



Department of Computer Science and Information
Systems

BSc (Hons) Computing

PROGRAMME BOOKLET
(2020/2021)

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Version of October 9, 2020

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1 General Information

1.1 Welcome

Welcome to all students of the BSc Computing. The Programme Director is:

- Dr David Weston (dweston@dcs.bbk.ac.uk).

David is a member of the Department of Computer Science and Information Systems which is located in the Main Building of Birkbeck College. The department is part of the School of Business, Economics and Informatics. The Programme Administrator is:

- Steve Morgan (bsc@dcs.bbk.ac.uk).

Any questions or queries concerning the programme should be directed to the Programme Administrator via email at bsc@dcs.bbk.ac.uk.

1.2 Enrolment

Enrolment can be carried out online at www.bbk.ac.uk/mybirkbeck. It is necessary to have a username and a password issued by IT Services.

1.3 Fees/Finance

Fees may be paid by direct debit in instalments and this is probably the best method to adopt. Additional expenses will be incurred and in particular it is important to budget for the purchase of books. An amount of £300 - £350 per year is normal. The College may be able provide financial support. Please see <http://www.bbk.ac.uk/mybirkbeck/finance/studentfinance>.

1.4 Change of Address

If during the year you change your address from your enrolment address, please make sure you inform both the Registry and the Programme Administrator in the DCSIS. Failure to inform the Programme Administrator will mean that you may miss important information concerning the programme and the examinations.

1.5 Workloads

Please note that you are expected to work hard for your degree. To maintain standards you will have to put in a lot of effort. As a minimum you are expected to devote at least as much time outside classes as in classes. Poor attendance at classes and too little study outside the classes usually lead to failure.

1.6 Beginning of Term

The autumn term starts the week beginning Monday 5th October 2020. There will be an induction evening, including a laboratory induction, for first year students on Thursday 1st October 2020.

1.7 International Students

International students (i.e. not home students and not EU students) must notify the BSc Administrator of any absences, including holidays, and any return, temporary or permanent, to their country of origin. This information will be passed to the UKVI.

1.8 Moodle

Information about most modules can be found on the Moodle virtual learning environment. The login page is <http://moodle.bbk.ac.uk/>. Further information about Moodle can be obtained from this page.

1.9 Birkbeck Evening Nursery

Birkbeck College has an evening nursery, which is available for students and current members of staff and accepts children aged 2-10 years. In exceptional circumstances, children up to 12 will be accepted. However, Staff reserve the right not to accept older children if they are disruptive. Full details, including opening times, may be found at

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

1.10 Final Year Project

The final year project, which is compulsory but not timetabled, has a value of 30 credits. There are two types of project: Information Systems Development and Computing.

Fee for a “project only” year: if supervision is required, then a fee equal to one quarter of the normal programme fee will be charged.

Further information about the project can be found at https://www.dcs.bbk.ac.uk/intranet/index.php/BSc_Student_Projects

1.11 Coursework Deadlines

For each coursework assignment you are set, you will be issued with a deadline. To achieve full marks for the assignments, you must submit by the assignment deadline. Coursework that is submitted up to seven calendar days late will receive a late penalty mark and deduction of 10% of marks. However, this deduction will not take the mark for the late piece of assessment lower than the 40% pass threshold. Any work that is submitted between seven and fourteen calendar days late will receive a late capped penalty mark of 40%. Work submitted more than fourteen calendar days from the deadline will be awarded a grade of 0%.

Deadlines are published by module tutors in Moodle and publicised in class. If you are not sure about your deadlines for coursework assignment, please speak to your module tutor at the earliest possible opportunity.

1.12 Feedback on Assessment

Feedback on coursework is normally provided within four weeks of the deadline for submission of the piece of work in question. If a piece of work is submitted after the normal deadline then it may not be possible to provide feedback within four weeks. Feedback on end of year examinations, beyond the confirmed mark, is not normally provided.

1.13 Catch up Tests

For some modules students who miss a test or fail a test are offered a catch up test for which the mark is capped at 40% in the absence of an accepted claim for mitigation.

