University of the West of England
BRISTOL

CORPORATE AND ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data	
Awarding Institution	UWE
Teaching Institution	UWE
Delivery Location	UWE, Frenchay
Faculty responsible for programme	Environment and Technology
Department responsible for programme	Computer Science and Creative Technologies
Modular Scheme Title	Environment and Technology
Professional Statutory or Regulatory Body Links *Name of PSRB* *Type of approval* **Dates**	None
Highest Award Title	BSc (Hons) Computer Studies
Default Award Title	None
Interim Award Titles	BSc Computer Studies Dip HE Computer Studies Cert HE Computer Studies
UWE Progression Route	
Mode(s) of Delivery	Full-time, Sandwich, Part-time
Codes	**UCAS: no UCAS entry not recruiting externally** **JACS:** **ISIS2: FT/PT** I19013 **HESA:** **SW** I190
Relevant QAA Subject Benchmark Statements	Computing
CAP Approval Date	18th September 2012
Valid From	September 2012
Valid until Date	September 2018
Version	1

Part 2: Educational Aims of the Programme
This programme is designed for students who are unable to complete their original programme of study, due to failure in one or more core modules. It is intended to provide a flexible opportunity for students to continue to study to degree level in their broad discipline area.   Students may not enroll directly onto this programme.

Part 2: Educational Aims of the Programme

The following general aims apply:

- To equip students with a range of skills and knowledge that will enable them to embark on graduate careers or further study in higher education.
- To foster in students the interest and ability to become independent lifelong learners, able to reflect critically both on their practice and that of others.

Part 3: Learning Outcomes of the Programme

The award route provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas:

Learning Outcomes	Teaching, Learning and Assessment Strategies
A Knowledge and Understanding	
A Knowledge and understanding of - The structure and workings of computing and its associated professions - Key topics in the area of computing, which may include: Architecture, Artificial intelligence Computer-based systems, Computer networks, Databases, Data structures and algorithms, objects and patterns, Operating systems programming, Security and privacy Web-based computing, ethics - Methods, modeling techniques, and concepts in software development	Teaching/learning methods and strategies: Teaching and learning methods are specified in the relevant module specifications and are consistent with faculty practice in other programmes. Throughout, the learner is encouraged to undertake independent study both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject Assessment: A variety of assessment methods will be used. Particular range of assessment methods will depend on module choice.
B Intellectual Skills	
B Intellectual Skills By the end of the programme the student should be able to: - Analyze and synthesize issues, information, and perspectives relating to different scenarios in computing. - Approach problem solving creatively effectively. - evaluate alternative ideas and solutions.	Teaching/learning methods and strategies: Intellectual skills are developed in accordance with the module specifications Assessment: A variety of assessment methods will be used. Particular range of assessment methods will depend on module choice.
C Subject, Professional and Practical Skills	
C Subject, Professional and Practical Skills By the end of the programme students should be able to: - Select and use appropriate methods and techniques to analyse / design / develop software to satisfy user requirements	Teaching/learning methods and strategies: A wide range of teaching methods will be used to teach subject, professional and practical skills. These could include, lectures tutorials, laboratory sessions, work placements. Individual approaches will be specified in the module specifications

Part 3: Learning Outcomes of the Programme	
• Appraise technical designs. • Employ a variety of technical methods of analyzing presenting and interpreting information. • Understand and comply with relevant legislation and professional standards pertaining to practice in computing and software development	Assessment: A variety of assessment methods will be used. Particular assessment methods will depend on module choice.
D Transferable Skills and other attributes	
D Transferable Skills and other attributes By the end of the programme the students should be able to: • Communicate effectively, both verbally and in writing, using a wide range of media • Work independently and as part of a team. • Demonstrate the ability to plan, manage and complete a range of tasks to meet deadlines. • Read and make appropriate use of academic and professional literature • Use appropriate information and communication technologies to advance their understanding and command of the discipline area	Teaching/learning methods and strategies: Transferable skills will be embedded in all modules and will be acquired through a wide range of teaching methods, specifics dependant on module choice. Assessment: A variety of assessment methods will be used. Particular assessment methods will depend on module choice.

