



Department of Computer Science and Information Systems

**MSc in Information Technology  
Course Arrangements  
2011-2012**

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# 1 General Information

## 1.1 Important Contacts

Programme Director:	Dell Zhang (dell@dcs.bbk.ac.uk)
Programme Administrator:	Thomas Epineau (CompAdmin@dcs.bbk.ac.uk)
Admissions Tutor:	Sergio Gutierrez Santos (sergut@dcs.bbk.ac.uk)
Projects Tutor:	Roger Mitton (roger@dcs.bbk.ac.uk)

## 1.2 Overview

The MSc in Information Technology is a programme for graduates of disciplines other than computing, focusing on practical aspects of information systems development, modern management topics, and professionalism in IT. Students who complete this programme will have gained in-depth knowledge which they will be able to use in:

- analysis of problems arising in information systems and in the management of IT
- evaluation of technology options
- information systems development
- technology-driven organisational change
- technology-based innovation.

Full-time students follow 7 taught modules and undertake a 3-4 month project. Part-time students follow 3 to 4 taught modules in each of the two years and the project component in the second year.

## 1.3 Student Support

Every student is allocated a personal tutor in the first weeks of the programme. The personal tutor is someone students can contact to discuss any problems of a non-academic nature. These may relate to special needs or personal problems that may affect the student's academic performance. The Department also has a disability officer whom students can contact.

Academic problems should first be addressed to the lecturer concerned. If the problem is not resolved or it does not relate to a specific module, then the Programme Director should be contacted. A more detailed complaints procedure is given on the College's MyBirkbeck web pages at <http://www.bbk.ac.uk/mybirkbeck/aig>

## 1.4 Additional Information

More detailed and updated information about the programme is available from the web page <http://www.dcs.bbk.ac.uk/courses/mscinfo/> Important notices are posted throughout the year on an electronic whiteboard located on the intranet accessible from the the above page. For more general information about Birkbeck have a look at the MyBirkbeck web page on “Information and Advice”: <http://www.bbk.ac.uk/mybirkbeck/aig>

It is your responsibility to familiarise yourself with the contents of this booklet as well as the web sites, and to consult the web sites on a regular basis since additional information will be posted there during the year. You should also read your College email on a regular basis.

## 2 Dates and Time Tables

### 2.1 Introductory Talks

The programme will kick off with introductory talks to the **new students**:

- Part-time students: 6:00pm, Thursday, 29 September 2011 (MAL 404 in the main building in Malet Street)
- Full-time students: 11:00am, Monday, 3 October 2011 (MAL 404 in the main building in Malet Street)

These will include a short hands-on introduction to the departmental computer system. There will also be short presentations by a representative of the students' union, the library, and the disability office.

#### 2.1.1 First Lectures of Term

Lectures will commence in the week starting on Monday, 3 October 2011. The teaching (i.e. not including exams and projects) covers two terms of eleven weeks each (autumn and spring term). The summer term is given over to revision, exams, and the beginning of projects.

- Autumn term: Monday, 3 October 2011 - Friday, 16 December 2011
- Spring term: Monday, 9 January 2012 - Friday, 23 March 2012
- Summer term: Monday, 23 April 2012 - Friday, 6 July 2012

Students should attend lectures during term time as shown in the timetables in Section 2.2. If students are unable to attend lectures, they should arrange with lecturers or fellow-students to obtain copies of any material distributed in class.

Any student who decides to withdraw from the course should inform the Programme Administrator, in writing or by email. Students who simply stop turning up for lectures without formally withdrawing from the course will still be held liable for fees.

#### 2.1.2 College Holiday Closing

- Christmas and New Year Closure: closing at 5pm on Thursday, 22 December 2011, and re-opening at 9am on Tuesday, 3 January 2012
- Easter closure: closing at 6pm on Wednesday, 4 April 2012, re-opening at 9am on Wednesday, 11 April 2012
- May Day Bank Holiday: closed on Monday, 7 May 2012, re-opening at 9am on Tuesday, 8 May 2012

- Spring Bank Holiday (and Queen's Diamond Jubilee): closed on Monday, 4 June 2012 and Tuesday, 5 June 2012, re-opening at 9am on Wednesday, 6 June 2012
- August Bank Holiday: closing from 8pm Friday, 24 August 2012, re-opening at 9am on Tuesday, 28 August 2012

## 2.2 Time Tables

### 2.2.1 General Remarks

The compulsory modules, FoC, IS, and ISD, which have to be taken by every student studying on the MSc in Information Technology are shown in **bold** below. Modules shown underlined are level 6 options and no more than two may be taken.

Additional information on all the modules can be found in Section 3, some recommendations regarding the optional modules are listed in Section 3.2. Please note that due to timetabling constraints not all modules are available each year.