1.14 Mitigating Circumstances

Mitigating circumstances are circumstances that are outside a student's control and that significantly disrupt performance in an assessment. Examples are sudden illness and the death of a close relative. Any claim for mitigation should be submitted within two weeks after the assessment date or assessment deadline. Documentary evidence is required. Full details, including a claim form, are at <http://www.bbk.ac.uk/registry/policies/documents> under the two headings *mitigating-circumstances* and *mit-circs-form*.

1.15 Common Award Scheme

The regulations for Birkbeck degree programmes can be found at <http://www.bbk.ac.uk/registry/policies/>

It is useful to know the definitions of “retake” and “reassessment”. If a failed module is retaken, then it is necessary to attend the lectures and to carry out all components of the assessment, even those components that were passed in a previous attempt. If a failed module is reassessed, then it is not necessary to attend the lectures and it is only necessary to carry out those components of the assessment that were failed. There is a cap at 40% on the mark for any component carried out in the reassessment, unless mitigating circumstances have been accepted. The marks for a retake are not capped. A student offered a reassessment may choose instead to retake the module in question. A fee will be charged for any retake module, in addition to the normal fees.

1.16 Retakes and Reassessments

Entry Year from 2019/20 and onwards: if a module is failed at the first attempt in 2020/21, then there will be an automatic reassessment in August or September 2021. This reassessment will count as a second attempt. At most four attempts at passing a module are allowed.

Entry Year 2018/19 or earlier: if a module is failed at the first attempt with a mark in the range 30% to 39% inclusive then a reassessment is permitted. If the mark is 29% or less, then a retake is required. At most three attempts at passing a module are allowed.

A student who is required to retake a module in 2021/22, and for whom 2021/22 is not the final year of study, can only register for at most 60 credits part time or at most 90 credits full time in 2021/22, including the credits for any modules that are retaken.

2 Student Support

Student Services at Birkbeck encompass a wide range of services within Birkbeck, aimed at supporting students' learning experience and personal development.

Advice Service

Our trained advisors are on hand to provide information and advice about many aspects of your studies at Birkbeck including but not limited to: application and enrolment process, applying for government loans and financial support from the College, and payment options. Where we cannot answer questions immediately, we will either get back to you with an answer or refer your query to a specialist team who can.

Ask us a question, call us on 020 3907 0700 or come along to our drop-in sessions for help and support. Alternatively, please visit our website, <http://www.bbk.ac.uk/student-services> for further information.

Careers and Employability Service

We provide comprehensive careers advice, events and information services both in person and online. The service is free and available to all Birkbeck students and recent graduates. To find out how we can help you to enhance your career development and employability ask us a question or visit the Students' Employability Space. Alternatively, please visit our website for further information.

Counselling Service

We offer a free, non-judgmental and confidential counselling service to support you with emotional or psychological difficulties during your time at university. To make an appointment for an initial consultation, please email counselling-services@bbk.ac.uk with your name, student ID, gender and telephone number. Alternatively, please visit our website for information about the service including a comprehensive selection of self-help resources which may be useful in gaining a greater understanding of the personal challenges you are facing and the ways in which you can think about addressing them.

Disability and Dyslexia Service

At Birkbeck we welcome students with disabilities and we are committed to helping you seize the opportunities that studying here presents. Regardless of your condition, our experienced, understanding and welcoming staff are here to support you during your studies. To make an appointment, please contact the Wellbeing Team from your My Birkbeck profile by clicking on 'Ask us' and selecting 'New Ask' or call us on 020 3907 0700. Alternatively, please visit our website for information about a Study Support Plan, Disabled Students' Allowance, free dyslexia screening and more.

Study Skills

Through a range of workshops, accessible learning materials, and one-to-one meetings, our Learning Development Service is here to help you to fulfil your potential in a number of ways while studying at Birkbeck. Visit our Learning Skills module on Moodle for resources that will help you build academic skills and increase academic performance.

Ask us a question, call us on 020 3907 0700 or visit our website for advice and support with study skills.

The School of Business, Economics and Informatics has Learning Co-ordinators. Their role is to support students in their studies. They can offer help and support on a variety of topics ranging from writing skills to basic maths. See www.bbk.ac.uk/business/current-students/learning-co-ordinators for details.

