

Programme Specification: Undergraduate

For students starting in Academic Year 2017/2018

1. Course Summary

Names of programme(s) and award title(s)	BSc (Hons) Computer Science BSc (Hons) Computer Science with International Year (see Annex A for details) BSc (Hons) Computer Science with Work Placement Year
Award type	Single Honours
Mode of study	Full time
Framework of Higher Education Qualification (FHEQ) level of final award	Level 6
Duration	3 years 4 years with International Year or Work Placement Year options
Location of study	Keele University – main campus
Accreditation (if applicable)	All three programmes are accredited by the Chartered Institute for IT (BCS)
Regulator	Office for Students (OfS)
Tuition Fees	UK/EU students: Fee for 2017/18 is £9,250* International students: Fee for 2017/18 is £15,250** The fee for the international year abroad is calculated at 15% of the standard year fee The fee for the work placement year is calculated at 20% of the standard year fee
Additional Costs	Refer to section 18

How this information might change: Please read the important information at <http://www.keele.ac.uk/student-agreement/>. This explains how and why we may need to make changes to the information provided in this document and to help you understand how we will communicate with you if this happens.

2. What is a Single Honours programme?

The Single Honours programme described in this document allows you to focus more or less exclusively on Computer Science. In keeping with Keele's commitment to breadth in the curriculum, the programme also gives you the opportunity to take some modules outside Computer Science, in other disciplines and in modern foreign

* These fees are regulated by Government. We reserve the right to increase fees in subsequent years of study in response to changes in government policy and/or changes to the law. If permitted by such change in policy or law, we may increase your fees by an inflationary amount or such other measure as required by government policy or the law. Please refer to the accompanying Student Terms & Conditions. Further information on fees can be found at <http://www.keele.ac.uk/studentfunding/tuitionfees/>

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languages as part of a 360-credit Honours degree. Thus it enables you to gain, and be able to demonstrate, a distinctive range of graduate attributes.

The Single Honours programme in Computer Science enables students to devote their studies full-time to the tools, techniques and underpinning theories that make the science and technology so innovative and exciting. It provides the greatest breadth of learning in the subject, and has been developed to be in accordance with the accreditation requirements of the British Computer Society (BCS).

3. Overview of the Programme

Single Honours Computer Science is a programme for students with an interest in the application of computing to a wide range of problems. Computer systems are now vital to business, government, science and society, and there is much demand for graduates with the professional understanding and practical skills to harness software and hardware technologies to solve real-world problems and develop the systems of the future. Many of the recent advances in these areas can be attributed to developments in computing, and this trend is likely to increase in speed and impact.

The programme explores the theoretical underpinnings of the discipline and places an emphasis on practical computer programming and software development. There is no specific subject requirement for entry to the programme, and no previous experience of computing or computer programming is assumed. The programme does not involve an advanced level of mathematics, and any mathematical knowledge needed beyond that taught at GCSE is taught as part of the modules included in the programme.

4. Aims of the Programme

The broad aims of the programme are to:

- Develop your intellectual, practical and additional transferable skills, to enable you to gain a sound academic grounding in the discipline of Computer Science and an understanding of the professional issues relevant to your future working life.
- Include areas of teaching at the leading edge of the discipline, as informed by subject research, discipline and industry trends and market requirements.
- Prepare you for further study or research, and for employment in industry, commerce or public service.
- *(Work Placement year only) Gain substantial experience of work in the computing sector, including familiarisation with the professional working environment.*

The range of opportunities for graduates with computing skills continues to expand. Many of our graduates move into employment that is directly computing-related, for example as systems analysts, software engineers and consultants. A number of graduates go on to study for higher degrees in a wide range of subject areas, at Keele and elsewhere.

5. What you will learn

The intended learning outcomes of the programme (what students should know, understand and be able to do at the end of the programme), can be described under the following headings:

- Subject-related cognitive abilities and skills
- Subject-related practical abilities and skills
- Additional transferable skills (including employability skills)
- (Work placement year only) Work placement abilities and skills

Subject-related cognitive abilities and skills

Successful students will be able to demonstrate knowledge and understanding of:

LO1.1 Computational thinking including its relevance to everyday life.

- LO1.2 The scientific method and its applications to problem solving in this area.
- LO1.3 Essential facts, concepts, principles and theories relating to Computing and computer applications as appropriate to the programme of study.
- LO1.4 Modelling: use such knowledge and understanding in the modelling and design of computer-based systems for the purposes of comprehension, communication, prediction and the understanding of trade-offs.
- LO1.5 Requirements, practical constraints and computer-based systems (and this includes computer systems, information security, embedded, and distributed systems) in their context: recognise and analyse criteria and specifications appropriate to specific problems, and plan strategies for their solutions.
- LO1.6 Critical evaluation and testing: analyse the extent to which a computer-based system meets the criteria defined for its current use and future development.
- LO1.7 Methods and tool: deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems.
- LO1.8 Professional considerations: recognise the professional, economic, social, environmental, moral and ethical issues involved in the sustainable exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices.

Subject-related practical abilities and skills

Successful students will have the ability to:

- LO2.1 Specify, design and construct reliable, secure and usable computer-based systems.
- LO2.2 Evaluate systems in terms of quality attributes and possible trade-offs presented within the given problem.
- LO2.3 Plan and manage projects to deliver computing systems within constraints of requirements, timescale and budget.
- LO2.4 Recognise any risks and safety aspects that may be involved in the deployment of computing systems within a given context.
- LO2.5 Deploy effectively the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.
- LO2.6 Critically evaluate and analyse complex problems, including those with incomplete information, and devise appropriate solutions, within the constraints of a budget.

Additional transferable skills (including employability skills)

Successful students will have the opportunity to develop:

- LO3.1 A wide range of generic skills to ensure they become effective in the workplace, to the benefit of themselves, their employer and the wider economy.
- LO3.2 Intellectual skills: critical thinking; making a case; numeracy and literacy; information literacy. The ability to construct well-argued and grammatically correct documents. The ability to locate and retrieve relevant ideas, and ensure these are correctly and accurately referenced and attributed.
- LO3.3 Self-management: self-awareness and reflection; goal setting and action planning; independence and adaptability; acting on initiative; innovation and creativity. The ability to work unsupervised, plan effectively and meet deadlines, and respond readily to changing situations and priorities.
- LO3.4 Interaction: reflection and communication; the ability to succinctly present rational and reasoned arguments that address a given problem or opportunity, to a range of audiences (orally, electronically or in writing).
- LO3.5 Team working and management: the ability to recognise and make best use of the skills and knowledge of individuals to collaborate. To be able to identify problems and desired outcomes

and negotiate to mutually acceptable conclusions. To understand the role of a leader in setting direction and taking responsibility for actions and decisions.

