

## PROGRAMME SPECIFICATION



1	<b>Awarding Institution</b>	Newcastle University
2	<b>Teaching Institution</b>	Newcastle University
3	<b>Final Award</b>	MSc
4	<b>Programme Title</b>	E-Business and Information Systems
5	<b>UCAS/Programme Code</b>	5124F
6	<b>Programme Accreditation</b>	N/A
7	<b>QAA Subject Benchmark(s)</b>	Masters Awards in Business Management
8	<b>FHEQ Level</b>	M
9	<b>Date written/revised</b>	18 May 2007

### 10 Programme Aims

This postgraduate course in E-Business and Information Systems (EBIS) aims to produce graduates who understand both the fundamentals of strategies and business processes and the development and application of information systems in supporting new organisations and new business practices.

Our aim is to produce graduates who aspire to take on strategic responsibilities in private and public sector organisations and lead the transformation of organisations through innovative use of information systems. The course is primarily aimed at graduates or those at graduate level who have a background either in computing science/information systems or in business management, but are interested in a management career with a strong emphasis on E-Business and Information Systems. On completion we expect them to fill the void between managers who, for the most part, lack the technical expertise of computer scientists, and computer scientists who lack the business acumen of managers.

The programme aims are:

- To produce professionals with both in-depth computing and business expertise, by developing multidisciplinary skills
- To provide a systematic understanding of computational and business knowledge and skills required to tackle practical and theoretical e-business related problems
- To provide a deep understanding of the most commonly used analytical, quantitative and experimental methods in both business and computing sciences
- To develop advanced research skills to identify emerging problems and opportunities, devise appropriate methodologies to tackle these problems and develop and implement effective solutions
- To produce professionals who can be self-directed and able to act autonomously, but who are also able to operate effectively in a variety of team roles
- To produce professionals who have the ability to communicate effectively both orally and in writing, using a range of media.
- To develop and improve skills in the use of literary resources and information and communication technologies
- To encourage creativity and help develop enterprise skills, in order to facilitate decision making in complex and unpredictable situations.
- To develop skills in critical assessment, analysis and storage of information and data.
- To provide a qualification enhancing employment prospects for e-related positions.
- To provide a programme that conforms to University policies and to the Higher Education Qualifications Framework (HEQF)
- To conform to the subject benchmarking statements for Masters Business programmes.

**11 Learning Outcomes**

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. The programme outcomes have references to the benchmark statements for (subject) (X).

**Knowledge and Understanding**

On completing the programme students should:

- A1 An in-depth understanding of the fundamental business and computational knowledge required to tackle practical and theoretical e-business related problems
- A2 A demonstrable, broad knowledge of the most commonly used analytical, quantitative and experimental methods in both business and computing sciences
- A3 A deep understanding of contemporary business and computing environments
- A4 Up-to-date knowledge of theories of business strategies and processes, organisational design and transformation derived from current research and business practice
- A5 Comprehensive knowledge of latest theories of computing and information system design, development and implementation derived from research and practice
- A6 Advanced knowledge and understanding of chosen specialist area in E-Business and Information Systems
- A7 A deep understanding of the theory and principles which underlie computing and business management, so that students can appreciate the current state of these subjects and can adapt to continued rapid developments throughout their subsequent careers
- A8 Knowledge of an up-to-date object-oriented programming language

**Teaching and Learning Methods**

Fundamental and specialist knowledge are imparted largely through direct student contact (lectures and tutorials), supplemented by seminars and practical sessions that may take the form of group discussions, computing sessions, problem solving and assessed coursework, and project proposals. Student understanding and learning is enhanced by the use of computing and information systems exercises, problem solving, literature reviews, teamwork and practical work and production of a group project proposal. Independent learning is encouraged through the provision of reading lists, literature reviews and critical analysis of research papers, and ready access to online information resources. Adequate time is provided in all modules for private study for independent learning. (A1-A8)

**Assessment Strategy**

A variety of techniques are employed to assess knowledge and understanding (A1–A8) including unseen written examinations for semester one modules, and a large proportion of continuously-assessed material: written reports on practical work and problem solving exercises; literature reviews; oral presentations; project proposals; and project theses. Some modules include self- and peer-assessed material and small problem-based questions. Fundamental knowledge is assessed primarily through the examinations, and students' abilities to apply the knowledge to relevant problems are assessed through the use of practical exercises and tutorials, group work, problem-solving exercises and reports.