The teaching venues will be announced online. For an overview of the teaching venue locations, please refer to

<http://www.bbk.ac.uk/mybirkbeck/guides/help/class-information/teaching-map.pdf>

### 2.2.2 Full-time (FT) Students

Autumn Term 2011/12		
Day	Module	Time
Monday	RMM1 (FT only)	2:00pm - 5:00pm
	<u>ISec</u>	6:00pm - 9:00pm
	CITC (1)	6:00pm - 9:00pm
Tuesday	ICC	6:00pm - 9:00pm
Wednesday	IMP	6:00pm - 9:00pm
Thursday	<b>IS</b>	1:30pm - 3:00pm
	<b>FoC</b>	3:30pm - 5:00pm
	<b>ISD</b>	6:00pm - 9:00pm
Friday	<b>ISD</b>	5:00pm - 7:30pm
Spring Term 2011/12		
Day	Module	Time
Monday	CITC (2)	6:00pm - 9:00pm
Tuesday	IWT	11:00am - 12:30pm
	OODP	1:30pm - 5:00pm
	DCNMM	6:00pm - 9:00pm
Wednesday	IWT	11:00am - 12:30pm
	CS	1:30pm - 5:00pm
	<u>DM</u>	6:00pm - 9:00pm
Thursday	MSc proj. (weeks 3-5)	11:00am - 12:30pm
	<b>IS</b>	1:30pm - 3:00pm
	<b>FoC</b>	3:30pm - 5:00pm
	<u>SIS</u>	6:00pm - 9:00pm
	EI	6:00pm - 9:00pm
	SM	6:00pm - 9:00pm
Friday		

### 2.2.3 Part-time (PT) Students Year 1

Year 1 part-time students must take the compulsory modules FoC, IS and ISD, and may take up to one other module from the available options.

Autumn Term 2011/12		
Day	Module	Time
Monday	<u>ISec</u>	6:00pm - 9:00pm
	CITC (1)	6:00pm - 9:00pm
Tuesday	ICC	6:00pm - 9:00pm
Wednesday	<b>FoC</b>	6:00pm - 7:30pm
	<b>IS</b>	7:40pm - 9:00pm
Thursday	<b>ISD</b>	6:00pm - 9:00pm
Friday	<b>ISD</b>	5:00pm - 7:30pm
Spring Term 2011/12		
Day	Module	Time
Monday	CITC (2)	6:00pm - 9:00pm
Tuesday	RMM1 (PT only)	6:00pm - 9:00pm
	DCNMM	6:00pm - 9:00pm
Wednesday	<b>FoC</b>	6:00pm - 7:30pm
	<b>IS</b>	7:40pm - 9:00pm
Thursday	<u>SIS</u>	6:00pm - 9:00pm
	CS	6:00pm - 9:00pm
	OODP	6:00pm - 9:00pm
	EI	6:00pm - 9:00pm
	SM	6:00pm - 9:00pm
Friday		

### 2.2.4 Part-time (PT) Students Year 2

Year 2 part-time students should select as many options as necessary to complete their set of four optional modules:

Autumn Term 2011/12		
Day	Module	Time
Monday	<u>I</u> Sec	6:00pm - 9:00pm
	CITC (1)	6:00pm - 9:00pm
Tuesday	ICC	6:00pm - 9:00pm
Wednesday	IWT	6:00pm - 9:00pm
	IMP	6:00pm - 9:00pm
Thursday		
Friday	MSc proj. (weeks 3-4)	6:00pm - 9:00pm
Spring Term 2011/12		
Day	Module	Time
Monday	CITC (2)	6:00pm - 9:00pm
Tuesday	RMM1 (PT only)	6:00pm - 9:00pm
	DCNMM	6:00pm - 9:00pm
Wednesday	<u>D</u> M	6:00pm - 9:00pm
Thursday	<u>S</u> IS	6:00pm - 9:00pm
	CS	6:00pm - 9:00pm
	OODP	6:00pm - 9:00pm
	EI	6:00pm - 9:00pm
	SM	6:00pm - 9:00pm
Friday		

## 3 Syllabus and Reading Lists

Lectures aim to introduce the key concepts of each module. The specific objectives of each module and the principal readings are circulated at the start of the term. The reading lists for individual modules given below are indicative – lecturers will specify, usually at the first lecture, whether or not specific books should be purchased for particular modules.

Most modules have dedicated web pages that provide links to relevant online literature. Depending on the nature of the material, some lecturers use ‘lecture outlines’ to support their teaching and may distribute these outlines via their web pages.

Students can also contact lecturers outside the classroom to discuss the material. They can meet the lecturers during scheduled office hours or can contact them via e-mail either to discuss a problem or to make an appointment. Lecturers’ contact details are given on the Department’s web site.

A number of modules require students to submit coursework as part of the assessment. Such coursework must always be the students own work, except where explicitly noted. Students are required to confirm in writing or via e-mail that each item of coursework submitted is indeed their own work. The Department and College have strict guidelines and penalties associated with plagiarism, and routinely submit students’ work to plagiarism detection services. More details are given in the Departments Student Handbook and in the section “Plagiarism” of this booklet.

Before going into the details of the individual modules, we give a general overview. Each taught module is worth either 15 or 30 credits, the project is worth 60 credits.