Part 4: Programme Structure			
This structure diagram demonstrates the student journey from Entry through to Graduation for a **full time student**.			
ENTRY	Year 1	Compulsory Modules There are no compulsory modules at this stage of the award	Optional Modules **Students must take 120 credits at level 1 and can choose any module from the following programmes, subject to any prerequisites that may apply.** **BSc Computer Science** **BSc Computer Systems Integration** **BSc Computing** **BSc Enterprise Computing** **BSc Forensic Computing and Security**	Interim Awards Cert HE Computer Studies 120 credits, of which not less than 100 are at Level 1 or above.
	Year 2	Compulsory Modules There are no compulsory modules at this stage of the award	Optional Modules **Students must take 120 credits at level 2 and can choose any module from the following programmes, subject to any prerequisites that may apply.** **BSc Computer Science** **BSc Computer Systems Integration** **BSc Computing** **BSc Enterprise Computing** **BSc Forensic Computing and Security**	Interim Awards Dip HE Computer Studies 240 credits, of which not less than 100 are at Level 2 or above and a further 120 are at Level 1 or above.
	Year Out: Students may optionally take an industrial placement. Those doing so must take the following module as part of their placement activity: UFCxxx-15-3 Professional Practice			
	Year 3	Compulsory Modules There are no compulsory modules at this stage of the award	Optional Modules **Students must take 120 credits at level 3 and can choose any module from the following programmes, subject to any prerequisites that may apply.** **BSc Computer Science** **BSc Computer Systems Integration** **BSc Computing** **BSc Enterprise Computing** **BSc Forensic Computing and Security**	Interim Awards BSc Computer Studies 300 credits with at least 60 credits at level 3, plus a further 100 credits at level 2 or above and a further 120 credits at level 1 or above Highest award BSc (Hons) computer Studies 360 credits, of which at least 100 must be at Level 3 or above, at least a further 100 at Level 2 or above and a further 140 at Level 1 or above.

GRADUATION
NB: For part time mode of delivery provide a diagram to demonstrate the student journey from entry to graduation for a typical part time student
Students may follow the programme in part-time mode but selection of modules will be subject to both timetable and prerequisite constraints and a student journey cannot be predicted for students on this highly flexible programme.

Part 5: Entry Requirements

The University's Standard Entry Requirements apply with the following additions/exceptions*:

Registration on this award is not permitted without prior registration on a programme of study within the Dept of Computer Science and Creative Technologies and more specifically within the Computer Science Cluster which consists of the following programmes:

BSc (Hons) Computer Science
BSc (Hons) Computer Systems Integration
BSc (Hons) Computing
BSc (Hons) Enterprise Computing
BSc (Hons) Forensic Computing and Security

Part 6: Assessment

Approved to University Regulations and Procedures

Assessment Map

An assessment map cannot be completed, as the diet of assessment is dependent on module choice.

Part 7: Student Learning

Teaching, learning and assessment strategies to enable learning outcomes to be achieved and demonstrated

At UWE, Bristol there is a policy for a minimum average requirement of 12 hours/week contact time over the course of the full undergraduate programme. This contact time encompasses a range of face-to-face activities as described below. In addition a range of other learning activities will be embedded within the programme which, together with the contact time, will enable learning outcomes to be achieved and demonstrated.

On the BSc (Hons) Computer Studies programme, teaching is a mix of scheduled, independent and placement learning.

Scheduled learning includes lectures, tutorials, supervised lab classes, project supervision, demonstrations / presentations, external visits. The number and range of each type of scheduled session varies depending on the module choices made.

Part 7: Student Learning

Independent learning includes hours engaged undertaking: practical work, essential reading, case study preparation, assignment preparation and completion etc. Scheduled sessions may vary slightly depending on the module choices made.

Placement learning: Students are strongly encouraged to undertake a placement year. They are also encouraged to take the Professional Experience module whilst on placement

Description of Distinctive Features and Support
This programme is designed to enable students who cannot continue on their original programme of study to continue to achieve a degree. Students will be able to transfer all relevant credit to this new programme. They will then be able to choose from the set of modules in the discipline in order to complete their studies. Students will be supported in their module choice by programme leaders whose aim is to ensure that all learners undertake a coherent programme of study that is relevant to their individual academic interests and aspirations and which will allow them to progress at each level in relation to their knowledge and understanding, cognitive, subject specific and study skills.

Module pre-requisites may limit the choices that are open to students.

Class-based Activities The particular mode of delivery of a module is determined by its Module Leader, and typically involves a combination of lectures, practical sessions, individual and group activities and group project work. Many modules involve significant practical work and therefore a proportion of the student's contact time for that module, usually 50%, is spent in the computer labs.

Module-based Academic Support Academic advice and support in terms of the content of individual modules is the responsibility of the staff delivering the module. Outside of normal timetabled hours, advice and guidance on matters relating to the material being taught and on its assessment can be obtained either by arranging an appointment with academic staff or during published "surgery" hours. Appointments are most commonly arranged by email.