**Intellectual Skills**

On completing the programme students should be able to:

- B1 Propose, carry out and write up an extended research project involving where appropriate a literature review, problem specification, design, implementation, and analysis
- B2 Design and implement new software packages, and compositions of existing packages
- B3 Apply knowledge of specific business, computational, mathematical and statistical techniques to the development and implementation of a real E-Business system
- B4 Have expertise in the use and applicability of up-to-date business management and computational and information system analysis and development tools and techniques
- B5 Perform system management and installation functions as required to support E-Business applications

**Teaching and Learning Methods**

Subject-specific and professional skills are imparted by a combination of lectures, practical

sessions, case studies and an in-depth research project tailored to individual interests. Tutorials are used to focus on specific research topics in detail, to carry out problem solving exercises and critical analysis of the current software tools, analytical techniques and research literature, to ensure up-to-date knowledge of subject-specific research fields. (B1-B5)

#### **Assessment Strategy**

Subject-specific and professional skills (B1-B5) are assessed by written examinations and continuously assessed material that includes written reports, practical write-ups, literature reviews, group projects, oral presentations, a poster presentation and a research thesis. The assessment methods aim to evaluate the students' understanding and ability to apply theories and techniques that form the basis for this multidisciplinary course.

#### **Practical Skills**

On completing the programme students should be able to:

- C1 Critically evaluate research and literature relating to e-business and information systems
- C2 Solve computational and information system development problems
- C3 Present, store and handle quantitative and qualitative information
- C4 Demonstrate appropriate solutions applied to analytical and information handling problems

#### **Teaching and Learning Methods**

Critical evaluation of current research is developed through literature searching, through coursework exercises and in the research project in particular. The ability to solve computational and numeric problems is acquired through practical sessions and self-directed learning. Tutorials and group discussion are used to reinforce specific computational and numeric methodology. Problem solving exercises and case studies are used to improve student skills in the application of appropriate solutions to E-Business problems. (C1-C4)

#### **Assessment Strategy**

Cognitive skills (C1-C4) are primarily assessed continuously in the form of individual reports from practical studies, literature reviews, tutorial exercises and group project reports. Data and information handling and interpretation are a strong component of many modules and are also assessed through the use of examinations and continuously-assessed problem-solving exercises.

#### **Transferable/Key Skills**

On completing the programme students should be able to:

- D1 Ability to communicate orally
- D2 Written communication skills
- D3 Ability to use literary resources
- D4 Ability to work as part of a team
- D5 Creative skills
- D6 Adaptability and initiative

#### **Teaching and Learning Methods**

Oral presentation skills are exercised by group discussions in tutorial sessions, by communication during group exercises, and by the preparation of oral presentations on specific research topics. Written communication skills are developed during independent study, the preparation of coursework, web page design, poster presentation and through the completion of the research project proposal and the project thesis. Formal lectures and practical sessions address the use of online literary resources and research techniques, reinforced through the use of practice exercises. The group project and student-led tutorials are used to develop team skills. The preparation of web pages and poster presentations is used to enhance writing and creativity skills (whilst also improving computing skills). (D1-D6)

#### **Assessment Strategy**

Written communication skills are assessed by report preparation, the research thesis and

literature reviews. Oral communication skills are assessed in oral presentations. The ability to use computer-based literacy resources is assessed through the preparation of literature reviews and through self-assessment. Team work is formally evaluated using small group-based problem-solving and data-analysis exercises. Independent work is assessed in literature reviews and research projects. Creativity is assessed through problem-solving exercises and poster preparation. The production of web pages is included in some modules to assess students' abilities to provide synopses of information in a scientific but creative fashion. (D1-D6)

## 12 Programme Curriculum, Structure and Features

### Basic structure of the programme

This is a one-year, full-time, intensive modular programme. The programme consists of two parts: a **taught component** that runs during the first and second semesters and a **research project** that runs during the third semester, for which a thesis is submitted. The programme is jointly run by the Business School and the School of Computing. It is of great importance to ensure that students feel that they genuinely belong to both the Business School and the School of Computing, and not just to one or the other.

The programme consists of mandatory modules, and two major group projects, at least one of them in a real business environment. The programme aims to provide comprehensive training in interdisciplinary aspects of both e-Business and information systems. The taught component of the course accounts for 90 credits and the Research and consultancy projects 90 credits.

Different from conventional conversion courses, this programme aims to produce graduates who truly understand both computing and business management. To this end, this programme will adopt a unique approach to teaching and learning. This course will emphasise group/team working; student-centred learning; skills/ competence development; practical orientation; and problem solving. From the beginning students will be assigned in groups of mixed disciplinary and cultural backgrounds so they can help each other develop relevant knowledge and skills in the area they lack expertise; and the process itself will also be a valuable experience for students to succeed in the global, knowledge based economy.

The **taught component** of the course is split across semester 1 and semester 2.