### 3.1 Compulsory Modules

There are three compulsory modules, which need to be taken by every student studying on the MSc in Information Technology:

- COIY058H7: Fundamentals of Computing (FoC) (15 credits)
- COIY059H7: Information Systems (IS) (15 credits)
- BUCI021S7: Introduction to Software Development (ISD) (30 credits)

### 3.2 Optional Modules

Students choose four additional modules from a range of available options (see the back of this booklet for a form to register your choices). Some of these modules are offered in the Department of Computer Science and Information Systems (DCSIS), others in the Department of Management (DoM). Please note that the list of optional modules available may vary from year to year, and that choices are subject to timetabling constraints. If you are interested in taking a module that is not listed, please discuss this with the programme director.

### 3.2.1 DCSIS Modules

Different levels have to be distinguished among these modules, as some are on level 7 (postgraduate) and some are on level 6 (final year undergraduate). The level 7 modules cover more sophisticated technical details and should only be taken **after** completing ISD and/or FoC. While CS and OODP can be taken in year 1, we recommend part-time students to take these modules in year 2.

- COIY060H7: Computer systems (CS) (15 credits)
- COIY063H7: Internet and Web technologies (IWT) (15 credits)
- COIY062H7: Object-oriented Design and Programming (OODP) (15 credits)

The following list contains the level 6 modules. Please note that only a maximum of two level 6 modules may be selected:

- COIY028H6: Database Management (DM) (15 credits)
- COIY045H6: Information Security (ISec) (15 credits)
- COIY031H6: Strategic Information Systems (SIS) (15 credits)

### 3.2.2 DoM Modules

- MOMN011H7: Research Methods in Management 1 (RMM1) (15 credits)
- MOMNxxxH7: Creative Industries: Theory and Context (CITC)
  - This module is split into Part 1 and Part 2, Part 2 may be available from the School of Arts
  - Each part is worth 15 credits
- MOMN061H7: Digital Creativity and New Media Management (DCNMM) (15 credits)
- MOMN073H7: Entrepreneurship & Innovation (EI) (15 credits)
- MOMN038H7: Intellectual Capital & Competitiveness (ICC) (15 credits)
- MOMN043H7: Innovation: Management and Policy (IMP) (15 credits)
- MOMN082H7: Strategic Management (SM) (15 credits)

## 3.3 Project

Students will also undertake either a research dissertation or an information systems development project. More details on this in Section 3.13.

## 3.4 Fundamentals of Computing

### Aims of the Module

Discrete mathematics, mathematical logic, and the related fundamental areas of data structures and algorithms lie at the heart of any modern study of Computer Science. Any understanding of how computers operate and how to use them effectively and efficiently, in terms of either their hardware or software, inevitably involves numerous mathematical concepts.

This module introduces and develops mathematical notions, data structures and algorithms that are used in various areas of Computer Science, in particular those required for other modules of the programme.

### Teaching Staff

Michael Zakharyashev, Trevor Fenner

### Assessment

By 2-hour written examination and coursework exercises, weighting 80% and 20% respectively.

### Online material

<http://www.dcs.bbk.ac.uk/~michael/foc/foc.html>

<http://www.dcs.bbk.ac.uk/~trevor>

### Syllabus

- Numbers: integer, rational, and real. Numeral systems.
- Arithmetic for computers.
- Digital logic (combinational circuits).
- Elements of set and graph theories.
- Finite state machines (automata) and regular languages.
- Turing machines.
- Data structures: representations and operations.
- Lists, trees, forests, binary trees.
- Tree traversal and other operations; binary search trees.
- Organisation of disk storage; methods of file organisation; B-trees.
- Algorithms: design and analysis; algorithmic complexity; space utilisation.
- Sorting and searching.

### Reading

- D. Patterson and J. Hennessy, Computer Organization and Design: The Hardware/Software Interface. Morgan Kaufmann; 3 edition, 2007.
- E. Kinber and C. Smith, Theory of Computing. A gentle introduction. Prentice Hall, 2001.

## 3.5 Information Systems

### Aims of the Module

The module sets the social and organisational contexts in which computing is deployed before explaining approaches, processes, methodologies and techniques commonly used for organisational information systems development (ISD). The social impact of major movements in ISD, e.g. packaged approaches to information infrastructure development such as ERP; outsourcing and offshoring, are also treated.

To empower students to appraise the environments in which information and communications technologies are effectively deployed and to make informed decisions about their careers with fast changing socio-technical systems and professional practice. Further, to appraise, select or design architectures, frameworks, and information processing constructs including files and data schemata, programs and other coded units. To understand the process of Information Systems development and develop powers of insightful appraisal with respect to the affects of such systems on evolving social constructs as well as topics surrounding the development of Information Systems such as legal and professional issues.

### Teaching Staff

David W. Wilson, Sven Helmer

### Assessment

By 2-hour written examination and in-class test, weighting 80% and 20% respectively.

