UG & PGT Computer Science Student Handbook

Contents

(Last modified on 12/02/2021 15:49)

Welcome to New Students

Computer Science at the University of Liverpool has a history going back to the 1960s. As the subject grew in importance, the Department of Computer Science was created in 1982, to provide a focus for continued development within the University. Since then the Department has grown and flourished. We currently have over 50 members of academic staff and more than 15 members of professional services staff who provide excellent support for the running of the Department. We now expect to welcome around 400 new students including a number from Xi'an Jiaotong Liverpool University (XJTLU) in China. Like other University departments, we see ourselves as having a dual role: in research, aimed at developing new knowledge and understanding of the subject of Computer Science, and in teaching and learning, through which we seek to pass on this knowledge and understanding to others. In our University, the two activities are interwoven, and both staff and students participate in both. The distinction between teachers and students is not as clear as it is in earlier education; we see learning as a co-operative process that requires effort from both sides. In addition to our research-led teaching provision, we also provide support for developing students' employability skills through a variety of formal and informal activities that students have the opportunity to participate in.

You will probably find that study at the University will be more open-ended and less tightly structured than you have been used to. It may take you some time, also, to familiarise yourself with the organisation and ways of working of the University and the Department. Don't worry if you find these changes difficult at first; you will not be the only one feeling this way. I am sure that you will soon get used to the new way of life and study that you find here. In addition to the support offered by staff, the Department has a lively student society, CompSoc, which organises a variety of activities for computer science students to get involved in and meet others who are also studying the subject at our University.

Finally, if you do encounter problems, with your work or otherwise, please remember that my colleagues and I are all here to help you in any way we can. Each student has an Academic Advisor who can be contacted to provide advice throughout the duration of their studies. We all hope that your time at the University of Liverpool will be a happy and rewarding experience for you, and we will do our best to make it so.

I look forward to getting to know you during the coming year.

Professor Boris Konev
Head of Department of Computer Science

Section 1 – Information about the Department

1.1 Introduction

The Department of Computer Science, together with the Department of Electrical Engineering and Electronics, is part of the School of Electrical Engineering, Electronics and Computer Science. The interface between computer science and electrical engineering is where hardware meets software, for example in the domain of signal processing. Although computer science also has strong connections with mathematics (for example in the field of algorithms) and to an extent philosophy (for example in the fields of logic programming and the theory of computation), the relation with electrical engineering means that the two departments within the school are well matched, thus allowing students in both departments to benefit from the experience and knowhow available across the entire school.

The Department of Computer Science is located in the Ashton and George Holt Buildings. The Ashton Building houses the offices of the academic and administrative staff and the George Holt Building houses mainly the technical staff and the computer laboratories. The two buildings are linked by a corridor on the second floor.

The Department aims to provide students with an understanding of the basic principles of computer science, the current state of knowledge of the subject, and its application to the processing of information in all aspects of life and work. In addressing these aims, the Department's programmes all include a significant amount of material on the theory, design and implementation of computer systems while at the same time focusing on their individual specialist areas. We believe that all our programmes will provide students with skills that can be used immediately in industry and commerce as well as the broader view which is needed, for example to deal with issues arising from advances in technology, in management and in high level research. For more detailed information about the aims and philosophy of the Department see **Section 4.1**.

1.2 Student Handbook

This handbook aims to be a guide to life in the Department of Computer Science. It contains information on the structure of the Department, its staff, its committees, and other information useful to you throughout your studies. You are advised to read it thoroughly, in order to familiarise yourself with the practices and procedures of the Department. It does not replace any other communications you receive from the University, Faculty, or individual subject department, but should be read in conjunction with them. You should also be aware of the general rules and regulations of the University which apply to all students and should take note of the additional information issued by the University such as the 'Your University' handbook which can be found via the following link:
https://www.liverpool.ac.uk/student-administration/my-student-record/student-handbooks/students

1.3 Communication within the Department

Email
Students are provided with a University email account and once your registration is completed, all University communications will be sent to this account. It is very important that you check this daily during term-time, and regularly during vacation periods.

When emailing academic staff or professional services staff, please do so only from your University email account. Write in a professional, polite style, and remember to use an appropriate greeting and sign-off in all mails.

When contacting the Student Experience Team (SET), it is important to indicate your student ID number, which degree programme you are on and your year of study in all communications; this will help the SET to identify you more easily and respond to your enquiry efficiently.

Academic and professional services staff will not normally reply to emails outside normal office hours—in other words you should not expect a reply to your email in the evenings or at the weekend.

Please try to find information in this handbook or through the School or University web pages in the first instance; if you cannot find what you are looking for, let us know so that we can post that information for the benefit of other students. Your SET will also be able to answer many of your non-academic queries.

VITAL/Canvas
Students are expected to monitor information concerning their modules using the Virtual Learning Environments (VLEs) including VITAL and Canvas regularly.

The department has a VITAL page where you will find lots of useful announcements that the SET have posted. The page also contains links to the staff-student liaison committee minutes and other important documentation. It is regularly updated with news and information relevant to students.

External post
Sometimes we need to contact you via the external postal system so it is important that your school is kept informed of any changes to your address – both term-time and vacation. You can update your details via Liverpool Life. **Please check that your postal details and mobile phone details are accurate and up to date!**

Telephone contact
All staff have a direct telephone number and many have voicemail. Please note that when telephoning staff on a University telephone, you only need to dial the last 5 digits (e.g. for 7941234 you simply dial 41234). Calls made from outside the University or from a mobile require the full number. If you are dialling from outside the UK, use the prefix +44 (151).

Online communication and Departmental website: Information about particular modules may be provided via module specific web pages or the central University VITAL or Canvas system.

The Department of Computer Science websites can be found here:

External website: http://www.liv.ac.uk/computer-science/

Intranet: http://intranet.csc.liv.ac.uk/index.php/

(Last modified on 12/02/2021 15:49)

Noticeboards: Student noticeboards are situated on the first floor of the George Holt Building adjacent to Lab 1. General information including details of the Staff Student Liaison Committee, COMPSOC and careers will be found here.

Exam related information is available from the SET, if you have any issues accessing your examination information then please contact csstudy@liverpool.ac.uk.

1.4 Online Attendance/Coursework Database

The Department maintains a database (Student Activity Monitor [SAM]) which contains information about student activity, including attendance and assessed coursework. This can be accessed via: https://sam.csc.liv.ac.uk/COMP/

1.5 Student Representation within the Department

The views of students are valued by the Department and students are encouraged to provide feedback relating both to the content and provision of their programme of study, and also to any other aspects of the overall University environment.

Students should feel able to provide informal feedback to any member of staff. However, there are several mechanisms for providing formal feedback:

1.5.1 Staff Student Liaison Committee

Staff-Student Liaison Committees are established in accordance with the University Code of Practice on Student Representation available here.

Staff-Student Liaison Committees will normally meet at least three times a year. The membership, its terms of reference, and the manner in which it conducts its business will conform to the requirements of the Annex to the Code of Practice on Student Representation. Elections to the Staff-Student Liaison Committee will be carried out within the structure determined by the University Student Representation Steering Group, and Programme Representatives will be encouraged to attend the training provided for them by the Guild of Students. More information about becoming a student representative is available here: Course Representatives

The Department tries to be as open as possible in the way it runs, and students are encouraged to make their views heard. This is not to say every opinion will be acted upon because ultimately academic staff are responsible for using their judgement about how their subject should be taught and assessed. However, student opinion will always be listened to and seriously considered.

Representation on Committees
There are committees at Faculty and School Level and both include student representation. Committee reps are usually recruited through the SSLCs and you will hear more about these opportunities at the first SSLC. You can also find out more by contacting the Faculty Student Voice Coordinator, Jamie Bennett, (Jamie.bennett@liv.ac.uk) who is based in the Guild of Students, but works very closely with staff in the Faculty. (See Section 2.1 for contact details).

1.5.2 Representation on Committees

There are committees at Faculty and Department Level and both include student representation on their membership. Committee reps are usually recruited through the SSLCs and you will hear more about these opportunities at the first SSLC meeting. You can also find out more by contact the Faculty Student Voice Coordinator who is based in the Guild but works very closely with staff in the Faculty of Science and Engineering

1.5.3 End of Module Questionnaires

You will be invited to complete a questionnaire on each module that you study. Please make every effort to complete this, as comments are noted and can help to lead to improvements in content/delivery.

1.5.4 National Student Survey (NSS)

This survey is completed by final year students throughout the country towards the end of their study. Results are published nationally and allow prospective students to compare overall satisfaction at different institutions.

1.6 Student Societies

1.6.1 COMPSOC

The departmental student society is known as COMPSOC and all students in the Department are welcome to join. This society, which is associated with the University's Guild of Students, is run by students and involves various social and sporting activities. For further information you can contact the society via email Compsoc@society.liverpoolguild.org or check out Facebook page, which can be found here: https://www.facebook.com/groups/livcompsoc/

1.6.2 Computer Science Football Team

Computer Science FC is an 11 a-side football team that plays in the campus football Wednesday division. Further details of this will be emailed round during the start of term.

1.6.3 CyberSoc

CyberSoc is a community of hackers and security enthusiasts, offering talks from industry leaders, workshops to teach you new skills, opportunities to hack in CTF challenges, and support with pen testing. Everyone, from people just starting out with security, to people with years of experience, are welcome and will benefit from what CyberSoc has to offer.

For more information visit: https://www.cybersoc.cf
Sign up at: https://www.liverpoolguild.org/groups/cyber-security

1.6.4 Coding and Robotics Society

This is a society dedicated to engaging with electronics and coding at all levels, from complete beginners to cutting edge research. They meet weekly, run regular introductory sessions, as well as more advanced projects, tutorials, and workshops. They have connections with local and international businesses, providing the opportunity for real world experience and insight into how technology is shaping the modern world as well as networking opportunities, as well as close ties

with UoL's sister university in China, with whom they competed in the DJI Robomaster competition in Shenzen.

For more information and to join this society visit: https://www.liverpoolguild.org/groups/coding-and-robotics-society

1.7 Departmental Events

The Department holds weekly seminars which are open to students. Speakers include leading international researchers from the UK and beyond. The topics cover a wide range of computer science research. For details please see http://intranet.csc.liv.ac.uk/research/seminars/

From time to time, outside companies visit the Department to talk about careers. You will be advised of any such events by e-mail, and posters will also be displayed on the noticeboards.

1.8 Opportunities to Enhance Your CV

The My Liverpool interactive resource is a website where students can find out about a wide range of co- and extra- curricular activities that they can take part in to make the most of their time at Liverpool. These opportunities include sports, music, volunteering, mentoring, taking an additional course, learning a new language, being a Student Representative, joining a sports club or any of the 150+ Guild societies, and many more. The My Liverpool e-Portfolio system provides students with a summary of co- and extra- curricular activities that they have taken part in lasting more than 7 hours, and which will also include the opportunity for students to reflect on the skills developed through participating in these activities. Activities from the My Liverpool e-Portfolio will populate the Higher Education Achievement Reports (HEARs.)

You may also consider membership of professional societies, such as the British Computer Society (BCS) or the Association for Computing Machinery (ACM). For information on student membership, please see
http://www.bcs.org/category/10970
https://www.acm.org/membership/about-acm-membership

1.8.1 A Year in China – UG Students only
The Year in China is the University of Liverpool's exciting flagship programme enabling undergraduate students, from a huge range of departments the opportunity to spend one year at our sister university Xi'an Jiaotong-Liverpool University (XJTLU), following XJTLU's BA China Studies degree classes. More information is available here: Year in China

1.8.2 Study Abroad – UG students only
Semester Abroad
As part of your degree programme you may have the opportunity to study abroad. Studying abroad has huge personal and academic benefits, as well as giving you a head start in the graduate job market. We share good links with a wide range of worldwide exchange partners, resulting in many opportunities for students. More information is available here: Study Abroad

Summer Abroad

Summer Abroad programmes are short term summer placements, either participating in a summer school or a research project. The programmes do not count towards your degree and add no extra time to your studies. This means you can benefit from a university-supported study abroad experience outside of your degree programme. You can apply to many of the summer options regardless of your degree programme or your year of study. In some cases, you will be able to take subjects from outside your chosen academic discipline. For a full list of Summer Abroad opportunities available, check the Study Abroad Study Abroad - Where can I go?

1.8.3 Voluntary Work in the Department
Peer Mentoring
Each year the Department requires a number of students to be trained as peer mentors. Once trained, the peer mentor is linked to a small number of new UG students whom they will meet during Welcome Week or shortly after the start of the academic year. Their role is to offer practical advice to help new students settle into University life. Also see Section 6.1.6
Assisting with Open Days/Applicant Discovery Days
There are a number of occasions throughout the year when prospective students and their parents visit the Department to finalise their choice of a place to study. Current students are an important part of these visits and we generally look for a small number to help show visitors around the Department and to answer their questions.

1.8.4 Open Languages
Open Languages gives students the chance to study a language alongside their named degree programme. Students can start as a beginner, intermediate or advanced learner and progress accordingly depending on their previous experience with the language.
More information is available here: Open Languages

1.8.5 Demonstrating opportunity
Each year Postgraduate students are very warmly invited to participate in the Department's teaching by assisting lab classes and giving a helping hand with assessments. This usually provides a valuable job experience and supports the Department's teaching activities. Announcements will be sent to eligible students regarding this when at particular times of the academic year.

1.9 Fire Alarms/Safety

If you have any problems or questions about safety, please raise them with a member of staff or with the Departmental Safety Coordinator. See Section 2.4. The fire alarm in the Ashton building is tested weekly on a Wednesday at around 9:50. The fire alarm in the George Holt building is tested weekly on a Tuesday at around 10:00. If the fire bells ring continuously for longer than this (or at any other time), you should immediately leave the building by the nearest exit. Do not stop to collect personal items, or linger in the building. Do not use the lifts. Assemble in the quadrangle and do not attempt to re-enter the building until told by the fire safety officer that it is safe to do so. The Department has an EVAC chairs in the Ashton building and George Holt building – this is a universal evacuation solution for smooth stairway descent during an emergency.

Once a year, a fire safety evacuation practice will be held. The alarm will be sounded and the bells will ring continuously. This should be treated as if it were a real fire, and everyone should leave the building immediately.

Entering and Exiting the Ashton and George Holt Buildings

ASHTON BUILDING:
Entrance is via the main entrance in the Quadrangle.
To exit the GROUND FLOOR ONLY, use the Ashton Street exit.
To exit from the 1st, 2nd, and 3rd floors, go to the end of the corridor that leads to the VG&M and use the emergency exit that leads to the stairwell in the VG&M. Once on the ground floor, exit the VG&M via the doorway that leads to the Quadrangle.

GEORGE HOLT BUILDING:
The entrance and exit to this building is via the main entrance in the Quadrangle.
The stairwell to the left (as you walk in) is for ascending the building, and the stairwell to the right (as you walk in) is for descending the building.
There will be a one-way flow for people to follow on each floor. Like all things, a little common sense is required.

COMMON:
The policy of one person in an elevator at any one time must be adhered to.
Elevators should only be used if necessary, i.e. disabled person, moving/carrying heavy items (where use of stairs is not safe/practical), or similar.

Section 2 – Contacts

A list of all staff including rooms and telephone numbers can be found on the departmental website at http://intranet.csc.liv.ac.uk/people/staff.php. The sections below list the key contacts in the Academic, Professional Services and Technical staff.

2.1 Academic Staff

If you wish to see any member of the academic staff, please contact them by e-mail in the first instance to arrange a mutually convenient time. Module co-ordinators will also schedule office hours or drop-in sessions for their modules.

Role	Name	E-mail	Room
Head of Department	Prof Boris Konev	konev@liverpool.ac.uk	115
Deputy Head of Department (Teaching)	Dr Martin Gairing	M.Gairing@liverpool.ac.uk	303
Chair, Board of Studies	Prof Prudence Wong	P.Wong@liverpool.ac.uk	318
Disability and Dyslexia Contact (DDC)	Mr Phil Jimmieson	phil@liverpool.ac.uk	120
European Liaison Officer/Study Abroad (Erasmus/Socrates)	Dr Floriana Grasso	F.Grasso@liverpool.ac.uk	G16
Examination Officer	Dr John Fearnley	fearnley@liverpool.ac.uk	322

Role	Name	E-mail	Room
Academic Integrity and Assessments Officer	Prof Rida Laraki	rida@liverpool.ac.uk	H201D
Chair, UG Board of Examiners	Prof Paul Dunne	P.E.Dunne@liverpool.ac.uk	204
Chair, PGT Board of Examiners Chair, PGT Extenuating Circumstances Committee	Prof John Goulermas	J.Y.Goulermas@liverpool.ac.uk	219
Chair, UG Extenuating Circumstances Committee	Dr John Fearnley	fearnley@liverpool.ac.uk	322
School Publicity/ Contact with Industry	Dr Terry Payne	T.R.Payne@liverpool.ac.uk	218
Undergraduate Programme Directors	Dr Stuart Thomason G40A, G401, G404, GZ10, G40E	S.Thomason@liverpool.ac.uk	316
	Dr ValentinaTamma G402, G403, G61Z	V.Tamma@liverpool.ac.uk	212
	Mr Sebastian Coope GG1A (GG14), GG16	coopes@liverpool.ac.uk	G18
	Prof Piotr Krysta G3N4, GN34	P.Krysta@liverpool.ac.uk	313
Postgraduate Taught Programme Directors	Prof John Goulermas CSMS, CSAD, CSCI, CMBD, CDSM	J.Y.Goulermas@liverpool.ac.uk	219
	Prof Igor Potapov CSAI, CSCN, CMBI, CZSM	potapov@liverpool.ac.uk	315
UG Staff-Student Liaison Committee (Student Representation Officer)	Dr Thomas Carroll	Thomas.Carrroll2@liverpool.ac.uk	G14
PGT Staff-Student Liaison Committee (Student Representation Officer)	Dr Othon Michail	Othon.Michail@liverpool.ac.uk	Holt 214
Faculty Student Voice Coordinator	Mr Jamie Bennett	Jamie.Bennett@liverpool.ac.uk	Liverpool Guild of Students

2.2 Professional Services Staff

During COVID-19 restrictions, the SET will be available via MS Teams, email and the office telephones. If you wish to arrange a virtual meeting with one of the SET please either send an Outlook meeting request or an email with the subject 'Confidential meeting required' to csstudy@liverpool.ac.uk. Please ensure you include your full name and student ID when requesting meetings.