LO3.6 Contextual awareness: the ability to understand and meet the needs of individuals, business and the community, and to understand how workplaces and organisations are governed.

LO3.7 Sustainability: recognising factors in environmental and societal contexts relating to the opportunities and challenges created by computing systems across a range of human activities.

(Work placement year only) Work placement skills

Successful students will be able to:

LO4.1 Evaluate their own employability skills (via a SWOT Analysis).

LO4.2 Create ILOs for their placement in order to develop the skills areas which they have identified as being weak or needing further enhancement.

LO4.3 Develop, through practice in the work place, the work-related skills identified through their SWOT analysis and ILOs.

LO4.4 Apply academic theory learnt as part of the taught degree to real situations in the work place.

LO4.5 Reflect on their work placement activities and experiences and evaluate the impact on their employability skills.

LO4.6 Explain how the professional computing sector operates and identify the skills required to pursue careers within the sector.

Keele Graduate attributes

Engagement with this programme will enable you to develop your intellectual, personal and professional capabilities. At Keele, we call these our ten Graduate Attributes and they include independent thinking, synthesizing information, creative problem solving, communicating clearly, and appreciating the social, environmental and global implications of your studies and activities. Our educational programme and learning environment is designed to help you to become a well-rounded graduate who is capable of making a positive and valued contribution in a complex and rapidly changing world, whichever spheres of life you engage in after your studies are completed.

Further information about the Keele Graduate Attributes can be found here: <http://www.keele.ac.uk/journey/>

6. How is the Programme taught?

Learning and teaching methods used on the programme vary according to the subject matter and level of the module. They include the following:

- **Traditional lectures** providing students with detailed notes, often supported by copies of lecture slides in print or electronic form
- **Practical sessions** in computer laboratories often supported by copies of laboratory instruction sheets
- **Web-based learning** using the University's virtual learning environment (KLE)
- **Tutorials** and directed reading on specific topics under the supervision of a member of academic staff
- **Group project** sessions in which students develop a design for a software item to a level sufficient to allow implementation to follow
- **(Work Placement Year only)** Work placement within the computing sector.

Apart from these formal activities, students are also provided with regular opportunities to talk through particular areas of difficulty, and any special learning needs they may have, with their Personal Tutors or module lecturers on a one-to-one basis.

These learning and teaching methods enable students to achieve the learning outcomes of the programme in a variety of ways. For example:

- lectures allow students to gain a systematic knowledge and understanding of computer science concepts and ideas and how to apply them to development of software and information systems
- web-based learning and directed reading allow students to develop their interest in computer science, their ability to reflect on their own learning and to take responsibility for its development
- group sessions enable students to develop their written and oral communication skills
- practical sessions and group work encourage students to work both independently and in collaboration with others as well as enabling them to solve problems in new or unfamiliar environments

7. Teaching Staff

The Computer Science academic staff currently comprises Professors, Readers, Senior Lecturers, Lecturers and Teaching Fellows, of whom a number are Associate Fellows, Fellows and Senior Fellows of the Higher Education Academy. More information about the Computer Science staff is available at <http://www.keele.ac.uk/scm/staff/>

The University will attempt to minimise changes to our core teaching teams, however, delivery of the programme depends on having a sufficient number of staff with the relevant expertise to ensure that the programme is taught to the appropriate academic standard.

Staff turnover, for example where key members of staff leave, fall ill or go on research leave, may result in changes to the programme's content. The University will endeavour to ensure that any impact on students is limited if such changes occur.

8. What is the Structure of the Programme?

The academic year runs from September to June and is divided into two semesters. The number of weeks of teaching will vary from course to course, but you can generally expect to attend scheduled teaching sessions between the end of September and mid-December, and from mid-January to the end of April.

Our degree courses are organised into modules. Each module is usually a self-contained unit of study and each is usually assessed separately with the award of credits on the basis of 1 credit = 10 hours of student effort. An outline of the structure of the programme is provided in the tables below.

There are four types of module delivered as part of this programme. They are:

- Compulsory core module – a module that you are required to study on this course;
- Optional core module – these allow you some limited choice of what to study from a list of modules;
- Programme approved elective module – subject-related modules that count towards the number of subject credits required by your degree;
- Free-standing elective module – a free choice of modules that count towards the overall credit requirement but not the number of subject-related credits.

Year 1 (Level 4)

In the first year of study the emphasis is placed upon learning to design and write programs to solve problems. Students therefore study both the algorithmic aspects of programming and the use of data structures as a means of incorporating data and knowledge within programs. In addition, they learn about some of the fundamental concepts in computing and the way in which humans interact with technology. Single Honours Computer Science students also study how information systems are used in business and our every-day lives, and get a chance to apply their coding skills within the context of animation and multimedia development environments.

Core modules	Credits	Elective modules	Credits
Fundamentals of Computing	15	Cybercrime, or a free-standing elective module from another discipline	15
Programming I - Programming Fundamentals	15	A free-standing elective module from another discipline	15
Requirements, Evaluation and Professionalism	15		

Natural Computation	15		
Information Systems and Interaction	15		
Computer Animation and Multimedia	15		

The content of modules at level 4 is informed by discipline and industry trends and market requirements, and the theoretical and practical requirements of level 5 and 6 modules.

Level 4 of this programme consists of modules to the value of 120 credits. Discounting electives (of which all students must take two) there are no options at level 4. However, formally the level 4 modules have the following co-requisites (modules required to be studied in the same year):

Module	Co-requisite
Fundamentals of Computing	none
Programming I - Programming Fundamentals	none
Cybercrime	none
Requirements, Evaluation and Professionalism	none
Natural Computation	none
Information Systems and Interaction	Fundamentals of Computing
Computer Animation and Multimedia	Programming I

Year 2 (Level 5)

The second year builds upon this foundation and introduces a number of different models for solving complex problems with computers, such as advanced programming techniques. Students also explore some of the professional and ethical issues in computing, and learn to develop sophisticated web applications and configure the servers on which these rely. Single Honours Computer Science students also study computational intelligence topics including evolutionary algorithms and neural networks, their use in vision systems and robotics

Core modules	Credits	Elective modules	Credits
System Lifecycles and Design	15	Virtual Worlds	15
Programming II - Data Structures and Algorithms	15		
Database Systems	15		
Mobile Application Development	15		
Computational Intelligence I	15		
Web Technologies	15		
Advanced Programming Practices	15		

The content of modules at level 5 is informed by discipline and industry trends and market requirements, and the theoretical and practical requirements of level 6 modules.