### Online material

<http://www.dcs.bbk.ac.uk/~dave/teaching/IS/IS.htm>

### Syllabus

- The Software Development Life Cycle
- Project Identification and Selection
- Requirements Analysis
- Use Case Models
- Class Models
- Normalisation
- Logic Modelling
- Database Design
- Architecture Design
- Implementing Information Infrastructures through Packages
- Outsourcing and offshoring
- IT Profession
- Intellectual Property Rights
- Software Contracts and Liability

## Reading

- Dennis, Wixom, Tegarden, “Systems Analysis and Design with UML”, International Student Version, 3rd Edition, ISBN 978-0-470-40030-2 (main text)
- Bott “Professional Issues in IT”, BCS, 2005 ISBN 1 902505 654 (recommended for social and professional issues topics)
- Other supplementary readings will be distributed.

## 3.6 Introduction to Software Development (ISD)

### Aims of the Module

The main aim of this module is to allow students who hold a first degree in a subject other than computing to gain understanding of solving computational problems and of the software development process, which are fundamental to the study of information systems and informatics. The module covers the principles of designing, implementing and testing programs, with a specific focus on object-oriented design. The module explains the fundamental aspects of these techniques, and exemplifies them with respect to the Java programming language within a series of practical lab sessions. Students will be able to apply this knowledge in learning new programming languages, developing software systems, and managing software development projects within given time constraints.

### Teaching Staff

Keith Mannoek, Alex Poulouvassilis

### Assessment

By 2-hour written examination and practical coursework, weighting 50% and 50% respectively. To obtain a pass grade in the module the overall grade needs to be 50% or greater, with a minimum grade of 30% in each component of the assessment.

### Online material

<http://www.dcs.bbk.ac.uk/~keith/isd/>

### Syllabus

- The software development process.
- Principles of programming and programming languages
- Solving computational problems (problem decomposition, abstraction, sequencing, branching, iteration).
- The Java programming language (classes, objects, variables, values, types, arithmetic operations, control expressions, methods, string manipulation, persisting objects, exceptions, arrays, collections, documentation).
- Designing, implementing and testing Java programs (object-oriented design, unit testing, code coverage, performance considerations).

### Reading

- Cay S. Horstmann, “Java for Everyone”, February 2010, Paperback, 515 pages, John Wiley, ISBN 978-0-470-79191-1

- Objects First with Java: A Practical Introduction Using BlueJ by David J. Barnes and Michael Kolling, Pearson Education; 4th Edition, 2008, ISBN 0137005628
- Introduction to Programming Using Java, Fifth Edition by David J Eck, November 2007, online textbook, <http://math.hws.edu/javanotes/>

## 3.7 Computer Systems

### Aims of the Module

To learn the basics of computer architecture and organisation, and the role and mechanism of operating systems.

### Staff

Szabolcs Mikulás

### Assessment

By 2-hour written examination and coursework, weighting 90% and 10%, respectively.

### Module URL

<http://www.dcs.bbk.ac.uk/~szabolcs/compsys.html>

### Pre-requisites and co-requisites to the module

None.

### Syllabus

1. Introduction: Computer architecture (CA) and Operating system (OS) overview
2. Processors
3. Processes and threads
4. Concurrency
5. Memory management
6. I/O and file systems
7. Protection and security
8. Distributed and parallel processing

### Reading

- Textbook: W. Stallings, Operating Systems, Internals and Design Principles, Prentice Hall, 5th edition, 2005, or 6th edition, 2008
- Recommended reading:
  - W. Stallings, Computer Organization and Architecture: Designing for Performance, Prentice Hall, 7th edition, 2006
  - A.S. Tanenbaum, Modern Operating Systems, Prentice Hall, 2nd edition 2001, or 3rd edition, 2008

## 3.8 Internet and Web Technologies

### Aims of the Module

To provide students with an understanding of how network protocols work, particularly those used on the Internet, and the ability to present and manipulate information on the World Wide Web, with an emphasis on XML.

### Teaching Staff

Peter Wood

### Assessment

By 2-hour written examination and by practical coursework. The written examination will have a weighting of 80% and the coursework a weighting of 20% of the final mark.

### Online material

<http://www.dcs.bbk.ac.uk/~ptw/teaching/IWT.html>

### Prerequisites

The ability to program (so the first half of C++ for CS students, and ISD for Information Technology students).

### Syllabus

- Introduction to the Internet and its applications
- Data communication concepts
- Packet switching and network technologies
- Internetworking
- Web languages (e.g., HTML, XHTML, XML)
- Languages for defining Web document types (e.g. DTDs)
- Web query and transformation languages (e.g. XPath, XSLT)
- Client-side processing (e.g. using Javascript, DOM)
- Server-side processing (e.g. using CGI, ASP, JSP)

### Reading

- Sas Jacobs, *Beginning XML with DOM and AJAX*. Apress, 2006, ISBN 1-59059-676-5.
- Anders Moller and Michael Schwartzbach, *An Introduction to XML and Web Technologies*. Addison Wesley, 2006, ISBN 0-321-26966-7.
- Douglas E Comer, *Computer Networks and Internets (4th Edition)*, Pearson, 2004, ISBN 0-13-143351-2

## 3.9 Object-oriented Design and Programming

### Aims of the Module

The main aim of the module is to provide students with the necessary skills for developing software in an object-oriented way according to high quality standards. This ranges from learning object-oriented concepts, designing object-oriented software using a proven methodology (such as the Unified Process), to learning how to program in an object-oriented way.

