******Programme Specification and Curriculum Map for *BSc Business Information***

***Systems***

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| **1. Programme title** | Business Information Systems |
| **2. Awarding institution** | Middlesex University |
| **3. Teaching institution** | Middlesex University |
| **4. Programme accredited by** |  |
| **5. Final qualification** | BSc Honours *Business Information Systems* |
| **6. Academic year** | 2013/2014 |
| **7. Language of study** | English |
| **8. Mode of study** | Full time/Part time/January/Thick Sandwich |

**9. Criteria for admission to the programme**

Entry requirements are in accordance with the University regulations. We accept students from a range of backgrounds. Most students educated in the UK will have studied A Levels, AVCEs or an accredited Access Course. To enter a degree programme you would be expected to have achieved 160-240 UCAS tariff points including a minimum of 120-160 from two 6-unit awards or 60 points, or have successfully completed the Middlesex University School of Science and Technology Foundation Year in Computing with Business. All candidates should possess at least grade C in GCSE maths and English language, or equivalent. Mature applicants with relevant work experience are also welcome to apply.

You may be credited for part of the course provided you have appropriate prior learning such as a Higher National Diploma or similar. To obtain any qualification you must complete at least one academic year - 4 modules of the programme.

Individual applicants may wish to claim certain number of credits against their learning that may have taken place outside education or through training that is not assessed as part of an education system. Typically these applicants would possess knowledge and skills that may have been acquired at the workplace through practice but may not be supported by formal qualifications.

Applicants may also hold academic, vocational or professional qualifications that may be aligned to certain modules of the programme at an appropriate level. Typically such qualifications are supported by evidence in the form of certification.

Each of these cases is considered individually with the scope to assess whether applicants should be allowed in the programme with specific credit that would count towards the end qualification, to an appropriate point of the programme. As each case is treated individually, applicants should seek support from the programme team towards their application with Accreditation of Prior Experiential Learning (APEL) or Accreditation of Prior Certificated Learning (APCL).

International students who have not been taught in the English medium must show evidence of proven ability in English such as TOEFL grade 550 or IELTS grade 6.0. The University provides pre-sessional English language courses throughout the year for candidates who do not meet the English requirements.

University policies supporting students with disabilities apply, as described in the University Regulations under “Information for students with disabilities”.

**10. Aims of the programme**

The programme’s aims are underpinned by the following key principles of business information systems; the importance of *information* in all modern organisations and the strategic value of information systems within a global *business* context; the pivotal role of information and communication *technologies* in information systems, and the key role of *people* in designing, managing and using these systems. The programme aims to provide students with an understanding of the advantages of aligning information systems with different organisational and business goals, and with various strategic and operational activities. Students will learn how to use a range of technical skills and methods, both for managing data, and for developing information systems, in response to different business problems and to different needs. The programme aims to instil an ethos of independent learning and continuous professional development amongst its graduates. Graduates of the programme will be equipped with the professional and employability skills that will enable them to pursue a successful future career in this field.

**11. Programme outcomes**

**A. Knowledge and understanding**

On completion of this programme the successful student will have knowledge and understanding of:

1. How businesses work in a global environment; how business processes and functions are supported by information systems, and the roles and responsibilities of people within organisations.
2. The impact of current and emerging information and communication technologies on the development and management of information systems.
3. The alignment of business strategies and information systems strategies; how information systems support decision-making, and their strategic importance for business intelligence.
4. The respective capabilities and uses of different information systems across a wide range of organisational and business contexts, and the criteria for evaluating the success of such systems.
5. The social, environmental, professional, legal and ethical issues related to the design, management and use of information systems.

***Teaching/learning methods***

Acquisition of programme learning outcomes occurs at all levels of the programme through a combination of:

* Lectures
* Supervised practical, laboratory work
* Supervised seminars and tutorials
* Guided individual and group research
* Coursework assignments
* Open-ended practical assignments
* Project work
* Formative and summative assessment and feedback on assignments
* Online discussion boards
* Directed reading

**Assessment Methods**

Assessment of programme learning outcomes occurs at all levels of the programme through a combination of:

* Informal individual and group work during supervised seminars, tutorials and labs
* Essays
* Reports
* Presentations
* Online quizzes
* Documentation
* Individual and group coursework assignments
* Lab exercises
* Lab tests
* Unseen examinations

**B. Cognitive (thinking) skills**

On completion of this programme the successful student will be able to:

1. Critically analyse the effects and advantages of strategically aligning business needs and information systems.
2. Demonstrate analytical and critical thinking skills in solving business problems and approaching research problems
3. Use research skills and appropriate research methodologies successfully, and be able to synthesise and evaluate information from a variety of sources.
4. Plan, manage and report on, complex projects related to the development of business information systems.
5. Apply theoretical concepts and principles to specific problems in a range of business contexts

***Teaching/learning methods***

Acquisition of programme learning outcomes occurs at all levels of the programme through a combination of:

* Supervised laboratories and practical exercises
* Critical thinking and problem-solving activities
* Directed reading and seminar discussions
* Supervised seminar activities
* Experimentation
* Lectures illustrating theories, concepts and principles through case studies, examples and scenarios
* Modelling
* Individual and group coursework assignments
* Student presentations
* Essays
* Online discussion boards

**Assessment Method**

Assessment of all learning outcomes is through a combination of:

* Coursework
* Unseen examinations
* Online quizzes
* Modelling of systems
* Assessing case studies
* Group assignments
* Documentation
* Essays
* Lab and seminar exercises
* Laboratory tests
* Appropriate use of Case tools for analysis and design
* Peer assessment and review

**C. Practical skills**

On completion of the programme the successful student will be able to:

1. Apply a range of technical skills in information management and systems development in various business environments.
2. Use appropriate methods, techniques and tools for generating information systems in response to specific business problems, and according to specific needs and requirements.
3. Select, use and critically evaluate appropriate methods and techniques at each stage of the system development lifecycle.
4. Critically assess the feasibility and risks of business information systems development in relation to different domains, organisational needs and project management practices.

***Teaching/learning methods***

Acquisition of programme learning outcomes occurs at all levels of the programme through a combination of:

* Supervised practical work
* Critical thinking and problem-solving activities
* Practical application of concepts, principles and models to specific case studies and scenarios
* Directed reading and seminar discussions
* Supervised Seminars
* Experimentation
* Modelling
* Use of Case tools for analysis and design
* Individual and group coursework assignments
* Students presentations
* Essays

***Assessment Method***

Assessment of all learning outcomes is through a combination of:

* Coursework
* Unseen examinations
* Practical laboratory tests
* Online quizzes
* Modelling of systems
* Assessing Case Studies
* Group Assignments
* Documentation
* Essays
* Use of Case tools for analysis and design
* Peer assessment and review

**D. Graduate Skills**

On completion of this programme the successful student will be able to:

1. Demonstrate professional development and employability skills necessary for the development and deployment of information systems in a business context.
2. Communicate effectively in a range of settings, and to different stakeholders, through writing and oral presentations
3. Apply mathematical and numeracy skills appropriate to the development and deployment of business information systems.
4. Demonstrate appropriate management and team-working skills, including decision-making, participating in projects, working in multi-disciplinary teams and responding to diverse stakeholder requirements
5. Adopt an ethos of independent learning and continuous professional development.

***Teaching/learning methods***

Acquisition of programme learning outcomes occurs at all levels of the programme through a combination of:

* Supervised practical work
* Supervised tutorials and seminars
* Directed and independent research
* Coursework assignments
* Lectures
* Individual and group project work
* Formative and summative assessment, and feedback on assignments
* Online discussion boards
* Directed reading
* Workshop and seminars conducted by Library and Learning Support staff

***Assessment method***

Assessment of all learning outcomes is through a combination of:

* Coursework and project work
* Guided research
* Group assignments
* Individual and group presentations
* Essays
* Lab and Seminar Activities
* Reports
* Project milestones

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| **12. Programme structure (levels, modules, credits and progression requirements)** |
| **12. 1 Overall structure of the programme** |
| DO NOT INCLUDE THE PROGRAMME STRUCTURE DIAGRAMME – REFER STUDENTS TO WHERE THIS CAN BE FOUND IN THE HANDBOOK  The programme is studied in four modes:   * Three years full-time; 100% university based * Four years full-time thick sandwich. [This entails completing years 1 and 2 at the University, followed by a full-time industrial placement in year 3, with a final, fourth year at the university. The study mode is therefore 25% industry and 75% university-based] * Four to six years part-time; 100% university based * Four years full-time with Foundation degree; 100% university based. On completion of Level 0, students can then continue in any of the study modes outlined above   The programme is undertaken at Levels 4, 5 and 6, where a Level is equivalent to one year of full-time study. The delivery of each Level is completed over 2 terms; Autumn and Winter. Each Level is composed of the delivery of four modules each worth 30 credits, totalling 120 credits for each Level and thus giving a grand total of 360 credits for the entire programme. [Note: students taking the programme in thick sandwich mode gain 120 general credits from their placement year, and therefore require 480 credits to graduate]. |

