

# **Programme Specification**

# **Course record information**

Name and level of final award:	The Business Information Systems is a BSc Honours degree that is Bologna FQ-EHEA first cycle degree or diploma compatible.	
Name and level of intermediate	Diploma of HE	
awards:	Certificate of HE	
Awarding body/institution:	University of Westminster	
Status of awarding body/institution:	Recognised Body	
Location of delivery:	FST/CS New Cavendish Street	
Language of delivery and assessment:	English	
Course/programme leader:	Kamalini Sivagurunathan	
Course URL:	http://www.westminster.ac.uk/courses/subjects/business-	
	information-systems/undergraduate-courses/full-	
	time/u09fubiy-bsc-honours-business-information- systems	
Mode and length of study:	3 year full-time	
mode and longer or olddy.	4 year full-time sandwich	
	4 year full-time with foundation	
University of Westminster course code:	U09FUBIY	
JACS code:	G500	
UCAS code:	G505	
QAA subject benchmarking	QAA subject benchmark for Computing	
group:	British Computer Society guidelines on accreditation	
Professional body accreditation:	The Accreditation by British Computer Society (BCS)	
Date of course	Initial approval: April 2009	

validation/review: Last review: June 2014

Date of programme July 2014

specification:

# **Admissions requirements**

Candidates must fully satisfy the University requirements in spoken and written English and should also demonstrate an acceptable degree of aptitude in mathematics (GCSE can be used as a guide).

# **Level 4 Entry Requirements**

240 UCAS points from Advanced GCE levels that include at least two A2 levels, e.g. CCC in three A2 subjects. Equivalent qualifications will also be considered.

# **Level 5 Entry Requirements**

Candidates who have successfully completed studies on other courses such as a Higher National Diploma may obtain exemption from a sufficient number of modules to enable them to enter the second year (Level 5) of the course.

#### **Selection Process**

Responsibility for the admission of students onto this programme is delegated to a named member of staff within department of Business Information Systems. The Admissions Tutor collaborates with the Course Leader and is responsible for applying the agreed admissions criteria; for example, in terms of A2-Level grades. Non standard applications have to be dealt with on an individual basis. The current Admissions Tutor for this course is Kamalini Sivagurunathan.

# **Accreditation of Prior Learning (APL)**

The University operates a system of awarding credit for prior learning, either accredited (APCL) or experiential (APEL), which may contribute up to a maximum of 50% of the credits required for an award. If students think their prior experiential or accredited learning (e.g. work experience or other study they may have undertaken) may qualify them for accreditation and thereby exemption from one or more modules they should contact the Course Leader.

In respect of accredited prior learning, the student will be required to submit specific evidence (such as original transcripts and syllabuses) which will be considered by the Course Leader, or their nominee.

In respect of prior experiential learning (APEL) the Course Leader will either allocate the student with a Mentor, or will perform this role themselves. The Mentor will assist the student in making their claim and will then submit it, together with their assessment of it, to a second assessor who will be a member of the Course Team, for an independent assessment. Once the second assessment has been made, the assessors make a joint agreed report to the University-wide APEL Assessment Board. It is the Board which makes the final assessment of what credit, if any, should be awarded to the student in respect of prior experiential learning.

Any credit awarded for prior certificated or experiential learning will be notified to the Conferment Board. Until a student who has applied for APL/APEL has been formally advised of the outcome of their application for credit, they should register for and participate in their normal programme of modules, including any modules for which they are seeking credit. For further details, please refer to the full regulations governing APL, which appear in Section 4 of the *Handbook of Academic Regulations*.

### Aims of the course

The overall aim of the Business Information Systems course is to develop professionals who can understand the business challenges of an enterprise and conceive and manage solutions which are ICT dependent. This course is designed to produce graduates who will be able to integrate their ICT skills with their knowledge of business operations and environments to support an enterprise to achieve competitive advantage.