Mental Health Advisory Service

We provide specialist advice and support in a safe, non-judgemental environment. Like the Counselling Service, we are here to help you when you are going through emotional or psychological difficulties. The main difference between our services is that the emphasis of our work is on practical support, rather than therapeutic interventions, to enable you to progress through your studies.

To make an appointment, please contact the Wellbeing Team from your My Birkbeck profile by clicking on 'Ask us' and selecting 'New Ask' or call us on 020 3907 0700. For further information about the service, please visit our website.

Nursery Service

We understand that studying while caring for a child or children can be especially challenging and so we offer an affordable, professional evening nursery service, based in our central London campus, for children aged from two to six years.

For further information and contact details, please visit our website.

3 Support for Students with Disabilities, Dyslexia and Mental Health Needs

At Birkbeck there are students with a wide range of disabilities, specific learning difficulties, medical conditions and mental health conditions (hereinafter referred to as disabled students). Many of them have benefited from the advice and support provided by the College's Wellbeing Centre. The Wellbeing Centre is located in G26 on the Ground floor of the Malet Street building.

All enquiries should come to the Wellbeing Centre (tel. 0207 631 6316), who will determine the appropriate referral to specialists in the Disability and Dyslexia Service and Mental Health Service. They can provide advice and support on travel and parking, physical access, the Disabled Students' Allowance, specialist equipment, personal support, examination arrangements, etc.

On enrolment you need to complete a Study Support Plan (SSP), which will set out the reasonable adjustments that we will make with physical access, lectures, seminars, assessments and exams. After you complete this and provide disability evidence, we confirm the adjustments you require and then your department, examinations office, etc. will be informed that your SSP is available and adjustments can be made. You should contact the Wellbeing Service if any of your adjustments are not in place.

Access at Birkbeck

Birkbeck's main buildings have wheelchair access, accessible lifts and toilets, our reception desks and teaching venues have induction loops for people with hearing impairments, and we have large print and tactile signage. Accessible parking, lockers, specialist seating in lectures and seminars and portable induction loops can all be arranged by the Disability & Dyslexia Service.

The Disabled Students' Allowance

UK and EU (with migrant worker status) disabled students on undergraduate and postgraduate courses are eligible to apply for the Disabled Students' Allowance (DSA). The DSA provides specialist equipment including computers with assistive technology and training, personal help (e.g., study skills tutors, mentors and BSL interpreters) and additional travel costs for students who have to use taxis. It provides thousands of pounds worth of support and all the evidence shows that students who receive it are more likely to complete their courses successfully.

The Wellbeing Centre can provide further information on the DSA and can assist you in applying to Student Finance England for this support. From September 2016, new students will receive their note-taking support from the University rather than the DSA.

Support in your Department

Your Department is responsible for making reasonable adjustments in learning and teaching and assessment, including permission to record lectures, specialist seating, extensions on coursework, etc. Whilst we anticipate that this support will be provided by the Programme Director, tutors and Programme Administrator in the Department, they will also have a Disability Lead. If you experience any difficulties or require additional support from the Department then they may also be able to assist you. They may be contacted through the Programme Administrator.

Support in IT Services and Library Services

There is a comprehensive range of specialist equipment for students with disabilities in IT Services. This includes an Assistive Technology Room, which may be booked by disabled students. We have software packages for dyslexic students (e.g. ClaroRead and Mind view), screen reading and character enhancing software for students with visual impairments available in our computer laboratories, specialist scanning software, large monitors, ergonomic mice and keyboards, specialist orthopaedic chairs, etc. We have an Assistive Technology Officer, who can be contacted via IT Services.

The Library has an Assistive Technology Centre, where there is also a range of specialist equipment, including an electronic magnifier for visually impaired students, as well as specialist orthopaedic chairs and writing slopes. The Disability and Dyslexia Service Office refers all students with disabilities to the Library Access Support service, who provide a comprehensive range of services for students with disabilities and dyslexia.

Examinations and Assessments

Many disabled students can receive support in examinations, including additional time, use of a computer, etc. In exceptional circumstances, students may be offered an alternative form of assessment.

Specific Learning Difficulties (e.g. dyslexia, dyspraxia)

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 to make studying significantly easier. If you think you may be dyslexic you can take an online screening test in the computer laboratories – the instructions for the screening test are available on the Disability Office website. If appropriate, you will be referred to an Educational Psychologist for a dyslexia assessment. Some students can receive assistance in meeting the cost of this assessment, either from their employer or from Birkbeck.