Level 5 of this programme consists of modules to the value of 120 credits. Discounting electives (of which all students must take one) there are no options at level 5. However, formally the level 5 modules have the following precursors (modules for which the study hours must have been completed).

Module	Precursor
System Lifecycles and Design	Programming I Requirements, Evaluation and Professionalism
Programming II - Data Structures and Algorithms	Programming I

Database Systems	Fundamentals of Computing Programming I
Mobile Application Development	Programming I
Computational Intelligence I	Programming I
Web Technologies	Programming I
Advanced Programming Practices	Programming II (co-requisite)
Virtual Worlds	Programming I

Year 3 (Level 6P) – Work Placement Year option

During the work placement year, students undertake a work placement (minimum 30 weeks (1050 hours) or equivalent) in a computing role. Students take CSC-30024 (non-credit bearing Work Placement Year module).

Sem1	Sem2	Module	Credit
Comp		CSC-30024 Work Placement Year Module	0

In order to undertake the Work Placement module, a student must have successfully completed 120 credits at both Level 4 and 5 (year 1 and 2). There are no specific module precursors, the programme's course specific regulations set out entry and eligibility requirements for the programme.

Year 3 (Level 6)

During the final year, students study a selection of more advanced and specialist topics. Each student also undertakes an individual project which continues throughout the year, culminating in a written dissertation.

Compulsory Core modules	Credits	Optional Core modules	Credits
30-credit Project	30	Software Engineering Project Management	15
		Advanced Information Systems	15
		Advanced Databases and Applications	15
		Games Computing	15
		Bioinformatics	15
		Computing in Education	30
		Computational and Artificial Intelligence II	15
		Communications and Networks	15
		Advanced Web Technologies	15

The content of modules at level 6 reflects and is informed by the research interests of the teaching staff, discipline and industry trends and market requirements, giving students an opportunity to explore topics at the leading edge of the discipline.

The level 6 modules have the following precursors.

Module	Precursors
Software Engineering Project Management	Requirements, Evaluation and Professionalism System Lifecycles and Design
Advanced Information Systems	Information Systems and Interaction System Lifecycles and Design
Advanced Databases and Applications	Database Systems Web Technologies
Games Computing	Programming I plus any of Web Technologies, Mobile App. Development, Programming II, Virtual Worlds

30-credit Project	(Normal progression)
Computing in Education	Interview, Secured place
Computational and Artificial Intelligence II	Computational Intelligence I
Communications and Networks	(Normal progression)
Advanced Web Technologies	Web Technologies
Bioinformatics	(Normal progression)

For further information on the content of modules currently offered please visit:

www.keele.ac.uk/recordsandexams/az

Learning Outcomes

Subject Knowledge and Understanding		
Learning Outcome <i>Successful students will be able to demonstrate knowledge and understanding of:</i>	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
Computational thinking including its relevance to everyday life.	All modules	Coursework and Examination
An understanding of the scientific method and its applications to problem solving in this area.	All modules	Coursework and Examination
Knowledge and understanding: demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to Computing and computer applications as appropriate to the programme of study.	All modules	Coursework and Examination
Modelling: use such knowledge and understanding in the modelling and design of computer-based systems for the purposes of comprehension, communication, prediction and the understanding of trade-offs.	All modules except Fundamentals of Computing and Computing in Education	Coursework and Examination
Requirements, practical constraints and computer-based systems (and this includes computer systems, information, security, embedded, and distributed systems) in their context: recognise and analyse criteria and specifications appropriate to specific problems, and plan strategies for their solutions.	All modules except Fundamentals of Computing and Computing in Education	Coursework and Examination
Critical evaluation and testing: analyse the extent to which a computer-based system meets the criteria defined for its current use and future development.	Requirements, Evaluation and Professionalism; Information Systems and Interaction; Database Systems; System Lifecycles and Design; Software Engineering Project Management; Advanced Information Systems; Advanced Web Technologies	Coursework and Examination

Methods and tools: deploy appropriate theory, practices and tools for the specification, design, implementation and evaluation of computer-based systems.	All modules except Fundamentals of Computing and Computing in Education	Coursework and Examination
Professional considerations: recognise the professional, economic, social, environmental, moral and ethical issues involved in the sustainable exploitation of computer technology and be guided by the adoption of appropriate professional, ethical and legal practices.	All modules except Programming I - Programming Fundamentals; Fundamentals of Computing; Computer Animation and Multimedia; Natural Computation; Programming II - Data Structures & Algorithms; Advanced Programming Practices; Mobile Application Development; Web Technologies; Database Systems; Computational Intelligence I; Virtual Worlds; Communications and Networks; Games Computing; Computational and Artificial Intelligence II; Bioinformatics; Advanced Web Technologies	Coursework and Examination

Subject Specific Skills		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will have the ability to:</i>		
Specify, design and construct reliable, secure and usable computer-based systems.	All modules except Fundamentals of Computing, Natural Computation, Computational Intelligence I, Computational and Artificial Intelligence II, and Computing in Education	Coursework and Examination
Evaluate systems in terms of quality attributes and possible trade-offs presented within the given problem.	Requirements, Evaluation and Professionalism; Information Systems and Interaction; Mobile Application Development; Database Systems; System Lifecycles and Design; Software Engineering Project Management; Advanced Information Systems; 30 credit Project; Advanced Web Technologies	Coursework and Examination
Plan and manage projects to deliver computing systems within constraints of requirements, timescale and budget.	All modules except Fundamentals of Computing, Communications and Networks, and Computing in Education	Coursework and Examination
Recognise any risks and safety aspects that may be involved in the deployment of computing systems within a given context.	Cybercrime; Requirements, Evaluation and Professionalism; Information Systems and Interaction; Advanced Programming Practices; Mobile Application Development; Web Technologies; Database Systems; System Lifecycles and Design; Communications and Networks; Software Engineering Project Management; Advanced Information Systems; Advanced Databases and Applications; 30 credit Project; Computing in Education; Advanced Web Technologies	Coursework and Examination