The course also aims to

- develop students' critical thinking, analytical reasoning and modelling skills for problem solving;
- enable students to recognise the professional, legal and ethical issues in developing or employing information systems and technology;
- produce graduates with a range of key skills such as such as team working and independent learning;
- provide educational foundation for further study.

The detailed objectives are that students completing the course will be able to:

- Comprehend and demonstrate the understanding of key information and business systems and their interrelationships;
- Analyse business environment issues that influence information systems development;
- Interpret and apply proven management paradigms to a specific problem;
- Evaluate critically contending information systems development strategies and practices;
- Select and apply appropriate technology to design and deliver ICT related applications for an enterprise;
- Demonstrate awareness, knowledge and skills required to operate effectively in a commercial or public sector environment;
- Recognise the potential benefits of employing Information Systems and ICT within organisations;
- Evaluate situations and solutions and make appropriate choices in relation to the use of information systems to solve business problems in a dynamic environment.

### **Employment and further study opportunities**

Today's organisations need graduates with both good degrees and skills relevant to the workplace, ie employability skills. The University of Westminster is committed to developing employable graduates by ensuring that:

- Career development skills are embedded in all courses
- Opportunities for part-time work, placements and work-related learning activities are widely available to students
- Staff continue to widen and strengthen the University's links with employers in all sectors, involving them in curriculum design and encouraging their participation in other aspects of the University's career education and guidance provision
- Staff are provided with up-to-date data on labour market trends and employers' requirements, which will inform the service delivered to students.

The study of Business Information Systems involves applying knowledge and problem solving to practical business situations, and in an academic environment successful students must also be able to discuss and communicate these ideas effectively. The combination of knowledge and skills gained in each of the areas as stipulated by the learning outcomes ensures that students have many of the attributes required by the graduate employers. For a number of years there has been a consistent demand for graduates with hybrid knowledge and skills in ICT and business.

With the current explosion in the availability of information, businesses are becoming more and more reliant on information systems to support innovation, decision-making and day-to-day operations. Working in the advancing world of information systems can be exciting and rewarding, as companies throughout the world are keen to recruit staff who can maximise business potential. Graduates of the BIS course typically go on to careers in the business and/or IT sectors. They have open to them a wide spectrum of career options. The British Computer Society (BCS) recognises some of the career routes available to BIS practitioners as *Systems Analyst, Web Designer, Sales Executive*, and *End User Support Analyst*. The University's First Destination Statistics of the precursor degrees show how proudly our graduates demonstrated their skills and knowledge to qualify for positions in these categories. In addition to these as career entry opportunities, BCS lists *Business Analyst, Consultant, Project Manager* and *Director* positions as opportunities open to experienced BIS graduates in their career progression.

Graduates who wish to continue to masters can confidently pursue their education in a variety of advanced courses in information systems, information technology, business management or similar disciplines.

# Learning outcomes

Learning outcomes are statements on what successful students have achieved as the result of learning. These threshold statements of achievement and are linked to the knowledge, understanding and skills that a student will have gained on successfully completing a course.

### Knowledge and understanding

On completion of the BSc Business Information Systems course, students should have detailed knowledge and understanding of:

- 1. The structures of business organisations, their functions and challenges, and the environment in which they operate.
- 2. The application of information systems and their impact on the business operations and on an organisation as a whole.
- 3. The information systems life cycle including the major development processes/models, phases, activities, and issues relating to the development, management and maintenance of information systems
- 4. The principles, methodologies, criteria and tools that can be employed in the analysis, specification, development, evaluation, and management of information systems
- 5. The wider issues of quality, security, ethical principles, legislative compliance and the social and economic implication in relation to the computer industry

- 6. The issues and implications surrounding the management of information systems projects.
- 7. The history and theoretical foundations of information systems and trends in the application of information systems.
- 8. The components of ICT e.g. hardware, software, servers, and networks.
- 9. Security and risks relating to computer systems and the implications of security breaches

