on undemonstrated performance and therefore your grade(s) will not be increased because your performance was impaired by medical or other personal circumstances.

Time Limit. You **MUST** notify the University no later than one week (i.e. within 7 days) after the date of the examination or the due date for submission of the assessment affected. The information you provide will be treated confidentially.

Please do not shy away from divulging important information. It will be treated sensitively. Without your information the Board of Examiners will not be able to take the matter into account. Furthermore, you will not be able to appeal against your assessment result on the grounds of adverse medical or personal circumstances unless you can provide a good reason why this information could not be presented in time.

How to Notify. A notification of good cause and supporting evidence must be completed following the guidelines in the University's <u>Student Absence Policy</u>.

If you were present for the examination, or submitted the assessment, but believe that illness or other personal circumstances affected your performance this must be reported, with appropriate evidence, in a notification of good cause on My Campus.

Evidence of Good Cause. This must be in the form of a report that describes the medical condition or other adverse personal circumstances. The report should include a supporting statement from an 'appropriate person' as defined in the University's <u>Student Absence Policy</u>. (In the event of a short-term worsening of a long-term condition, it is possible for your Disability Advisor to provide such a supporting statement if you have consulted the Disability Service during the period when the difficulties were occurring.)

Appendix E – Exam Process & Procedures

This appendix explains how we arrive at the final marks for Computing Science courses; in particular, how a percentage mark on an exam paper is returned as a point on the University's 22 point scale (corresponding to A1 to H grades).

The School and the University takes these procedures extremely seriously. The School has four external examiners (Two in Undergraduate, one each for Specialist Masters and Conversion Masters), who are appointed by the Senate Office and report directly to the Senate Office. They provide external scrutiny of our policies and procedures and are directly involved in the maintenance of our academic standards.

Our procedures are governed by the University's Code of Assessment.

Pre-Exam. Exam papers are set by the course lecturer, checked by another lecturer, and when the two are in agreement, sent to the appropriate external examiner for comment/corrections etc. At this stage questions such as the standard of the paper (which the lecturers endeavour to maintain from year to year) are raised as well as error-checking in both the exam paper and marking scheme.

Post-Exam. The following procedures occur after the exam paper is taken.

The paper is marked, using the previously agreed marking scheme.

Spot checking and cross checking and the exam marks is then performed by the course coordinator.

The marks are entered into School database and double-checked for errors.

A spreadsheet is produced for each exam, with the School's standard grade boundaries applied.

Scatterplots are also produced that show how each course compares to all other courses, in terms of overall performance, and shows how the bands compare to a particular student's average performance across all their courses. The scatterplots are not available to students.

The basic question that is addressed at the exam boards is: are the grade distributions appropriate? Such academic judgements will take into account a variety of factors. For example, extenuating circumstances may have to be addressed – a mistake in the exam paper may have occurred, or a fire drill may have disrupted the exam.

While the School endeavours to maintain grade boundaries from year-to-year, such circumstances do occur, and the procedures in place are to ensure they are correctly taken into account. These boundaries are discussed between the lecturers involved in the particular level (e.g. all Computing Science Level 4 lecturers), and a recommendation is made for each course. This is informed by the historical data, e.g. grade boundaries from previous levels. This collective setting of standards enables the performance of the cohort as a whole to be assessed, with this being fed into the discussions.

Our recommendations for the grade point boundaries (on the 22 point scale) are presented to the appropriate external examiner. Individual exam scripts are made available to the external. This is an important point – this is not just a numerical exercise – exam scripts are examined by the external examiner to ensure that the decisions are based on academic grounds.

Projects (with marks also returned directly on the 22 point scale) are also discussed at this stage.

The final decisions are taken by the full Exam Board, which is attended by the appropriate lecturers, the Honours and Level Heads, the Head of School, the Convenor of Teaching and Learning and the external examiners. The Exam Board

ratifies the marks and takes into account individual extenuating circumstances. Marks from individual courses – each on the 22 point scale – are combined to arrive at a final grade, in accordance with the University's published procedures. In the case of joint degree programmes, a representative of the other part of the programme attends the Exam Board (or visa-versa) and results for the two components are combined, again in accordance with the University's rules.

The final marks are uploaded directly to MyCampus by the Teaching Administration staff in the School.

I would be happy to explain these procedures further, if required: comments and questions should be sent to: <u>MaryEllen.Foster@glasgow.ac.uk</u>.

Appendix F – Student Exam Feedback Policy

Generic Feedback. Lecturers shall provide generic exam feedback via the course Moodle page, within 3 weeks of publication of exam results. This shall include the following.

- Comment on how well students coped with each question.
- A mapping from learning outcomes to exam questions, so that students can see where they did not achieve the learning outcomes. Where necessary, a pointer to the course slides/textbook will be provided.

Individual Feedback Only for Students Who MUST Resit to Progress/Graduate. Upon getting exam results, and realizing that they are unable to progress or graduate with the grades they have achieved:

- A. If a student thinks that there has been an administrative error (e.g. a section of your script was not marked or marks were not added up correctly), you should contact the <u>SoCS Helpdesk</u>, who will investigate this. Note that only administrative errors will be investigated; contacting the Helpdesk does not mean that your script will be reviewed, or remarked, by an academic member of staff. Students are strongly advised to consult the generic feedback on Moodle at this point. University Policy is that you cannot ask for the academic judgement on the quality of your work to be investigated.
- B. If a student who needs to take the resit to graduate or progress requires further assistance he/she must do the following:
 - Email the course coordinator within the 3 week cut off period to request more feedback.
 - After the cut off period, the course coordinator will arrange a feedback session, which can be either individual or in a group.
 - Feedback sessions will be student-driven. Students must attempt the exam questions themselves before the session. Students have to ask specific questions; the lecturer will then explain and clear up misunderstandings. Students do not learn from passive feedback and this ensures active engagement in the process.