### Teaching Staff

Oded Lachish

### Assessment

By 2-hour written examination and practical coursework (design/programming), weighting 75% and 25% respectively.

### Online material

<http://www.dcs.bbk.ac.uk/~oded/>

### Prerequisites

C++ module for MSc CS students; C++ or ISD module for MSc CFS students; ISD module for students on other Masters programmes; experience with a modern programming language otherwise.

### Syllabus

- Introduction to object-oriented concepts and the Unified Process
- Overview of object-oriented analysis and design using UML 2.0
- Design Patterns
- Designing objects and their interactions
- Data model and implementation model
- Object-oriented language implementation
- Type systems and genericity

### Reading

- Craig Larman. Applying UML and Patterns; An Introduction to Object-Oriented Analysis and Design and the Unified Process, 3rd edition, Prentice-Hall 2002
- E. Gamma, R. Helm, R. Johnson, J. Vlissides. Design Patterns: Elements of Reusable Object-Oriented Software
- Roger S. Pressman. Software Engineering. A practitioner's approach. Fifth Edition 2001, Chapters 11, 20-23
- David J. Eck. Introduction to Programming Using Java, Fifth Edition, Online text, 2009

## 3.10 Database Management (DM)

### Aims of the Module

To familiarise the student with the main concepts underlying Database Management, and in particular with the Relational Database model which is the dominant database system used within corporate IT departments. The course has three main strands: (1) Fundamental concepts introduced using the Entity-Relationship model, (2) Querying a relational database, and (3) Relational database design.

### Teaching Staff

Peter Wood

### Assessment

By 2-hour written examination and practical coursework, weighting 80% and 20%, respectively.

### Online material

<http://www.dcs.bbk.ac.uk/~ptw/teaching/DBM/>

### Syllabus

- Entity Relationship Diagrams
- Relational Model
- Querying a Relational Database
- Creating Relational Schemas
- Modifying a Relational Database
- Integrity Constraints in the Relational Model
- Relational Database Design
- Normal Forms
- Normalisation Algorithms
- Object Relational Databases
- XML and Databases

### Reading

- J.D. Ullman and J. Widom, *A First Course in Database Systems*. Third edition, Prentice Hall, 2008.
- A.B. Silberschatz, H.F. Korth and S. Sudarshan, *Database System Concepts*. Sixth edition, McGraw-Hill, 2011.
- T. Connolly and C. Begg, *Database Systems: a practical approach to design, implementation and management*. Fifth edition, Addison Wesley, 2010.

## 3.11 Information Security (ISec)

### Aims of the Module

Information security is about protecting information (and information systems) against unauthorised access and tampering. Avoiding security breaches has a high priority for organisations storing and handling confidential data. This module provides students with an introduction to information security. This covers technical aspects, such as cryptography, but also extends to management aspects, such as security policies, as having the technical infrastructure in place is only part of the solution. Students will learn how to employ technical solutions effectively in an organisation-wide context.

### Teaching Staff

Sven Helmer

### Assessment

By 2-hour written examination and practical coursework, weighting 80% and 20%, respectively.

### Online material

<http://www.dcs.bbk.ac.uk/~sven/infsec/>

### Syllabus

- Overview of Information Security
- Access Control Matrix Model
- Security Policies
- Social Engineering
- Basic Cryptography
- Key Management
- Cipher Techniques
- Authentication
- Identity Management
- Access Control Mechanisms
- Confinement
- Assurance and Trust

### Reading

- Bruce Schneier, Applied Cryptography, John Wiley & Sons, 1996, ISBN 0-471-11709-9
- Matt Bishop, Computer Security: Art and Science, Addison-Wesley, 2002, ISBN 0201440997

## **3.12 Strategic Information Systems (SIS)**

### **Aims of the Module**

Following study of the unit students will be able to contribute to IS Planning and Strategy formulation in corporate enterprises and complex administrations. They will have a deep understanding of a Socio-Technical approach to the deployment of Information Technology in modern organisations. They will have an understanding of frameworks for analysing strategic issues of IS deployment and a familiarity with the most cogent current issues. They will develop confidence in addressing an audience and skills of explanation and persuasion.

### **Teaching Staff**

Dave Wilson

### **Assessment**

By 2-hour written examination, in-class test, and presentation, weighting 60%, 16% and 24%, respectively.

