Programme Specification

Programme Title: BSc(Hons) Computing and Website Development

Awarding Institution:	University of Bolton		
Teaching Institution:	University of Bolton		
Division and/or Faculty/Institute:	Faculty of Arts and Media Technologies		
Professional accreditation	Professional body	Professional body URL	Status of graduates
Final award(s):	BSc (Hons)		
Interim award(s)	N/A		
Exit or Fallback award(s)	Certificate of Higher Education in Computing and Website Development Diploma of Higher Education in Computing and Website Development		
Programme title(s)	Computing and Website Development		
UCAS Code	G430		
JACS Code	G450		
University Course Code(s)	Full time: COM0011 Part time: COM5013		
QAA Benchmark Statement(s)	Computing		
Other internal and external reference points	QAA Academic Infrastructure, including the Framework for Higher Education Qualifications and the Code of Practice UK Quality Code for Higher Education University of Bolton awards framework BCS Guidelines on Course Accreditation, Sept 2010		
Language of study	English		
Mode of study and normal period of study	Full time – 3 years Part time – 4.5 years		

Admissions criteria

You should have a minimum of two GCE A2-level passes (or equivalent); and five GCSEs at grade C or above (or equivalent), including English and Mathematics.

If English is not your first language you will need to complete an English Language proficiency test at IELTS 6.0 or equivalent.

Students with a technical computing background may be accepted on to the course, after attending an interview.

Additional admissions matters

Not applicable

Fitness to practise declaration

Not applicable

Aims of the programme

The principal aims of the programme are to:

1. develop transferable knowledge and skills appropriate to the field of Computing and Website Development.
2. develop competence, adaptability, self-confidence and critical self-reflection through critical enquiry and independent judgement;
3. develop capability in the exploration, critical analysis and evaluation of technical and business issues and concepts including an awareness of ethical and environmental issues;
4. develop knowledge and skills in applying enterprise problem solving and decision making to meet the needs of various types of business organisations;
5. prepare for employment at graduate level or postgraduate study at MSc or PhD level.
6. develop a positive attitude towards, and the skills for, life-long learning and Personal Development Planning.

Distinctive features of the programme

This course focuses on the techniques for developing scalable commercial websites, including those built on database technologies using appropriate scripting and programming languages. It is a practical course and you will build up a portfolio demonstrating competence in developing content for a number of different target devices.

Links with businesses provide 'live briefs' for coursework assignments to ensure students are working on meaningful projects. The programme leader maintains active links with businesses and former students who are now working in the industry to establish opportunities for work placements during vacation periods and after finishing the course.

The course concentrates on the development of skills in the following scripting and programming languages: HTML, CSS, JavaScript, jQuery, PHP, Java, C#. These languages are used to develop commercial websites that interact with 'back-end' data stores such as databases (MySQL, MS SQL) and XML based files.

The first year of the course is common to all programmes in the Computing group, allowing flexible progression into the second year. This flexibility allows students the possibility of transferring to one of the other BSc (Hons) programmes in the Computing group at the end of Year 1.

Although the first year is common to other computing courses, it includes three modules that are specific to website development: *Website Production, Information Systems & Databases* and *Introduction to Programming.* These modules are supported by modules which introduce background technologies: *Computer Platforms*, and *Networking Fundamentals.*

In the second year the modules focus more on the various needs of industry such as the development of content for mobile platforms and the development of skills in several website development languages. The content of the modules has been designed after consultation with industry and employers to ensure that the areas of study are significant and relevant to their requirements.

In the third year the emphasis is on independent, research-based work; the undertaking of a major project and advanced programming relating to the production of secure, E-Commerce sites and business to business (B2B) operations over the internet using web services.

The classes are small so there is plenty of interaction with the lecturers and questions can always be answered. Guest speakers provide relevant, up-to-date input from practitioners in the industry.

The course is supported by dedicated IT suites. Many of the computing facilities can be accessed across the internet from home, allowing students to work on their assignments whenever and wherever they choose.