Module Code	Title	Semester	Credits
NBS8007	Understanding Organisations	1	10
CSC8401	Computer Environments	1	10
NBS8207	E-Business	1	20
CSC8403	Information Systems	1	20
NBS8008	Consultancy Project	2	30
NBS8009	Advanced Seminars	2	20
NBS8010	Research Methods	2	10
NBS8011	Dissertation	3	60

### Key features of the programme (including what makes the programme distinctive)

**Semester 1** modules build the basic grounding in, and understanding of, management and e-business theories, together with necessary computational and information systems understanding and skills. Four mandatory modules (60 credits total) run throughout the semester. These modules are examined in January at the end of semester 1.

**Semester 2** aims to put in practice the knowledge and skills acquired in the first semester through a consulting/group project. Groups are established with students of both disciplines and undertake a real project to address a given problem. The group project also aims to help students develop generic key skills, including literature searching, managing teams and projects, and most of all, helping each other to develop essential knowledge and skills in both E-Business and Information Systems. The advanced seminars are aimed at giving students the opportunity to develop a general awareness of the latest thinking in E-Business and information systems, and a deep

understanding of a particular area they choose to specialise in. The research methods module will help students develop essential knowledge and skills and prepare them for the dissertation.

**Research project:** The 60-credit research project is of three months duration. The research project will be based within a real business environment giving students the opportunity to apply their skills in real problem solving. If the dissertation is based on a group project, each student needs to outline clearly their contributions to the project and articulate their individual learning and reflections in the dissertation.

**Programme regulations (link to on-line version)**

<http://www.ncl.ac.uk/regulations/>

**13 Criteria for admission**

*Entry qualifications*

Candidates should hold a good first degree in an appropriate subject. Normally a 2:1 Upper Second Class degree will be the minimum entry requirement, although candidates without this qualification may be interviewed by the Degree Programme Director and/or Director of Postgraduate Studies who will assess the candidate's suitability on the basis of a sample of written work and/or oral discussion.

*Admissions policy/selection tools*

The admissions policy conforms to the University standard policy for postgraduate students. Upon receipt of a completed application form candidates may be offered an interview. Offers of places may be made to suitably-qualified candidates, conditional upon two satisfactory references and upon the applicant achieving a minimum of an upper 2<sup>nd</sup> class degree (or overseas equivalent), if they do not hold such a degree at the time of application. Applicants whose first degree is not taught in English must provide evidence of a satisfactory command of English by means of an IELTS score of 6.5 or greater, or an equivalent TOEFL score (570) or 230 for computer-based test.

*Non-standard Entry Requirements*

*Additional Requirements*

*Level of English Language capability*

Overseas applicants should have, or expect to obtain, an IELTS score of 6.5 or above, or a TOEFL score of 580 (240) or above. The University provides pre-sessional and foundation courses in English Language and successful completion of one of these may be a condition of entry.

**14 Support for Student Learning**

*Induction*

During the first week of the first semester students attend an induction programme. New students will be given a general introduction to University life and the University's principle support services and general information about the School and their programme, as described in the Degree Programme Handbook. New and continuing students will be given detailed programme information and the timetable of lectures/practicals/labs/ tutorials/etc. The International Office offers an additional induction programme for overseas students (see [http://www.ncl.ac.uk/international/coming\\_to\\_newcastle/orientation.phtml](http://www.ncl.ac.uk/international/coming_to_newcastle/orientation.phtml))

*Study skills support*

Students will learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification. Some of this material, e.g. time management is covered in the appropriate Induction Programme. Students are explicitly tutored on their approach to both group and individual projects.

#### *Academic support*

The initial point of contact for a student is with a lecturer or module leader, or their tutor (see below) for more generic issues. Thereafter the Degree Programme Director or Head of School may be consulted. Issues relating to the programme may be raised at the Staff-Student Committee, and/or at the Board of Studies.

#### *Pastoral support*

All students are assigned a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees. Details of the personal tutor system can be found at <http://www.ncl.ac.uk/undergraduate/support/tutor.phtml>  
In addition the University offers a range of support services, including the Student Advice Centre, the Counselling and Wellbeing team, the Mature Student Support Officer, and a Childcare Support Officer, see <http://www.ncl.ac.uk/undergraduate/support/welfare.phtml>

#### *Support for students with disabilities*

The University's Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with: advice about the University's facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements; a resources room with equipment and software to assist students in their studies. For further details see <http://www.ncl.ac.uk/disability-support/>

#### *Learning resources*

The University's main learning resources are provided by the Robinson and Walton Libraries (for books, journals, online resources), and Information Systems and Services, which supports campus-wide computing facilities, see <http://www.ncl.ac.uk/undergraduate/support/acfacilities.phtml>

All new students whose first language is not English are required to take an English Language test in the Language Centre. Where appropriate, in-session language training can be provided. The Language Centre houses a range of resources for learning other languages which may be particularly appropriate for those interested in an Erasmus exchange. See <http://www.ncl.ac.uk/undergraduate/support/facilities/langcen.phtml>

### **15 Methods for evaluating and improving the quality and standards of teaching and learning**

#### *Module reviews*

All modules are subject to review by questionnaires which are considered by the Board of Studies. Changes to, or the introduction of new, modules are considered at the School Teaching and Learning Committee and at the Board of Studies. Student opinion is sought at the Staff-Student Committee and/or the Board of Studies. New modules and major changes to existing modules are subject to approval by the Faculty Teaching and Learning Committee.