### **Online material**

<http://www.dcs.bbk.ac.uk/~dave/teaching/>

### **Syllabus**

- IS, IM, IT Strategy
- Alignment & Maturity
- Packages & Information Infrastructures
- The CIO & IT Governance
- Knowledge Management
- Outsourcing & Offshoring
- Evaluation & Risk Management

### **Reading**

- Strategic Information Management Robert D Galliers and Dorothy E Leidner, Routledge ISBN 0 415 99647 3
- Selected Research Papers

## 3.13 MSc Project

### Aims of the Module

In the MSc project a student will be able to demonstrate his or her skills in organising and completing a task that goes beyond a typical coursework assignment. That means either (i) planning and undertaking an orderly piece of social science research in an Information Systems & Management context or (ii) planning and executing a major piece of information systems development work, and presenting also, existing approaches in the problem area (placing the student's own approach in the wider context),

Students are encouraged to come up with their own ideas for projects. In order to arrange supervision for the project, a student should discuss possible projects with the Programme Director, Project Co-ordinator or with the lecturer who seems the most appropriate for the topic.

Students intending to take a non-implementation project, as (i) above, are strongly advised to take RMM1, while those interested in (ii) above should attend a brief series of lectures given for MSc Computer Science students.

### Teaching Staff

Supervisor of the project

### Assessment

Written project proposal (of about 2000-3000 words) and written project report (of about 8,000 to 12,000 words for an implementation project and 10,000 to 16,000 words for a research dissertation), weighting 20% and 80%, respectively.

### Online material

For research dissertations, see module RMM1 above; for implementation projects, see here: <http://www.dcs.bbk.ac.uk/~sven/project/>

### Syllabus

The main part of the module will be done by a student on his or her own (supported by the supervisor). The brief series of lectures mentioned above covers the following points:

- how to formulate the objectives/aims of an MSc project
- how to write a project proposal
- how to organise and plan the project
- how to research literature
- how to write a project report

### Reading

- As recommended by supervisor

### **3.14 Modules offered by the Department of Management**

For a description of the modules offered by the Department of Management, please refer to their Postgraduate Handbook, which is available here:

<http://www.bbk.ac.uk/management/prospective-students/postgraduate/handbook>

The Department of Management also publishes a time table for their modules. The most current version can be found here under the heading Timetables:

<http://www.bbk.ac.uk/management/current-students>

## 4 Administration and Assessment

For detailed College rules and regulations see

<http://www.bbk.ac.uk/mybirkbeck/services/rules> and, in particular,

<http://www.bbk.ac.uk/mybirkbeck/services/rules/casregs.pdf>

Below we summarize the most relevant rules for the MSc in Information Technology.

### 4.1 Requirements for the Award of the MSc/PGDip

Each taught module is assessed by a written exam and, in most cases, by additional coursework. The project module is assessed by the project proposal document (20%) and the project report (80%).

Each taught module is assessed a written exam. For each module, a Pass requires at least 50% of the available marks. Up to 30 credits of the taught modules (all modules except the project) with a mark between 40% and 49% can be compensated (assuming that the total weighted average mark is above 50%). Additionally, there is a 60 credit project module.

To gain an award the following is required:

- Postgraduate Certificate (PGCert): pass modules worth 60 credits.
- Postgraduate Diploma (PGDip): pass modules worth 120 credits.
- Master of Science (MSc): pass all taught modules and the project.

The final grade is computed by taking the weighted average (according to the credits) of the module assessment marks. The following has to be satisfied:

- Pass requires at least a 50% weighted average pass mark
- Merit requires at least a 60% weighted average pass mark
- Distinction requires at least a 70% weighted average pass mark.

### 4.2 Announcement of Results

The Examination Board meets in July to consider the results of the written exams and coursework, and in November to consider the results of the projects and to award degree.

Shortly after the meeting of the exam board you will receive a letter from the Department about your results. Your results and grades will be officially confirmed by a letter (and/or via the MyBirkbeck site) some time later by the College.

Keep the Department notified of any change of address; the letters after the Board go to whatever address the Department holds for you. The College letters go to whatever address you put on your examination entry forms.

Candidates are also offered the option of receiving photocopies of their marked exam scripts. The letter that goes out after the July board contains a form on which candidates can make this request. A charge is made for this service.

Students who have not paid their fees are given *no information at all* about their examination results.

### 4.3 Exam Entry Forms

You receive your exam entry forms from the Registry and return them to the Programme Administrator for the MSc in Information Technology in the Department's admin office. You have to list all modules (including project) that you want to be assessed that year.

### 4.4 Deferral

In **exceptional cases**, students may be permitted to defer the written exams and/or the project to the following year. They must apply by filling in a deferral form (available from the Programme Administrator) setting out the reasons for wishing to defer. They have to do this before **1 May** for exams and before **1 September** for the project. A student who defers an element of assessment has to enter for that element the following year; usually no further deferrals are permitted.

Simply not turning up for an exam or failing to submit a coursework or project, without permission to defer, will be considered to be the same as failing it, in the sense that it will count as one of the two attempts that you are permitted to make at passing that element. If you have a valid excuse for not turning up for the exam, such as illness, you should send details in writing to the Programme Director within 28 days of the exam. In the case of illness, this should be accompanied by a doctor's certificate.