Graduates of the BSc (Hons) Computing and Website Development will hold an internationally recognised qualification appropriate for employment in the following areas: web development, e-commerce, mobile applications, m-commerce, social marketing, search engine optimisation, internet security. Self-employment is a viable option for graduates of this programme. Website development is a global activity and graduates are employable anywhere in the world.

Programme learning outcomes

K. Knowledge and understanding

On completion of the programme successful students will be able to demonstrate systematic knowledge and understanding of:

1. essential facts, concepts, principles and theories relating to computing and computer applications;
2. business and professional aspects of the industry;
3. the gathering, processing, storage and management of data;
4. the development of structured software and its testing and maintenance;
5. the stages of the systems life cycle, and the use of appropriate tools and techniques therein;
6. the production of websites;
7. research methods and the contribution of a literature review to a project or investigation within a managed timescale.

C. Cognitive, intellectual or thinking skills

On completion of the programme successful students will be able to demonstrate the ability to:

1. identify and solve problems using a systematic approach to reach a solution.
2. investigate the existing body of knowledge in a particular field.
3. apply concepts and evaluate alternatives in designing new products and services.
4. critically analyse findings, reflect and then apply skills and knowledge to new areas.
5. integrate a variety of investigative skills, synthesise and then apply to problem solving.

P. Practical, professional or subject-specific skills

On completion of the programme successful students will be able to demonstrate the ability to:

1. produce a systems requirements specification, including user interactions, interfaces and documentation.
2. understand the potential risks, security and safety aspects appropriate to the field of study, including risk assessment and disaster recovery.
3. specify, design, test and implement a database using an industry standard database package.
4. choose and deploy effectively the hardware and software used to create and maintain web/mobile content.
5. plan, manage and control a project, taking account of professional and ethical issues.
6. develop and implement secure, online, e-commerce systems.

T. Transferable, key or personal skills

On completion of the programme successful students will be able to demonstrate the ability to:

1. communicate effectively both orally and in writing, involving quantitative and qualitative aspects.
2. manage their own learning and development including time management, organisational skills and self appraisal.
3. prepare for employment in the industry, recognising the importance of teamwork and the need for continuing professional development.
4. carry out a substantial piece of independent work and undertake a critical evaluation.

Programme structure

The BSc (Hons) Computing & Website Development programme involves completing 120 credits at HE4, 120 credits at HE5 and 120 credits at HE6.

Module Code	Module title	Core/ Option/ Elective (C/O/E)	Credits	Length (periods)
CPU4000	Core Skills	C	20	1
CPU4001	Website Production	C	20	1
CPU4002	Information Systems and Databases	C	20	1
CPU4003	Introduction to Programming	C	20	1
CPU4004	Computer Platforms	C	20	1
CPU4005	Networking Fundamentals	C	20	1
CPU5000	Level 2 Project	C	20	1
CPU5001	Web Programming	C	20	1
CPU5002	Database Theory & Practice	C	20	1
CPU5003	UNIX	C	20	1
CPU5004	Mobile Applications Design	C	20	1
CPU5005	Internet Applications & Server Systems	C	20	1
CPU6000	Professional Issues in Computing	C	20	1
CPU6001	Major Project	C	40	2
CPU6002	Web Application Project Management	C	20	1
CPU6003	Web & Systems Based Programming	O	20	1
CPU6004	Network Security	O	20	1
CPU6005	Facilitating E-commerce	O	20	1

Learning and teaching strategies

The programme uses a blended learning approach, combining face to face sessions with online work as appropriate. The learning and teaching methods typically used by tutors include, lectures, seminars, workshops, tutorials, e-learning, online sessions and support.

A significant amount of personal study time is expected to be undertaken by the student, comprising, for example, background reading, assignment work, preparation for seminars, and revision for examinations.

Active learning is promoted throughout the course, e.g. theoretical concepts being delivered in a framework of lectures, practical demonstrations and workshops applying theory to practice using activity based assignments.

Learning activities (KIS entry)

	Course Year		
	1	2	3
Scheduled learning and teaching activities	25%	25%	25%
Guided independent study	75%	75%	75%
Placement/study abroad	0%	0%	0%

Assessment strategy

Assessment tasks are linked to the learning outcomes of each module and are completed before the end of the module.