# Specific skills

On completion of the BSc Business Information Systems course, students should be able to:

- 1. Conduct critical analysis of a business problem/situation, formulate criteria to identify and employ an appropriate strategy to solve it.
- 2. Identify, analyse and specify user requirements to develop or to select an appropriate information system solution
- 3. Specify, design, develop and test information systems to address business problems.
- 4. Evaluate the quality of an information systems solution and the effects of possible trade-offs in a particular business context.
- 5. Critically evaluate, select and apply appropriate principles, methodologies, techniques, tools and packages in the analysis, specification, development and evaluation of information systems.
- 6. Produce models of business processes, business data, and information systems using a industry standard modelling language
- 7. Select and use appropriate methods and tools to plan and manage the development of an information system.

# Key transferable skills

On completion of the BSc Business Information Systems course, students should be able to:

- 1. Effectively and fluently communicate critically acquired knowledge by written, oral and visual means in a clear and concise manner
- 2. Choose, apply and critically evaluate analysis and modelling techniques which lead through to an effective solution.
- 3. Identify and utilise tools and analysis and development environments independently in order to implement and then justify and critically evaluate new solutions
- 4. Undertake self-directed study and project management in a supportive environment
- 5. Adopt multiple perspectives to justify methodologies, tools, and solutions
- 6. Work effectively as a member of team towards achieving a common goal

- 7. Work independently and manage own time and workload. Take responsibility for own learning and become independent learners.
- 8. Carry out a comprehensive literature research of a given topic using a wide range of resources and justify the inclusion of ideas and techniques to benefit new custom made solution
- 9. Competently use a range of ICT applications for communication, presentation, research and learning purposes.
- 10. Confidently use and present data/information

# Learning, teaching and assessment methods

# Learning

Working with industry in a real-life situation is invaluable in developing professional skills but also in raising confidence. Interacting with the workplace while studying can help students prepare for a future career and help them reflect on their knowledge and be more aware of how this fits with the developing needs of industry.

The course is designed to offer opportunities to engage with industry before graduation, so that the students can develop skills alongside the ones they get from the rest of their course. These opportunities can be a formal part of their course, such as doing an industrial placement within their course or attending talks giving by guest speakers from industry. They will also, however, be able to engage with industry by interacting with the professional community through specially designed modules, working on assessments drawn from real-life examples, and engaging with their area's professional bodies.

Students are encouraged to learn independently throughout their studies. This may be in the form of literature review or research to support their assignments and projects. There are also guided Independent study periods when students are encouraged to interact with their tutors and lecturers for advice and guidance and take responsibility for their on learning.

# **Teaching**

Most modules include a formal taught component with lectures provided on a weekly basis. Tutorial seminar classes are also provided each week to provide a stimulating environment for students to work through examples and case studies, experiment with hands-on solutions in the labs, engage in group discussions or on-line discussions, and gain immediate feedback and support from tutors.

In addition, students are provided with a range of additional resources including comprehensive self-diagnostic materials and online discussion forums to encourage student centred learning. The resources can be accessed through the Blackboard on-line content management system, and textbooks, academic journals and other materials available in the University's information resource centres, and software systems are provided in the Schools labs. Teaching staff are often engaged in research or commercial activities, and this ensures that the students gain an understanding of contemporary business issues.

### **Assessment**

A variety of assessment methods are used through the course as some methods are more suitable to measuring different aspects of knowledge and skills. Appropriate diagnostic testing early on in modules helps the teaching team to address identified issues. Course work is often used for formative assessment, and this may be based around written reports, laboratory practical tests, participation in group discussions, individual and group project

work, and vivas. Summative assessment may be undertaken with similar methods, or with a formal written examination.

#### **Course structure**

This section shows the core and option modules available as part of the course and their credit value. Full-time Undergraduate students study 120 credits per year.