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| **12.2 Levels and modules** | | |
| **Level 4** | | |
| COMPULSORY | OPTIONAL | PROGRESSION REQUIREMENTS |
| Students must take all of the following:  DCS1200 Information in Organisations  BIS1100 Introduction to Business and Organisations  BIS1200 Information Systems Foundations  BIS1000 Business Information Systems in Practice |  | To progress to Level 5 students are expected to achieve 120 Level 4 credit points |
| **Level 5** | | |
| COMPULSORY | OPTIONAL | PROGRESSION REQUIREMENTS |
| Students must take all of the following:  DCS2000 Database Design  BIS2500 Decision Support Systems  BIS2400 Information Systems Research  BIS2300 Information Systems Analysis and Design | : | To progress to Level 6 students are expected to achieve at least 90 Level 5 credit points |
| **Level 6** | | |
| COMPULSORY | OPTIONAL | PROGRESSION REQUIREMENTS |
| Students must take all of the following:  Students must take the following:  BIS3999 Information Systems Project  BIS3400 Social, Professional and Ethical Issues in Information Systems | Students must choose 2 of the following:  DCS3200 Data Warehousing and Business Intelligence  BIS3300 Strategic Management and Information Systems  DCS3950 Artificial Intelligence Techniques in Information Management  BIS3500 Innovation and Technology Management  BIS3XXX Healthcare Business Informatics  DCS3XXX Open Source Software  BIS3XXX Systems Development Methodologies | Students are expected to achieve 120 credit points at Level 6 to complete their programme and achieve 360 credit points overall. This will qualify students for the degree award of BSc Hons *Business Information Systems*. |

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| **12.3 Non-compensatable modules (note statement in 12.2 regarding FHEQ levels)** | |
| Module level | Module code |
| Level 6 | BIS3999 Information Systems Project |
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| **13. Curriculum map** |
| See Curriculum Map attached |

**14. Information about assessment regulations**

* Information on the University’s formal assessment regulations, including details of how award classifications are determined, can be found in the University Regulations available online through *UniHub*.
* Grades are awarded on the standard University scale of 1–20, with Grade 1 being the highest.

For additional information on assessment and how learning outcomes are assessed please refer to the individual module narratives.

**15. Placement opportunities, requirements and support (if applicable)**

All Undergraduate students have the opportunity to undertake an Industrial Placement. Industrial Placements are highly encouraged by the School and the University. Placements give students valuable experience which enhances their future career prospects. Students who undertake a placement year normally achieve better results in their final year. Please note the following:

* The placement provides a year’s experience as an appropriately paid graduate trainee
* Industrial placement is conditional on the successful completion of all modules at Levels 4 and 5. Students need 240 credits before they are able to embark on an industrial placement
* Obtaining a placement is co-ordinated through the Employability and Careers Centre, and by a dedicated team of placement officers for the School of Science and Technology
* For undergraduate programmes, students wishing to undertake a placement position must register for the placement module.
* Each placement will be assigned to an industrial tutor who will visit the student during their placement
* On graduation the degree will be qualified with the term “…with approved industrial experience”

The placement option is not available to direct-entry students in their final year

**16. Future careers (if applicable)**

All programmes in the School of Science and Technology – their curricula and learning outcomes – have been designed with an emphasis on currency and relevance to future employment. Professional development and employability skills are embedded into teaching, learning and assessment at all levels of the programme.

* The majority of graduates are employed in IT posts relevant to the subject area.
* Over 20% of students pursue further postgraduate study or research.

Employer links with the School are encouraged in the following ways:- by inviting practitioners from industry as guest speakers in lectures; through links with companies where students are employed as part of their Industrial placement; through links with alumni, both in the UK and overseas.