### 4.5 Mitigating Circumstances

The Academic Board in March 2007 approved the following guidelines for dealing with mitigating circumstances in relation to examinations and other forms of assessment in order to ensure consistent and fair practice across the College. For further information, students may consult the document on mitigating circumstances through MyBirkbeck: <http://www.bbk.ac.uk/mybirkbeck/services/rules>

A Mitigating Circumstances claim should be submitted if valid detrimental circumstances result in:

- the late or non-submission of assessment;
- non-attendance of examination(s);
- poor performance in assessment.

If a student feels their circumstances warrant consideration by the Board of Examiners they should notify the Programme Director, in writing, in advance, at the earliest opportunity (within 7 days of the assessment deadline or examination) using a **Mitigating Circumstances Claim Form** (can be downloaded from the above MyBirkbeck site). In the form, students should state whether the circumstances relate to non-attendance at an examination or late submission of an assignment and should include supporting evidence (e.g. a medical certificate giving the nature and duration of any illness). They may inform their personal tutor, in confidence, of any problem they may not wish to disclose in writing. They should also complete late submission of coursework forms. If they discover subsequently that there are circumstances they could not report in advance, these should be notified to the Programme Director in writing as soon as possible. Students should be aware that discussing their claim with a member of staff does not constitute a submission of a claim of mitigating circumstances.

For a claim to be accepted a student must produce independent documentary evidence to show that the circumstances:

- have detrimentally affected their performance/submission/attendance in assessment or will do so;
- were unforeseen;
- were out of their control and could not have been prevented;
- relate directly to the timing of the assessment affected.

## 4.6 Resitting elements of the assessment

One resit (but only one) is allowed for each element. You may resit a written exam or the project if your marks for that module are below 50%

There are no special resit exams; students resit alongside the other candidates. They normally do so a year after their first attempt. Where the syllabus has changed, we set a paper that is suitable for resit candidates, providing alternative questions where necessary. Note, however, that we do this only for candidates from the previous year, not from further in the past.

## 4.7 Enrolment as a Revision Student or Project-only Student

It is not essential to re-enrol as a student in order to resit the written exams; you may simply complete the examination entry forms (obtainable from the Programme Administrator for the MSc in Information Technology in the Department in February/March) and pay an exam entrance fee. Non-enrolled students may not attend lectures or use the Department's facilities. They may, however, make use of the Birkbeck library, for a fee of £50 (you need a letter from the Programme Administrator confirming your status).

If, however, you wish to re-enrol, perhaps to attend some of the lecture courses again, you may enrol as a (part-time) revision student and you pay a reduced fee. Students who wish to use the departmental equipment to do their extra coursework should enrol as revision students. Candidates who enrol as revision students do not have to pay a further fee for the examination entrance.

Students who wish to resit the project have to enrol as a project-only student for the period they receive supervision for their project.

## 4.8 Examinations

Please consult the programme's intranet web page, reachable via a link under the heading **For enrolled students** on the main page: <http://www.dcs.bbk.ac.uk/courses/info/>

## 4.9 Coursework

Please consult the programme's intranet web page, reachable via a link under the heading **For enrolled students** on the main page: <http://www.dcs.bbk.ac.uk/courses/info/>

## 4.10 Projects

Please consult the programme's intranet web page, reachable via a link under the heading **For enrolled students** on the main page: <http://www.dcs.bbk.ac.uk/courses/info/>

## 4.11 Plagiarism

Plagiarism is defined as “copying a whole or substantial parts of a paper from a source text (e.g. a web site, journal article, book or encyclopedia), without proper acknowledgement; paraphrasing of another's piece of work closely, with minor changes but with the essential meaning, form and/or progression of ideas maintained; piecing together sections of the work of others into a new whole; procuring a paper from a company or essay bank (including Internet sites); submitting another student's work, with or without that student's knowledge; submitting a paper written by someone else (e.g. a peer or relative), and passing it off as one's own; representing a piece of joint or group work as one's own”.

The College considers plagiarism a serious offence, and as such it warrants disciplinary action. This is particularly important in assessed pieces of work where plagiarism goes so far as to dishonestly claim credit for ideas that have been taken by someone else. According to paragraph 3.2 of the College's “Procedures for Dealing with Plagiarism by Students on Taught Programmes of Study”: “A student who knowingly assists another student to plagiarise (for example by willingly giving them their own work to copy from) is committing an examination offence.” The College's procedure also identifies various types of assessment offences and is available online at the MyBirkbeck web site: <http://www.bbk.ac.uk/mybirkbeck/services/rules>

## 5 Career Development

Most students are interested in developing their careers, either within their current field of work or in a completely new direction. The Specialist Institutions Careers Service (SICS), part of The Careers Group, University of London, offers great expertise and experience in working with students and graduates of all ages and at all stages of career development, and its Birkbecks next-door neighbour!

- Term-time they offer an Early Evening Advisory Service specifically and exclusively for evening students on Mondays between 17.00 & 19.00.
- Drop-In Advice Service - Monday-Thursday, 14.00-16.30 always very popular with the Birkbeck students.
- Longer Advisory Interviews can be arranged if necessary - for complete career beginners, for people wanting a practice job interview, and for every stage and situation in between.
- They also offer Psychometric Testing and Personality Assessment Workshops, Employer Presentations, Computer-based Career Guidance Programs, Insight Career Courses as well as invaluable information on Course Funding.