The BSc Business Information Systems is structured as a set of *modules*. Each module is a relatively self contained unit of study of a particular topic. A single module represents 1/24 of the work required for an Honours degree, and as a rule of thumb can be taken to involve about 150 hours of study. Of this, roughly 50 hours will be timetabled contact time in the University, and the balance should be made up with independent study.

Modules are offered at three levels, *Level 4*, *Level 5* and *Level 6*. These levels correspond to the three years of a full-time Honours degree programme. Module Levels are identified by the first number after the letters in a module code, for example EBSY401 is Level 4, EBSY501 is Level 5 and so on.

Modules are valued in terms of *credits*. All the taught modules on the BIS course are worth either 15 or 30 credits. One year of full-time undergraduate study is equivalent to 120 credits. The academic year is structured into two *semesters*, within which formal teaching takes place. Some modules will be semester based (i.e. will complete in a single semester) and some modules will be year long. All 30 credits modules are year long while some 15 credit module will be semester based and some will be year long.

Full time students take modules worth of 120 credits each year for three years, and have scheduled classes for about 15 or 16 hours per week. Part-time students can attend in varying ways depending on their needs and some timetabling constraints.

At each level you have a number of *Core* modules and a number of *Option* modules. A core module is one that you must take while an 'Option' module is one which you choose from a number of alternative modules i.e. you choose an option module from a predefined set. At level 4, all modules (seven in total) are Core. At Level 5, five modules are Core, a further two modules are Option. At Level 6, five modules are Core, a further two modules are Option. The Project module at Level 6 is worth 30 credits and must be passed for Honours degree.

Credit Level	4			
Module code	Module title	Status	UK credit	ECTS
EBSY400	Communication and Learning Skills	Core	15	
EBSY401	Information and Data Modelling	Core	15	
EBSY402	Programming the Technology	Core	30	
EBSY403	Business Mathematics		15	
EBSY404	Requirements Analysis	Core	15	
EBSY405	Business Information Systems Concepts 1	Core	15	
EBSY406	Business Information Systems Concepts 2	Core	15	
Award of Certi	ficate of Higher Education available		•	
Credit Level	5			
Module code	Module title	Status	UK credit	ECTS
Core modules	to the value of 90 credits:		1	<u> </u>
EBSY500	Professional Practice	Core	15	
EBSY501	Project Management	Core	15	
EBSY502	BIS Design and Development	Core	30	
EBSY505	Database Design and Practice I	Core	15	
EBSY512	Information Technology Security	Core	15	
and two option	nal modules (to the value of 30 credits):		1	I
EBSY503	User Interface Design and Usability	Option	15	
EBSY510	People, Groups and Social Interactions	Option	15	
EBSY508	Business Analytics	Option	15	
EBSY511	Service Operations Management	Option	15	
EBSY506	Database Design and Practice II	Option	15	
EBSY507	Web Development	Option	15	
EBSY509	Computer Forensics Investigation	Option	15	
Award of Diplo	oma of Higher Education available			
Credit Level	6			
Module code	Module title	Status	UK credit	ECTS
Core modules	to the value of 90 credits:		<u> </u>	I
EBSY600	IS Development Methodologies	Core	15	
EBSY601	IS Strategy	Core	15	
EBSY602	IS Quality and Testing	Core	15	
EBSY613	Networked Enterprise	Core	15	
EBSY699	Project	Core	30	
•	nal modules (to the value of 30 credits):	0	45	
EBSY610	Starting a Business	Option	15	
EBSY604	Data Warehousing and Mining	Option	15	
EBSY611	Knowledge Management	Option	15	
EBSY605	Advanced Topics in Databases	Option	15	
				i
EBSY612	Web and Social Media Analytics	Option	15	

Please note: Not all option modules will necessarily be offered in any one year.

