B.Sc. Business Software Development Programme Specification

1. Qualification	2. Programme Title	3. UCAS	4. Programme Type
B.Sc (Hons)	**Business Software Development**	**G601/G602**	**Full time/Part-time**

5. Main Purposes and Distinctive Features of the Programme

1   To develop in the student an in depth understanding of the role, design, development and operation of computer-based information systems in the context of the information requirements of business

2   To provide students with the knowledge and skills required to contribute to the analysis, design, testing and development of software systems in a systematic and professional manner

3   To develop a professional approach to information systems engineering

4   To expose students to current and future issues affecting the development of computer-based information systems.

5   To develop the students' ability to adopt new methods and technology and to keep abreast of developments in hardware and software.

6   To give a broad education in computing and its applications in business and industry.

7   To develop and improve the students' interpersonal and communication skills particularly the investigative, formal writing, formal presentation and group working skills that are required for the workplace

8   To enable students to apply a critical and analytical approach to problem solving and the investigation of topics in Computing.

9   To develop and improve the students' interpersonal and communication skills particularly the investigative, formal writing, formal presentation and group working skills that are required for the workplace.

Distinctive Features

Professional accreditation from The British Computer Society (BSC) as meeting the academic requirements for full membership of BCS. Professional accreditation is an attractive feature to many employers since it validates the academic programme as providing a qualification recognised by the professional body.
Note: In this case professional accreditation only applies to on campus students. Not students studying via off campus centres.

6. What a graduate should know and be able to do on completion of the programme
(objectives and learning outcomes)

To gain the qualification the learner will have demonstrated: i) subject knowledge and understanding ii) cognitive skills iii) discipline-related practical and professional skills and iv) other general skills and capabilities (e.g. key/transferable/common) as specified in the learning objectives/outcomes for approved modules in the programme. Further details of module outcomes can be found in the programme document.

Knowledge and understanding in the context of the subject(s)

1   Understanding of the stages of the systems life cycle

2   Knowledge of the tools and techniques that can be used at the different stages of the life cycle

3   Understanding of the systems, program and data modelling/ design techniques that are fundamental to systems development and corresponding skills

Subject-specific practical/professional skills

1   plan, monitor, control, implement and document a small software system to defined standards

2   investigate and document a well-defined system to a standard using appropriate tools.

3   produce a requirements specification using a standard method

4   evaluate, select and justify the

4	Structured design skills in a range of computer applications
5	Understand the gathering, processing, storage and management of data
6	The role in organisations and the basic technology of computer networks

Cognitive skills in the context of the subject(s)

1	Capacity to identify and solve problems and to develop a systematic approach to reaching a solution
2	ability to apply concepts
3	competence in evaluating alternatives
4	capability to transfer skills/knowledge to new areas
5	competence in designing new products or services
6	ability to use a range of thought processes
7	ability to critically evaluate the work of others and own contribution to a project

hardware and software requirements needed to meet a well-defined set of requirements

5	design, implement and test a database using an industry-standard database package.
6	use software development tools, operating systems and the internet
7	design and implement user interactions and interfaces

Other skills (e.g. key/transferable) developed in subject or other contexts

1	communicate effectively both in writing and orally
2	numerical skills appropriate to a computer systems developer
3	work competently as part of a team
4	ability to investigate and design solutions for routine and non-routine problems
5	research a new area in Computing as a basis for a project
6	carry out a substantial piece of independent work

7. Qualities, Skills & Capabilities Profile

The educational and training goals of the programme seek to develop and demonstrate the following qualities, skills, capabilities and values in its graduates

A Cognitive	B Practical	C Personal & Social	D Other
Problem Solving	Analysis and Design Skills	Team-working	
Application of Concepts	Programming Skills	Communication	
Powers of critical evaluation	QA and Testing Skills	Time management	
Transfer skills/knowledge	Database Skills	Working with 'users'	
Design new products	Technical documentation	Career development and planning	
Flexibility of thought	Evaluation of hardware and software	Professional Development	
Research skills	User interaction design		
Clarification of Objectives	Formal Presentation		
Synthesis of differing methods and approaches to problem solving	Use of software tools and operating systems		