**17. Particular support for learning (if applicable)**

The School’s Teaching and Learning Strategy is aligned with that of the University as a whole in seeking to develop learner autonomy and resource-based learning. In particular support of the students’ learning experience, the following is provided:

* All new students go through an induction programme, and some have early diagnostic numeric and literacy testing before starting their programme.
* The Learner Development Unit provides workshops and one to one support for those students needing additional support in academic writing, presentation skills and numeracy. LDU-run seminars, workshops and lectures are embedded into specific modules across all levels of the programme, particularly in support of programme outcomes D2 and D3.
* Students are allocated a personal email account, and secure networked computer storage (the Skydrive) for student’s University-related files and documents.
* Soft copies of all module handbooks are provided on MyUniHub. Extensive web-based learning materials are provided to support learning in all modules.
* Extensive library facilities are available on and off campus, with e-resources accessible through the MyLibrary page on MyUniHub. Virtual learning is provided via the My Learning pages through MyUniHub. Seminars and workshops by Library and Learning Support staff are embedded into specific modules across all levels of the programme, particularly in support of programmes outcomes B3 and D2.
* Students can access advice and support on a wide range of issues from the UniHelp Desk, and specific one-to-one advice and support from the School’s Achievement Officers.
* High quality specialist laboratories, equipped with industry standard software and hardware, are provided for formal teaching as well as student self-study.
* Past exam papers with solutions and marking schemes for all modules are available for students in module handbooks and at http://unihub.mdx.ac.uk
* Research activities of academic staff feed into the teaching programme, which can provide individual students with ad-hoc opportunities to work with academics on some aspects of their research.

Middlesex University encourages and supports students with disabilities. Some practical aspects of School of Science and Technology programmes may present challenges to students with particular disabilities. You are encouraged to visit our campuses at any time to evaluate facilities and talk in confidence about your needs. If we know your individual needs we’ll be able to provide for them more easily. For further information contact the Disability Support Service (email: disability@mdx.ac.uk)

**18. JACS code (or other relevant coding system)**

G500

**19. Relevant QAA subject benchmark group(s)**

Computing

**20. Reference points**

The following reference points were used in designing this programme:

* QAA Computing subject benchmark statement, available at:-
* <http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/Subject-benchmark-statement-Computing.aspx>
* QAA Framework for Higher Education Qualifications in England, Wales and Northern Ireland
* QAA/QAAS guidelines for programme specifications
* QAA Code of Practice for the assurance of academic quality and standards in HE
* British Computer Society (BCS) accreditation criteria, available at:-
* <http://www.bcs.org/upload/pdf/criteria-appendix4.pdf>
* Association for Computing Machinery (ACM) and Association for Information Systems (AIS) Curriculum Guidelines for Undergraduate Degree Programs in Information Systems, available at: <http://www.acm.org/education/curricula/IS%202010%20ACM%20final.pdf>
* Middlesex University’s Regulations
* Middlesex University and the School of Science and Technology’s Teaching Learning and Assessment policies and strategies
* University policy on equal opportunities.

**21. Other information**

N/A

Please note programme specifications provide a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve if s/he takes full advantage of the learning opportunities that are provided. More detailed information about the programme can be found in the programme handbook and the University Regulations.

Curriculum map for BSc Business Information Systems

This section shows the highest level at which programme outcomes are to be achieved by all graduates, and maps programme learning outcomes against the modules in which they are assessed.

**Programme learning outcomes**

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| --- | --- | --- | --- |
| Knowledge and understanding | | Practical skills | |
| A1 | How businesses work in a global environment; how business processes and functions are supported by information systems, and the roles and responsibilities of people within organisations. | C1 | Apply a range of technical skills in information management and systems development in various business environments. |
| A2 | The impact of current and emerging information and communication technologies on the development and management of information systems. | C2 | Use appropriate methods, techniques and tools for generating information systems in response to specific business problems, and according to specific needs and requirements. |
| A3 | The alignment of business strategies and information systems strategies; how information systems support decision-making, and their strategic importance for business intelligence. | C3 | Select, use and critically evaluate appropriate methods and techniques at each stage of the system development lifecycle. |
| A4 | The respective capabilities and uses of different information systems across a wide range of organisational and business contexts, and the criteria for evaluating the success of such systems. | C4 | Critically assess the feasibility and risks of business information systems development in relation to different domains, organisational needs and project management practices. |
| A5 | The social, environmental, professional, legal and ethical issues related to the design, management and use of information systems. | C5 |  |
| Cognitive skills | | Graduate Skills | |
| B1 | Critically analyse the effects and advantages of strategically aligning business needs and information systems. | D1 | Demonstrate professional development and employability skills necessary for the development and deployment of information systems in a business context. |
| B2 | Demonstrate analytical and critical thinking skills in solving business problems and approaching research problems. | D2 | Communicate effectively in a range of settings, and to different stakeholders, through writing and oral presentations. |
| B3 | Use research skills and appropriate research methodologies successfully, and be able to synthesise and evaluate information from a variety of sources. | D3 | Apply mathematical and numeracy skills appropriate to the development and deployment of business information systems. |
| B4 | Plan, manage and report on, complex projects related to the development of business information systems. | D4 | Demonstrate appropriate management and team-working skills, including decision-making, participating in projects, working in multi-disciplinary teams and responding to diverse stakeholder requirements. |
| B5 | Apply theoretical concepts and principles to specific problems in a range of business contexts. | D5 | Adopt an ethos of independent learning and continuous professional development. |