Personal Academic Support In addition all students are allocated Academic Personal Tutor (APT) to whom they can turn for general academic advice related to their studies. From time to time students can expect their APT to invite them to meet to discuss their progress.

Peer-Assisted Learning As a supplement to this formal academic support, all modules at level 1 include timetabled Peer-Assisted Learning (PAL) sessions. These classes are extra to the sessions timetabled with academics and provide students with a significant additional resource, over and above the normal 12 hours contact time. PAL sessions are led by trained PAL leaders; second and final year students who are able to use their experience during the first year to help the newer students overcome barriers to success in their studies.

On-line Academic Support Extensive on-line support for this programme is provided through the University portal (myUWE). This provides access to the University's e-library, which allows students to read academic journals and study-skills material. Of particular interest to students of this programme is access to the ACM, IEEE and British Standards Online databases. The portal also gives entry to UWE's Virtual Learning Environment (Blackboard) which is used by academics to make available general information about the module delivery, handbooks, lecture notes and other materials. In addition, the portal publishes individual student timetables, marks and other aspects of the operation of the programme and University life.

Pastoral Support Pastoral care is provided through the University-wide Student Advisers, a team of staff who provide comprehensive, full-time student support service. Advisers are trained to provide advice on matters commonly of concern, including regulatory and other matters; the Adviser will, when necessary, direct the student to specialist professional services including the University's counselling service, careers, financial services etc..

Independent Study
All modules require students to carry out independent study, such as preparation for classes, research for projects and completion of assignments, and a full range of facilities are available at all sites to help students with these. The philosophy is accordingly to offer students both guided support and

Part 7: Student Learning

opportunities for independent study. Guided support is mainly in the form of timetabled sessions. Students are expected to attend all sessions on their timetable.

The habits and practice of independent study is then developed through the support offered in individual modules. Typically, module leaders will provide a plan for the module indicating the activities to be carried out and the forms of learning to be undertaken during the delivery of the module, with a view to encouraging students to plan ahead and to take responsibility for managing their time and resources.

Computing Facilities In 2012 the Faculty has undertaken a major new build f computing facilities in which it offers a specialised computing facility alongside the general University provisions. There are multiple computing laboratories of 20 plus seats running Windows, Linux and dual-boot systems required for this program. Computers within the specialist laboratories include the standard University build augmented by software resources and hardware equipment necessary for the delivery of the modules. .

In addition, one of the most popular areas within the Faculty is the Open Access laboratory. This area is never timetabled and gives students the opportunity to access machines at all times during opening hours.

This programme aligns with the Faculty's teaching and learning strategy which in turn is aligned with the University's vision mission and strategy, and is designed in accordance with the principles of INSPIRE. The programme supports the faculty's aim to provide a high quality undergraduate experience by ensuring the curricula is dynamic, responsive, contemporary and relevant.

Part 8: Reference Points and Benchmarks

Description of *how* the following reference points and benchmarks have been used in the design of the programme:

QAA subject benchmark statements
The programme aligns with the principles outlined in the QAA benchmark statement on Computing 2007. In section 2.8 it states that "At one extreme, an honours degree programme in computing might provide opportunities for its students to attend modules on a wide range of topics spanning the entire area of computing. Graduates from such courses would have great flexibility and might be of especial value, either in emerging areas where specialist courses may not be established or in contexts where their ability to span the field would be useful. At another extreme there can be programmes that take one very specific aspect of computing and cover it in great depth."

The programmes from which students are drawn each satisfy the principles in the benchmark statement. Most are relatively specialist rather than wide ranging. Students on this programme have the opportunity to take a much wider range of modules and so conform to the former flexible category.

University strategies and policies
This programme aligns with the Faculties teaching and Learning Strategy which in turn is aligned with the University's vision mission and strategy, and is designed in accordance with the principles of INSPIRE. The programme supports the faculty's aim to provide a high quality undergraduate experience by ensuring the curricula is dynamic, responsive, contemporary and relevant.

Staff research projects
The extensive research undertaken in the department in areas such as AI, and complex systems contribute to the programme and a number of modules are taught by those leading these research projects.

Employer interaction and feedback
The specialist programmes, from which students on this programme are drawn, benefit from close

Part 8: Reference Points and Benchmarks
collaboration with local companies. Theses liaisons influence the curriculum and also provide professional mentors, placement opportunities and guest speakers all of which are made available to students on this general programme, as appropriate to their module choices.

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of individual modules can be found in module specifications, available on the University's website.