(Last modified on 12/02/2021 15:49)

The Computer Science Student Experience Team (SET) is located in the Student Office, room G09, ground floor, Ashton Building. The SET are responsible for all matters relating to students and are the first point of contact. The office is open Monday to Friday all year round (apart from bank holidays and University closed days) from 9.15 to 16.45, with the exception of Wednesday afternoons when it closes at 14:00.

The members of the SET are as follows (more information can all be found here):

Role	Name	E-mail	Tel	Location
Student Experience Team Leader	Mrs Jan Harding	csstudy@liverpool.ac.uk	0151 795 4234 0151 795 4275	5th floor, Electrical Engineering & Electronics (building no 235)
Student Experience Co-ordinator	Mrs Judith Birtall			G09, ground floor, Ashton Building
Student Experience Administrator	Miss Lindsay Chadwick			
On-Line Student Experience Administrator	Mrs Helen Mattocks			
Student Experience Administrative Assistant	Mr Jamie Murphy			
Student Experience Administrative Assistant	Miss Charlotte Dunne			

2.3 Technical Support Staff

The Technical Support Staff offer support for the teaching and research activities of the department. They can offer advice and support for any matters relating to the departmental computer systems, and can be contacted directly via the Helpdesk, which is located on the second floor of the George Holt Building (H225), or via email CSC-HelpDesk@liverpool.ac.uk.

Members of the team are as follows:

Name	E-mail	Tel
Mr Patrick Colleran	csc-helpdesk@liverpool.ac.uk	0151 795 4287
Mr Andrew Craig		
Mr Dave Nixon		
Mr Dave Shield		

(Last modified on 12/02/2021 15:49)

While COVID-19/Pandemic restrictions are in place, the Helpdesk in George Holt (H225) will remain closed. Students can attend a "Virtual Helpdesk" via a Zoom Meeting using this link:
https://intranet.csc.liv.ac.uk/helpdesk
The "Virtual Helpdesk" meetings are subject to the same hours of operation as the physical Helpdesk (H225), as detailed above. Emails to CSC-HelpDesk@liverpool.ac.uk can be sent at any time.

If you require a virtual meeting with a member of the support staff, outside of the specified hours of operation, email CSC-HelpDesk@liverpool.ac.uk with the subject heading "Zoom Meeting Request". Give details of the issue you wish to discuss and a suitable time to contact you. Please be aware that we may not always be able to accept the time you specify, and if this is the case an alternative time will be suggested.

2.4 Health and Safety Contacts

Role	Name	E-mail	Tel.	Location
School Health and Safety Officer	Dr David Donaghy	donaghy@liverpool.ac.uk	0151 795 7624	EEE
Departmental Safety Coordinator	Mr Paddy Colleran	Paddy.Colleran@liverpool.ac.uk	0151 795 4261	Room H205, George Holt Building
First Aider	Miss Rebekah Martin	Rebekah.Martin@liverpool.ac.uk	0151 795 4273	Room G07, Ashton Building
	Mrs Helen Mattocks	h.bradley@liverpool.ac.uk	0151 795 4276	
	Mr Andrew Craig	acraig@liverpool.ac.uk	0151 795 4269	Room H205, George Holt Building

2.5 Contact Details for the Department

Address:	Ashton Building
	Ashton Street
	Liverpool
	L69 3BX
Tel:	0151 795 4275/4234

Student Office email:	csstudy@liverpool.ac.uk
Helpdesk email:	csc-helpdesk@liverpool.ac.uk
External website:	http://www.liv.ac.uk/computer-science/
Intranet:	http://intranet.csc.liv.ac.uk/

(Last modified on 12/02/2021 15:49)

Section 3 – Programme Information

3.1 Introduction

The Board of Studies in Computer Science has overall responsibility for all aspects of the provision and assessment of undergraduate and taught postgraduate programmes within the Department. The Board of Studies comprises key academic members of staff and is chaired by Prof Prudence Wong. In addition, each of our degree programmes has a Programme Director who is responsible for the day to day running of the programme.

There are four UG directors within the Department:
1. Prof Piotr Krysta (GN34, formally known as N300)
2. Dr Stuart Thomason (G40A, GZ10, G401, G404, G40E)
3. Dr Valentina Tamma (Year in Industry programmes)
4. Mr Sebastian Coope (GG14 and GG16)

There are two such PGT directors within the Department:
1. Prof John Goulermas (CSAD, CSCI, CMBD, CSMS and CDSM)
2. Prof Igor Potapov (CSAI, CSCN, CMBI and CZSM)

For contact details see Section 2.1.

3.2 Programmes administered by the Department of Computer Science

Below is a brief description of the programmes offered by the Department. Detailed information about the programmes can be accessed via https://intranet.csc.liv.ac.uk/teaching/

Undergraduate Applicable Code of Practice framework/model and ordinance
CoPA Appendix B can be accessed via:
https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_B_2014-15_cop_assess.pdf
Ordinance
https://www.liverpool.ac.uk/media/livacuk/cgso/programmeordinances/ORDINANCE,37(A),General,Ordinance,for,Non-Clinical,Undergraduate,Degrees,from,2011-12.pdf

Postgraduate Applicable Code of Practice framework/model and ordinance
CoPA Appendix C can be accessed via:
https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_C_2015-16_cop_assess.pdf
Ordinance information can be accessed via:
https://www.liverpool.ac.uk/media/livacuk/cgso/programmeordinances/ORDINANCE,52(A),General,Ordinance,for,Modular,Masters,Degrees,PG,Diplomas,PG,Certs,and,PG,Awards,from,2014-15.pdf

3.2.1 UG BSc Degree Programmes

More information and detailed programme structures can be found in Appendix A of this Student Handbook.

Please note that programme information is currently being updated on the departmental intranet webpages.

1. <u>G40A/G400 BSc (Hons) Computer Science</u>
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=G400):
   This programme is directed at students with 'AS' level (or equivalent) in Mathematics and includes a significant amount of material relating to the theory of Computer Science. As of 2017/18, students can choose to maintain a mixture of modules throughout their degree or follow a specialism pathway in
   - <u>Artificial Intelligence</u>
     This is an exciting and revolutionary field of Computer Science, with cutting-edge applications in areas as diverse intelligent robotics and autonomous vehicles, healthcare, law, climate change and computer games.
   - <u>Algorithms and Optimisation</u>
     Algorithms are at the heart of every computer system. This specialism will introduce students to the fascinating world of design, analysis and the optimisation of algorithms, covering a wide range of relevant areas from finance to information security, and from biological systems to social networks.
   - <u>Data Science</u>
     This prepares students to fill the looming employment gap in the field of big data analytics, especially in the context of the skills required with respect to the application of High Performance Computing capabilities to address large scale data intensive problems that occur in many fields.

   Further information regarding this can be found in Appendix A.

2. <u>GZ10 BSc (Hons) Computer Science with Software Development</u>
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=GZ10):
   Software developers bring system designs to life. This specialism prepares students to build commercial-ready systems in prominent domains such as networks, the Web, mobile apps and computer games.

3.2.2 UG MEng Degree Programmes

1. <u>G401 MEng (Hons) Computer Science</u>
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=G401):
   This programme is designed for students who wish to include an element of research/near-research work in their undergraduate study. The programme comprises four years of study, with the first three years following the same programme as G40A/G400 students. The fourth year comprises four research-oriented taught modules, an individual project and a group project.

2. <u>G40E MEng (Hons) Computer Science with Education (with recommendation for Qualified Teacher Status)</u>
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=G40E):
   This is an opt-in programme after Year 2. The aim of the programme is to produce graduates who will have a complete and systematic understanding of the domain of computer science

(Last modified on 12/02/2021 15:49)

while at the same time gaining Qualified Teacher Status. As such this will enable students who successfully complete the programme to take up a rewarding career as teachers of Computer Science in schools. The programme is also designed equip students with the necessary skills required with respect to careers open to general Computer Science graduates.

3.2.3 UG Degree Programmes with a Year in Industry

1. G403 BSc (Hons) Computer Science with a Year in Industry
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=G403)

2. G404 MEng (Hons) Computer Science with a Year in Industry
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=G404)

3. G3N4 BSc (Hons) Financial Computing with a Year in Industry
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=G3N4)

4. GG16 BSc (Hons) Mathematics and Computer Science with a Year in Industry
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=GG16)

Please note that from 2018/19 the following programme was phased out to accommodate the new structures with specialism pathways drawn up during a review of the Year 1 and 2 programme provisions.

5. G402 BSc (Hons) Computing with a Year in Industry
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=G402)

These programmes address both the requirement to provide a core technical skill base and to equip students with an appreciation of how such skills will be used in practical commercial settings. They all follow the same structure as their equivalent programme without the year in industry but include a one-year placement with a commercial organisation in the third year.

3.2.4 UG Joint Degree Programmes

1. GG14 BSc (Hons) Mathematics and Computer Science
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=GG14):
   This programme combines the theory and practice of mathematics and computer science. The programme provides theoretical knowledge in mathematics that is fundamental to the computer science discipline and introduces concrete applications in computer science. Students will develop initiative by tackling problems in a rational analytic manner and forming balanced judgements.

2. GN34 BSc (Hons) Financial Computing
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=GN34):
   Financial Computing is the provision of financial services and markets using electronic communication and computation. This programme is designed to address the demand for graduates who have both the necessary computer skills and the knowledge of financial products to build finance applications. This programme is based in the Department of Computer Science and is taught in conjunction with the Management School.

3.2.5 UG Joint Degree Programmes with the Department of Electrical Engineering and Electronics (not administered by the Department of Computer Science)

1. **HH66 BEng (Hons) Computer Science and Electronic Engineering/GHK6 MEng (Hons) Computer Science and Electronic Engineering**

2. **HG6L BEng (Hons) Computer Science and Electronic Engineering with a Year in Industry:**

The aim of these programmes is to teach those aspects of Computer Science that have applications to Electronic Engineering while at the same time giving a balanced treatment of both subjects.

The Computer Science modules taken by each programme are given in Section 3.7. This handbook concentrates on the computing-related aspects of these degree programmes; please consult the links below for full details of the corresponding programme.

HH66:

http://www.liv.ac.uk/study/undergraduate/courses/computer-science-and-electronic-engineering-beng-hons/overview/

GHK6:

http://www.liv.ac.uk/study/undergraduate/courses/computer-science-and-electronic-engineering-meng-hons/overview/

HG6L:

http://www.liv.ac.uk/study/undergraduate/courses/computer-science-and-electronic-engineering-with-year-in-industry-beng-hons/overview/

3.2.6 MSc (PGT) Programmes

More information and detailed programme structures can be found in Appendix B of this Student Handbook.

Please note that programme information is currently being updated on the departmental intranet webpages.

The Department currently offers the following full-time on-campus MSc programmes:
1. MSc Computer Science (CSMS)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CSMS

2. MSc Advanced Computer Science (CSAD)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CSAD

3. MSc Advanced Computer Science with Internet Economics (CSCI)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CSCI

4. MSc Big Data and High Performance Computing (CMBD)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CMBD

5. MSc Data Science and Artificial Intelligence (CDSM)

The Department currently offers the following on-campus MSc programmes with a Year in Industry:

1. MSc Big Data and High Performance Computing with a Year in Industry (CMBI)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CMBI

2. MSc Advanced Computer Science with a Year in Industry (CSAI)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CSAI

3. MSc Advanced Computer Science with Internet Economics with a Year in Industry (CSCN)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CSCN

4. MSc Data Science and Artificial Intelligence with a Year in Industry (CZSM)
   https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CZSM

The Department currently also offers the following programmes as part-time on-campus MSc programmes:

1. MSc Computer Science (CSMS)
2. MSc Advanced Computer Science (CSAD)
3. MSc Advanced Computer Science with Internet Economics (CSCI)

More detailed information can be accessed via
http://intranet.csc.liv.ac.uk/teaching/programmes/index.php?level=pg.

Below is a brief description of the programmes offered by the Department.

MSc Computer Science (CSMS): The MSc in Computer Science is intended for graduates who do not hold an undergraduate degree in Computer Science but who wish to augment their existing knowledge with a good foundation in Computer Science as well as knowledge of research issues at the "cutting edge" of the discipline. The programme comprises a sequence of modules designed to both bring students "up to speed" and give a good understanding of a number of significant research areas. It is directed at careers in the IT industry that require some degree of research and development as well as more mainstream IT careers.

MSc Advanced Computer Science (CSAD): The MSc in Advanced Computer Science is intended for graduates who already have a first degree in Computer Science or a closely related subject, and who wish to extend the knowledge gained in their undergraduate study with more advanced specialised material reflecting current research at the "cutting edge" of the discipline. The programme comprises a sequence of modules focusing on the research strengths of the Department and is directed at careers in the IT industry that require a degree of research and development. It is also intended as a stepping stone for students who wish to continue their study to a higher level and undertake a PhD.

MSc Advanced Computer Science with Internet Economics (CSCI): The MSc Advanced Computer Science with Internet Economics is intended for graduates who already have a first degree in Computer Science, in Economics, or a closely related subject, and who wish to extend their knowledge with more advanced specialised material reflecting current research at the "cutting-edge" of the discipline of Algorithmic Game Theory, which lies at the intersection of economics and computer science.

(Last modified on 12/02/2021 15:49)

MSc Big Data and High Performance Computing (CMBD): The MSc in Big Data and High Performance Computing aims to provide students with an in depth understanding of big data analytics and processing using High Performance Computing technology. More specifically the programme is designed to allow students to gain a specialist qualification in an area of computing that has seen recent growth and in which there is expected to be a significant skills shortage.

MSc Data Science and Artificial Intelligence (CDSM): The MSc Data Science and Artificial Intelligence is a conversion master's, designed for students who have a first degree in a subject other than Computer Science (or a subject closely related to Computer Science), who wish to develop their knowledge and skills to start a career in the Data Science and Artificial Intelligence Industry. The course has been developed in close collaboration with a number of commercial partners including IBM to meet the skills gaps in this growing employment area.

3.2.7 MSc (PGT) Programmes with a Year in Industry

1. MSc Big Data and High Performance Computing with a Year in Industry (CMBI)
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CMBI)

2. MSc Advanced Computer Science with a Year in Industry (CSAI)
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CSAI)

3. MSc Advanced Computer Science with Internet Economics with a Year in Industry (CSCN)
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CSCN)

4. MSc Data Science and Artificial Intelligence with a Year in Industry (CZSM)
   (https://intranet.csc.liv.ac.uk/teaching/programmes/programme.php?pcode=CZSM)

The above MSc with a Year in Industry programmes are divided into two equally weighted years (years 1 and 2). The first year runs concurrently with the normal first and second undergraduate semesters, and comprises taught modules to a total of 60 credits per semester (120 credits in total). The placement takes place in the second year typically running concurrently with the normal first and second undergraduate semesters. This counts for a further 120 credits, making a total of 240 credits over the two year period. These programmes address both the requirement to provide a core technical skill base and to equip students with an appreciation of how such skills will be used in practical commercial settings. They all follow the same structure as their equivalent programme without the year in industry but include a one-year placement with a commercial organisation in the second year.

3.3   Change of Programme of Study

For UG students, it is possible that, having started out on a particular programme, you decide that you would prefer to follow one of the alternative degree programmes provided within Computer Science. Depending on the programme into which you wish to transfer, such changes can normally be accommodated as late as the end of your second year of study for UG students. However, you should note that it will **not** normally be possible to change your programme of study once you have started the final (Honours) year. It is also not normally possible to transfer between programmes if you are taking either GN34 (formally known as N300) or GG14 since these programmes involve modules from other departments and are structured differently.

(Last modified on 12/02/2021 15:49)

For PGT students, it is possible for you to change programme, we strongly advise you to do so in the first two weeks of the first semester, unless you are wanting to change to a Year in Industry Programme. Please speak to a member of the SET for further information.

If you are concerned that your current programme does not suit you, then you should first discuss this with your Academic Advisor or the appropriate Director of Studies. Please note the conditions below affecting change of programme.

If you decide to proceed, you should obtain and complete a Transfer Form (available from the SET csstudy@liverpool.ac.uk). This form must be signed by the appropriate Director of Studies in order for the change of programme to be implemented. All international students will also need the form signing by the International Advice and Guidance Team.
During COVID-19 restrictions if you wish to arrange a virtual meeting with one of the SET please either send an Outlook meeting request or an email with the subject 'Confidential meeting required' to csstudy@liverpool.ac.uk.
Please ensure you include your full name and student ID when requesting meetings.

3.4.1 Conditions affecting Change of Programme
Please note that the changes below relate to students on single honours degree UG programmes only.