#### *Programme reviews*

The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to Faculty Teaching and Learning Committee.

### *External Examiner reports*

External Examiner reports are considered by the Board of Studies. The Board responds to these reports through Faculty Teaching and Learning Committee. External Examiner reports are shared with institutional student representatives, through the Staff-Student Committee.

### *Student evaluations*

All modules, and the degree programme, are subject to review by student questionnaires. Informal student evaluation is also obtained at the Staff-Student Committee, and the Board of Studies. The National Student Survey is sent out every year to final-year undergraduate students, and consists of a set of questions seeking the students' views on the quality of the learning and teaching in their HEIs. Further information is at [www.thestudentsurvey.com/](http://www.thestudentsurvey.com/) With reference to the outcomes of the NSS and institutional student satisfaction surveys actions are taken at all appropriate levels by the institution.

### *Mechanisms for gaining student feedback*

Feedback is channelled via the Staff-Student Committee and the Board of Studies.

### *Faculty and University Review Mechanisms*

The programme is subject to the University's Internal Subject Review process, see [http://www.ncl.ac.uk/aqss/qsh/internal\\_subject\\_review/index.php](http://www.ncl.ac.uk/aqss/qsh/internal_subject_review/index.php)

### *Accreditation reports*

### *Additional mechanisms*

## **16 Regulation of assessment**

### *Pass mark*

The pass mark is 50 (Postgraduate programmes)

### *Course requirements*

Only those students who satisfy the examiners that they have attained the required pass marks in the taught modules they have studied may normally proceed to the dissertation.

Progression is subject to the University's Masters Degree Progress Regulations, Taught and Research (<http://www.ncl.ac.uk/calendar/university.regs/tpmdepr.pdf>) and Examination Conventions for Taught Masters Degrees (<http://www.ncl.ac.uk/calendar/university.regs/tpmdeprexamconv.pdf>). Limited compensation up to 40 credits of the taught element and down to a mark of 40 is possible and there are reassessment opportunities, with certain restrictions.

### *Common Marking Scheme*

The University employs a common marking scheme, which is specified in the Taught Postgraduate Examination Conventions, namely:

#### **Summary description applicable to postgraduate Masters programmes**

<50

Fail

#### **Summary description applicable to postgraduate Certificate and Diploma programmes**

<50

Fail

50-59	Pass	50 or above	Pass
60-69	Pass with Merit		
70 or above	Pass with Distinction		

#### *Role of the External Examiner*

An External Examiner, a distinguished member of the subject community, is appointed by Faculty Teaching and Learning Committee, after recommendation from the Board of Studies. The External Examiner is expected to:

- See and approve examination papers
- Moderate examination and coursework marking
- Attend the Board of Examiners
- Report to the University on the standards of the programme

In addition, information relating to the programme is provided in:

The University Prospectus (see <http://www.ncl.ac.uk/undergraduate/>)

The School Brochure (contact [enquiries@ncl.ac.uk](mailto:enquiries@ncl.ac.uk))

The University Regulations (see <http://www.ncl.ac.uk/calendar/university.regs/>)

The Degree Programme Handbook

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.



### How the intended learning outcomes map onto modules

Module Title	Code	Intended Learning Outcomes
Understanding organisations	NBS8007	A1,A3,A4,A7,B4,C1,D1-D6
Computer Environments	CSC8401	A1,A3,A5,A7,A8,B2,B4,B5,C2,C3,C4,D1-D2
E-Business & Internet Technologies	CSC8402	A1, A3,A4,A7,B4,C1,D1-D6
Information systems analysis and development	CSC8403	A1,A3,A4,A5,A7,B4,C1,D1-D6
Consultancy Project  Or  Health Informatics	NBS8008   NBS8098	B1, B4, C2,C5, D1-D6
Advanced Seminars	NBS8009	A1, A3, A4, A7,B4,C1,D1-D6
Research Methods	NBS8010	A2, B1, D1,D2,D3,D6
Dissertation	NBS8011	A2, B1, C1,C3,C4, D1-D6