8. Subjects Studied, Levels, Credits & Qualifications
(Duration and structure of programme/modes of study/credit volume of study units)
3 years full-time (4.5 years part-time at two modules per semester) for the award of Degree
6 level 1, 6 level 2 and 6 level 3 modules worth 20 credits
Courses organised on a two-semester year

	Core Modules	Dissertation/project	Optional Modules
			Bachelor Honours Degree 360 Credits
Part 2 Level H3	CST3007 Professional Issues in Computing	CST3100 Computing Project 40 credit individual project (for single subject pathway) involving self-managed integration, extension and practical application of knowledge	CST3003 Advanced Database systems CST3005 Client Server Solutions LCT3009 E-Commerce CST3104 Computer Security CST3006 Object Oriented Methods 2 CST3008 Software Engineering CST3106 User Interface Design CST3009 Web & Systems Based Programming CST3108 Advanced Systems Design
			HE Diploma – 240 credits
Part 2 Level H2	CST2502 Data Structures & Algorithms CST2503 Database Theory & practice CST2508 Object Oriented Methods 1 CST2509 Networks & Communications CST2511 Systems Analysis		CST2514 Building Office Applications CST2501 Visual Programming 2 LCT2506 Internet 1 CST2505 Human Computer Interaction
			HE Certificate – 120 credits
Part 1 Level H1	LCT1023 Core Skills CST1010 Information Systems LCT1019 Networking Basics CST1205 Introduction to Programming CST1206 Programming and Design		CST1203 Computerised Financial Systems LCT1000 Internet 1 CST1202 Visual Programming 1

## 9. Learning, Teaching and Assessment Strategy	## 10. Other Information
<u>Learning and Teaching Methods</u> A combination of lectures, supervised and unsupervised practical work, directed study, Case Study weeks, group-working and a project <u>Assessment Methods</u> Assessments are linked to the student outcomes for each module. Types of assessment include: Examinations Coursework reports Coursework to produce a program/ model a system Project to produce and document a piece of software	<u>Date programme first to be offered</u> 1999 <u>Admissions Criteria</u> *The standard minimum requirements for the pathway are as* follows: 2 A Level passes + 3 subjects at GCSE with grade C or above including English Language and Mathematics OR 3 passes at Scottish Certificate 'Higher' grade + 2 passes at standard grade

Assessment Classification System

Description	Mark Range	Degree Class
Work of Exceptional Quality	70 - 100	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	35-40	Fail
Clear Fail	0-34	Fail

The definitions of the above criteria are:

Work of Exceptional Quality
Virtually all of the relevant information/skills accurately deployed. Excellent and exceptional grasp of theoretical, conceptual, analytical and practical elements. Very effective integration of theory, practice and information in relation to the objectives of the assessment. Substantial evidence of originality and creativity as appropriate to the subject.

Work of Very Good Quality
Most of the relevant information/skills accurately deployed. Good grasp of theoretical, conceptual, analytical, practical elements. Effective integration of theory, practice and information in relation to the objectives of the assessment. Significant evidence of originality and creativity as appropriate to the subject.

Work of Good Quality
Some of the relevant information/skills accurately deployed. Adequate grasp of theoretical, conceptual, analytical and practical elements. Fair integration of theory, practice and information in relation to the objectives of the assessment. Some evidence of originality and creativity as appropriate to the subject.

Work of Satisfactory Quality
Some omissions in the deployment of information/skills. Some grasp of theoretical, conceptual, analytical and practical elements. Limited integration of theory, practice and information in relation to the objectives of the assessment. Limited evidence of originality and creativity as appropriate to the subject.

Borderline Fail
Deficiencies or omissions in information, skills, theoretical, conceptual, practical elements. Limited integration of these in relation to the assessed work's objectives. Some relevant content and marginal evidence of skills, knowledge or creativity which could, in the light of overall performance, constitute the basis for a pass grade in the examiners' judgement.