Change of Programme to	Time	Conditions
G40A/G400	During Year 1 or start of Year 2	Students must have the appropriate mathematical pre-requisite (AS Level Mathematics at grade B or equivalent). However, students lacking the necessary mathematical background may be given approval if they perform very well during their first year of study, particularly on the modules COMP108 Algorithmic Foundations and COMP109 Foundations of Computer Science.
G401	Start of year 3	This is normally considered for G40A/G400 and G403, students at the end of the second year of study.
Programmes offering a year in industry	No later than start of Year 2	This would be dependent on Year 1 examination performance.

3.4.2 Change of Programme with a Year in Industry – UG students
UG students on these programmes must pass their second year of study at first attempt in order to proceed to the placement year. Students who fail to do so will be transferred to the corresponding programme without a year in industry.

3.5   Professional Accreditation

The single honours degree programmes, G40A, G403, GZ10 and G61Z are all accredited by the British Computer Society (BCS).   These programmes fully meet the academic requirement for registration for CITP (Chartered IT Professional) and partially meet the academic requirement for CEng (Chartered Engineer) registration and CSci (Chartered Scientist).

The MEng degree programme, G401 and G404, fully meets the academic requirement for registration for CITP (Chartered IT Professional) and CITP Further Learning and fully meets the academic requirement for registration as CEng (Chartered Engineer) and CSci (Chartered Scientist).

The BCS last visited the Department in October 2019 and the programmes are accredited until 2024. Further information about BCS accreditation can be found on the BCS website http://www.bcs.org.uk/. Further details on BCS membership are available from the Student Office (room G09).

The Institute of Engineering and Technology similarly accredits the Degree in Computer Science and Electronic Engineering (HH66), providing a route to Chartered Engineer status.

The British Computer Society (BCS) has accredited the MSc Computer Science (CSMS), MSc Advanced Computer Science (CSAD) and MSc Advanced Computer Science with Internet Economics (CSCI) programmes as fully meeting the educational requirement for Chartered IT Professional (CITP) Further Learning, and partially meeting the educational requirement for Chartered Scientist (CSCI) registration.

Full exemption means that students who successfully complete the programme qualify for full exemption from BCS Professional Examinations. Advanced Computer Science graduates can therefore attain Professional BCS Membership after a shortened period of relevant experience and training. For further information see http://www.bcs.org/.

3.6   Programme Structures: Programmes administered by the Department of Computer Science

For information regarding the programme structures, please refer to the following separate documents:

1. **UG CS Programme Structures for 2020-21 APPENDIX A**
2. **PGT CS Programme Structures for 2020-21 APPENDIX B**

If you require any further information, please contact the Computer Science Student Experience Team.

3.8   Summary Information on Modules

As can be seen in the programme structures, several degree programmes in Computer Science consist of modules, which are offered by other Departments. To ensure that the module content and options available are appropriate for students, the Board of Studies in Computer Science membership consists of academic representatives from other relevant Departments. Equally, the

(Last modified on 12/02/2021 15:49)

Department has academic representatives, which attend Board of Studies meetings for other relevant Departments.

The School's Timetabling Team, in conjunction with the University's Central Timetabling Team do their upmost to try and avoid any timetabling clashes. Unfortunately in some rare cases this cannot be prevented. If a student notices a timetabling clash they should please immediately contact the Student Experience Team (please see Section 2) to consider all available options.

3.8.1 Computer Science (CS) Modules
For pre-requisite and co-requisite information, please see Section 3.8.2.
For assessment and resit information, please see Section 3.8.3.

Module Code	Module Name	FHEQ Level	Semester	Credits	Module Co-ordinator	Notes for 2020/21
COMP101	Introduction to Programming	FHEQ level 4 (former UoL level 1)	1	15	Mr Keith Dures	
COMP105	Programming Language Paradigms	FHEQ level 4 (former UoL level 1)	1	15	Dr John Fearnley	
COMP107	Graduates for the Digital Society	FHEQ level 4 (former UoL level 1)	1	15	Dr Floriana Grasso	
COMP108	Data Structures and Algorithms	FHEQ level 4 (former UoL level 1)	2	15	Prof Prudence Wong	
COMP109	Foundations of Computer Science	FHEQ level 4 (former UoL level 1)	1	15	Prof Boris Konev	
COMP111	Introduction to Artificial Intelligence	FHEQ level 4 (former UoL level 1)	1	15	Prof Frank Wolter	
COMP116	Analytic Techniques for Computer Science	FHEQ level 4 (former UoL level 1)	2	15	Prof Paul Dunne	
COMP122	Object-Oriented Programming	FHEQ level 4 (former UoL level 1)	2	15	Dr Patrick Totzke	
COMP124	Computer Systems	FHEQ level 4 (former UoL level 1)	2	15	Dr Stuart Thomason	
COMP201	Software Engineering I	FHEQ level 5 (former UoL level 2)	1	15	Mr Sebastian Coope	
COMP202	Complexity of Algorithms	FHEQ level 5 (former UoL level 2)	2	15	Prof Piotr Krysta	
COMP207	Database Development	FHEQ level 5 (former UoL level 2)	1	15	Dr Rasmus Ibsen-Jensen	
COMP208	Group Project	FHEQ level 5 (former UoL level 2)	2	15	Dr Michele Zito	
COMP211	Computer Networks	FHEQ level 5 (former UoL level 2)	1	15	Dr Martin Gairing	
COMP212	Distributed Systems	FHEQ level 5 (former UoL level 2)	2	15	Dr Othon Michail	
COMP218	Decision, Computation and Language	FHEQ level 5 (former UoL level 2)	1	15	Dr Dominik Wojtczak	
COMP219	Advanced Artificial Intelligence	FHEQ level 5 (former UoL level 2)	1	15	Dr Xiaowei Huang	
COMP220	Software Development Tools	FHEQ level 5 (former UoL level 2)	2	15	Mr Sebastian Coope	
COMP221	Planning your Career	*FHEQ level 5 (former UoL level 2)*	1	7.5	Dr Valentina Tamma	

COMP222	Principles of Computer Games Design and Implementation	FHEQ level 5 (former UoL level 2)	2	15	Dr Konstantinos Tsakalidis	
COMP226	Computer-Based Trading in Financial Markets	FHEQ level 5 (former UoL level 2)	2	15	Prof Rahul Savani	
COMP228	App Development	FHEQ level 5 (former UoL level 2)	1	15	Mr Phil Jimmieson	Jointly taught with COMP327
COMP229	Introduction to Data Science	FHEQ level 5 (former UoL level 2)	1	15	Dr Vitaliy Kurlin	
COMP232	Cyber Security	FHEQ level 5 (former UoL level 2)	2	15	Dr Alexei Lisitsa	
COMP281	Principles of C and Memory Management	FHEQ level 5 (former UoL level 2)	2	7.5	Mr Phil Jimmieson	
COMP282	Advanced Object Oriented C Languages	FHEQ level 5 (former UoL level 2)	2	7.5	Dr Stuart Thomason	
COMP283	Applied Database Management	FHEQ level 5 (former UoL level 2)	2	7.5		not offered this year
COMP284	Scripting Languages	FHEQ level 5 (former UoL level 2)	2	7.5	Dr Ullrich Hustadt	
COMP285	Computer Aided Software Development	FHEQ level 5 (former UoL level 2)	2	7.5	Mr Sebastian Coope	
COMP299	Industrial Placement Year 3	FHEQ level 5 (former UoL level 2)	1&2	15	Dr Michael Bane	
COMP304	Knowledge Representation and Reasoning	FHEQ level 6 (former UoL level 3)	1	15	Dr Louwe Kuijer	Jointly taught with COMP521
COMP305	Biocomputation	FHEQ level 6 (former UoL level 3)	1	15	Dr Irina Biktasheva	
COMP309	Efficient Sequential Algorithms	FHEQ level 6 (former UoL level 3)	1	15	Dr Reino Niskanen	
COMP310	Multi-Agent Systems	FHEQ level 6 (former UoL level 3)	2	15	Dr Thomas Carroll	
COMP313	Formal Methods	FHEQ level 6 (former UoL level 3)	2	15	Dr Martin Zimmermann	
COMP315	Technologies for E-Commerce	FHEQ level 6 (former UoL level 3)	2	15	Dr Bakhtiar Amen	
COMP318	Ontologies and semantic web	FHEQ level 6 (former UoL level 3)	2	15	Dr Valentina Tamma	
COMP319	Software Engineering II	FHEQ level 6 (former UoL level 3)	1	15	Mr Sebastian Coope	
COMP323	Introduction to Computational Game Theory	FHEQ level 6 (former UoL level 3)	1	15	Prof Paul Spirakis	
COMP324	Complex Information Networks	FHEQ level 6 (former UoL level 3)	2	15	Dr Michele Zito	
COMP326	Computational Game Theory and Mechanism Design	FHEQ level 6 (former UoL level 3)	2	15	Dr Giorgos Christodoulou (with COMP559)	
COMP327	Mobile Computing	FHEQ level 6 (former UoL level 3)	1	15	Mr Phil Jimmieson	Jointly taught with COMP228
COMP328	High Performance Computing	FHEQ level 6 (former UoL level 3)	2	15	Dr Michael Bane	
COMP329	Robotics and Autonomous Systems	FHEQ level 6 (former UoL level 3)	1	15	Dr Terry Payne	
COMP331	Optimisation	FHEQ level 6 (former UoL level 3)	1	15	Dr Christian Ikenmeyer	Jointly taught with COMP557
COMP335	Communicating Computer Science	FHEQ level 6 (former UoL level 3)	1&2	15	Dr Stuart Thomason	Not offered this year
COMP336	Big Data Analysis	FHEQ level 6 (former UoL level 3)	1	15	Dr Bakhtiar Amen	Jointly taught with COMP529
COMP337	Data Mining and Visualisation	FHEQ level 6 (former UoL level 3)	2	15	Dr Viktor Zamaraev	Jointly taught with COMP527
COMP338	Computer Vision	FHEQ level 6 (former UoL level 3)	1	15	Dr Shan Luo	

(Last modified on 12/02/2021 15:49)

COMP390	Honours Year Computer Science Project	FHEQ level 6 (former UoL level 3)	1&2	30	Dr Stuart Thomason	
COMP391	Final Year First Semester 15 Credit Project	FHEQ level 6 (former UoL level 3)	1	15	Prof Rida Laraki	not offered this year
COMP392	Final Year Second Semester 15 Credit Project	FHEQ level 6 (former UoL level 3)	2	15	Prof Rida Laraki	
COMP396	Honours Year Automated Trading Group Project	FHEQ level 6 (former UoL level 3)	1&2	30	Dr John Fearnley	
COMP516	Research Methods in Computer Science	FHEQ level 7 (former UoL level M)	1	15	Dr Othon Michail	
COMP517	Software Development	FHEQ level 7 (former UoL level M)	1	15	Dr Thomas Carroll	
COMP518	Database and Information Systems	FHEQ level 7 (former UoL level M)	1	15	Dr Alkmini Sgouritsa	
COMP519	Web Programming	FHEQ level 7 (former UoL level M)	1	15	Dr Ullrich Hustadt	
COMP521	Knowledge Representation	FHEQ level 7 (former UoL level M)	1	15	Dr Louwe Kuijer	Jointly taught with COMP304
COMP522	Privacy and Security	FHEQ level 7 (former UoL level M)	1	15	Dr Jeffrey Ray	
COMP523	Advanced Algorithmic Techniques	FHEQ level 7 (former UoL level M)	1	15	Dr Aris Filos-Ratsikas	
COMP524	Safety and Dependability	FHEQ level 7 (former UoL level M)	2	15	Prof Sven Schewe	
COMP525	Reasoning about Action and Change	FHEQ level 7 (former UoL level M)	2	15		not offered this year
COMP526	Applied Algorithmics	FHEQ level 7 (former UoL level M)	2	15	Dr Sebastian Wild	
COMP527	Data Mining and Visualisation	FHEQ level 7 (former UoL level M)	2	15	Dr Viktor Zamaraev	Jointly taught with COMP337
COMP528	Multi-core and Multi-Processor Programming	FHEQ level 7 (former UoL level M)	1	15	Dr Michael Bane	
COMP529	Big Data Analysis	FHEQ level 7 (former UoL level M)	1	15	Dr Bakhtiar Amen	Jointly taught with COMP336
COMP530	Big Data Group Project	FHEQ level 7 (former UoL level M)	2	15	Dr Michael Bane	
COMP532	Machine Learning and BioInspired Optimisation	FHEQ level 7 (former UoL level M)	2	15	Dr Shan Luo	
COMP533	Maths and Statistics for AI and Data Science	FHEQ level 7 (former UoL level M)	1	15	Prof Leszek Gasieniec	
COMP534	Applied Artificial Intelligence	FHEQ level 7 (former UoL level M)	2	15	*tbc*	
COMP557	Optimisation	FHEQ level 7 (former UoL level M)	1	15	Dr Christian Ikenmeyer	Jointly taught with COMP331
COMP559	Algorithmic Game Theory	FHEQ level 7 (former UoL level M)	2	15	Dr Giorgos Christodoulou	Jointly taught with COMP326
COMP575	Computational Intelligence	FHEQ level 7 (former UoL level M)	2	15	Prof John Goulermas	
COMP590	MEng Final Year Project	FHEQ level 7 (former UoL level M)	2	60	Prof Rida Laraki	
COMP591	MEng Group Project	FHEQ level 7 (former UoL level M)	1	30	Prof Rida Laraki	
COMP592	MEng Individual Project	FHEQ level 7 (former UoL level M)	2	30	Prof Rida Laraki	
COMP598	MSc Placement Experience	FHEQ level 7 (former UoL level M)	1&2	60	Dr Reino Niskanen	
COMP599	MSc Industrial Project	FHEQ level 7 (former UoL level M)	1&2	60	Dr Reino Niskanen	
COMP702	MSc Project	FHEQ level 7 (former UoL level M)	Summer	60	Prof Leszek Gasieniec	

(Last modified on 12/02/2021 15:49)

3.8.2 Pre-requisite and Co-requisite Information for CS Modules

The following information should be referred to when selecting optional modules, in line with information provided in Appendix A and B.

Module Code	Pre-requisites #1	Pre-requisites #2	Pre-requisites #3	Co-requisites #1	Co-requisites #2
COMP101					
COMP105					
COMP107					
COMP108					
COMP109					
COMP111					
COMP116					
COMP122					
COMP124					
COMP201	COMP122				
COMP202	COMP108	COMP116			
COMP207	COMP122				
COMP208	COMP207	COMP201	COMP122		
COMP211	COMP122	COMP124			
COMP212	COMP108	COMP122			
COMP215	COMP207	COMP201	COMP122		
COMP218	COMP108	COMP109			
COMP219	COMP111	COMP116	COMP122		
COMP220	COMP201	COMP122			
COMP221	COMP107				
COMP222	COMP122	COMP111			
COMP226	COMP116				
COMP228	COMP122				
COMP229	COMP116				
COMP232	COMP211				
COMP281					
COMP282	COMP281				
COMP283	COMP207				
COMP284	COMP207	COMP107	COMP122		
COMP285	COMP201	COMP122			
COMP299					
COMP304	COMP111	COMP109			
COMP305	COMP116	COMP219			
COMP309	COMP202				
COMP310	COMP111				
COMP313	COMP109	COMP111			
COMP315					
COMP318	COMP211	COMP111			
COMP319	COMP201				
COMP323	COMP116				

COMP324	COMP202				
COMP326	COMP323				
COMP327					
COMP328	COMP122	COMP201	COMP281		
COMP329	COMP111	COMP116			
COMP331	COMP116	COMP202			
COMP335					
COMP336	COMP122				
COMP337	COMP116	COMP229			
COMP338	COMP116	COMP122			
COMP390					
COMP391					
COMP392					
COMP393					
COMP394					
COMP395					
COMP396	COMP226				
COMP516					
COMP517					
COMP518					
COMP519				COMP517	COMP518
COMP521					
COMP522					
COMP523					
COMP524					
COMP525					
COMP526	COMP516				
COMP527	COMP516				
COMP528					
COMP529					
COMP530	COMP516				
COMP532					
COMP557					
COMP559	COMP323				
COMP575					
COMP590	COMP516				
COMP591					
COMP592					
COMP593					
COMP598	COMP516			-	
COMP599					
COMP702	COMP516				

3.8.3 Assessment and Resit arrangement information for CS Modules

The following information has been taken from the Module Specifications and is intended to provide students with an overview of arrangements for each module.

Module Code	Assessment Strategy
COMP101	University assessment ID / Departmental assessment ID / Weighting: 101 / CA1 / 12% 101.1 / CA2 / 12% 101.2 / CA3 / 13% 101.3 / CA4 / 13% 101.4 / CA5 / 16% 101.5 / CA6 / 16% 101.6 / CA7 / 18% Anonymous marking is impossible. Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, Lab based resit exam will replace CA components, the Learning Outcomes will be covered in the resit exam.
COMP105	University assessment ID / Departmental assessment ID / Weighting: 105 / Class test / 25% 105.1 / CA1 / 20% 105.2 / CA2 / 20% 105.3 / CA3 / 25% 105.4 / CA4 / 10% Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / Lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, Lab based resit exam will replace CA components, the Learning Outcomes will be covered in the resit exam.

