ASTON UNIVERSITY PROGRAMME SPECIFICATION

Programme Title	Computing for Business
UCAS/JACS Code	G460
School/Subject Area	Engineering and Applied Science / Computer Science
Final Award	BSc Honours
Interim Awards	Certificate of Higher Education Diploma of Higher Education
Mode(s) of Study	Full-Time or Sandwich including optional placement year
Normal Length of Programme	3 academic years (full-time) or 4 years (sandwich, comprising: two academic years; 40 week placement during third year; final academic year)
Total Credits	360 (full-time), 480 (sandwich)
Programme Accredited By	British Computer Society Chartered IT Professional (CITP) Accreditation. Endorsed by e-Skills as an Information Technology Management for Business programme.
Programme Last Accredited	
Accreditation Frequency	
Dates Programme Specification Written and Revised	December 2002, February 2003, August 2006, August 2007, August 2008, June 2009, June 2010, July 2011

Education Aims of the Programme	• Produce Graduate Software Developers who specialize in Managing Software Development for Business.Graduateswill be highly attractive to employers and well prepared for a rewarding career as a computing professional, specifically prepared to respond to the computing challenges of the business world. • Develop practical information systems engineering capability based on well-founded principles • Promote generic attributes appropriate to professionally oriented graduates. • Enable students opting for the sandwich variant of the programme to enhance their career preparation through a period of structured professional training. • Provide a participation route leading to professional computing employment that is accessible to students who have demonstrated good intellectual aptitude rather than necessarily subject-specific preparation.
Relevent Subject Benchmark Statements and other External and Internal Reference Points used to inform programme outcomes	• UK Quality Code Part A.1 (2011) • Quality Assurance Agency for Higher Education subject benchmark statement for Computing • Quality Assurance Agency subject benchmark statement for Business and Management • Professional approval requirements of the British Computer Society • Curriculum recommendations of the Association for Computing Machinery • SFIA Skills Framework for the Information Age

Programme Structures and Requirements: Levels, Modules and Credits **Stage 1**				
Module Title	**Credits**	**Level**	**Module Code**	**Core**
Principles of Financial Accounting	10	4	BF1101	Core
Introduction to Organisational Behaviour	10	4	BH1107	Core
Foundations of Business Analytics	10	4	BN1115	Core
Economic Environment of Business	10	4	BS1102	Core
Java Programming Foundations (CB)	20	4	CS1020	Core
Information Systems and Databases	20	4	CS1050	Core
Academic and Professional Communication Skills	10	4	CS1150	Core
Introduction to Computer Systems	10	4	CS1170	Core
Internet Computing	10	4	CS1240	Core
Problem Solving	10	4	CS1320	Core
TOTAL	120			

Programme Structures and Requirements: Levels, Modules and Credits **Stage 2**				
Module Title	**Credits**	**Level**	**Module Code**	**Core**
Management Accounting	10	5	BF2262	Core
Marketing	10	5	BM2257	Core
Business Policy	10	5	BS2232	Core
Group Project (CB)	20	5	CS2000	Core
Software Lifecycle and Design	20	5	CS2090	Core
Professional and Social Aspects of Computing	10	5	CS2160	Core
Human-Computer Interaction	10	5	CS2260	Core
Java Program Construction	10	5	CS2300	Core
Internet Applications and Techniques	10	5	CS2410	Core
Project Management	10	5	LT2306	Core
TOTAL	120			

Programme Structures and Requirements: Levels, Modules and Credits **Stage 3**				
Module Title	**Credits**	**Level**	**Module Code**	**Core**
TOTAL	120			

Programme Structures and Requirements: Levels, Modules and Credits **Stage F**				
Module Title	**Credits**	**Level**	**Module Code**	**Core**
Entrepreneurial Strategy	20	6	BS3357	Core
Individual Project	40	6	CS3010	Core
Software Project Management	10	6	CS3360	Core
Enterprise Computing Strategies	10	6	CS3460	Core
TOTAL	120			

Programme Outcomes, Learning and Teaching and Assessment Strategies			
Knowledge and Understanding			
	On successful completion of their programme students, are expected to have knowledge and understanding of:	**Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated**	
		Learning and Teaching Methods	**Assessment Methods**
1	The legal, social and ethical context for professional ISE	A mixture of formal lectures, tutorial classes, computing laboratory classes,independent practical work associated with taught and project modules,independent study. For the sandwich option, an agreed programme ofprofessional experience and training.	Knowledgeand understanding are assessed through unseen examinations and project reports,and (particularly in the case of (5)) through coursework reports. Assessment of the sandwich option isbased on: • a reflective log-book kept by thestudent • an analytical final report written bythe student • reports by an academic supervisor, taken together withthe employers views.
2	Concepts and principles and methodologies relevant to chosen areas of specialisation, thereby acheiving additional depth and breadth		
3	(Sandwich students only) The relevance of the programme's discipline-specific and generic content to the professional world		
4	Concepts and principles of information systems engineering (ISE), emphasising software engineering and business-oriented application technologies		
5	Analysis, design and implementation methods applicable to ISE in general, but emphasising business problems		
6	Mathematics relevant to business methods and business-related applications of computing		
7	Concepts and principles of business organisation and methods		
8	The strategic importance of business data		
9	The strategic importance of business processes		