Clear Fail
Little evidence of the information, skills, theoretical, conceptual, analytical, creative or practical elements relevant to the assessment. Mainly irrelevant and/or incorrect information provided. Scant evidence of understanding of the requirements of the assessment.

OR
 BTEC National Certificate/Diploma
OR
 Advanced GNVQ
OR
 NVQ Level III
OR
 Pass in Access to Higher Education course
OR
 Irish Leaving Certificate
OR
 Other equivalent qualifications

Applicants who have successfully completed an HND/C in a Computing subject and who have 3 Merits at Level 2 will be accepted onto the degree. We will grant an exemption from all level one modules and we will grant exemptions from any level 2 modules for which the applicant has a merit in an equivalent level 2 HND/C module. Students who have the requisite merit profile from Bolton Institute's current HND in Computing may be able to acquire a maximum of six exemptions and will therefore need a minimum of two semesters to complete their degree.

Non Standard Entry
Applicants who do not have any of the above qualifications are regarded as non-standard applicants. To be considered for entry, non-standard applicants must normally be at least 21 years of age on 1st September of the year in which their programme begins.

Non-standard applicants will normally attend an informal interview with the course leader, in order to assess their level of academic competence as well as experience and motivation.

Indicators of Quality and Standards
Validated by panel with two external subject specialists
External verifier
Internal yearly quality monitoring cycle

MAPPING OF LEARNING OUTCOMES TO MODULES

BSc Business Software Development

	K1	K2	K3	S1	S2	S3	C1	C2	C3	C4	O1	O2	O3	O4
Level 1 modules														
LCT1023			X				X				X	X	X	
CST1203				X	X	X		X	X	X				X
CST1010	X		X	X										X
LCT1000			X				X		X		X		X	
LCT1019			X				X		X			X		X
CST1205	X	X			X	X		X		X	X			
CST1206	X	X			X	X	X		X	X		X		
CST1202		X		X		X			X	X				X
Level 2 Modules														
LCT2506		X	X		X			X	X		X			X
CST2514	X			X		X			X		X		X	
CST2503		X		X	X			X		X				X
CST2505	X		X			X	X		X	X			X	
CST2511	X			X	X		X	X		X	X		X	
CST2501		X		X		X			X	X	X			X
Level 3 Modules														
CST3003		X		X	X		X	X		X	X			
CST3005	X			X	X					X		X	X	
LCT3009		X	X		X	X		X			X			X
CST3007	X		X				X		X	X		X		
CST3108	X			X	X		X	X		X	X		X	
CST3107		X	X			X			X		X	X		
CST3100	X	X			X	X	X		X	X	X		X	X

Kn, Sn, Cn, On are Knowledge, Subject-specific, Cognitive and Other learning outcomes respectively. Refer to the Programme Specification for a definition of each learning outcome.

Core modules are shown in bold. An X at a row/column intersection indicates that the specified module supports the specified learning outcome.

Mapping of Assessment Methods to Modules
BSc Business Software Development

	CW %	EX %	ICA %	PRA %	PRE %	IS %
LEVEL 1 MODULES						
LCT1023	100					
CST1203	50+50					
CST1010	50+50					
LCT1000	70	30				
LCT1019	30	50		20		
CST1205			100			
CST1206			100			
CST1202	50		50			
LEVEL 2 MODULES						
LCT2506	30	30	40			
CST2514	50+50					
CST2503	50	50				
CST2505	50	50				
CST2511	50	50				
CST2501	50+50					
LEVEL 3 MODULES						
CST3003	50	50				
CST3005	25	50		25		
LCT3009	50	50				
CST3007	50				50	
CST3108	50	50				
CST3107	50	50				
CST3100			10		45	20+25

Assessment Type Codes

CW   **Coursework**
EX   **Examination**
ICA   **In-class assessment**
PRA   **Practical**
PRE   **Presentation**
IS   **Independent study**