Module assessments are typically either coursework or examination or a combination of both. In the second and final years formal written examinations take place during the last week of the module delivery period. Other types of assessment may include in-class tests, coursework assignments, presentations, projects.

Formative Assessment, which does not contribute to the final mark, is given to help the student improve their work in future. It may be given to the student verbally/written/online.

Summative assessment, which does contribute towards the final result, is normally given in writing to the student, with the opportunity for the student to receive more detailed verbal explanation.

Assessment methods (KIS entry)

	Course Year		
	1	2	3
Written exams	0%	17%	17%
Coursework	84%	66%	75%
Practical exams	16%	17%	8%

Assessment regulations

The University of Bolton Assessment Regulations for Undergraduate Modular Programmes apply.

Grade bands and classifications

Grade Description	Mark %	Honours Degree Classification
Work of exceptional quality	70+	i
Work of very good quality	60-69	ii.i
Work of good quality	50-59	ii.ii
Work of satisfactory quality	40-49	iii
Borderline fail	35-39	
Fail	Below 35	

Honours classification

You will normally be awarded the honours classification resulting from the application of either Rule ACM20 or Rule ACM6.

Rule ACM20

A weighted average of the marks from modules worth a total of 200 credits at Levels HE5 and HE6 combined, including the marks from modules worth no more than 80 credits at least at Level HE5 (weighted 30 percent) and marks from modules worth at least 120 credits at Level HE6 (weighted 70 percent), which represent the best marks achieved by you at those Levels.

Where the average falls unequivocally into one of the following bands: 48.00 - 49.99,

58.00 - 59.99, 68.00 - 69.99; and you have achieved marks clearly in an honours classification category higher than their average for modules worth at least 110 credits, then you will be awarded an honours degree in the classification category one higher than that indicated by your average.

Rule ACM6 (an alternative if you do not have sufficient marks at Levels HE5 and 6 to apply ACM20)

A simple average of the equally weighted marks from modules worth 120 credits at Level HE6 which represent the best marks achieved by you at that Level.

Where the average falls unequivocally into one of the following bands: 48.00 – 49.99, 58.00 – 59.99, 68.00 – 69.99; and you have achieved marks clearly in an honours classification category higher than their average for modules worth at least 70 credits, then you will be awarded an honours degree in the classification category one higher than that indicated by their average.

Where you have marks available for fewer than 120 credits at Level HE6, honours classification shall normally be based **solely** on a simple average of the available marks for modules at Level HE6, subject to there being marks for a **minimum of 60 credits awarded by the University**. **Upgrading of the honours classification will not normally be available where there are marks available for fewer than 120 credits at Level HE6**, unless this is explicitly approved.

Role of external examiners
External examiners are appointed for all programmes of study. They oversee the assessment process and their duties include: approving assessment tasks, reviewing assessment marks, attending assessment boards and reporting to the University on the assessment process.

Support for student learning
- The programme is managed by a programme leader
- A more rounded and consolidated learning approach is achieved through the regular use of excellent laboratory facilities. These practical sessions are scheduled to coincide with the theoretical lecture based studies.
- Technician support is available outside of scheduled class times. Students find this particularly helpful on project work
- An induction programme introduces students to the University and their programme
- Each student has a personal tutor, responsible for support and guidance
- Personal Development Planning (PDP) integrated into all programmes
- Feedback on formative and summative assessments
- A Student Centre providing a one-stop shop for information and advice
- University support services include housing, counselling, financial advice, careers and a disability
- A Chaplaincy
- Library and IT services

- Student Liaison Officers attached to each Faculty
- The Students' Union advice services
- Faculty and Programme Handbooks which provide information about the programme and University regulations
- The opportunity to develop skills for employment
- English language support for International students
- Placement opportunities may be available
- Access and use of virtual learning environments for each module