(Last modified on 12/02/2021 15:49)

COMP107	University assessment ID / Departmental assessment ID / Weighting: 107 / CA1 / 25% 107.1 / CA2 / 25% 107.2 / CA3 / 25% 107.3 / CA4 / 25% CA1: The students will work in a group to the production of a document aimed at evaluating the adoption of an information system in a given context. Students will research competitor products, will analyse the impact of the potential new system uptake, and will present arguments in favour and against such uptake. CA2: Students will work in a group to the production of a design of a database as a proof of concept of the system identified in Assignment 1, using Entity Relationship modelling. CA3: Students will work in groups towards a presentation introducing the proof of concept, pitching to a potential customer, paying special attention to ethical implications of their solution. Students will peer assess other groups presentations. CA4: Students will engage in a number of individual tasks towards setting up their personal e-portfolio. These will include collecting their experience on all assessments, participating to mock interviews and career advising sessions, and/or various activities organised by guest speakers. Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP108	University assessment ID / Departmental assessment ID / Weighting: 108 / Exam / 60% 108.1 / CA1 / 15% 108.2 / CA2 / 15% 108.3 / CA3 / 10% CA: 3 (sets of) assessment tasks. This work is not marked anonymously. Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. The Learning Outcomes will be demonstrated on appropriately selected examples in the assessments, therefore all of the assessments address the specified Learning Outcomes. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.

(Last modified on 12/02/2021 15:49)

COMP109	University assessment ID / Departmental assessment ID / Weighting:
	109 / Exam / 50%
	109.1 / CA1 / 10%
	109.2 / CA2 / 10%
	109.3 / CA3 / 10%
	109.4 / CA4 / 10%
	109.5 / CA5 / 10%
	This CA work is not marked anonymously.
	Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work.
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP111	University assessment ID / Departmental assessment ID / Weighting:
	111 / Exam / 50%
	111.1 / CA1 / 10%
	111.2 / CA2 / 10%
	111.3 / CA3 / 10%
	111.4 / CA4 / 10%
	111.5 / CA5 / 10%
	Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work.
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP116	University assessment ID / Departmental assessment ID / Weighting:
	116 / Exam / 60%
	116.1 / CA1 / 10%
	116.2 / CA2 / 15%
	116.3 / CA3 / 15%
	CA: Three class tests
	Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work.
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP122	University assessment ID / Departmental assessment ID / Weighting:
	122 / CA1 / 25%
	122.1 / CA2 / 25%
	122.2 / CA3 / 25%

	122.3 / CA4 / 15% 122.4 / CA5 / 10% Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, Lab based resit exam will replace CA components, the Learning Outcomes will be covered in the resit exam.
COMP124	University assessment ID / Departmental assessment ID / Weighting: 124 / Exam / 70% 124.1 / CA1 / 15% 124.2 / CA2 / 15% Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP201	University assessment ID / Departmental assessment ID / Weighting: 201 / Exam / 60% 201.1 / CA1 / 20% 201.2 / CA2 / 20% This CA work is not marked anonymously. Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP202	University assessment ID / Departmental assessment ID / Weighting: 202 / Exam / 70% 202.1 / CA1 / 15% 202.2 / CA2 / 15% CA1: Class test CA2: Assignment Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.

(Last modified on 12/02/2021 15:49)

COMP207	University assessment ID / Departmental assessment ID / Weighting: 207 / Exam / 70% 207.1 / CA1 / 15% 207.2 / CA2 / 15% This CA work is not marked anonymously. Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP208	University assessment ID / Departmental assessment ID / Weighting: 208 / CA3 / 8% 208.1 / CA2 / 12% 208.2 / CA1 / 15% 208.3 / CA4 / 15% 208.4 / CA5 / 50% CA1: Design CA2: Requirements Analysis CA3: Meeting Record CA4: Software Demonstration CA5: Portfolio and Individual Contribution. The Portfolio itself is worth 30%; the peer assessment exercise is worth 20%. Reassessment opportunity: Yes resit of failed CA components.
COMP211	University assessment ID / Departmental assessment ID / Weighting: 211 / Exam / 60% 211.1 / CA1 / 13% 211.2 / CA2 / 13% 211.3 / CA3 / 14% CA: 2 (sets of) assessment tasks. This work is not marked anonymously. Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.

(Last modified on 12/02/2021 15:49)

COMP212	University assessment ID / Departmental assessment ID / Weighting:
	212 / Exam / 70%
	212.1 / CA1 / 15%
	212.2 / CA2 / 15%
	CA: 2 (sets of) assessment tasks. This work is not marked anonymously.
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP218	University assessment ID / Departmental assessment ID / Weighting:
	218 / Exam / 70%
	218.1 / CA1 / 15%
	218.2 / CA2 / 15%
	CA: 2 class tests each contributing 15%. This work is marked anonymously.
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP219	University assessment ID / Departmental assessment ID / Weighting:
	219 / Exam / 70%
	219.1 / CA1 / 15%
	219.2 / CA2 / 15%
	CA1: Class test on Prolog (week 6). This work is marked anonymously.
	CA2: Class test on rest of syllabus (week 12). This work is marked anonymously
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP220	University assessment ID / Departmental assessment ID / Weighting:
	220 / Exam / 70%
	220.1 / CA1 / 15%
	220.2 / CA2 / 15%
	CA1: Class test
	CA2: Lab based assessment
	The CA work is not marked anonymously.
	Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work.
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP221	University assessment ID / Departmental assessment ID / Weighting:
	221 / CA1 / 100%
	If a student fails to pass the module at the first sitting, students on the Year in Industry programmes will be transferred to the equivalent programme without the placement year.

COMP222	University assessment ID / Departmental assessment ID / Weighting: 222 / Exam / 70% 222.1 / CA1 / 12% 222.2 / CA2 / 12% 222.3 / CA3 / 6% CA: 2 (sets of) assessment tasks. This work is not marked anonymously. Practical assessment is employed for both formative assessment and summative assessment. Students will get short formative feedback on a weekly basis from the module demonstrators during tutorial / lab sessions. More detailed summative and formative feedback will be returned following assessment of the continuously assessed (CA) work. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP226	University assessment ID / Departmental assessment ID / Weighting: 226 / Exam / 70% 226.1 / CA1 / 15% 226.2 / CA2 / 15% Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP228	University assessment ID / Departmental assessment ID / Weighting: 228 / Exam / 60% 228.1 / CA1 / 15% 228.2 / CA2 / 15% 228.3 / CA3 / 10% CA: Three (sets of) assessment tasks. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP229	University assessment ID / Departmental assessment ID / Weighting: 229 / Exam / 60% 229.1 / CA1 / 40% 4-5 formative assessments (marked by demonstrators) - using problems similar to exam questions, without a contribution to the final mark. Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP232	University assessment ID / Departmental assessment ID / Weighting: 232 / Exam / 60% 232.1 / CA1 / 10% 232.2 / CA2 / 10% 232.3 / CA3 / 10% 232.4 / CA4 / 10% Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.

COMP281	University assessment ID / Departmental assessment ID / Weighting: 281 / CA1 / 50% 281.1 / CA2 / 50% CA: Two (sets of) assessment tasks. Reassessment opportunity: Yes, each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall on the Friday prior to the start of the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP282	University assessment ID / Departmental assessment ID / Weighting: 282 / CA1 / 50% 282.1 / CA2 / 50% Reassessment opportunity: Yes, a single problem sheet to be solved in a three hour session in the departmental lab replaces all assessment tasks. Students are allowed internet access and the use of notes and textbooks during the session. The session will take place during the resit period and be scheduled by SAS. This lab based resit exam will replace CA components, the Learning Outcomes will be covered in the resit exam.
COMP284	University assessment ID / Departmental assessment ID / Weighting: 284 / CA1 / 50% 284.1 / CA2 / 50% CA: 2 assessment tasks, one for each of the scripting languages covered by the module. Failure on one or more assessment tasks can be compensated by higher marks on the other assessment tasks. Reassessment opportunity: Yes, each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the the task.
COMP285	University assessment ID / Departmental assessment ID / Weighting: 285 / CA1 / 50% 285.1 / CA2 / 50% Reassessment opportunity: Yes, each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.

COMP299	University assessment ID / Departmental assessment ID / Weighting: 299 / CA4 / 35% 299.1 / CA1 / 15% 299.2 / CA2 / 15% 299.3 / CA3 / 35% CA1: Introductory report: This report is marked by the academic supervisor and by a second marker who is another academic member of staff from the Department of Computer Science. CA2: Final Presentation: This report is marked by the industrial supervisor and second marked by the academic supervisor. CA3: Performance in the placement year: It is required for students to achieve a pass mark on this component in order for the module to be completed successfully. This report is marked by the industrial supervisor and second marked by the academic supervisor. CA4: Final report: This report is marked by the academic supervisor and by a second marker who is another academic member of staff from the Department of Computer Science. Reassessment opportunity: Yes for CA1 and CA4 only.
COMP304	University assessment ID / Departmental assessment ID / Weighting: 304 / Exam / 70% 304.1 / CA1 / 15% 304.2 / CA2 / 15% CA: Two class tests of 1 hour duration each to be held in a scheduled lecture or tutorial slot. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP305	University assessment ID / Departmental assessment ID / Weighting: 305 / Exam / 70% 305.1 / CA1 / 15% 305.2 / CA2 / 15% Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted. For MSc students there is no CA resit opportunity - the resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP309	University assessment ID / Departmental assessment ID / Weighting: 309 / Exam / 70% 309.1 / CA1 / 15% 309.2 / CA2 / 15% CA: 2 (sets of) assessment tasks. This work is not marked anonymously. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.

(Last modified on 12/02/2021 15:49)

COMP310	University assessment ID / Departmental assessment ID / Weighting:
	310 / Exam / 70%
	310.1 / CA1 / 15%
	310.2 / CA2 / 15%
	Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted. For MSc students, there is a resit opportunity during the resit period.
COMP313	University assessment ID / Departmental assessment ID / Weighting:
	313 / Exam / 70%
	313.1 / CA1 / 15%
	313.2 / CA2 / 15%
	Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP315	University assessment ID / Departmental assessment ID / Weighting:
	315 / Exam / 70%
	315.1 / CA1 / 15%
	315.2 / CA2 / 15%
	Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted. For MSc students, there is a resit opportunity during the resit period.
COMP318	University assessment ID / Departmental assessment ID / Weighting:
	318 / Exam / 70%
	318.1 / CA1 / 10%
	318.2 / CA2 / 10%
	318.3 / CA3 / 10%
	CA: 2 (sets of) assessment tasks. This work is not marked anonymously.
	Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted. For MSc students there is no CA resit opportunity - the resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP319	University assessment ID / Departmental assessment ID / Weighting:
	319 / Exam / 60%
	319.1 / Coursework / 20%
	319.2 / Coursework / 20%
	Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.

COMP323	University assessment ID / Departmental assessment ID / Weighting: 323 / Exam / 75% 323.1 / CA1 / 10% 323.2 / CA2 / 10% Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted. For MSc students there is no CA resit opportunity - the resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP324	University assessment ID / Departmental assessment ID / Weighting: 324 / Exam / 60% 324.1 / CA1 / 10% 324.2 / CA2 / 12% 324.3 / CA3 / 18% Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) extenuating circumstances have been accepted.
COMP326	University assessment ID / Departmental assessment ID / Weighting: 326 / Exam / 70% 326.1 / CA1 / 15% 326.2 / CA2 / 15% Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP327	University assessment ID / Departmental assessment ID / Weighting: 327 / Exam / 60% 327.1 / CA1 / 10% 327.2 / CA2 / 15% 327.3 / CA3 / 15% CA: 3 (sets of) assessment tasks. This work is not marked anonymously. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP328	University assessment ID / Departmental assessment ID / Weighting: 328 / Exam/ 55% 328.1 / CA1 / 18% 328.1 / CA2 / 12% 328.1 / CA3 / 15% Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.

COMP329	University assessment ID / Departmental assessment ID / Weighting: 329 / CA1 / 50% 329.1 / CA2 / 40% 329.2 / CA3 / 10% CA1: Assignment CA2: Class test CA3: Lab work Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP331	University assessment ID / Departmental assessment ID / Weighting: 331 / Exam / 70% 331.1 / CA1 / 15% 331.2 / CA2 / 15% Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP336	University assessment ID / Departmental assessment ID / Weighting: 336 / Exam / 60% 336.1 / CA1 / 20% 336.2 / CA2 / 20% CA: Two assessment tasks (Not marked anonymously, each of which is expected to take approximately 18 hours of work to complete - each involves installing software, writing code and writing a report). Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP337	University assessment ID / Departmental assessment ID / Weighting: 337 / Exam / 70% 337.1 / CA1 / 15% 337.2 / CA2 / 15% CA: Two programming assignments. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP338	University assessment ID / Departmental assessment ID / Weighting: 338 / Exam / 70% 338.1 / CA1 / 15% 338.2 / CA2 / 15% Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.

COMP390	University assessment ID / Departmental assessment ID / Weighting: 390 / CA3 / 60% 390.1 / CA1 / 15% 390.2 / CA2 / 25% CA1: Proposal CA2: Presentation CA3: Dissertation None of the project stages are marked anonymously. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP392	University assessment ID / Departmental assessment ID / Weighting: 392 / CA1 / 10% 392.1 / CA2 / 20% 392.2 / CA3 / 70% CA1: Specification CA2: Presentation CA3: Report None of the project stages are marked anonymously. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP396	University assessment ID / Departmental assessment ID / Weighting: 396 / CA1 / 20% 396.1 / CA2 / 30% 396.2 / CA3 / 50% CA1: Design Presentation/Documentation CA2: Evaluation of trading strategies CA3: Final report This work is not marked anonymously. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.

(Last modified on 12/02/2021 15:49)

COMP516	University assessment ID / Departmental assessment ID / Weighting: 516 / CA1 / 20% 516.1 / CA2 / 20% 516.2 / CA3 / 60% CA1: The group of students will deliver a presentation on their project in class. This work is not marked anonymously. CA2: A class test on the content covered in the lectures. CA3: The actual Research project of the groups submitted and assessed in the form of a final report. This work is not marked anonymously. Students will select a group project related to research (on a topic agreed between them and the examiner). This could include work on a research problem, literature review of a state-of-the-art or landmark CS topic, proposal of an MSc project, teaching and communications methods of research. Reassessment opportunity: Yes, CA resit opportunity available for CA2 and CA3 only. For CA1 there's no reassessment opportunity, as part of the task is speaking and maintaining eye-contact with larger audience. This is done during the lecture in front of all the other MSc (20+) students. It would be impossible to recreate such conditions during a resit. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP517	University assessment ID / Departmental assessment ID / Weighting: 517 / CA1 / 15% 517.1 / CA2 / 20% 517.2 / CA3 / 20% 517.3 / CA4 / 20% 517.4 / CA5 / 25% This work is not marked anonymously. Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.

(Last modified on 12/02/2021 15:49)

COMP518	University assessment ID / Departmental assessment ID / Weighting:
	518 / Exam / 25%
	518.1 / CA1 / 25%
	518.2 / CA2 / 25%
	518.3 / CA3 / 25%
	Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP519	University assessment ID / Departmental assessment ID / Weighting:
	519 / CA1 / 25%
	519.1 / CA2 / 25%
	519.2 / CA3 / 25%
	519.3 / CA4 / 25%
	This work is not marked anonymously.
	Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP521	University assessment ID / Departmental assessment ID / Weighting:
	521 / Exam / 70%
	521.1 / CA1 / 15%
	521.2 / CA2 / 15%
	CA: Two class tests of 1 hour duration each to be held in a scheduled lecture or tutorial slot.
	Reassessment opportunity: Yes, resit exam will replace failed CA components, the Learning Outcomes will be covered in the resit exam.
COMP522	University assessment ID / Departmental assessment ID / Weighting:
	522 / Exam / 60%
	522.1 / CA1 / 20%
	522.2 / CA2 / 20%
	Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.

(Last modified on 12/02/2021 15:49)

COMP523	University assessment ID / Departmental assessment ID / Weighting:
	523 / Exam / 70%
	523.1 / CA1 / 15%
	523.2 / CA2 / 15%
	Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP524	University assessment ID / Departmental assessment ID / Weighting:
	524 / Exam / 70%
	524.1 / CA1 / 15%
	524.2 / CA2 / 15%
	CA: two assessment tasks. This work is not marked anonymously.
	Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP526	University assessment ID / Departmental assessment ID / Weighting:
	526 / Exam / 50%
	526.1 / CA1 / 10%
	526.2 / CA2 / 10%
	526.3 / CA3 / 10%
	526.4 / CA4 / 15%
	526.5 / CA5 / 5%
	CA: There are five assessment tasks (e.g., assignments, quizzes). This work is not marked anonymously.
	Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.

COMP527	University assessment ID / Departmental assessment ID / Weighting: 527 / Exam / 70% 527.1 / CA1 / 15% 527.2 / CA2 / 15% CA: Two programming assignments. Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP528	University assessment ID / Departmental assessment ID / Weighting: 528 / Exam / 50% 528.1 / CA1 / 11% 528.2 / CA2 / 11% 528.3 / CA3 / 12% 528.4 / CA4 / 16% Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP529	University assessment ID / Departmental assessment ID / Weighting: 529 / Exam / 60% 529.1 / CA1 / 20% 529.2 / CA2 / 20% Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP530	University assessment ID / Departmental assessment ID / Weighting: 530 / CA1 / 20% 530.1 / CA2 / 20% 530.2 / CA3 / 60% Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit

assessment task will be provided at least four weeks before the deadline for the submission of work for the task.