# **Academic regulations**

The BSc Honours Business Information Systems and its intermediate awards operate in accordance with the University's Academic Regulations and the Framework for Higher Education Qualifications in England, Wales and Northern Ireland published by the Quality Assurance Agency for Higher Education (QAA) in 2008.

All students should make sure that they access a copy of the current edition of the general University handbook called Essential Westminster, which is available at <a href="westminster.ac.uk/essential-westminster">westminster.ac.uk/essential-westminster</a>. The following regulations should be read in conjunction with Section 17: Modular Framework for Undergraduate Courses and relevant sections of the current Handbook of Academic Regulations, which is available at <a href="westminster.ac.uk/academic-regulations">westminster.ac.uk/academic-regulations</a>.

#### **Pass**

A pass in a module is achieved when the overall mark is greater than or equal to 40%; with at least 30% in the final assessment and any qualifying marks and/or sets achieved as detailed in the module handbook.

### Condoned Credit at Level 3 and Level 4

A student may be awarded condoned credit at Levels 3 and 4 only, on the condition that the failed element(s) of assessment has been attempted at both the first and referred opportunity, and where he/she has achieved:

- a) an overall module mark of greater than or equal to 30% but less than 40%;
- b) an overall mark of 40% or greater but not reached the required qualifying mark(s) and/or qualifying set(s) as detailed in the module handbook.

Where a student is awarded condoned credit, the recorded module mark will be capped at 40%. Condoned credit will count towards any credit limits for specified awards. Where a student is awarded condoned credit in a module but subsequently achieves an overall pass at a re-take, credit may contribute only once to an award.

### **Progression Requirements**

To progress from Level 3 to Level 4 and from Level 4 to Level 5 in full time study, a student must achieve an average of 40% across 120 credits; to progress from Level 5 to Level 6 full-time study, a student must pass at least 165 credits, including 75 credits at Level 5.

### **Award**

To qualify for the award of BSc Honours Business Information Systems, a student must have:

- obtained at least 360 credits including:
  - passed 75 credits at credit Level 4 or higher and achieved at least a condoned credit in each of the remaining modules worth 45 credits at Level 4; and
  - passed a minimum of 120 Credits at credit Level 5 or higher; and
  - passed a minimum of 120 credits at credit Level 6 or higher.

- attempted modules with a maximum value of 330 credits at credit Levels 5 and 6; and
- satisfied the requirements contained within any course specific regulations for the relevant course scheme.

Please state any course specific regulations as approved by a University Validation Panel here.

The class of the Honours degree awarded is decided by two criteria, the average of the best 105 credits passed at credit Level 6 being in the range of the class to be awarded, and the average of the next best 105 credits passed at credit Levels 5 and 6 provided the next best 105 credits passed are no more than one classification below this.

# **Support for students**

Upon arrival, an induction programme will introduce students to the staff responsible for the course, the campus on which they will be studying, the Library and IT facilities and to the Faculty Registry. Students will be provided with the Course Handbook, which provides detailed information about the course. Students are allocated a personal tutor who can provide advice and guidance on academic matters.

Learning support includes four libraries, each holding a collection of resources related to the subjects taught at their Faculty. Students can search the entire library collection online through the Library Search service to find and reserve printed books, and access electronic resources (databases, e-journals, e-books).

Students can choose to study in the libraries, which have areas for silent and group study, desktop computers, laptops for loan, photocopying and printing services. They can also choose from several computer rooms at each campus where desktop computers are available with the general and specialist software that supports the courses taught at their Faculty. Students can also securely connect their own laptops and mobile devices to the University wireless network.

The University uses a Virtual Learning Environment called Blackboard where students access their course materials, and can communicate and collaborate with staff and other students.

At University level, Services for Students provide advice and guidance on accommodation, financial and legal matters, personal counselling, health and disability issues, careers and the chaplaincy providing multi-faith guidance. The International Office provides particular support for international students. The University of Westminster Students' Union also provides a range of facilities to support all students during their time at the University.