Methods for evaluating and enhancing the quality of learning opportunities

- Programme committees with student representation
- Module evaluations by students
- Students surveys, e.g. National Student Survey (NSS)
- Annual quality monitoring and action planning through Programme Quality Enhancement Plans (PQEPs), Data Analysis Report (DARs) Subject Annual Self Evaluation Report (SASERs), Faculty Quality Enhancement Plans (FQEPs), University Quality Enhancement Plan (UQEP)
- Peer review/observation of teaching
- Professional development programme for staff
- External examiner reports

Other sources of information

Student portal (http://www.bolton.ac.uk/Students/)
Students Union (http://www.ubsu.org.uk/)
Faculty or similar Handbook (http://www.bolton.ac.uk/amt)
Module database: http://modules.bolton.ac.uk
External examiners reports
http://www.bolton.ac.uk/Quality/QAEContents/ExternalExaminersReports/Home.aspx

Document control	
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Document History:	

Learning outcomes map

Module title	Mod Code	Status C/O/E	K1	K2	K3	K4	K5	K6	K7	C1	C2	C3	C4	C5	P1	P2	P3	P4	P5	P6	T1	T2	T3	T4
Core Skills	CPU4000	C	DTA	DT					DT		DTA										DTA	DTA	DT	
Website Production	CPU4001	C		D								DTA			DTA			DTA			DA			
Information Systems & Databases	CPU4002	C	DTA	D	DTA		DT	DT		DTA		DTA			DT		DTA				DTA	DT		
Introduction to Programming	CPU4003	C	DT	D	DT	DTA	DT	DT							DT						D			
Computer Platforms	CPU4004	C	DTA	D											DT	DTA		D			D			
Networking Fundamentals	CPU4005	C	DTA	D											DT	DTA					D			
Level 2 Project	CPU5000	C	DT	DTA	DT		DTA	DTA	DTA	DTA	DTA	DTA	DTA	DTA	DTA		DTA		DTA		DA	DTA	DTA	D
Web Programming	CPU5001	C			DT	DT	DT	DT							DTA		DTA							
Database Theory & Practice	CPU5002	C			DTA		DTA	DTA				DTA			DT		DTA							
UNIX	CPU5003	C	D	D			DT	D		D	D					DTA	DTA	D			D			
Mobile Applications Design	CPU5004	C		D		DTA	D	D	D						DTA	D		DTA			D	D		D
Internet Applications & Server Systems	CPU5005	C		DTA	D	DTA	D	DTA	D	D	D	D			DTA	DTA	DTA	DTA	D	D	DA	D		DTA
Professional Issues in Computing	CPU6000	C		DTA			DTA	DTA	DTA		DTA		DTA		DTA			DT		DTA		DTA		DTA	DTA
Major Project	CPU6001	C		DTA		DA	DA	DA	DTA	DA	DA	DA	DA	DTA	DTA		DA		DTA	DTA	DA	DA	D	DTA
Web Application Project Management	CPU6002	C		DT			DTA		DTA						DTA		DTA		DTA	DTA			D	DTA
Web & Systems Based Programming	CPU6003	O					DTA		D						DTA			DTA						DTA
Network Security	CPU6004	O		D				DTA	D				D	D			D	D			DTA			DTA
Facilitating E-commerce	CPU6006	O	DTA	DTA	D	D		D	D	D	D	DTA	D	D	DA	DTA	D	D	D	DTA	D	D	D	D

Key

K = Knowledge and understanding
C = Cognitive, Intellectual and thinking skills

P = Practical, professional and subject specific skills
T = Transferable, key or personal skills.