Deploy effectively the tools used for the construction and documentation of computer applications, with particular emphasis on understanding the whole process involved in the effective deployment of computers to solve practical problems.	All modules except Fundamentals of Computing, Communications and Networks, and Computing in Education	Coursework and Examination
Critically evaluate and analyse complex problems, including those with incomplete information, and devise appropriate solutions, within the constraints of a budget.	Cybercrime; Requirements, Evaluation and Professionalism; Information Systems and Interaction; Computer Animation and Multimedia; Natural Computation; Programming II - Data Structures & Algorithms; Advanced Programming Practices; Mobile Application Development; Web Technologies; Database Systems; System Lifecycles and Design; Virtual Worlds; Communications and Networks; Software Engineering Project Management; Advanced Information Systems; Advanced Databases and Applications; Games Computing; 30 credit Project; Advanced Web Technologies; Bioinformatics	Coursework and Examination

Key or Transferable Skills		
Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will have the opportunity to develop:</i>		
A wide range of generic skills to ensure they become effective in the workplace, to the benefit of themselves, their employer and the wider economy.	All modules	Coursework and Examination
Intellectual skills: critical thinking; making a case; numeracy and literacy; information literacy. The ability to construct well argued and grammatically correct documents. The ability to locate and retrieve relevant ideas, and ensure these are correctly and accurately referenced and attributed.	Cybercrime; Requirements, Evaluation and Professionalism; Information Systems and Interaction; Mobile Application Development; Web Technologies; Database Systems; System Lifecycles and Design; Computational Intelligence I; Communications and Networks; Software Engineering Project Management; Advanced Information Systems; Advanced Databases and Applications; Games Computing; 30 credit Project; Computing in Education; Computational and Artificial Intelligence II; Advanced Web Technologies; Bioinformatics	Coursework and Examination
Self-management: self-awareness and reflection; goal setting and action planning; independence and adaptability; acting on initiative;	Requirements, Evaluation and Professionalism; Information Systems and Interaction; System Lifecycles and Design; Virtual Worlds; 30 credit Project; Computing in Education	Coursework and Examination

innovation and creativity. The ability to work unsupervised, plan effectively and meet deadlines, and respond readily to changing situations and priorities.		
Interaction: reflection and communication: the ability to succinctly present rational and reasoned arguments that address a given problem or opportunity, to a range of audiences (orally, electronically or in writing).	All modules	Coursework and Examination
Team working and management: the ability to recognise and make best use of the skills and knowledge of individuals to collaborate. To be able to identify problems and desired outcomes and negotiate to mutually acceptable conclusions. To understand the role of a leader in setting direction and taking responsibility for actions and decisions.	Requirements, Evaluation and Professionalism; Information Systems and Interaction; System Lifecycles and Design; Software Engineering Project Management; Advanced Information Systems; Computing in Education	Coursework and Examination
Contextual awareness: the ability to understand and meet the needs of individuals, business and the community, and to understand how workplaces and organisations are governed.	Cybercrime; Requirements, Evaluation and Professionalism; Information Systems and Interaction; Mobile Application Development; Web Technologies; Database Systems; System Lifecycles and Design; Virtual Worlds; Communications and Networks; Software Engineering Project Management; Advanced Information Systems; Advanced Databases and Applications; Computing in Education; Advanced Web Technologies	Coursework and Examination
Sustainability: recognising factors in environmental and societal contexts relating to the opportunities and challenges created by computing systems across a range of human activities.	System Lifecycles and Design; Software Engineering Project Management; Advanced Information Systems	Coursework and Examination

(Work placement year only) Work placement skills

Learning Outcome	Module in which this is delivered	Principal forms of assessment (of the Level Outcome) used
<i>Successful students will be able to:</i>		
LO4.1 Evaluate their own employability skills (via a SWOT Analysis).	Work Placement Year	Coursework
LO4.2 Create ILOs for their placement in order to develop the	Work Placement Year	Coursework

skills areas which they have identified as being weak or needing further enhancement.		
LO4.3 Develop, through practice in the work place, the work-related skills identified through their SWOT analysis and ILOs.	Work Placement Year	Coursework
LO4.4 Apply academic theory learnt as part of the taught degree to real situations in the work place.	Work Placement Year	Coursework and Presentation
LO4.5 Reflect on their work placement activities and experiences and evaluate their learning from the work placement	Work Placement Year	Coursework and Presentation
LO4.6 Explain how the professional computing sector operates and identify the skills required to pursue careers within the sector.	Work Placement Year	Coursework

Module Topics

The course has been developed in line with BCS accreditation requirements that an honours degree provides breadth and depth in the area of computing, the course is influenced by relevant research, industry and market requirements, and has adequate theoretical underpinning. The ACM CS2013 Curriculum Guidance for Undergraduate Programmes in Computer Science provides a "Body of Knowledge" seen as defining the scope of the broad area of computing. This is not intended to define curricula or syllabi. The table below shows which modules contribute to each topic from the Body of Knowledge. The Work Placement year has not been included below as the skills developed will be specific to each individual project.

Body of Knowledge topic	Modules contributing to the topic
Algorithms and Complexity	Programming I - Programming Fundamentals; Fundamentals of Computing; Cybercrime; Information Systems and Interaction; Computer Animation and Multimedia; Natural Computation; Programming II - Data Structures & Algorithms; Advanced Programming Practices; Mobile Application Development; Web Technologies; Database Systems; Computational Intelligence I; Virtual Worlds; Communications and Networks; Software Engineering Project Management; Advanced Information Systems; Advanced Databases and Applications; Games Computing; Computational and Artificial Intelligence II; Bioinformatics; Advanced Web Technologies
Architecture and Organisation	Fundamentals of Computing; Cybercrime; Information Systems and Interaction; Communications and Networks
Computational Science	Programming I - Programming Fundamentals; Fundamentals of Computing; Cybercrime; Requirements, Evaluation and Professionalism; Information Systems and Interaction; Computer Animation and Multimedia; Natural Computation; Programming II - Data Structures & Algorithms; Advanced Programming Practices; Mobile Application Development; Web Technologies; Database Systems; System Lifecycles and Design;