# Reference points for the course

# Internally

University Quality Assurance Handbook and Undergraduate Modular Framework University Teaching and Learning Policy

# **Externally**

The importance of information systems is highlighted in the QAA Subject Benchmark Statement for General Business and Management:

'Within the framework of three main areas: organisations, external environment and management, graduates will also be able to demonstrate knowledge and understanding in Information Systems which is defined as the 'development, management and exploitation of information systems and their impact upon organisations'

The Subject Benchmark for Computing also identifies information systems as one component of the computing graduate's body of knowledge. Included under the IS heading are:

'information systems design, development, maintenance, management and impacts.'

The course has been designed in accordance with the recommendations for Computing by the QAA (Quality Assurance Agency for Higher Education) benchmark standard. https://www.gaa.ac.uk/academicinfrastructure/benchmark/statements/computing07.asp

# **Professional body accreditation**

BSc Business Information Systems course is accredited for Full Chartered IT Professional (CITP) by British Computer Society (BCS).

For more information about BCS CITP accreditation, please see http://www.bcs.org/category/5844

# **Quality management and enhancement**

# **Course management**

The host faculty for the BIS course is the Faculty of Science and Technology (FST), situated at 115 New Cavendish Street (Cavendish Campus). The BIS course is managed and run by the Department of Computer Science (CS) which is one of five Departments in FST.

Typically, the management structure supporting the course is as follows:

- Dean of Faculty, holds overall responsibility for the course, and for the other courses run by the Faculty:
- Head of Department, holds academic responsibility for the course and other courses within the Department;
- Course Leader is responsible for day to day running and overall management of the course and development of the curriculum;
- Module Leader is responsible for a module's delivery, resourcing, assessment and smooth operation, and for co-ordinating a module team, if one is required for teaching purposes

# Course approval, monitoring and review

The course was initially approved by a University Validation Panel in 2009. The panel included internal peers from the University and external subject specialists from academia and industry to ensure the comparability of the course to those offered in other universities and the relevance to employers. Periodic course review helps to ensure that the curriculum is up-to-date and that the skills gained on the course continue to be relevant to employers.

The course is monitored each year by the Faculty to ensure it is running effectively and that issues which might affect the student experience have been appropriately addressed. Staff will consider evidence about the course, including the outcomes from each Course

Committee, evidence of student progression and achievement and the reports from external examiners, to evaluate the effectiveness of the course. The Annual Monitoring Sub-Committee considers the Faculty action plans resulting from this process and the outcomes are reported to the Academic Council, which has overall responsibility for the maintenance of quality and standards in the University.

# Student involvement in Quality Assurance and Enhancement

Student feedback is important to the University and student views are taken seriously. Student feedback is gathered in a variety of ways. The most formal mechanism for feedback on the course is the Course Committee. Student representatives will be elected to sit on the Committee to represent the views of their peer group in various discussions. The University and the Students' Union work together to provide a full induction to the role of the Course Committee.

All students are invited to complete a Module Feedback Questionnaire before the end of each module. The feedback from this will inform the module leader on the effectiveness of the module and highlight areas that could be enhanced. The University also has an annual Student Experience Survey, which elicits feedback from students about their course and University experience.

Students meet with review panels when the periodic review of the course is conducted to provide oral feedback on their experience on the course. Student feedback from course committees is part of the Faculty's' quality assurance evidence base.

# For more information about this course:

http://www.westminster.ac.uk/courses/subjects/business-information-systems/undergraduate-courses/full-time/u09fubiy-bsc-honours-business-information-systems

# **Admissions Office**

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# **Course Leader**

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Please note: This programme specification provides a concise summary of the main features of the course and the learning outcomes that a student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided. This specification should be read in conjunction with the Course Handbook provided to students and Module Handbooks, which provide more detailed information on the specific learning outcomes, content, teaching, learning and assessment methods for each module.

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