For example, we will not respond to: "How do you do question 2?" We will respond to questions such as "I attempted question 2 using a BubbleSort. Why was BubbleSort the wrong choice?" or "I thought I should use a While loop to do question 2 – should I have used a For loop?" or "I got stuck doing the SQL query in 2(d) – I could not make it work with a join. What am I missing?"

Appendix G – How to generate your HEAR form MyCampus



1. Click on My Academic Record

Academics								
rollment	view my timetable 🕟							
<u>/ Classes</u> / Academic Record / Absence / Results		my choices ▶						
ther options 🔻 🛞								
	Acad	lemic Registrat	ion		16			
	Term	Academic Year	Career		Status			
	2013	2013-14	the design of the best		a state to			
Finances		2010 11	Undergraduate	V	Completed			
y Account		nt Summary	Undergraduate					
y Account ccount Inquiry anking Details	You o	nt Summary we 0.00.		2				
y Account	You o	nt Summary	0.00 0.00					
y Account ccount Inquiry anking Details irect Debit	You o Du Fu This n and fe Inquir	nt Summary we 0.00. Ie Now ture Due nay not reflect rec aes. For an updat y.	0.00 0.00 ent changes to your ed balance, click on	(? tuition				
y Account anking Details irect Debit nancial Aid iew Financial Aid ccept/Decline Awards	You o Du Fu This n and fe Inquir	It Summary we 0.00. Ie Now ture Due nay not reflect rec ees. For an updat	0.00 0.00 ent changes to your ed balance, click on	(? tuition				
y Account anking Details irect Debit nancial Aid iew Financial Aid ccept/Decline Awards	You o Du Fu This n and fe Inquir	nt Summary we 0.00. Ie Now ture Due nay not reflect rec aes. For an updat y.	0.00 0.00 ent changes to your ed balance, click on	(? tuition Account				
y Account anking Details irect Debit nancial Aid iew Financial Aid ccept/Decline Awards	You o Du Fu This n and fe Inquir Curren	nt Summary we 0.00. Ie Now ture Due nay not reflect rec aes. For an updat y.	0.00 0.00 ent changes to your ed balance, click on Sterling, make a p	(? tuition Account				
y Account anking Details irect Debit nancial Aid iew Financial Aid ccept/Decline Awards	You o Du Fu This n and fe Inquir Curren	It Summary we 0.00. Ine Now ture Due nay not reflect rec ses. For an updat y. ncy used is Pound	0.00 0.00 ent changes to your ed balance, click on Sterling, make a p	(? tuition Account				

2. Select View Electronic HEAR

go to 🔻 🛞

3. Click on View Report (Make sure pop-up blockers switch off)

	Academic Requirements	View my advisement report	My Program:	
nrc	What-If Report	Create a what-if scenario	L. Career - Undergraduate	
	Advisors	<u>View my advisors</u>	Program - Master of Arts L. UG Honours - Psychology,MA	
v 1	Transfer Credit	Evaluate my transfer credits		
	Course History	View my course history		
	Transcript	View Electronic HEAR		
e a	Certificate of Student Status	Request Certifying Letter		

4. Click View all Requested Reports - allows user to view previously requested HEARs

			go to	• (>)	
Enrollment	My Classes	My Academic Record	My Absence	My Results	

Find View All 🖾 🛛 First 🚺 1 of 1 🚺				
on User ID Future Release Reque	Institution	Description	Request Date	
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1100037M Immediate Processing 02/0	GLSGW	Electronic HEAR	02/07/2014	view report

Appendix H – Financial support available to University of Glasgow Students

The <u>University of Glasgow Financial Aid Team</u> offers financial support to registered students who are experiencing financial difficulties or hardship during the course of their studies.

SAAS HEI Discretionary and Childcare Funds

Government funding available via the University to home UK undergraduates and postgraduates who have received their full Student Loans Company (SLC) loan entitlement (when eligible).

Provides support across the academic session under several categories: accommodation; childcare; disability; mature student.

Students who live with their parent(s) are generally ineligible for funding.

Funding does not cover tuition fees and is not intended as a primary source of income.

Applicants must demonstrate clear hardship i.e. a monthly shortfall between income and expenditure across the academic session, in order to be considered.

Applicants must also take reasonable steps to reduce outgoings before submitting an application e.g. reducing budget for socialising; food budget; club memberships etc.

University Hardship Fund

University funds available to part-time and full-time registered students.

Students should exhaust all other resources available to them before submitting an application e.g. personal loans, overdraft etc.

The fund will not provide ongoing support to any single individual.

Applications from students undertaking a one-year Masters programme will only be considered in exceptional circumstances.

International students should refer to the International Student Support team before completing and application.

Crisis Loans

Cash loans of up to £250 available from the Financial Aid Team, Level 2 Fraser Building, 2-4pm Monday-Friday.

Loans are available to cover one-off unexpected hardship e.g. excessive bill, delayed/reduced payment from employment etc.

No interest charged.

Full information on eligibility and application processes is available via the hyperlinks above. If you have any questions regarding any of the funds please contact the Financial Aid Team – <u>reg.finaid@admin.gla.ac.uk</u>