	Computational Intelligence I; Virtual Worlds; Communications and Networks; Software Engineering Project Management; Advanced Information Systems; Advanced Databases and Applications; Games Computing; 30 credit Project; Computing in Education; Computational and Artificial Intelligence II; Advanced Web Technologies; Bioinformatics
Discrete Structures	Programming I - Programming Fundamentals; Fundamentals of Computing; Natural Computation; Programming II - Data Structures & Algorithms; Advanced Programming Practices; Mobile Application Development; Web Technologies; Database Systems; Communications and Networks; Advanced Databases and Applications; Games Computing; Advanced Web Technologies; Bioinformatics
Graphics and Visualisation	Fundamentals of Computing; Computer Animation and Multimedia; Virtual Worlds; Games Computing; Bioinformatics
Human-Computer Interaction	Fundamentals of Computing; Requirements, Evaluation and Professionalism; Information Systems and Interaction; Mobile Application Development; Web Technologies; Advanced Information Systems; Games Computing; Advanced Web Technologies
Information Assurance and Security	Cybercrime; Requirements, Evaluation and Professionalism; System Lifecycles and Design; Communications and Networks; Advanced Databases and Applications; Advanced Web Technologies
Information Management	Fundamentals of Computing; Information Systems and Interaction; Database Systems; Advanced Information Systems; Advanced Databases and Applications; Advanced Web Technologies
Intelligent Systems	Information Systems and Interaction; Natural Computation; Computational Intelligence I; Advanced Information Systems; Computational and Artificial Intelligence II
Networking and Communications	Fundamentals of Computing; Cybercrime; Communications and Networks
Operating Systems	Fundamentals of Computing
Platform-based Development	Information Systems and Interaction; Computer Animation and Multimedia; Mobile Application Development; Web Technologies; Virtual Worlds; Database Systems; Games Computing; Advanced Web Technologies
Parallel and Distributed Computing	Advanced Programming Practices; Communications and Networks; Advanced Databases and Applications; Games Computing
Programming Languages	Programming I - Programming Fundamentals; Programming II - Data Structures & Algorithms; Advanced Programming Practices;
Software Development Fundamentals	Programming I - Programming Fundamentals; Fundamentals of Computing; System Lifecycles and Design; Games Computing; Bioinformatics;
Software Engineering	Requirements, Evaluation and Professionalism; Programming II - Data Structures & Algorithms; Advanced Programming Practices; Mobile Application Development; Web Technologies; Database Systems; System Lifecycles and Design; Software Engineering Project Management; Games Computing; Advanced Web Technologies

Systems Fundamentals	Requirements, Evaluation and Professionalism; Information Systems and Interaction; Mobile Application Development; System Lifecycles and Design;
Social Issues and Professional Practice	Cybercrime; Requirements, Evaluation and Professionalism; Information Systems and Interaction; System Lifecycles and Design; Software Engineering Project Management; Advanced Information Systems; 30 credit Project; Computing in Education

9. Final and intermediate awards

Credits required for each level of academic award are as follows:

Honours Degree	360 credits	You will require at least 120 credits at levels 4, 5 and 6. You must accumulate at least 315 credits in Computer Science (out of 360 credits overall), with at least 90 credits in Level 4, 105 credits in Level 5 and 120 credits in Level 6, to graduate with a named single honours degree in Computer Science.
Diploma in Higher Education	240 credits	You will require at least 120 credits at level 4 or higher and at least 120 credits at level 5 or higher
Certificate in Higher Education	120 credits	You will require at least 120 credits at level 4 or higher

Computer Science with International Year: in addition to the above students must pass a module covering the international year in order to graduate with a named degree in Computer Science with International Year. Students who do not complete, or fail the international year, will be transferred to the three-year Computer Science programme. The failure will be recorded on the student's final transcript.

Computer Science with Work Placement Year: in addition to the above students must pass CSC-30024, the non-credit bearing module covering the work placement year, in order to graduate with the 'with work placement year' version of the Computer Science degree. Students who do not complete or fail the work placement year will be transferred to the three-year Computer Science programme. Failure of the work placement year will be recorded on a student's final transcript.

10. How is the Programme assessed?

The wide variety of assessment methods used within Computer Science at Keele reflects the broad range of knowledge and skills that are developed as you progress through the degree programme. Teaching staff pay particular attention to specifying clear assessment criteria and providing timely, regular and constructive feedback that helps to clarify things you did not understand and helps you to improve your performance. The following list is representative of the variety of assessment methods used within Computer Science:

- **Unseen examinations** in different formats test a student's knowledge and understanding of computer science topics. Such examinations are of two hours in length and contain compulsory and possibly also optional questions.
- **Class tests** are taken during the course of a module, usually in a lecture slot. They are intended to assess a student's current understanding and subject knowledge in that module in a structured and focused manner. Some taught compulsory modules may have class tests as part of the assessment profile.
- **Coursework** normally consists of assignments designed to assess student's knowledge and understanding of the module material. Some of these assignments may be computer based; others take the form of individual reports, essays or group projects.

- **Short reports:** for which students are required to write up their own account of small group studies and discussions on particular topics.
- **Tutorial Participation**, whereby students may be asked to make contributions based on the subject material, either orally or as a written solution, sometimes in consultation with their peers.
- **Dissertations** are formal reports of work carried out by students undertaking a project. Projects involve the integration and application of theoretical knowledge and problem-solving skills to an identified programming need and/or research problem within the discipline. Dissertations describe product and process in extended detail.
- **Oral presentations** and reports assess a student's ability to communicate their knowledge and understanding, both visually and orally, to both general and academic audiences.

Marks are awarded for summative assessments designed to assess your achievement of learning outcomes. You will also be assessed formatively to enable you to monitor your own progress and to assist staff in identifying and addressing any specific learning needs. Feedback, including guidance on how you can improve the quality of your work, is also provided on all summative assessments within three working weeks of submission, unless there are compelling circumstances that make this impossible, and more informally in the course of tutorial and seminar discussions.

11. Contact Time and Expected Workload

This contact time measure is intended to provide you with an indication of the type of activity you are likely to undertake during this programme. The data is compiled based on module choices and learning patterns of students on similar programmes in previous years. Every effort is made to ensure this data is a realistic representation of what you are likely to experience, but changes to programmes, teaching methods and assessment methods mean this data is representative and not specific.

Undergraduate courses at Keele contain an element of module choice; therefore, individual students will experience a different mix of contact time and assessment types dependent upon their own individual choice of modules. The figures below are an example of activities that a student may expect on your chosen course by year/stage of study. Contact time includes scheduled activities such as: lecture, seminar, tutorial, project supervision, demonstration, practical classes and labs, supervised time in labs/workshop, fieldwork and external visits. The figures are based on 1,200 hours of student effort each year for full-time students.