COMP532	University assessment ID / Departmental assessment ID / Weighting: 532 / Exam / 70% 532.1 / CA1 / 10% 532.2 / CA2 / 10% CA1: The first report will be due in week 6. The first report will concern a task related to the state of the art literature in RL, evolutionary game theory, swarm intelligence (with a max of 5 pages). CA2: The second report will be due in week 10. The report of the second task will revolve around a student presentation during the tutorial sessions on one of the bio-inspired methods discussed during formal lectures (with a max of 5 pages). Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP533	There will be three programming assignments (10% each) and one (video) presentation (10%). This is concluded with the final examination (60%). University assessment ID / Departmental assessment ID / Weighting: 533 / Exam / 60% 533.1 / CA1 / 10% 533.2 / CA2 / 10% 533.3 / CA3 / 10% 533.4 / CA4 / 10% Reassessment opportunity: to be confirmed
COMP534	The module will be 100% CA assessed consisting of 3 assignments. 534 / CA1 / 35% 534.1 / CA2 / 35% 534.2 / CA3 / 30% Reassessment opportunity: to be confirmed

(Last modified on 12/02/2021 15:49)

COMP557	University assessment ID / Departmental assessment ID / Weighting: 557 / Exam / 70% 557.1 / CA1 / 15% 557.2 / CA2 / 15% Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP559	University assessment ID / Departmental assessment ID / Weighting: 559 / Exam / 70% 559.1 / CA1 / 15% 559.2 / CA2 / 15% CA: This work is not marked anonymously. Reassessment opportunity: Yes, CA resit opportunity available. Each resit assessment task will be different from the original assessment, except in the case of a skills-based assessment task, but the type of assessment will be the same; the deadline for the submission of work for each resit assessment task will be set by the module co-ordinator and will be part of the description of the assessment task; the deadline will typically fall within the resit period; the description of a resit assessment task will be provided at least four weeks before the deadline for the submission of work for the task.
COMP575	University assessment ID / Departmental assessment ID / Weighting: 575 / Exam / 70% 575.1 / CA1 / 30% Reassessment opportunity: Yes, resit exam.
COMP590	University assessment ID / Departmental assessment ID / Weighting: 590 / CA1 / 10% 590.1 / CA2 / 10% 590.2 / CA3 / 20% 590.3 / CA4 / 60% CA1: Specification CA2: Design presentation and documentation CA3: Final presentation including, where appropriate, software demonstration CA4: Dissertation This work is not marked anonymously. No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.

COMP591	University assessment ID / Departmental assessment ID / Weighting: 591 / CA3 / 60% 591.1 / CA1 / 20% 591.2 / CA2 / 20% Three Continuous Assessment Assignments are as following: CA1: Specification presentation and documentation. CA2: Final presentation including, where appropriate, software demonstration. CA3: Group report, individual report, peer assessment. This is the final assessment of the project. This work will not be marked anonymously. No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP592	University assessment ID / Departmental assessment ID / Weighting: 592 / CA3 / 60% 592.1 / CA1 / 20% 592.2 / CA2 / 20% CA1: Specification and Design CA2: Presentation CA3: Dissertation None of the project stages are marked anonymously. No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP593	University assessment ID / Departmental assessment ID / Weighting: 593 / CA3 / 65% 593.1 / CA1 / 15% 593.2 / CA2 / 25% CA1: Proposal CA2: Demonstration CA3: Dissertation None of the project stages are marked anonymously. Reassessment opportunity: No resit opportunity for final year students, only at the next ordinary sitting (subject to confirmation by the Board of Examiners) unless extenuating circumstances have been accepted.
COMP598	University assessment ID / Departmental assessment ID / Weighting: 598 / CA1 / 100% This module is PASS / FAIL only. Reassessment opportunity: No, if a student fails to pass the module at the first sitting, students on the Year in Industry programmes will be transferred to the equivalent programme without the placement year.

(Last modified on 12/02/2021 15:49)

COMP599	University assessment ID / Departmental assessment ID / Weighting:
	599 / CA1 / 20%
	599.1 / CA2 / 20%
	599.2 / CA3 / 60%
	Reassessment opportunity: No, if a student fails to pass the module at the first sitting, students on the Year in Industry programmes will be transferred to the equivalent programme without the placement year.
COMP702	University assessment ID / Departmental assessment ID / Weighting:
	702 / CA1 / 20%
	702.1 / CA2 / 20%
	702.2 / CA3 / 60%
	CA1: Specification and Proposed Design: Report and demonstration of the design.
	CA2: Demonstration/Presentation of Results: Report and demonstration of software (where applicable).
	CA3: Dissertation
	This work is not marked anonymously.
	Reassessment opportunity: Yes, only at the next ordinary sitting (subject to confirmation by the Board of Examiners), marks will be capped at 50% unless extenuating circumstances have been accepted.

3.8.4 Management School Modules

Further information about the modules listed below is available via

- https://www.liverpool.ac.uk/study/undergraduate/courses/business-management-ba-hons/module-details/
- https://www.liverpool.ac.uk/study/postgraduate-taught/taught/advanced-computer-science-with-internet-economics-msc/module-details/

The following modules are owed by the Management School, any problems relating to or affecting your studies (for example Extenuating Circumstances) on these modules should be forwarded to their Student Experience Team:
UG: ulmsugenq@liverpool.ac.uk
PGT: ulmspgenq@liverpool.ac.uk

All modules are worth 15 credits.

Code	Title	Semester	Pre-requisites	% CA	% Exam
ACFI101	Introduction to Financial Accounting	1	-	30	70
ACFI102	Introduction to Management Accounting	2	-	0	100
ACFI103	Introduction to Finance	2	-	0	100

Code	Title	Semester	Pre-requisites	% CA	% Exam
ECON121	Principles of Microeconomics	1	-	0	20/80
ACFI201	Financial Reporting 1	1	ACFI101 or ACFI104	0	100
ACFI202	Accounting Theory	2	ACFI201	30	70
ACFI204	Financial Management	1	ACFI102 or ACFI103 and either ACFI111 or ECON111 or equivalent.	0	100
ECON241	Securities Markets	2	ECON121 or ECON123 or ACFI103	25	75
MKIB225	International Business	2	-	50	50
ACFI302	Corporate Reporting and Analysis	2	ACFI101 ACFI201 ACFI309	30	70
ACFI314	Quantitative Business Finance	1	ACFI204		100
ACFI309	Financial Reporting 2	1	ACFI101 ACFI201	0	100
ACFI341	Finance and Markets	2	ACFI314	0	20/80
EBUS301	E-Business Models and Strategy	1	-	100	0
MKIB351	Global Strategic Management	1	MKIB225 or MKIB253	30	10/60
ECON915	Microeconomic Theory	1	-	20	80

3.8.5 Mathematics Department Modules

Further information about the modules listed below is available at https://www.liverpool.ac.uk/study/undergraduate/courses/mathematics-and-computer-science-bsc-joint-hons/module-details/

The following modules are owed by Mathematical Sciences any problems relating to or affecting your studies (for example Extenuating Circumstances claims) on these modules should be forwarded to the Maths Student Experience Team: mathstudentsupport@liverpool.ac.uk

All modules are worth 15 credits.

Code	Title	Semester	Pre-requisites	% CA	% Exam	
Level 4						
MATH101	Calculus I	1	A Level Mathematics.	20	80	
MATH102	Calculus II	2	MATH101 MATH103	20	80	

49

Code	Title	Semester	Pre-requisites	% CA	% Exam	
MATH103	Introduction to Linear Algebra	1	A level mathematics or equivalent.	20	80	
MATH122	Newtonian Mechanics	2	MATH101 MATH103	20	80	
MATH142	Numbers, Groups and Codes	2	-	20	20/60	
MATH162	Introduction to Statistics	2	A level mathematics	20	80	Not offered in 2020/21
MATH163	Introduction to Statistics using R	2	A level mathematics	50	50	Replacement for MATH162 in 2020/21
Level 5						
MATH201	Ordinary Differential Equations	1	MATH101-3	25	75	
MATH206	Group Project Module	2	-	100	0	
MATH224	Introduction to the Methods of Applied Mathematics	2	MATH101-3	10	90	
MATH225	Vector Calculus with Applications in Fluid Mechanics	1	MATH101 MATH102	15	85	
MATH227	Mathematical Models: Microeconomics & Population Dynamics	1	MATH101-3	10	90	
MATH228	Classical Mechanics	2	MATH101-3 MATH122	10	90	
MATH241	Metric Spaces and Calculus	1	MATH101-3	10	90	
MATH243	Complex Functions	1	MATH101-3	20	80	
MATH244	Linear Algebra and Geometry	1	MATH101-3	10	90	
MATH247	Commutative Algebra	2	MATH101-3	10	90	
MATH248	Geometry of Curves	2	MATH101-3	10	90	
MATH261	Introduction to Methods of Operational Research	1	MATH101-3	10	90	
MATH263	Statistical Theory and Methods I	2	MATH101-3 MATH162	15	85	
MATH264	Statistical Theory and Methods II	2	MATH101 MATH103 MATH162	10	90	
MATH266	Numerical Methods	2	MATH101-3	10	90	

(Last modified on 12/02/2021 15:49)

Code	Title	Semester	Pre-requisites	% CA	% Exam	
MATH322	Chaos and Dynamical Systems	1	MATH101 MATH103 MATH122	0	100	
MATH323	Further Methods of Applied Mathematics	1	MATH101-3 MATH224	0	100	
MATH324	Cartesian Tensors and Mathematical Models of Solids and Viscous Fluids	1	MATH101-3	0	100	
MATH325	Quantum Mechanics	1	MATH101-3, MATH122; MATH201 or MATH224	0	100	
MATH326	Relativity	1	MATH101-3 MATH122	0	100	
MATH331	Mathematical Economics	2	MATH101-3 MATH227 preferred	0	100	
MATH332	Population Dynamics	2	MATH101-3, MATH201	0	100	
MATH342	Number Theory	2	MATH101 MATH103; MATH142 or MATH343	0	100	
MATH343	Group Theory	1	MATH101 MATH103; MATH142 or MATH244 or MATH247 helpful	10	90	
MATH344	Combinatorics	1	MATH101-3	10	90	
MATH349	Differential Geometry	2	MATH101-3, MATH248 recommended	15	85	
Not on tulip						
MATH361	Theory of Statistical Inference	2	MATH101-3 MATH162 MATH263 and preferably MATH264	10	90	
MATH362	Applied Probability	1	MATH101 MATH103 MATH162 MATH264	0	100	
MATH363	Linear Statistical Models	1	Math101-3 MATH162 MATH263		100	
MATH364	Medical Statistics	2	MATH101-3 MATH162 MATH263	0	100	

(Last modified on 12/02/2021 15:49)

Code	Title	Semester	Pre-requisites	% CA	% Exam	
MATH366	Mathematical Risk Theory	2	MATH101 MATH103 MATH162 MATH264	0	100	
MATH367	Networks in Theory and Practice	1	2nd Yr Maths	0	100	

3.8.6 Electrical Engineering & Electronics Department Modules

Further information about the modules listed below is available at
https://www.liverpool.ac.uk/study/undergraduate/courses/computer-science-bsc-hons/module-details/

The following modules are owed by the EEE any problems relating to or affecting your studies (for example Extenuating Circumstances claims) on these modules should be forwarded to the EEE Student Experience Team: studyenq@liv.ac.uk

Code	Title	Semester	Pre-requisites	% CA	% Exam
ELEC319	Image Processing	1	-	0	100
ELEC320	Neural Networks	2	COMP229	0	100
ELEC415	Information Theory and Coding	2	-	0	100

Section 4 – Study

Students are taught either in lectures, tutorials or practicals, and study for each UG year will be divided into modules totalling 120 credits over two semesters. In this Department, most modules are worth 15 credits, although some UG second year modules are worth 7.5 credits. The final year project modules are worth 30 credits for UG and the project module is worth 60 credits for PGT.

During the normal teaching weeks total study time is expected to be about forty hours per week, i.e. ten hours per week for each 15 credit module. For example, COMP101 has three lecture hours per week plus a one hour supervised practical class and a one hour tutorial. In addition, students will need to spend time finishing practical exercises, studying their lecture notes, background reading and working on the practical assignments set as part of the assessment of the module. A significant amount of time, therefore, needs to be spent on private study.

The broad aim of the Department in its postgraduate teaching is to focus on depth of study, and critical awareness and evaluation, in selected areas of current research and advanced scholarship within the academic discipline of Computer Science; at the same time it ensures a more general all round ability. In addressing these aims, the postgraduate MSc programmes in Computer Science include a significant amount of material on the theory, design and implementation of computer systems while at the same time focusing on particular specialist areas of research.

The Department's full time MSc programmes will normally only be delivered over one year of study commencing in September. **Due to COVID-19 circumstances an additional January 2021 start date will be offered for some of the Department's PGT programmes.**

The MSc year is divided into three stages: semesters 1 and 2 and the summer project. The programmes each comprise a total of 120 credits of taught material, and 60 credits of project work. During a normal teaching week the total study time will be about forty hours, i.e. ten hours per week for each 15 credit module. The 120 credits (typically 8 modules) of taught material are provided over the first two semesters in the form of lectures, tutorials and/or practicals. A typical module (although there are many exceptions) has three lecture hours per week plus a one hour supervised practical class and six hours of private study. The remaining 60 credits consist of an individual project undertaken, with supervision, over the summer months of the MSc year.   Please note, therefore, that you are expected to attend full time from the beginning of the programme until the end of September.   It is essential that you ensure you have made suitable arrangements for your accommodation to cover the full year.

At least 90 of the 120 taught credits available in the first two semesters must be level '7' modules (i.e. meeting the national standards for a postgraduate taught programme). The remaining 30 may include selected level 6 modules (i.e. meeting the national standards for the final year of an undergraduate programme); with the proviso that a graduate of the University of Liverpool cannot elect to take a level 6 module if they have already passed that module as part of their undergraduate study.

4.1 Computer Science Departmental Learning, Teaching and Assessment Strategy

4.1.1 The UG aims of the Department in its teaching

- an understanding of the basic principles of Computer Science, the current state of knowledge of the subject, and its application to the processing of information in all aspects of life and work;
- transferable skills to assist you to take up employment and to equip you throughout your subsequent working life;
- a stimulating, supportive and well-equipped environment which will help you to maximise the benefits and achievements which you can gain from your studies.

In addressing these aims, the Department's programmes all include a significant amount of material on the theory, design and implementation of computer systems while at the same time focusing on their individual specialist areas. By the end of your selected programme, it is expected that you will:

- be able to demonstrate good practice and effective skills in the analysis of problems, and in the design and implementation of software;
- have a broad understanding of the subject of Computer Science, including state-of-the-art knowledge in selected areas (depending on the nature of the selected programme);
- have experience and skills in the oral and written presentation of results and reports;
- have an appreciation of the professional, ethical and moral issues relating to your subject;
- be able to undertake individual programmes of study involving the acquisition, assessment and application of knowledge.

With regard to its programmes, the Department considers it important to maintain a proper balance between academic and vocational aspects. In this respect our aims are:

- to give you a wide ranging academic view of the basic foundations of the subject. This will provide a firm foundation from which to judge future new developments that you may meet in a career in the subject;
- to provide skills in the use of many of the current computer systems and languages that will be immediately useful when you leave the University.

We believe that all our degree programmes will provide you with skills that can be used immediately in industry and commerce, as well as providing the broader view which is needed to deal with issues arising from advances in technology, in management and in high level research.

Full details of the departmental strategy may be accessed via:
https://intranet.csc.liv.ac.uk/department/ltas/LTAS.html. Details of the assessment method for each module can be found in the appendix relating to your programme.

4.1.2 The PGT aims of the Department in its teaching

- to provide a range of degree programmes which reflect the diversity of Computer Science and its applications in such a manner as to be able to recruit and retain appropriately qualified students able to benefit from the opportunities available at the University and to maximise flexibility of student choice between programmes;

- to develop and deliver curricula for degree programmes at both undergraduate and postgraduate levels which are informed by the research and scholarship of the staff as well as input by students, employers and professional bodies, and reflect current and potential future developments in the subject;
- to facilitate student achievement of the intended learning outcomes of their chosen programme of study as delineated in the programme specification by providing administrative, learning, pastoral, teaching and technical support and facilities for the effective delivery of the curriculum;
- to prepare students for further study in a related field and for careers where the skills and techniques acquired through computing based degree are important.

General information on assessment is provided in Section 5 while details of the assessment method for each module can be found in Section 3.8.1

Full details of the Departmental Learning, Teaching and Assessment Strategy may be accessed via https://intranet.csc.liv.ac.uk/department/ltas/LTAS.html. Details of the assessment method for each module can be accessed via:
http://intranet.csc.liv.ac.uk/teaching/modules/index.php?level=M

4.2   Teaching and Learning

Modules will use an appropriate mix of teaching methods as indicated below. For a `taught' module the total notional hours of teaching and learning, as indicated by the credit value of the module, will typically consist of 20-25% lectures, 10% scheduled practicals or tutorials, and 65-70% private study and assessment.

- **Lectures**
  The majority of modules are taught using 50-minute lectures which typically involve the whole cohort of a module. Lectures are intended to disseminate knowledge, concepts, ideas, background information, methods and skills and can also include elements of demonstration of processes, methods, and tools. They aim to promote reflection on your part and to stimulate wider learning beyond their specific content, and can also be developed further by private study, practicals, tutorials, and projects.

  The style of presentation of lectures varies from module to module. As of 2017/18, some lecturers will distribute handouts, which might be summaries, diagrams, rough notes or condensed manuals on a language or other computer facility. These handouts, however, will be supplementary to any material contained in the module textbook or presented during lectures and it will still be necessary to take notes during the lectures.