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| Programme outcomes | | | | | | | | | | | | | | | | | | | | | | | | | |
| A1 | A2 | A3 | A4 | A5 | A6 | A7 | B1 | B2 | B3 | B4 | B5 | B6 | C1 | C2 | C3 | C4 | C5 | C6 | D1 | D2 | D3 | D4 | D5 | D6 | D7 |
| Highest level achieved by all graduates | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Module Title | Module Code | Programme outcomes | | | | | | | | | | | | | | | | | | |
| A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | C1 | C2 | C3 | C4 | D1 | D2 | D3 | D4 | D5 |
| **Information in Organisations** | DCS1200 |  |  | ✓ |  | ✓ |  | ✓ | ✓ |  |  |  | ✓ | ✓ |  | ✓ |  | ✓ |  | ✓ |
| **Information Systems Foundations** | BIS1200 |  | ✓ |  |  |  |  | ✓ | ✓ |  |  |  | ✓ | ✓ |  | ✓ |  | ✓ |  | ✓ |
| **Introduction to Business and Organisations** | BIS1100 | ✓ |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |  |  | ✓ |
| **Business Information Systems in Practice** | BIS1000 | ✓ |  | ✓ | ✓ | ✓ | ✓ |  |  | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ |  | ✓ |  |
| **Database Design** | DCS2000 | ✓ | ✓ |  | ✓ |  |  | ✓ |  | ✓ |  | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |  | ✓ |
| **Information Systems Analysis and Design** | BIS2300 | ✓ |  | ✓ | ✓ |  | ✓ |  |  | ✓ | ✓ | ✓ | ✓ | ✓ |  |  | ✓ |  | ✓ | ✓ |
| **Information Systems Research** | BIS2400 |  |  |  |  | ✓ |  | ✓ | ✓ |  | ✓ |  |  | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ |
| **Decision Support Systems** | BIS2500 |  | ✓ | ✓ | ✓ |  | ✓ |  |  | ✓ |  | ✓ | ✓ |  | ✓ |  |  | ✓ | ✓ |  |
| **Information Systems Project** | BIS3999 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  | ✓ |
| **Data Warehousing and Business Intelligence** | DCS3200 |  | ✓ |  | ✓ | ✓ |  | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ |  | ✓ |  |
| **Strategic Management and Information Systems** | BIS3300 | ✓ | ✓ | ✓ |  |  | ✓ | ✓ |  |  | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |  | ✓ | ✓ |
| **Social, Professional and Ethical Issues in Information Systems** | BIS3400 | ✓ |  | ✓ | ✓ | ✓ |  |  | ✓ | ✓ | ✓ |  | ✓ |  | ✓ | ✓ | ✓ |  |  | ✓ |
| **Innovation and Technology Management** | BIS3500 |  | ✓ | ✓ | ✓ |  | ✓ |  | ✓ |  | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ |
| **AI Techniques in Information Management** | DCS3950 |  |  |  | ✓ | ✓ |  | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |  |  |
| **Healthcare Business Informatics** | BIS3XXX |  | ✓ | ✓ |  | ✓ |  | ✓ | ✓ | ✓ |  | ✓ | ✓ |  | ✓ | ✓ | ✓ |  |  | ✓ |
| **Open Source Software** | DCS3XXX | ✓ | ✓ |  | ✓ | ✓ | ✓ |  | ✓ |  | ✓ | ✓ | ✓ |  | ✓ | ✓ | ✓ |  |  | ✓ |
| **Systems Development Methodologies** | BIS3XXXX | ✓ |  | ✓ | ✓ |  | ✓ | ✓ |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |  | ✓ | ✓ |