Activity	Year 1 (Level 4)	Year 2 (Level 5)	Work Placement	Year 3 (Level 6)
Scheduled learning and teaching activities	27%	29%	0%	16%
Guided independent Study	73%	71%	0%	84%
Placements	0%	0%	100%	0%

12. Accreditation

The BSc (Hons) Computer Science, BSc (Hons) Computer Science with International Year, and BSc (Hons) Computer Science with Work Placement Year programmes are accredited by the Chartered Institute for IT (BCS).

13. Regulations

The University Regulations form the framework for learning, teaching and assessment and other aspects of the student experience. Further information about the University Regulations can be found at: <http://www.keele.ac.uk/student-agreement/>

[Computer Science Regulations](#)

Transfer onto the MComp Programme

Regulation 1F, paragraph 2.1 states that the rules governing eligibility for transfer onto an Integrated Masters programme shall be governed by the relevant Course Regulations.

Single honours BSc Computer Science students will be permitted to transfer onto the MComp programme at any point up to the end of Level 5, subject to having met any relevant progression criteria and, in any event, only with the approval of the Programme Director.

Study Abroad (semester abroad)

Students intending to study abroad must pass all modules in their first year and obtain an average of at least 50%. The school can insist that no placement is made if a student's progress is not of a satisfactory standard.

Students spending a semester abroad during their second year of study must agree a programme with the Study Abroad Tutor (SAT) before they leave and must agree any subsequent changes that become necessary.

Marks obtained will be converted into Keele equivalents according to the agreement between Keele and the partner institution. In the case of borderline marks or incomplete work, the Computer Science examination board will determine the mark to be awarded. In the event of unfinished modules, the Director of Learning and Teaching or Study Abroad Tutor may require extra work to be completed.

Study Abroad (International Year)

A summary of the International Year, which is a potential option for students after completion of year 2 (Level 5), is provided at Annex A. A student who has completed a semester abroad will not normally be eligible to transfer onto the International Year option.

Work Placement Year (Programme-specific regulations)

Entry

- a) Students have the opportunity to apply directly for the 4-year with Work Placement Year degree programme or to transfer onto the 4-year degree programme at the end of Year-1 and in Year-2 at the end of Semester 1. Due to visa requirements, it is not possible for international students who require a Tier 4 Visa to apply for direct entry onto the 4-year with Work Placement Year degree programme. Students wishing to transfer onto this programme should discuss this with student support, the academic tutor for the work placement year, and the Programme Director. Students should be aware that there are visa implications for this transfer, and it is the student's responsibility to complete any and all necessary processes to be eligible for this programme. There may be additional costs, including applying for a new Visa from outside of the UK for international students associated with a transfer to the work placement programme.
- b) Students who are initially registered for the 4-year degree programme may transfer onto the 3-year degree programme at any point in time, prior to undertaking their year-long work placement.
- c) Students who fail to pass the work placement year module (CSC-30024), and those who fail to meet the minimum requirements of the work placement year module (minimum 30 weeks full time (1050 hours), or equivalent, work placement), will be automatically transferred onto the 3-year degree programme.
- d) A student that has completed an International Year will not be allowed to transfer onto the Work Placement Year Programme.

Eligibility

- a) Students must have a good University attendance record.
- b) Students must have passed all Year-1 and Year-2 Semester 1 modules with an overall module average of 55%.
- c) Students must have met the progression requirements to proceed to their final year of study prior to commencing a work placement.
- d) Failure to complete reassessment work in the summer reassessment period due to a work placement position will not be classed as extenuating circumstances.

Reassessment

- a) Students must pass Assessment 1 (mid-placement portfolio) with a mark of 40% in order to continue with their work placement and pass the Work Placement Year module. Students will not be permitted to take reassessment of this component of the module.
- b) Students failing Assessment 1 at first attempt will be required to withdraw from the Work Placement Year module and will be transferred onto the 3-year degree programme.
- c) Students will be permitted to take reassessment of Assessment 2 (Final Placement Portfolio) and Assessment 3 (Oral Presentation), as appropriate. Students are not permitted to repeat the Work Placement Year.

International Placements

- a) Students can undertake an international work placement if appropriate.
- b) It is the student’s responsibility to ensure that they meet any visa and/or work permit requirements of the country in which they choose to undertake their placement.
- c) Failure to obtain the relevant visa and/or work permit documentation will not be classed as extenuating circumstances.
- d) All assessments for the work placement module must be completed in English, including the work placement host’s evaluation of the student.

International Students

- a) International students studying at Keele should check their existing visa regulations with the UK Home Office (UKVI) prior to committing to and undertaking a work placement.
- b) It is the student’s responsibility to keep the UKVI and Immigration Compliance at the University informed of any change in their circumstances or status, including the implications of undertaking both paid and unpaid employment in the UK or in another country.
- c) It is the student’s responsibility to ensure that undertaking a work placement (paid or otherwise) does not contravene their existing visa requirements and restrictions.
- d) For students who have or require a Tier 4 Student Visa to study in the UK that wish or are required to transfer to or from the 4 year with Work Placement Year degree programme will need to apply for a new Visa from outside of the UK at their own cost, prior to changing degree programme.
- e) Students with queries or concerns in relation to these requirements should initially contact the International Student Support and Immigration Compliance located in the Student Service Centre at Keele for advice.

Health and Safety

- a) Students undertaking work placements will be expected to complete a Health and Safety checklist prior to commencing their work experience.
- b) Students will be required to satisfy the Health and Safety regulations of the company or organisation at which they are based.

Student Finance and Funding

- a) Students registered on the 4-year ‘with Work Placement Year’ degree programme will be registered as a student at Keele for the 4-year duration of their degree programme.
- b) It is the student’s responsibility to notify Student Finance (England, Wales, Scotland, Northern Ireland, as appropriate), the Student Loans Company, and any other relevant funding bodies (as appropriate) of any change in their status.
- c) Students who undertake paid work placements should discuss the implications of this with Student Finance, the Student Loans Company and any other relevant funding body prior to commencing the placement.

14. What are the typical admission requirements for the programme?

Subject	A-level	Subjects not included	International Baccalaureate	BTEC	Access to Higher Education Diploma	GCSE requirements

Computer Science (Single Honours)	ABC / BBB	General Studies and Critical Thinking	32 points	DDM	Obtain Access to Higher Education Diploma with 30 Level 3 credits at Distinction	Maths @ C (or 4) English Language @ C (or 4)
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Applicants who are not currently undertaking any formal study or who have been out of formal education for more than 3 years and are not qualified to A-level or BTEC standard may be offered entry to the University's Foundation Year Programme.