  It is essential that you keep up with the material given in lectures and do not allow a backlog of work to build up. You should make sure that you have a complete and fully understandable set of lecture notes by making clear notes during all the lectures. If notes are distributed in printed or electronic form, you will need to go over them and rewrite parts in your own words in order to fully understand them.

  Obviously you must understand your notes, and the process of sorting them out should clarify the information and ideas they are intended to convey; those for some of the lectures will need rather a lot of work while others will need very little. The notes may need to be expanded to a

greater or lesser degree, using material from the module textbook and other sources (e.g. the library).

There will be two important consequences of this approach. Firstly, when the time comes round to revise, the notes will already be sorted out and it will not be necessary to spend valuable time doing this. Secondly, this is a task with a defined end point, in that you will know when you have finished dealing with a topic and can then go on to do other things.

If you have difficulty understanding any aspect of work and the textbooks do not help, you should not hesitate to ask either the module co-ordinator or a demonstrator for help. You should not be afraid to ask questions during or after lectures, tutorials, practicals or at other times. Many students experience difficulty with their work at some stage, so you need not be afraid that you will be alone in needing extra help to understand parts of the programme.

It is **very important** not to fall behind in any module, as the time available for catching up is very short.

- **Practicals/Labs**
  Practical and/or lab-based elements are central to ensuring that you acquire the key skills fundamental to your chosen programme of study. All practicals are linked to specific modules and are intended to enable you to acquire the practical abilities and skills that the module aims to imbue.

  The topic of each practical is determined by the module co-ordinator responsible. All scheduled practicals take place during timetabled sessions indicated in your individual timetable or by alternative arrangements as advised by the module co-ordinator. These are typically held in one of the specialised labs provided by the Department and will last 50 or 100 minutes.

  Scheduled practicals are supervised by demonstrators or by the module co-ordinator. Just as in lectures, you should not hesitate to ask questions or ask for help during a practical.

- **Tutorials and On-line Discussion Groups**
  Tutorials, usually delivered in smaller groups than lectures, provide an opportunity for you to get more individual help and attention from academic staff or appropriately trained postgraduate demonstrators. All tutorials are centred around exercises that relate to material taught in lectures or to a continuous assessment task of a specific module, and the topic of each tutorial is determined by the module co-ordinator responsible for the tutorial. Tutorials take place during timetabled sessions indicated in the individual timetables of students or by alternative arrangements as advised by the module co-ordinator. Each tutorial typically lasts 50 minutes.

  If the exercises for a tutorial are made available in advance, then you will either be instructed to familiarise yourself with the exercises and, in some cases, attempt to solve them before the tutorial. You should use part of your private study time to do this, as only by doing so will you take full advantage of the tutorials.

On-line discussion groups are a variation of tutorials where interchanges between students and staff or demonstrators take place on-line in a Virtual Learning Environment. Like tutorials they can be centred around specific exercises or may provide another means by which students can have open-ended discussions related to the content of a specific module.

- **UG Group and Individual Projects**
  At various stages throughout the programme you will undertake group and/or individual projects. Group projects are intended to emphasise student-directed learning as well as to enhance your ability to work collaboratively. The individual project or projects that you undertake are key elements in which student-directed initiative plays a part and provides a valuable opportunity for you to enhance presentation skills.

- **PGT Project**
  Over the summer all PGT students (apart from Year in Industry students) will undertake a 60 credit project. The main aim of the project is for you to develop and demonstrate autonomy in the management and development of a realistic project in computer science, either research or application oriented. Although new technical skills may be acquired, this is not the main aim. At the end of the project you should have demonstrated the ability to initiate, plan, manage and deliver a complete IT project for a customer or research supervisor. The delivery of the project will include giving interim presentations describing important stages of the project, and a final dissertation describing the project as a whole. Students on the Big Data and High Performance Computing programme will take an additional 15 credit project during the second semester.

- **Placements**
  Programmes may include placement elements where you undertake work at or with an organisation outside the University. Placements aim to provide the opportunity for you to experience the 'world of work', to develop a range of employability skills and to allow you to reflect upon your placement learning in the context of your possible future career. There is also an opportunity for placements abroad.

- **Private Study**
  Private study includes
  - the preparation for a formal teaching session (lecture, practical, tutorial, project meeting;
  - reflection and consideration of the content of the formal teaching session and related teaching material;
  - wider background reading and learning;
  - the practice of particular skills, methods, and processes (using the Department's laboratory equipment outside scheduled practicals or equipment equivalent to that provided);
  - completion of assessment tasks and revision for examinations.

During COVID-19 restrictions this facility has been suspended for all students and staff:
The Student Common Room on the second floor of the George Holt Building (room H216) is available for private study. The Department also has two meeting rooms in the Ashton Building (rooms 101 and 208) which are available for project related activity including group project meetings as well as group study. See also **Section 6.2.2**.

4.3   Commitment to Studies

The elements of learning and teaching within the Department have been detailed above, but however good the teaching, a major effort is required from you in order for you to be successful on your degree programme.

You yourself are responsible for keeping abreast of your programme of study. If you have any problems understanding sections of work, either in connection with lectures or with practical work, then you should seek help immediately from the module co-ordinator or your Academic Advisor. If you do not seek such help we will naturally assume, in the absence of evidence to the contrary, that you are not having any problems. When you do seek help we will do our best, with your co-operation, to help.

4.4   Monitoring Students' Commitment to Study

You are expected to attend/engage with all module activities regularly.   In previous years, attendance below 60% would have been regarded as unsatisfactory (except where there were extenuating circumstances). Attendance at practical classes was even more important and a full attendance record at them was expected. **EVERY piece of assessed work must be submitted**.

The expectation is that students will not take holidays during either the taught semesters or the summer project period for PGT students, missing several weeks out of the project period may be detrimental to study and will not be considered an acceptable extenuating circumstance warranting an extension on the deadline date.

4.4.1 Departmental Procedure for Monitoring Attendance/Engagement
Due to COVID-19 circumstances in 2020/21 data on engagement with the University's Virtual Learning Environment (VLE) including CANVAS and VITAL will be used – further details regarding this will be sent to students by email as soon as possible.

Attendance and engagement with your programme of study is crucial to the successful completion of coursework and examinations, and those are in turn central to your progress from one year to the next. The great majority of our students play a full part in their degree study and gain enormously from it.

The objective of attendance and engagement monitoring is to support student wellbeing and the expectation is that students will take responsibility for managing their learning and will demonstrate engagement by the following interactions:

- Attending all timetabled classes (on campus and online) seminars, tutorials, meetings with Academic Advisors, Study Skills and other extra-curricular learning activities
- Accessing learning resources via the virtual learning environment
- Completing formative and summative assessment tasks
- Registering their own attendance and monitoring their data.

Schools and Departments are responsible for monitoring attendance and engagement across all Programmes of Study within their remit.

Schools and departments have checkpoints thought the Semester where student engagement levels are reviewed. Students with low levels of engagement at these times will receive a communication from their School or Department and enter the intervention pathway/stage. Students must respond to these communications to enable us to support their wellbeing and prevent any unnecessary escalation. It is important to regularly check your University email and personal email accounts.

As soon as students respond and re-engage with their studies no further action will be taken.

In serious cases of a lack of attendance and engagement you will be referred to a School Progress Panel acting on behalf of the Board of Examiners, who can recommend that your studies are terminated.

International students (from outside the European Economic Area) who, under Tier 4 of the points-based immigration system, require a Biometric Residence Permit (BRP) to study in the UK should be aware that the University is registered as a UK Visa and Immigration (UKVI) Sponsor. The University has statutory responsibilities to monitor and report to the UKVI any international student who is not meeting the attendance/engagement requirements of the programme. A guide for Tier 4 students can be accessed via
https://www.liverpool.ac.uk/media/livacuk/student-support/ist/pdfs/Student,Guide,for,UK,visa,holders.pdf

Non-attendance or poor attendance is likely to lead to a decision of termination of studies by a Board of Examiners. The consequence of this for a Tier 4 international student is that the University would cease its immigration sponsorship of the student and this would mean that they could no longer study in the UK. Students should be aware that fee liability continues to accrue, even if they are not attending. If students wish to stop attending for reasons of ill health or other personal reasons, they should make arrangements to change their registration status.

If you are a sponsored student, your sponsor will contact the University regularly for return of attendance and progress data.

Falsifying attendance
Students should be aware that they are not penalised for low attendance levels, there is nothing to gain in attempting to falsify attendance registration. Students must only register their attendance when physically in the Lecture theatre. Any attempt by students to falsify their attendance registration will be deemed misconduct in line with the Universities policy on student conduct and discipline, Section 7m).
https://www.liverpool.ac.uk/media/livacuk/student-administration/student-administration-centre/documents/Policy,on,Student,Conduct,and,Discipline.pdf

Students believed to have falsified their attendance registration will be emailed reminding that any attempt to falsify attendance records will be deemed misconduct. Students who are found to have falsified their attendance registration for a second time will be invited to an informal meeting in

(Last modified on 12/02/2021 15:49)

which guidance will be provided on registration of attendance. This is also a wellbeing opportunity to ensure that student's ability to engage with their studies is not being affected by external factors leading to their attempts at falsifying attendance records. Should students fail to respond or attend this meeting and make no attempt at re-arranging, then the School or Department will have no option but to invite the student to a summary jurisdiction meeting for consideration of formal or final warnings. This would also apply if a student is found to have falsified their attendance records on a third occasion.

Complete procedures for summary jurisdiction can be found:
https://www.liverpool.ac.uk/student-administration/policies-procedures/conduct-discipline/

4.4.2 Reference Letter Support Tool

The Department of Computer Science is pleased to support students' applications for further study and to assist with this, a system is in place to help with the production and management of reference letters. All year 2 and 3 students who wish to request a reference letter from a member of staff **MUST** use the online reference letter tool to make this request requests will not be accepted by email (https://sam.csc.liv.ac.uk/COMP/ReferencesHelp.pl).

The first person a reference letter should be requested from is the student's Academic Advisor. A second letter may be requested from the student's final year project supervisor. In exceptional cases where a third reference is required for an application, the student may approach one of his/her lecturers to request (via the online tool) this letter in support of only the application that requires the third letter.

The Department has a policy of each Academic Advisor and final year project supervisor producing up to a maximum of five reference letters per student. Advice can be sought from Academic Advisors on which institutes are the most appropriate to target for individuals' postgraduate applications. Once reference letters have been provided to students, they will be asked to report to the Department which applications have been successful and any offers taken up by students. This will assist with the provision of advice to students in future years. Instructions on how to request a reference letter are provided within the tool.

4.5   Absence from Studies and Claims for Extenuating Circumstances

If you are not well enough to attend on campus and/or remote classes you must inform the Computer Science Student Experience Team (SET) by emailing csstudy@liverpool.ac.uk from your University email account. You must inform them when you become ill and when you are able to resume your studies.

You must keep a copy of these emails. If you subsequently submit a claim for extenuating circumstances based on absence due to illness you will need to provide copies of these emails as evidence of your illness. If you do not provide copies of these emails your claim may not be accepted.

In 2020-21 you will not be required to provide a doctors letter to support your claim of illnesses up to three weeks. If you are ill for longer than this you may be asked to provide a doctors letter.

If you are ill with COVID-19, have COVID-19 symptoms or are self-isolating following contact from NHS or University Track and Trace you should inform the SET and must also record this on Liverpool Life.

You should always inform the SET if you are unable to attend for any reason. For information about illness and assessments please see the Extenuating Circumstances Policy.

- **Absence from lectures.**
  You should email the SET if you know that you will miss, or if you have missed, a lecture, practical or tutorial.   If the absence is for a good reason, your attendance/engagement record will be modified to show an excused absence and this will not be taken into consideration when reviewing absences/non-engagement. We will forward the email on to your Academic Advisor for information.

Department: **Computer Science**
Form type: Absence
Academic year: 2020/21

1. **Family name:**   *<type here>*
2. **First name(s):**   *<type here>*
3. **Student ID:**   *<type here>*
4. **Programme:**   *<type here>*
5. **Year:**   *<type here>*
   (e.g. 1, 2, 3, 4, PGT)
6. **Semester:**   *<type here>*
7. **Academic Advisor:**   *<type here>*

I certify that I was/will be absent from the University
FROM: *<type here>*
TO: *<type here>*

8. **Total number of days absent:**   *<type here>*
9. **Brief explanation of the absence:**   *<type here>*
10. **Evidence available?** (Yes or No)**:**   *<type here>*
11. **Type of evidence:**   *<type here>*

12. **Has your academic performance been affected by this?** (Yes or No)**:**   *<type here>*
13. **If 'Yes' for Q12:**
    Please note that the purpose of this email form is to excuse absence/non-engagement for lectures/practicals/tutorials only. If you wish for your circumstances to be considered by the Board of Examiners you will also please need to complete either
    a) an **Extenuating Circumstances application** via the online system (https://exc.liverpool.ac.uk/)
    b) an **Exemption from Late Penalty** email form, which you'll need to request via csstudy@liverpool.ac.uk

---

- **Extenuating circumstances**
  Extenuating circumstances are usually short term, unforeseen circumstances which have affected performance in assessments (whether an examination, essay, practical or other form of assessment). If you miss an examination or an assessment deadline for reasons beyond your control and/or believe that extenuating circumstances may have affected your performance in assessments and examinations, you will need to formally submit an extenuating circumstances claim. Since August 2020 the Department has been using a new online system for extenuating circumstances claim submissions:

  How do I apply for extenuating circumstances?
  To apply for Extenuating Circumstances (ECs), you must please fill out the online form and provide supporting documentation (where applicable) via the following link – please use your University of Liverpool credentials to log in:
  https://exc.liverpool.ac.uk
  The online form will ask you to select a category from a drop down menu and to then provide a detailed description of your circumstances and how your studies have been adversely affected. When reviewing applications, the EC Committee will expect to see sufficient details of how a student's studies have been negatively impacted.
  The application will also ask students to list **all modules** affected by extenuating circumstances. You will therefore need to know the
  - module code(s)
  - assessment type(s) [you should be able to select this from a drop down list]
  - assessment date(s)
  You will also be required to confirm if the assessment in question has been either
  - missed (you did not submit/participate)
  or
  - affected (you submitted/participated).
  Please note, you are only required to submit one application and list all the modules affected.
  Can I amend my application once I have submitted it?
  Please do not submit multiple applications.
  To request for your application to be reopened in order to amend/upload further documentation please email csstudy@liverpool.ac.uk.
  What are extenuating circumstances?
  The University is aware that students' coursework and examination performance may sometimes be affected by serious circumstances beyond their control, which may result in absence from examinations and other classroom-based tests, and/or in poorer than expected performance. These circumstances are known as "extenuating circumstances". You can read about extenuating circumstances in Appendix M of the Code of Practice on Assessment, which you will find at the following link:
  https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_M_cop_assess.pdf
  The University has also issued an additional set of student guidelines about extenuating circumstances, which can be consulted via the following link:
  https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_M_Annex1_cop_assess.pdf

(Last modified on 12/02/2021 15:49)

Do I need to provide supporting documentation?

Due to disruption caused by COVID-19, flexibility will be applied in relation to supporting documentation as we understand that there may be situations whereas students are not able to obtain forms of documentation due to the pandemic. Please note flexibility in relation to providing support documentation is a temporary measure that is currently has only being applied to semester 2 and resit period 2019/20. Students are encouraged to provide documentation if they are already in possession of it or if they are able to obtain it.

Contact Details

If you would like to discuss your EC application or any issues affecting your studies then please don't hesitate to contact us via csstudy@liverpool.ac.uk.

If you require an extension for a piece of coursework please see Section 5.1.4 for Exemption from Late Penalties (ELP).

During COVID-19 restrictions if you wish to arrange a virtual meeting with one of the SET please either send an Outlook meeting request or an email with the subject 'Confidential meeting required' to csstudy@liverpool.ac.uk. Please ensure you include your full name and student ID when requesting meetings.

4.6   Departmental Progress Panel

Students who make insufficient progress in their studies may be asked to attend an interview with the Departmental Progress Committee. This comprises of the Chair of the Board of Examiners, the Director of Studies for the relevant programme and the Examinations Officer. This interview is intended to identify and recommend an appropriate course of action for the student to follow before it becomes necessary to rule that progress is unsatisfactory.

4.7   Whom to contact if something concerns you

It is recognised that, on occasion, situations may occur in the course of module delivery which you feel concerned about: this may be anything from disquiet about demonstrators, an assessment you have received, aspects of the module itself, to more serious issues such as the outcome of Board of Examiners meetings and their consequences on progression into the next year of study.

We would hope it is recognised that the Department takes such concern seriously and is perfectly happy to consider and advise on any issues that arise. Nevertheless, in addressing and dealing with specific issues it is far more likely that a successful resolution of problems will be achieved if the appropriate pathway of responsible individuals have been made aware of the problem.