D = Developed,   T = Taught,   A = Assessed

Programme specification: BSc (Hons) Computing and Website Development
Date: 12th July 2012

Module listing

Module title	Module Code	New? ✔	Level	Credits	Type	Core/Option /Elective C/O/E	Pre-requisite module	Assessment 1			Assessment 2		
								Assessment type	Assessment %	Add Y if final item	Assessment type	Assessment %	Add Y if final item
Core Skills	CPU4000	New	4	20	Stan	C	None	CW	100	Y	-	-	-
Website Production	CPU4001	New	4	20	Stan	C	None	CW	50	-	CW	50	Y
Information Systems & Databases	CPU4002	New	4	20	Stan	C	None	CW	100	Y	-	-	-
Introduction to Programming	CPU4003	New	4	20	Stan	C	None	PRA	30	-	CW	70	Y
Computer Platforms	CPU4004	New	4	20	Stan	C	None	CW	50	Y	CW	50	-
Networking Fundamentals	CPU4005	New	4	20	Stan	C	None	PRA	50	-	PRA	50	-
Level 2 Project	CPU5000	New	5	20	Stan	C	None	CW	50	-	CW	50	Y
Web Programming	CPU5001	New	5	20	Stan	C	None	CW	50	-	CW	50	Y
Database Theory & Practice	CPU5002	New	5	20	Stan	C	None	CW	50	-	EX	50	Y
UNIX	CPU5003	New	5	20	Stan	C	None	CW	50	-	EX	50	Y
Mobile Applications Design	CPU5004	New	5	20	Stan	C	None	PRA	50	-	CW	50	Y
Internet Applications & Server Systems	CPU5005	New	5	20	Stan	C	None	CW	50	-	EX	50	Y
Professional Issues in Computing	CPU6000	New	6	20	Stan	C	None	PRA	50	-	EX	50	Y
Major Project	CPU6001	New	6	40	Proj.	C	None	CW	100	Y	-	-	-
Web Application Project Management	CPU6002	New	6	20	Stan	C	None	CW	100	Y	-	-	-
Web & Systems based programming	CPU6003	New	6	20	Stan	O	None	CW	50	-	EX	50	Y
Network Security	CPU6004	New	6	20	Stan	O	None	CW	50	-	EX	50	Y
Facilitating E-commerce	CPU6005	New	6	20	Stan	O	None	CW	50	N	EX	50	Y

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Bolton Key Core Curriculum requirements

Module Title	Module Code	C/O/E	Employability											Bolton Values		
			PDP	Communication	Team work	Organisation & Planning	Numeracy	Problem solving	Flexibility & adaptability	Action planning	Self awareness	Initiative	Personal impact & confidence	Inter-nationalisation	Environmental sustainability	Social, public and ethical responsibility
Core Skills	CPU4000	C	DTA	DTA	DTA	DTA	D	DTA	D	DT	D	D	DT	D	D	D
Website Production	CPU4001	C		DA	D	DTA		DTA	D	DTA		D		D		D
Information Systems & Databases	CPU4002	C		DA		DTA	D	DTA	D	DTA		D		D		
Introduction to Programming	CPU4003	C		DA		DTA	D	DTA	D	DTA		D		D		
Computer Platforms	CPU4004	C		DA		D	D	DTA	D	D		D		D	D	
Networking Fundamentals	CPU4005	C		DA		DTA	DTA	DTA	D	D		D		D		D
Level 2 Project	CPU5000	C	DT	DTA	D	DTA	D	DTA	D	D	D	D	D	D	D	D
Web Programming	CPU5001	C		DA	D	D	D	DTA	D	D		D		D		D
Database Theory & Practice	CPU5002	C		DA		D	D	DTA		D		D				
Unix	CPU5003	C		DA		DTA		DTA	D	D		D		D		
Mobile Applications Design	CPU5004	C		DA		D		DTA	D	D		D		D		
Internet Applications & Server Systems	CPU5005	C		DA	D	D	D	DTA	D	D		D		D		
Professional Issues in Computing	CPU6000	C	D	DA	DTA	DA		DA	D	D	D	D	D	D	D	DT
Major Project	CPU6001	C	DT	DA		DTA	D	DA	D	DTA	D	D	D	D	D	D
Web Application Project Management	CPU6002	C		DTA	DT	DTA	D	DTA	D			D		D		
Web & Systems based programming	CPU6003	O		DA	D	DTA		DTA				D		D		
Network Security	CPU6004	O		DA		D		D	D	D		D		D		D
Facilitating E-commerce	CPU6005	O		DA		D		D				D		D		D

Key

D = Developed,   T = Taught,   A = Assessed

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