Applicants for whom English is not a first language must provide evidence of a recognised qualification in English language. The minimum score for entry to the Programme is Academic IELTS 6.0 or equivalent.

Please note: All non-native English speaking students are required to undertake a diagnostic English language assessment on arrival at Keele, to determine whether English language support may help them succeed with their studies. An English language module may be compulsory for some students during their first year at Keele.

Accreditation of Prior Learning (APL) is considered on a case-by-case basis and those interested should contact the Programme Director. The University's guidelines on this can be found here:

<http://www.keele.ac.uk/ga/accreditationofpriorlearning/>

15. How are students supported on the programme?

Support for student learning on the Programme is provided in the following ways:

- Module lecturers, teaching fellows and computing laboratory demonstrators are responsible for providing support for learning on the modules. They also give individual feedback on coursework assignments and more general feedback on examinations. Students do not normally need to make a formal appointment to meet a member of staff. Some staff have dedicated office hours when they guarantee to be in their room and available for enquiries. Other staff have an open door policy, which means students can drop in at any time. Many staff have both.
- Every student is allocated to a Personal Tutor who is responsible for reviewing and advising on students' academic progress in Computer Science.
- Personal Tutors also act as a first point of contact for students on non-academic issues which may affect their learning and can refer students on to a range of specialist health, welfare and financial services co-ordinated by the University's Student Support and Development Services.
- All students undertaking the work placement degree programme will be provided with an academic tutor, based at Keele. Students are expected to arrange their own work placement. A list of potential placements will be provided that students can apply for, with allocation being based on a competitive interview process involving the placement providers. Students are also permitted to provide their own placement option. Support will be offered throughout the placement process. This will involve support ensuring the appropriateness of the placement prior to starting the Placement Year, and email/telephone/face-to-face contact with the academic tutor throughout the placement at regular intervals.

16. Learning Resources

Computer Science is taught in lecture theatres, teaching rooms and computer laboratories. The learning resources available to students on the Programme include:

- Dedicated networked PC laboratories within the School of Computing and Mathematics, which use the Microsoft Windows and GNU/Linux operating systems and provide a wide range of supported software. The School buildings are accessible 24 hours a day. Students have individual email accounts and file stores on University and School servers. Additional facilities are provided for final year projects.

- The Keele Learning Environment (KLE) which provides easy online access to a range of learning resources including lecture notes and other resources supplied in modules.
- The extensive collection of books and journals relevant to undergraduate study held in the University Library. Much of this material is also accessible online to Keele students from anywhere in the world with a University username and password.

17. Other learning opportunities

Study abroad (semester)

Students on the Computer Science programme have the potential opportunity to spend a semester abroad in their second year studying at one of Keele's international partner universities.

Exactly which countries are available depends on the student's choice of degree subjects. An indicative list of countries is on the website (<http://www.keele.ac.uk/studyabroad/partneruniversities/>); however this does not guarantee the availability of study in a specific country as this is subject to the University's application process for studying abroad.

No additional tuition fees are payable for a single semester studying abroad but students do have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad to be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination

Whilst students are studying abroad any Student Finance eligibility will continue, where applicable students may be eligible for specific travel or disability grants. Students studying in Erasmus+ destinations may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible for income dependent bursaries at Keele.

Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.

Students considering study abroad should be aware that because of the nature of the discipline, it is difficult to find appropriate matching modules in other countries. Any student considering study abroad is strongly advised to take specific advice from appropriate members of staff such as the Study Abroad Tutor as early as possible.

Study Abroad (International Year)

A summary of the International Year, which is a potential option for students after completion of year 2 (Level 5), is provided at Annex A.

18. Additional costs

Computer Science Programme Additional Costs

Some travel costs may be incurred if an external project is undertaken in the third year. However, any such costs would be discussed with you before the project was selected. It would be possible for you to select an internal project that would not incur any additional costs.

Computing in Education is an optional third year (level 6) module which involves students spending one day a week supporting a teacher in a local school or college, over at least 16 weeks. Due to UK Home Office rules on student Tier 4 Visas this option is not available if a student has a student Tier 4 Visa to study in the UK. A DBS check will be required in order to take the module, and this currently costs £44. Travel will be required, depending on the location of the school or college you choose. The costs of both of these would be incurred by

the student and cannot be reimbursed by the University. It is possible to select alternative modules, which do not incur any cost.

Students taking the BSc (Hons) Computer Science with Work Placement Year programme will be responsible for organising their own placement with the support of the module tutors. This allows students to choose when and where to carry out their work placement, taking into consideration the potential living and travel expenses incurred and the effect on other times available to earn money. Students are encouraged to consider the potential costs incurred in carrying out the work placements at the time of setting them up. Further guidance and support on these considerations is available from the module tutors.

For international students transferring onto the BSc (Hons) Computer Science with Work Placement Year programme there may be implications and additional costs incurred by this transfer relating to applying for a new student Visa from outside of the UK before the transfer takes place.

These costs have been forecast by the University as accurately as possible but may be subject to change as a result of factors outside of our control (for example, increase in costs for external services). Forecast costs are reviewed on an annual basis to ensure they remain representative. Where additional costs are in direct control of the University we will ensure increases do not exceed 5%.

As to be expected there will be additional costs for inter-library loans and potential overdue library fines, print and graduation.

We do not anticipate any further additional costs for this undergraduate programme.

19. Quality management and enhancement

The quality and standards of learning in Computer Science are subject to a continuous process of monitoring, review and enhancement.

- The Learning and Teaching Committee of the School of Computing and Mathematics is responsible for reviewing and monitoring quality management and enhancement procedures and activities across the School.
- Individual modules and the Computer Science Programme as a whole are reviewed and enhanced every year in the annual programme review which takes place at the end of the academic year and as part of the University's Curriculum Annual Review and Development (CARD) process.
- The School operates a process of peer observation of teaching, whereby members of academic staff critically evaluate the teaching of one another.
- Continuous Professional Development is available to all staff.
- The programmes are run in accordance with the University's Quality Assurance procedures and are subject to periodic reviews under the Internal Quality Audit (IQA) process.

Student evaluation of, and feedback on, the quality of learning on every Computer Science module takes place every year using a variety of different methods:

- The results of student evaluations of all modules are reported to module leaders and reviewed by the Programme Committee as part of the Curriculum Annual Review and Development (CARD) process.
- Findings related to the Computer Science Programmes from the annual National Student Survey (NSS), and from regular surveys of the student experience conducted by the University, are subjected to careful analysis and a planned response at programme and School level.
- Feedback received from representatives of students in all three years of the Computer Science Programme is considered and acted on at regular meetings of the Programmes Staff/Student Liaison

Committee.