The flowchart below presents the route that ought to be followed.
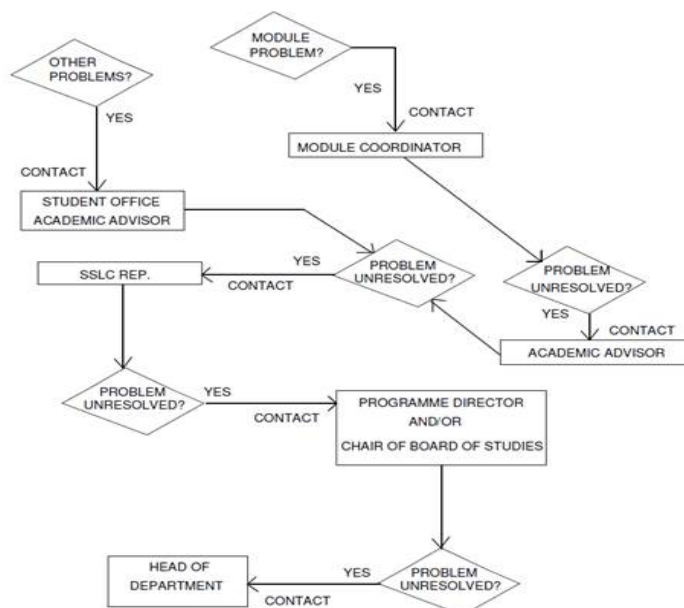
Please note that there is no point in raising an issue (no matter how serious it may appear to you) directly with, for example the Chair of the Board of Studies in Computer Science (let alone with the Head of Department) unless the matter in question has already been considered by responsible parties at an earlier stage and you do not consider the matter to be resolved.

It is not that these individuals are reluctant to become involved, it is more the case that: firstly, you will only increase the length of time taken to deal with the issue of concern (if a problem is raised immediately with the Head of Department with no record of it having been discussed earlier, this will only result in it being referred through proper channels not with its solution being expedited); secondly, going directly to the most senior individual without consulting others creates an impression of at best frivolous time-wasting and, at worst, of malicious disregard for procedures. By following these procedures staff will be able to work with you in an efficient manner to address any such issues that arise and, it is hoped, reach a mutually acceptable conclusion.

Board of Examiners
Computer Science Board of Examiners. Link to Appendix D of the Code of Practice (CoPA) Regulations for the Conduct of Examinations:
https://www.liverpool.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_D_cop_assess.pdf

Board of Studies
Computer Science Board of Studies. The responsibilities of the Computer Science Board of Studies include the following: external examiners reports, module evaluation and feedback to and from students, student consultations, practices for the moderation of assessments, consideration of the withdrawal or suspension of programmes. Further details are available at:
https://www.liverpool.ac.uk/aqsd/quality-and-enhancement-framework/programme-development/

Section 5 – Assessment

The University has a Code of Practice on Assessment which brings together the main institutional policies and rules on assessment. The Code is an authoritative statement of the philosophy and principles underlying all assessment activities and of the University's expectations in relation to how academic subjects design, implement and review assessment strategies for all taught programmes of study. The Code of Practice includes a number of Appendices which provide more detail on the regulations and rules that govern assessment activity; these include:

- The University marks scale, marking descriptors and qualification descriptors;
- The model for non-clinical first degree programmes;
- The system for classifying three-year, non-clinical, undergraduate degrees;
- The system for classifying four-year, non-clinical, undergraduate degrees that include a year in industry or a year abroad;
- Information about students' progress, including guidance for students;
- The procedure for assessment appeals;
- Regulations for the conduct of exams;
- The University's policy on making adjustments to exam arrangements for disabled students.
- The code of practice relating to external examining (see also below)
- The Academic Integrity Policy, which covers matters such as plagiarism and collusion and includes guidance for students;
- The policy relating to extenuating circumstances which explains what you should do if you have extenuating circumstances that have affected assessment; and
- The policy on providing students with feedback on assessment.

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

5.1   Assessment in the Department of Computer Science

Assessment is by a mixture of coursework and written examinations in January and May. The PGT project, undertaken from mid-June to mid-September, has a number of units of assessment associated with it including oral presentations, demonstrations and the final dissertation. Below is a description of the main types of assessment.

5.1.1 Types of assessment

There are a wide variety of ways that different modules are assessed, the method(s) being chosen to suit the material and aims of each particular module. For Computer Science modules, these are:

- **Written examinations**
  An examination is an assessment task formally scheduled and supervised by the University which takes place over a specified period, in a specified location and at a specified time.

  For examinations on modules in the remit of the Board of Studies in Computer Science students provide written answers to a set of questions. This includes written examinations that may in part or solely consist of multiple choice questions. Where the assessment of a module includes a written examination, this will take place at the end of the semester or

semesters in which a module is taught. The duration of examinations varies between 1 and 3 hours.

- **Practical assessments**
  Practical assessments include the assessment of tasks performed in laboratories as well as the assessment of written reports, oral presentations, or demonstrations of the outcome of work conducted in laboratories (or using equipment equivalent to that provided in laboratories), often in relation to an assignment set for a module.

- **Class tests**
  A class test is an assessment task scheduled by the module co-ordinator with a typical duration of 50 minutes. The format of class tests is identical to that of examinations.

  On-line tests are an alternative form of class test. An on-line test might be time-limited, that is students have only a certain amount of time to complete the test and there will either be a specific date and time on which the test takes place, or there will be a deadline by which students must complete the test.

- **Placement reports, project reports and dissertations**
  Placements and projects typically involve an element of assessment by a final report or dissertation due at the end of the placement or project. Such reports and dissertations on a module in the remit of the Board of Studies in Computer Science will typically be practical assessments, that is, be based on laboratory or laboratory-related work. However, dissertations based on purely theoretical work are possible at FHEQ level 7 (former UoL level M).

- **Other types of coursework**
  This includes presentations, demonstrations of software, essays, or the completion of small assessed tasks during, or in advance of a tutorial.

Modules will use an appropriate mix of these types of assessment, varying from 100% assessment by written examination to 100% assessment by continuous assessment (practical assessments, class tests, reports, essays, presentations are particular forms of `continuous assessment'). An example of the latter is the UG module COMP101 on which students are required to write a short program each week. Each of these programs must be handed in for assessment by a given deadline. Similarly, on the UG module COMP107 students have to write essays, give a presentation and complete other practical assessments. For COMP101, a reasonable attempt must be made for each assessment in order to pass the module.

For PGT students Modules will use an appropriate mix of these types of assessment, varying from 100% assessment by written examination to 100% assessment by continuous assessment (practical assessments, class tests, reports, essays, presentations are particular forms of `continuous assessment'). An example of the latter is the module COMP516 on which students are required to write reports, give a presentation and complete other practical assessments.

The form of assessment (and relative percentages) for all modules is given in Section 3.8.1.

(Last modified on 12/02/2021 15:49)

It should be noted that assessments of a module are not restricted to the assessment of material and skills covered in lectures, tutorials, and practicals but can extend to material and skills that can be expected to have been acquired through private study.

5.1.2 Practical assessments, projects and other types of coursework

Nearly all the practical work that is done for a practical assessment, project or other type of coursework involves the use of the Department's computer systems.

On some modules, the scheduled practicals in your timetable are intended to give you time in one of the laboratories to work on a practical assignment under the supervision of a demonstrator. In order to make the best use of this time, you should have given some thought to the solution of the assignment beforehand. This will probably involve familiarising yourself with any relevant handouts and lecture notes on the topic. You will also need to have planned out how to tackle the problem.

If the assignment is concerned with the design and implementation of a program, database, website, or other computer software, a draft solution should be prepared in advance of the practical class. This can be taken along, ready to be typed into or uploaded onto the computer, or be made available beforehand. If you have not been able to do that, then you should at least have a list of questions about the work to ask the demonstrator.

Without this preliminary preparation you will not be able to make use of help that the practical class demonstrator can provide, but will spend the time reading and understanding the assignment, being ready to ask questions only at the end of the session. This is obviously not an optimal use of the time.

Even if scheduled practicals are dedicated to exercises other than practical assignments, they still provide an opportunity to ask questions not only about those exercises but also about practical assignments.

You should try to make the maximum use of the help available during scheduled practicals. Do not hesitate to ask the demonstrators and module co-ordinator questions; that is what they are there for. However, there will be a limit to what they will able to do for you, as it is not the job of a demonstrator or module co-ordinator to solve assignments for you.

In addition to supervised practical sessions, most assignments will involve additional unsupervised work using the computers in order to prepare or complete a solution and to write reports.

It is also possible to obtain assistance and advice on general programming problems from the departmental **Helpdesk**. However, the technical support staff are typically not familiar with the detailed contents of individual modules, so may not be able to assist with specialised queries. Such issues should be directed to the module co-ordinator and/or demonstrators.

For the PGT programmes with a Year in Industry, the Group Project module (COMP598) and the MSc Industrial Project module (COMP599) both include an element of assessment by oral presentation and demonstration of project work. The mark produced for a module is subject to scrutiny by the Computer Science Postgraduate Boards of Examiners including the External Examiner for the programme. Decisions on progress are also controlled by the university's published regulations.

5.1.3 Submission of Work

In any module where set work is part of the assessment, you will be notified in advance of:

- The deadlines for the assessed work.
- Where, when and how the work must be submitted.

An overview of coursework deadlines can also be found on the departmental database which can be accessed at https://sam.csc.liv.ac.uk/COMP/ See also Section 1.4

If this information is not provided, then you should not hesitate to ask for it. Some modules have specific requirements with regard to the format and length of the submitted work. If this is the case, you will be notified in advance and you should ensure that you adhere to these requirements, as there may be penalties if you do not.

If you hand in coursework within five days of the submission deadline it will be marked but 5% of the total marks available for the assessment will be deducted for each working day after the submission date, up to a maximum of five working days. The mark will not be reduced below the pass mark for the assessment and work assessed below the pass mark will not be penalised for late submission.

There is a standard University Policy imposing penalties for late submission, which is applied by the Department. See Section 6.2.2 of the Code of Practice on Assessment at:
http://www.liv.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/code_of_practice_on_assessment.pdf

We may make and authorise third parties to make copies of any work submitted by you for assessment but only for the following purposes:

- Assessment of a student's work;
- Comparison with databases of earlier answers or works or other previously available works to confirm there is no plagiarism; and
- Addition to databases of works used to ensure that future works submitted at this institution and others are not plagiarised from a student's work.
- Review by accrediting bodies, external examiners, University QAA and other external bodies as appropriate.

Feedback on assessment tasks will be provided following the Policy on Feedback to Students (see **Section 5.4**). You can appeal against the results of an assessment task, examination, or decisions by the Board of Examiners following the University's Assessment Appeals Procedure. See Appendix F of the Code of Practice on Assessment at:
http://www.liv.ac.uk/media/livacuk/tqsd/code-of-practice-on-assessment/appendix_F_cop_assess.pdf

Please also see Section 4.7 with details about whom to contact if something concerns you.

5.1.4 Procedure for Requesting an Extension/Missed Class Test
Exemption from Late Penalties

You may apply for exemption from late penalties for any coursework submitted late (and providing the coursework has the opportunity for late submission) because of unforeseen medical or other exceptional circumstances. You will need to complete an 'Application for Exemption from Late Penalties' email form, which you can request from csstudy@liverpool.ac.uk. The completed email form should normally be submitted with appropriate independent documentary evidence to the SET in the School or Department that delivers the module at the same time as the late coursework or at the earliest opportunity thereafter. You should submit documentary evidence to support your application (normally the type of contemporaneous independent evidence required for extenuating circumstances claims) ideally at the same time as the late coursework. However, if you are unable to submit an application for exemption from late penalties and/or to provide supporting evidence with the late coursework the final deadline for any request for exemption from late penalties and supporting evidence would be the same as the deadline specified by the relevant Extenuating Circumstances Committee for receipt of extenuating circumstances applications.

The latest you can submit coursework after a deadline is the earliest of:
  (i)   The time of release of feedback on the assessment task that would benefit you, or
  (ii)   Two working weeks from the date of the original deadline, or
  (iii)   The last day of the relevant assessment period.

Coursework submitted after this time will be treated as a non-submission and dealt with under the Policy on Extenuating Circumstances (Appendix M).

Extensions

Extensions to coursework submission deadlines are <u>only</u> available to students undertaking programmes delivered in partnership with Liverpool Online and students with a Support Plan confirmed with Disability Advice and Guidance Team.

Further information about exemption from late penalties and extensions can be found in section 4.5 and in the Code of Practice on Assessment (sub-sections 6.4 to 6.5.)

5.2 Marking Descriptors

Marking on FHEQ **level 4, 5, and 6 modules** offered by the Department of Computer Science is carried out using the following marking descriptors:

	For practical exercises and projects	**For exercises, presentations, projects, and written examinations:**
90-100%	Displays an *exceptional* degree of originality and creativity and/or *exceptional* analytical and problem solving skills. Solution must have novel aspects. The methodology employed is well-developed and correct.	Shows *critical* understanding of current knowledge. For level 6 this should include relevant recent research papers. Perceptive, focused treatment of all issues/questions presented in a critical and scholarly way.
80-89%	Displays a level of originality and creativity and/or the ability to suggest realistic solutions to novel problems. The methodology employed is well-developed and correct.	Evidence of wide reading. For level 6 this should include relevant research papers and books. Perceptive, focused treatment of all issues/questions presented in a critical and scholarly way.

(Last modified on 12/02/2021 15:49)

	For practical exercises and projects	For exercises, presentations, projects, and written examinations:
70-79%	Demonstrates ability to analyse, interpret and organise information to produce coherent accounts or solve complex problems. All aspects of a suitable methodology evident and used correctly.	Comprehensive knowledge and understanding of the subject together with the ability to put the work into context and to critically evaluate selected aspects of the work. Arguments/answers will be clear, competently structured, and accurate.
60-69%	Demonstrates ability to analyse, interpret and organise information to produce coherent accounts or solve relatively complex problems. Use of a suitable methodology evident and used correctly, with minor omissions.	Good knowledge and understanding of the subject, with no major gaps or omissions, but minor gaps or omissions may occur. Arguments/answers will be clear, competently structured, and largely accurate.
50-59%	Displays ability to analyse, interpret and organise information to produce coherent accounts or solve well-defined problems of some scope. Most aspects of a suitable methodology evident and used correctly, some omissions occur but without negative impact on the result of the work.	Satisfactory knowledge and understanding of the essentials of the subject, with an ability to integrate information into a clear, well-structured account, but lacking in breadth or depth, or with some significant aspects omitted. Arguments/answers must be clear, although they may not be well-developed or reflect a wider appreciation of the subject. Some errors and omissions are likely to be present.
40-49%	Demonstrates an ability to solve limited, well-defined problems of a familiar type. Most aspects of a suitable methodology evident, but minor flaws in its use or omissions with some negative impact on the result of the work.	General knowledge and understanding of the subject but very limited in depth or breadth. Arguments/answers are likely to be somewhat lacking in structure. There are likely to be errors and omissions and the evidence provided to support arguments will be very limited.
35-39%	Fails to demonstrate an ability to solve limited, well-defined, problems of a familiar type. Aspects of a suitable methodology evident, but flaws in its use or omissions which negatively impact on the result of the work.	Knowledge and understanding of the subject are fragmentary, some aspects showing a very basic level of understanding but other aspects displaying fundamental errors. Arguments/answers are lacking in structure. There are errors and omissions and the evidence provided to support arguments is very limited.
30-34%	Fails to demonstrate an ability to solve simple, well-defined problems of a familiar type. Lack of the use of a suitable methodology or flaws in its use which negatively impact on the result of the work.	Knowledge and understanding of the subject are fragmentary, with an insufficient number of aspects showing a very basic level of understanding and too many aspects displaying fundamental errors and omissions. Arguments/answers are lacking in structure. There are errors

(Last modified on 12/02/2021 15:49)

	For practical exercises and projects	For exercises, presentations, projects, and written examinations:
		and omissions and the evidence provided to support arguments is very limited.
20-29%	Fails to demonstrate an ability to solve simple, well-defined, problems of a familiar type under guidance. Serious lack of the use of a suitable methodology or flaws in its use which negatively impact on the result of the work.	Very limited range of knowledge with many important gaps and omissions. Shows incomplete understanding with numerous errors of interpretation. Arguments/ answers have little structure, contain serious errors, and there is no support for arguments.
10-19%	Little evidence of the use of a suitable methodology.	Shows only the most limited and fragmentary knowledge of the subject with little or no understanding of essential principles and concepts. Work is likely to be unstructured and ill-presented. Arguments/ answers are only loosely related to issues/questions or only cover a seriously inadequate part of the issues/questions.
0-9%	No evidence of the use of a suitable methodology.	Virtually devoid of any evidence of knowledge or understanding of the subject. No or almost no arguments/answers.

Marking on FHEQ **level 7 modules** offered by the Department of Computer Science is carried out using the following marking descriptors

Grade	Description	Key features
Outstanding: 80%+	**Outstanding work**. Factually almost faultless; clearly directed; logical; comprehensive coverage of topic; strong evidence of reading/research outside the material presented in the programme; substantial elements of originality and independent thought; very well written.	**Distinction Grade:** Originality; Well-directed independent thought
Excellent: 70-80%	**Excellent work**. Logical; enlightening; originality of thought or approach; good coverage of topic; clear, in-depth understanding of material; good evidence of outside reading/research; very well written and directed.	

Very Good: 60-70%	**Very Good work**. Logical; thorough; factually sound (no serious errors); good understanding of material; evidence of outside reading/research; exercise of critical judgement; some originality of thought or approach; well written and directed.	**Merit/Pass Grade:** Essentially correct and complete: Competence; Critical judgement
Good: 50-60%	**Good work.** Worthy effort, but undistinguished outcome. Essentially correct, but possibly missing important points. Largely derived from material delivered in the programme, but with some evidence of outside reading/research; some evidence of critical judgement; some weaknesses in expression/presentation.	
Marginal Fail: 40-50%	**Inadequate work.** Incomplete coverage of topic; evidence of poor understanding of material; poor presentation; lack of coherent argument.	**Compensatable Fail:** Significant weaknesses, but serious effort
Fail: <40%	**Unsatisfactory work:** Serious omissions; significant errors/ misconceptions; poorly directed at targets; evidence of inadequate effort.	**Fail:** Little or no achievement of learning outcomes

All students complete the initial stages of the project. If students fail one or more modules in the first and second semester examinations, then the following rules apply:

- Students who fail 15 credits proceed as normal;
- Students who fail 30 credits can proceed as normal. However they have the option to delay the continuation of the project until after their resit exams (this applies to the Dissertation stage only). They need to make this decision within two weeks of the second semester exam results being published. No extensions to any project deadlines will be granted on the grounds of resit assessments if a student decides to proceed as normal;
- Students who fail more than 30 credits are strongly recommended to defer the submission of the project until December.