Enrolled students of Birkbeck who are following degree and postgraduate courses lasting one year or longer courses may use the services of SICS free of charge up to the end of July of the year they finish (September for postgrads).

- For more information visit The SICS website at <http://www.careers.lon.ac.uk/sics>
- SICS is located at: 4th Floor, ULU Building, Malet Street, WC1E 7HY, 020 7866 3600; email: [sics@careers.lon.ac.uk](mailto:sics@careers.lon.ac.uk)

## 6 Disability Support Services

At Birkbeck there are students with a wide range of disabilities including dyslexia, visual or hearing impairments, mobility difficulties, mental health needs, HIV, M.E., respiratory conditions etc. Many of them have benefited from the advice and support provided by the Colleges disability service.

### 6.1 The Disability Office

The College has a Disability Office located on the main corridor of the Malet Street building. We have a Disability Service Manager, Mark Pimm, and a Disability Advisor, Steve Short.

Mark is your first point of referral for disability enquiries at the College whilst Steve is for dyslexia. They can provide advice and support on travel and parking, physical access, the Disabled Students Allowance, special equipment, personal support, examination arrangements etc. If you have a disability or dyslexia, we recommend you make an appointment to see them as soon as possible after commencing your course. Appointments lasting one hour are available from 12 noon to 5 pm Monday to Friday and are booked by Steve (details below).

At your first appointment at the Disability Office they will ask you to complete a Confidentiality Consent Form. This allows you to state who in the College can be informed of your disability. Remember, if you wish, we do not need to inform people of the exact nature of your disability, just your disability related needs.

They will also complete an Individual Student Support Agreement form, confirming your support requirements and send this to your Department and relevant Departments at the College so they are informed of your needs.

### 6.2 The Disabled Students Allowance

Students with disabilities or dyslexia on undergraduate or most postgraduate courses who meet the eligibility criteria regarding residency are eligible to apply for the Disabled Students Allowance (DSA). This can meet the cost of special equipment e.g. computers, cassette recorders, etc, non-medical personal help e.g. note-takers, interpreters, readers, etc, book and photocopying allowances and additional travel costs. The Disability Service Manager can assist you in applying to your Local Education Authority (LEA) for this.

### 6.3 The Personal Assistance Scheme

Some students need a personal assistant to provide support on their course, for example a note-taker, sign language interpreter, reader, personal assistant, disability mentor or dyslexia support tutor. Birkbeck has a Personal Assistants Scheme to assist you with recruiting, training and paying your personal assistant. Please contact Steve for information on this scheme.

## **6.4 Support in your Department**

The provision which can be made for students with disabilities by Departments is set out in the Procedures for Departments for Compliance with the Disability Discrimination Act. This is available from the Disability Office and the Disability website (see below).

As mentioned above your Department will receive a copy of your Individual Student Support Agreement from the Disability Office. This will make specific recommendations about the support you should receive from the Department.

If you experience any difficulties or require additional support from the Department then you can contact the Programme Directors, tutors and the course Administrator.

## **6.5 Support in Central Computing Services and Library Services**

There is a comprehensive range of specialist equipment for students with disabilities in Central Computing Services. This includes screen reading and character enhancing software for students with visual impairments, specialist scanning software, large monitors, dyslexia software, ergonomic mice and keyboards, specialist orthopaedic chairs etc. For advice and assistance please contact the Disability IT Officer. There is also some specialist equipment in the Malet Street Library, including a CCTV and students with disabilities may benefit from using the Librarys LAMP service for postal deliveries.

## **6.6 Specific Learning Difficulties (Dyslexia)**

Mature students who experienced problems at school are often unaware that these problems may result from their being dyslexic. Whilst dyslexia cannot be cured, you can learn strategies, which make studying significantly easier. If you think you may be dyslexic you should contact Steve, he can screen you and where appropriate refer you to an Educational Psychologist for a dyslexia assessment. These assessments cost 300. Some students can receive assistance in meeting this cost from their employer. In exceptional cases students may receive assistance from the Access Fund.

## **6.7 Examinations**

Students with disabilities and dyslexia may be eligible for special arrangements for examinations e.g. extra time, use of a word processor, amanuensis, enlarged examination papers etc. In order to receive special arrangements students must provide Medical Evidence of their disability (or an Educational Psychologists Report if you are dyslexic). The closing date for making special examination arrangements is the 15th March and beyond this date consideration will only be given to emergency cases.

## **6.8 The Disability Handbook**

The Disability Handbook provides detailed information on the support available from the College. Copies are available from all main reception areas, the Disability Office and from

the College disability web site at:

<http://www.bbk.ac.uk/mybirkbeck/services/facilities/disability>

For further information or to make an appointment to see Mark or Steve, please call Steve Short (Disability Advisor) on 020 7631 6336 or email [disability@bbk.ac.uk](mailto:disability@bbk.ac.uk).