In addition to this, the quality and standards of teaching are regularly discussed and monitored by the Computer Science Undergraduate Programme Committee and by the School Learning and Teaching Committee.

The University appoints senior members of academic staff from other universities to act as external examiners on all programmes. They are responsible for:

- Approving examination questions
- Confirming all marks which contribute to a student's degree
- Reviewing and giving advice on the structure and content of the programme and assessment procedures

Information about current external examiner(s) can be found here:

<http://www.keele.ac.uk/qa/externalexaminers/currentexternalexaminers/>

20. The principles of programme design

The Computer Science Programmes described in this document have been drawn up with reference to, and in accordance with the guidance set out in, the following documents:

- a. UK Quality Code for Higher Education, Quality Assurance Agency for Higher Education:
<http://www.qaa.ac.uk/en/quality-code/>
- b. QAA Subject Benchmark Statement: Computing (2016)
http://www.qaa.ac.uk/docs/qaa/subject-benchmark-statements/sbs-computing-16.pdf?sfvrsn=26e1f781_12
- c. Accreditation criteria, British Computer Society, 2010.
<http://www.bcs.org/category/5844>, <http://www.bcs.org/upload/pdf/criteria.pdf>
- d. Keele University Regulations and Guidance for Students and Staff: <http://www.keele.ac.uk/regulations>
- e. Keele University Placement Learning Code of Practice:
<https://www.keele.ac.uk/policyzone/viewbyowner/planningandacademicadministration/name,117421,en.php>

21. Document Version History

Version history	Approved Date	Notes
Date first created	October 2016	
Revision history	V2.0: 02/2017	Remove CSY-30002 Electronic Commerce optional module - content no longer current [minor change]
	V3.0: 08/2017	Remove CSC-10033 Systems and Architecture; CSC-20024 Virtual Worlds; CSC-30023 Evolution of Complex Systems [minor change – optional modules]
	V3.1: 02/2018	Updated to reflect module option offering for 2018-19: 'Virtual Worlds' added as a year 2 elective and a year 3 optional module change (IT Architectures replaced by Advanced Web Technologies) [minor]
	V3.2: 08/2018	Updated to reflect change in pre-requisites for CSY-30001 and CSC-20022 [minor]

	V4.0: 03/2019	Updated to reflect BCS accreditation. Updates to Level 6 modules.
Date approved	FLTC 03/02/17	

Annex A

BSc (Hons) Computer Science with International Year

International Year Programme

Students registered for Single Honours Computer Science may either be admitted for or apply to transfer during their period of study at Level 5 to the Single Honours Computer Science with International Year'. Students accepted onto this programme will have an extra year of study (the International Year) at an international partner institution after they have completed Year 2 (Level 5) at Keele.

Students who successfully complete both the second year (Level 5) and the International Year will be permitted to progress to Level 6. Students who fail to satisfy the examiners in respect of the International Year will normally revert to the BSc (Hons) Computer Science and progress to Level 6 on that basis. The failure will be recorded on the student's final transcript.

Study at Level 4, Level 5 and Level 6 will be as per the main body of this document. The additional detail contained in this annex will pertain solely to students registered for BSc (Hons) Computer Science with International Year'.

International Year Programme Aims

In addition to the programme aims specified in the main body of this document, the international year programme of study aims to provide students with:

1. Personal development as a student and a researcher with an appreciation of the international dimension of their subject
2. Experience of a different culture, academically, professionally and socially

Entry Requirements for the International Year

Students may apply to the 4-year programme during Level 5. Admission to the International Year is subject to successful application, interview and references from appropriate staff.

The criteria to be applied are:

- Academic Performance (an average of 60% across all modules at Level 5 is normally required)
- General Aptitude (to be demonstrated by application for study abroad, interview during the 2nd semester of year 2 (Level 5), and by recommendation of the student's personal tutor, 1st and 2nd year tutors and programme director)

Student Support

Students will be supported whilst on the International Year via the following methods:

- Phone or Skype conversations with Study Abroad tutor, in line with recommended Personal Tutoring meeting points.
- Support from the University's Global Education Team

Learning Outcomes

In addition to the learning outcomes specified in the main text of the Programme Specification, students who complete a Keele undergraduate programme with International Year will be able to:

- a. Describe, discuss and reflect upon the cultural and international differences and similarities of different learning environments
- b. Discuss the benefits and challenges of global citizenship and internationalisation
- c. Explain how their perspective on their academic discipline has been influenced by locating it within

an international setting.

In addition, students who complete BSc (Hons) Computer Science with International Year' will be able to:

- i) Communicate effectively in an international setting;
- ii) Reflect on previous learning within an international context.

These learning outcomes will all be assessed by the submission of a satisfactory individual learning agreement, the successful completion of assessments at the partner institution and the submission of the reflective portfolio element of the international year module.

Course Regulations

Students registered for the BSc (Hons) Computer Science with International Year' are subject to the course specific regulations (if any) and the University regulations. In addition, during the International Year, the following regulations will apply:

Students undertaking the International Year must complete 120 credits, which must comprise *at least 40%* in the student's discipline area.

This may impact on your choice of modules to study, for example you will have to choose certain modules to ensure you have the discipline specific credits required.

Students are barred from studying any Computer Science module with significant overlap to Level 6 modules to be studied on their return. Significant overlap with Level 5 modules previously studied should also be avoided.

Students taking a semester abroad during Level 5 will not be allowed to transfer onto the International Year programme.

Additional costs for the International Year

Tuition fees for students on the International Year will be charged at 15% of the annual tuition fees for that year of study, as set out in Section 1. The International Year can be included in your Student Finance allocation, to find out more about your personal eligibility see: www.gov.uk

Students will have to bear the costs of travelling to and from their destination university, accommodation, food and personal costs. Depending on the destination they are studying at additional costs may include visas, study permits, residence permits, and compulsory health checks. Students should expect the total costs of studying abroad be greater than if they study in the UK, information is made available from the Global Education Team throughout the process, as costs will vary depending on destination.

Students studying in Erasmus+ destinations may be eligible for grants as part of this programme. Students studying outside of this programme may be eligible income dependent bursaries at Keele.

Students travel on a comprehensive Keele University insurance plan, for which there are currently no additional charges. Some Governments and/or universities require additional compulsory health coverage plans; costs for this will be advised during the application process.