Intellectual Skills			
	On successful completion of their programme students, are expected to have knowledge and understanding of:	**Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated**	
		Learning and Teaching Methods	**Assessment Methods**
1	Integrate and apply knowledge and methods from a variety of sources	Intellectual skills are developed through formal lectures (often including suitable case studies), tutorial classes, practical work (both assessed and unassessed) associated with taught modules, and project work.	Unseen written examinations, coursework submissions relating to design exercises and business scenarios, project reports and presentations.
2	Analyse requirements of computing problems (particularly in a business setting) and design solutions		
3	Analyse business scenarios, develop and evaluate suitable plans, including opportunities for application of information technology.		
4	Plan, conduct and report on a programme of work covering multiple ISE lifecycle stages and leading to an end-product, with evaluation of end-product, process and business value		

Professional Skills			
	On successful completion of their programme students, are expected to have knowledge and understanding of:	**Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated**	
		Learning and Teaching Methods	**Assessment Methods**
1	Construct, test and document computer software	Formal lectures (including suitable case studies), tutorial classes, practical work (both assessed and unassessed) associated with taught modules, and project work.	Unseen written examinations, coursework submissions relating to design exercises and business scenarios, project reports and presentations.
2	Use a variety of programming languages, software tools and environments		
3	Apply Internet technology		
4	Prepare technical reports and presentations		
5	Use appropriate diagrammatic and formal written notations in design work and in reports		
6	Analyse business problems and apply ISE methods to meet problem requirements		
7	Draw up a set of accounts		
8	Analyse a market		
9	Document and understand business processes		
10	Construct a basic investment case for a multi-year initiative of non-guaranteed outcome using quantitative methods.		

Transferable Skills			
	On successful completion of their programme students, are expected to have knowledge and understanding of:	**Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated**	
		Learning and Teaching Methods	**Assessment Methods**
1	The ability to communicate effectively through oral presentation	Written and oral communication and information skills are taught in a dedicated module employing tutorial classes and practical work. Oral presentation is practised in business modules in particular and in project modules. Other skills are developed through practical work for taught modules, project work, and the professional placement option.	An English Speaking Board oral examination provides independent certification for (1). Other assessments (particularly project reports and presentations) provide direct or indirect evidence of the level of skills acquired.
2	Information gathering skills		
3	Team-working skills		
4	A capability for independent working able to tackle substantial practical problems with limited individual guidance		
5	Problem solving skills		
6	Good ICT skills		
7	Time management skills		
8	The ability to communicate effectively in writing and through technical diagrams		

Entry Requirements	As specified by the General Regulations for Undergraduate Programmes.
Programme Regulations	**Attendance requirements** Full-time students are normally required to attend the University for the first, second and third term of each of three consecutive academic years. Sandwich students are normally required to attend the University for the first, second and third term of the first, second and fourth of four consecutive academic years, and undertake an integrated programme of professional training between the second and fourth academic years. The approved specification for any particular module may include assessment elements that require attendance at scheduled classes. In stage 1, students will take either module BN1115 or BN1116 and the decision will be base on their perfomance on a pre-enrolment test. Students will be notified of that test and will be able to take the test online. **Specific assessment requirements for modules** The module *CS1020 Java Programming Foundations* is fundamental to the entire programme of study and cannot be condoned for progression on the Honours Degree, but may be condoned for progression on the Ordinary Degree. **Requirements for the Ordinary Degree** The modules taken in a particular stage of study by a student who has transferred to the Ordinary Degree are derived from those for the corresponding stage of the Honours Degree by omitting selected modules to reduce the credit requirement of the stage. The modules omitted must be approved by the Associate Dean for Undergraduate Programmes. Project modules(CS2000 and CS3010) cannot be omitted. **Industrial/Professional Training** The programme of professional training undertaken by a sandwich student must be approved by the Associate Dean for Undergraduate Programmes and of at least 40 weeks duration, excluding any periods of vacation. It will be assessed on a pass/fail basis and will not contribute to the overall degree classification. **Exemptions from (Professional Qualification)examinations** BCS Accreditation means that a graduate has fulfilled the academic requirement for registration as a Chartered IT Professional (CITP) **Alterations to the programme for 2012/13** CS3180 and BN3386 will not be available in 2012/13.

This specification provides a concise summary of the main features of the programme and the threshold learning outcomes that a student might normally be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. **The individual modules included in the programme may differ from those included in this programme specification as our programmes are subject to continuous review**. Information on admissions requirements and career opportunities is available in the relevant prospectus. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the appropriate module guides and programme handbook(s) which are available to students on enrolment.