5.3   Assessment in Other Departments

It is not possible here to provide information on the methods of assessment which apply to modules offered by other departments, especially those in other faculties. However, staff are required to inform students of the precise method of assessment at the beginning of each module.

If this has been overlooked you should ask the module coordinator to provide information on the method of assessment. Some modules can be assessed by methods which are not obvious, so it is important to get this information. For instance, in some cases, missing continuous assessment

exercises or class tests, or a poor performance in the continuous assessment element of a programme, can result in a large penalty being imposed.

5.4   Feedback

The purpose of feedback is to facilitate improvement and promote learning. This covers both academic content and formal aspects of work submitted for assessment. Information regarding the aims, learning outcomes, teaching and learning strategy, syllabus and method of assessment for each module are available on the departmental website, and further information will be provided by the lecturer concerned.

Continuously assessed work: Feedback may take many forms - written, recorded, oral or peer feedback or self-assessment, and may include numerical marks, grades, and/or qualitative points and comments. There will normally be publicised marking descriptors for numeric or grade-based marking.

The aim would always be to provide feedback as quickly as is practicable (normally within three weeks of the submission deadline) and ideally before the next related assessment task (or final examination). However this may not always be possible, depending on the size of the class, and the timescales involved.

Examinations. Examination scripts are not normally returned to students. If students require individual formative feedback on examination performance, they can request this by contacting the Computer Science Student Experience Team within one week of the release of the exam results.   In addition, examiners will, wherever possible, provide generic group feedback to students on their performance in examinations. This generic group feedback can be accessed via https://student.csc.liv.ac.uk/internal/exams/feedback/ once the exam results have been made available.

Academic advisors can be consulted regarding feedback on your overall academic performance.

The Feedback Policy for modules in the remit of the Board of Studies in Computer Science can be seen at https://intranet.csc.liv.ac.uk/department/ltas/LTAS.html

5.5   Departmental Prizes/Scholarships

The following prizes are expected to be available:

Undergraduate
- the **O'Reilly Academic Prize** for the best performance on COMP201 Software Engineering
- the **Andrew Young Prize** for excellent performance
- the **Athena Swan Prize** for contributions to promote increased participation of women in Computing
- the **Department of Computer Science Prize** for excellent performance in the final year of study
- the **Department of Computer Science Project Prize** for the best final year project

Postgraduate

- The **Ann Maybrey prize for excellent performance**, awarded to the best overall student on an MSc programme.
- The **Ann Maybrey prize for the best project**, awarded annually to the student on the MSc programmes, who has most distinguished him or herself in project work.

Ann Maybrey was one of the original members of the department when it was founded in the early 1980s. Several years ago she donated an amount to be used to endow a prize, however, she left the terms of the award to be decided by the department. It was felt appropriate to award to this to MSc Students as Ann was also involved in setting up and contributing to the first MSc run by the department in the mid 1980s.

Section 6 - Departmental Resources and Support for Students

6.1   Help and Advice

If you are having problems or need advice, there are a number of people who can help you:

A new framework for academic advising and student success will be rolled out at the start of the new academic year 2020-21. The framework focuses on a team approach to supporting students and comprises four pillars: academic advisors, student experience teams, peer mentors, and students themselves.

6.1.1 Academic Advisor

Every student is allocated an Academic Advisor who provides academic advice and guidance to support your academic progress.   You can find the name of your Academic Advisor via Liverpool Life. Your Academic Advisor will meet you when you begin your studies and regular meetings will be available with him/her in groups throughout your programme to discuss and review your progress.

You may ask your Academic Adviser to write your reference for employment/further study in your final year, so it is essential that you enable him/her to get to know you over the course of your studies by attending regular meetings.

You are expected to engage pro-actively with your Academic Adviser, Student Experience Team and Peer Mentors (if appropriate). You will also take responsibility for making and implementing plans, reviewing your achievements and reflecting on your progress in order to enhance your student experience with us and maximise your attainments and employability.

6.1.2 Student Experience Team (SET)

Student Experience Teams are based in Schools and are the main point of contact for advice and guidance unrelated to academic progress in a number of areas, including:

- Timetabling
- Module Registrations
- Assessment arrangements
- Extracurricular and placement activity
- Welfare and pastoral queries or concerns, e.g. extenuating circumstances
- Student mobility including Semester Abroad, Year in China, Year Abroad, Year in Industry and Summer programmes

Your Student Experience Team can be contacted via 0151 795 4275/4234, by email on csstudy@liverpool.ac.uk or you can drop in to the SET in room G09. The office is open daily from 9:15-16:45, except Wednesdays when it is open 9:15-14:00. You are welcome to call at any time during opening hours. The office also remains open during vacations apart from the Christmas vacation.

During COVID-19 restrictions if you wish to arrange a virtual meeting with one of the SET please either send an Outlook meeting request or an email with the subject 'Confidential meeting required' to csstudy@liverpool.ac.uk**.**
Please ensure you include your full name and student ID when requesting meetings.

6.1.3 Student Experience Co-ordinator and Team Leader

Mrs Judith Birtall (Student Experience Co-ordinator) and Mrs Jan Harding (Student Experience Team Leader) can help with advice on school level procedures and signposting to central and specialised support services. They also act as Secretary to the Board of Examiners. Mrs Birtall is located in the Computer Science Student Office, room G09 and Mrs Harding is located within the Department of Electronics and Electrical Engineering; for contact details, please see Section 2.2.

Both Mrs Judith Birtall and Mrs Jan Harding can help if you are experiencing serious difficulties with any aspect of University life. They will be able to provide advice and support with welfare and pastoral concerns, ensuring that you are guided to the most appropriate specialised support for your needs. Please contact the Computer Science Student Experience Team in the first instance, if you wish to make an appointment (csstudy@liverpool.ac.uk).

6.1.4 Technical Support Staff

The Technical Support Staff offer support for the teaching and research activities of the department. They can offer advice and support for any matters relating to the departmental computer systems, and can be contacted directly via the Helpdesk, which is located on the second floor of the George Holt Building (H225), or via email CSC-HelpDesk@liverpool.ac.uk. See Section 6.3.2 below.

6.1.5 Senior Tutor

We will advise you further who acts as Senior Tutor and can advise students on how to appeal against decisions made by Progress Committees.

6.1.6 UG Peer Mentor

Peer Mentors are existing students who have been recruited by the University and specially trained to provide a 'near peer' welcome to new students during the first few months at University. They will help students to settle in to their new surroundings while assisting in the transition to higher education. Peer Mentors are based within Schools and will focus on:

- Improving retention
- Reducing feelings of isolation
- Increasing belongingness within the University community
- Strengthening cohort identity and developing key friendships at an early stage

6.1.7 Student Services

The University's Student Services offer comprehensive support and welfare services to students through two teams. Student Welfare Advice and Guidance can offer you advice, support and information on a wide range of non-academic issues including finance, disability, issues relating to your general welfare and support for international students. Counselling and Mental Health Advisory Service is here to help you address personal or emotional problems that get in the way of

realising your full academic and personal potential. You can contact Student Services by calling 0151 795 1000 and email addresses are available on the Student Services website. The University also has a free online 24/7 support service through Togetherall, which students can access via this link: https://www.liverpool.ac.uk/studentsupport/counselling/togetherall/ using their University email account when they log in. Students can independently contact central Student Services at any time during their studies; more information is available here: Student Support

6.1.8 Departmental Disability and Dyslexia Contact (DDC)

Mr Phil Jimmieson (phil@liverpool.ac.uk) can provide advice if you have a disability and need any support.   For further information please visit the Disability Advice and Guidance page https://www.liverpool.ac.uk/studentsupport/disability/

6.2 Study Facilities

6.2.1 Student Common Room and Private Study Area

During COVID-19 restrictions, the student common room and private study area will be closed.

Room H211/H212 of the George Holt Building has been designated the student common room and private study area. This room contains vending machines dispensing cold drinks and snacks, lockers for the storage of small items (e.g. laptops & books) and is open during normal working hours. Lockers are allocated on a first come, first served basis - students wishing to rent a locker should see the staff on Helpdesk for further details.

This room also has Wi-Fi provision allowing you to gain access to the internet from your laptop.

You are permitted to eat and drink in this room and use it for social gatherings. You are responsible for keeping this area clean and tidy and also by disposing of any rubbish in the bins provided.

6.2.2 Meeting Rooms

During COVID-19 restrictions, this facility has been suspended for all students and staff.

The Department has two meeting rooms in the Ashton Building (rooms 101 and 208) which are available for project related activity including group project meetings as well as group study. An electronic booking system is used which allows students to check the availability of a room and request hourly slots electronically. The Computer Science Student Experience Team will approve or decline the request and you will receive an automated e-mail to inform you of the decision. The electronic room booking system is available via the Computer Science portal at https://cgi.csc.liv.ac.uk/~paddy/portal_new/login.php

6.3   Computing Facilities

The Department has around 300 computer workstations and servers, all networked together and connected to the wider University network and the global Internet. The facilities provide a full range of Microsoft Windows, Linux, and Apple Macintosh computing environments, as well as a selection of departmental network services. These are available to staff and students attending Computer

(Last modified on 12/02/2021 15:49)

Science modules, and are in addition to the University-wide computing facilities provided by the Computing Services Department.

Most of the workstations provided for student use are PCs running the Windows 10 operating system. These also provide networked access to a set of workstations running Scientific Linux, which can be used either via a command-line-based terminal session, or a full graphical desktop environment. There is also a laboratory of 30 Apple iMacs running Mac OS X.

All students have a personal file system for individual users' documents, programs, and their own data, which only they can access. These user files are backed up daily, to provide protection against accidental loss. Students attending Computer Science modules also have additional file-store for use with Unix/Linux systems and for personal web pages.

Students and staff also have access to the full range of University facilities provided by the Computing Services Department, including University printing (allowing output to be retrieved from anywhere across the campus), and electronic mail.

Other services available on request include database facilities (MySQL & Oracle), and collaborative management of source code and other documents (CVS, Subversion or git).

Some Computer Science facilities are administered separately from the CSD-maintained facilities, and access to these would need to be arranged explicitly. However most Computer Science student facilities use the same username and password as the standard University-wide services.

6.3.1 Student Laboratories

During the current situation, numbers using the computer labs at any one time will be strictly limited, and the systems available for physical use will be clearly marked as such. Other systems will be available for use remotely over the network.

There are four teaching laboratories located on the first floor of the George Holt Building dedicated for student use. In general, unless a given laboratory is booked for a scheduled class, the systems will be available for use by any student for working on practical assignments, private study or other activities relating to the degree programme. These laboratories will normally be open between 8:30 and 17:30, Monday to Friday during term time. Some of these labs may be closed for maintenance outside term time, but there would still be access to departmental computing facilities during normal working hours.

Faults with equipment or software should be reported to the technical support staff, so that they can be attended to promptly. You should not attempt to interfere with or move equipment. The laboratories are protected with motion sensors and CCTV cameras, and moving equipment may cause an alarm to be triggered.

You are asked to assist in keeping the computer labs tidy and pleasant to work in, by disposing of waste paper and other rubbish in the bins provided. **Food and drink may not be taken into the computer laboratories**.

6.3.2 Helpdesk

The first point of contact for issues relating to the departmental computing facilities would normally be the Helpdesk, which is situated on the second floor of the George Holt Building, in room H225. During term, the Helpdesk (H225) is open Monday to Friday from 10:30 to 12:30 and 14:00 to 15:30 (except Wednesday afternoons). Out of term, and out of hours, the Helpdesk can be contacted via email only. CSC-HelpDesk@liverpool.ac.uk.

While COVID-19/Pandemic restrictions are in place, the Helpdesk in George Holt (H225) will remain closed. Students can attend a "Virtual Helpdesk" via a Zoom Meeting using this link: https://intranet.csc.liv.ac.uk/helpdesk
The "Virtual Helpdesk" meetings are subject to the same hours of operation as the physical Helpdesk (H225), as detailed above. Emails to CSC-HelpDesk@liverpool.ac.uk can be sent at any time.

If you require a virtual meeting with a member of the support staff, outside of the specified hours of operation, email CSC-HelpDesk@liverpool.ac.uk with the subject heading "Zoom Meeting Request". Give details of the issue you wish to discuss and a suitable time to contact you. Please be aware that we may not always be able to accept the time you specify, and if this is the case an alternative time will be suggested.

The Helpdesk should be used to report problems with equipment or software packages. It may also be able to offer advice with general programming problems. However the technical support staff are not necessarily familiar with the detailed contents of individual modules, so may not be able to assist with more specialised queries. Such issues should be directed to the relevant module co-ordinator and/or demonstrators.   Similarly, questions about the organisation of the degree programme or other administrative matters should be directed to your Academic Advisor or the Computer Science Student Experience Team in the first instance.

Note that this Helpdesk is purely concerned with the Computer Science departmental equipment. Issues relating to University-wide facilities (such as electronic mail, printing, Liverpool Life or the PC teaching centres in the libraries or halls) should be directed to one of the Computing Services Help Desks, on Brownlow Hill, or in the Harold Cohen or Sydney Jones Libraries. However issues with teaching labs in George Holt should continue to be reported via the Computer Science Helpdesk.

6.3.3 Responsible Use of Computers

All use of computing facilities within the University, both departmental and University-wide, are subject to the Regulations, policies and guidelines for the use of IT facilities. These cover areas such as use of email and the web, teaching centres and laboratories, and the departmental, University and national academic computer networks.   The full text of these regulations and policies are available at http://www.liv.ac.uk/csd/regulations/.

The following summary is intended to highlight some of the most pertinent points, but should not be taken as a complete statement of what is/is not acceptable use of the facilities. Students are expected to familiarise themselves with the full regulations and policies via the URL given above.

General

- Computing and network facilities are provided for registered users only. By registering for use of these facilities, students will have agreed to be bound by the Regulations for the Use of IT facilities.
- Use of these facilities will typically be authenticated by a username and password. Students must keep their password secure and secret, and must not allow anyone else to access computer facilities by way of their username. Similarly, students must not attempt to use the facilities through someone else's username, or attempt to find out another person's username/password combination.
- The computing facilities are provided to support University work. Limited use of email and web for personal and social purposes is tolerated, but such use should not become excessive, or interfere with or cause difficulties for other users.

Electronic Publishing (including Email and Web Pages)
- Material must not be sent by email or published on the web, in such a way as to obscure or hide the source of such material, or to claim an authority that it does not possess.
- Publication of material (including sending by email) must abide by the copyright of that material. In particular, material should not be published without obtaining the permission of the copyright owner.
- Material must not be published that is insulting, abusive or offensive, or that advocates or condones illegal activities.
- The computing facilities are provided to support a student's programme of academic work. It is not permitted to use them for commercial purposes (including advertising).

Use of Laboratories
- Use of Labs and other shared facilities should show consideration for other users of the system. Loud or unruly behaviour, or the display of questionable material is not acceptable.
- Food and drink may not be taken into the Laboratories. Smoking is not permitted anywhere in the Department.
- Users must not attempt to open, move, disconnect or in any other way tamper with or attempt to destroy or damage any equipment. Headphones and USB devices may be connected to the front panel of a PC, but users must not otherwise connect any items of equipment to any part of the departmental computing facilities without first clearing this with the technical staff.
- Systems must not be left unattended. If students need to leave a terminal, they should either lock the screen (for a short absence) or log out of the system.
- The playing of computer games is not permitted at any time, unless specifically authorised for academic purposes.

Use of Networks
- All use of the departmental network must abide by the Regulations for Use of IT Facilities, and (where relevant) the JANET Acceptable Use policy.

6.3.4 Laptops
All software required for Computer Science modules is available and configured on the computers in the Computer Science teaching labs. Most of this is also available across all University teaching labs (although some packages may need to be explicitly activated via 'Install University

(Last modified on 12/02/2021 15:49)

Applications') It is not necessary to have access to a personal computer in order to study CS programmes.

Some students find it convenient to work on their own systems, and many packages are available at little or no cost. The module coordinator can advise as to what software might be needed for that module. However it is important to check that assignments written on your own personal equipment also work as expected on CS facilities, **before** handing them in.   This is particularly important for the final year project.

Certain modules (particularly COMP282, COMP327 and COMP329) require specialist facilities, typically only available within the Computer Science department.

Wi-Fi connectivity is available across the university – see http://wifi.liverpool.ac.uk for details.

6.4   Nursing Mothers

The School of EEECS has a room dedicated for nursing mothers, which also contains a small fridge for anyone wanting to store expressed milk. This room is located on the right hand corridor of the ground floor of EEE A Block. If you are unsure where this is the Computer Science Student Experience Team can direct you. The keycode for the room can be obtained from either Jane Gallagher (barneyb@liverpool.ac.uk, 0151 795 4297) or the EEE Building Manager whose contact details are at the reception desk in the EEE building.

Disclaimer

We make every effort to ensure the accuracy of this Handbook. However, it should be noted that the matters covered are subject to change from time to time. Where changes occur, we will endeavour to update this version as soon as possible.