Further information

For further information, please call the Wellbeing Centre on 020 7631 6316 or email disability@bbk.ac.uk.

4 Important Dates

4.1 Term Dates

Lectures will commence in the week starting on Monday 5 October 2020. The teaching (i.e., not including exams and project) covers two terms of eleven weeks each (autumn and spring term). The summer term is given over to revision (including revision lectures), exams, and the project.

- Autumn term: 5 October 2020 – 18 December 2020.
- Spring term: 11 January 2021 – 26 March 2021.
- Summer term: 26 April 2021 – 9 July 2021.

Please refer to

<http://www.bbk.ac.uk/about-us/term-dates>

for the College holiday closing times.

Students should attend lectures during term time as shown in the timetables in Section 5. 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 programme should inform the Programme Administrator. Students who simply stop turning up for lectures without formally withdrawing from the programme will still be held liable for fees. It is especially important for international students that they inform the department about any absence.

4.2 Credits

Students must obtain at least 360 credits of which at least 120 credits must be at level 6. The total value of the modules taken in a single year should not exceed 120 credits. In this timetable, modules which are taught in a single term have a value of 15 credits. Modules which are taught over two terms have a value of 30 credits.

4.3 Final year project

The final year project, which is compulsory but not timetabled, is level 6 and has a value of 30 credits. There are two types of project: 3) Information Systems Development and 4) Computing.

4.4 Optional modules

The optional modules are displayed in three tables, one for each of the autumn, spring and summer terms.

4.5 Lecture Rooms

Information about rooms can be found in MyBirkbeck. You are advised to check before each lecture because room bookings can change at short notice.

All modules shown below are taught from 6.00-9.00pm, unless indicated otherwise.

5 Timetables - Part-time and Full-time

Part-time Compulsory modules

Year 1

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Mathematics for Computing	Paul Newman	None	4
Tue	Introduction to Programming	Tingting Han	None	4
Thu	Introduction to Web Authoring	Various	Basic PC skills	4

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Systems Analysis and Design I	Felix Reidl	None	4
Tue	Introduction to Computer Systems	Keith Mannock	None	4
Fri	Computer Networking	Andrea Cali	None	5

Year 2

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Wed	Web Programming using PHP	Various	IWA, PSP or JS	5
Thu	Software Engineering I	Taolue Chen	None	5
Fri	Data Structures and Algorithms	Igor Razgon	ITP or SP1	5

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Wed	Systems Analysis and Design II	Andrea Cali	SAD1	5
Thu	Software and Programming I	Roman Kontchakov	ITP	5

Students must also select a 15 credit optional module.

Year 3

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Information Security	Igor Razgon	None	6
Wed	Software and Programming II	Carsten Fuhs	SP1	6

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Computer Organisation and Systems Software	Cen Wan	ICS	5

Students must select 45 credits of optional modules.

Year 4

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Tue	Professional Issues in Computing	Brian Gannon	None	6

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Database Management	Peter Wood	ITP, ICS, SAD1, SAD2	6
Tue	Software Engineering II	Jan Hidders	SE1	6

Students must select 15 credits of optional modules. Students will also complete a 30 credit project.

Full-Time Compulsory modules

Year 1

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Mathematics for Computing (daytime teaching 14:00-17:00)	Oded Lachish	None	4
Tue	Introduction to Programming (daytime teaching 14:00-17:00)	Tingting Han	None	4
Thu	Introduction to Web Authoring	Various	None	4

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Tue	Introduction to Computer Systems	Keith Mannock	None	4
Thu	Software and Programming I (daytime teaching 14:00-17:00)	Carsten Fuhs	None	5
Fri	Computer Networking	Andrea Cali	None	5
Fri	Systems Analysis and Design I (daytime teaching 14:00-17:00)	Felix Reidl	None	4

Summer Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Web Programming using PHP	Various	IWA, PSP or JS	5

Year 2

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Tue	Professional Issues in Computing	Brian Gannon	None	6
Wed	Software and Programming II	Carsten Fuhs	SP1	6
Thu	Software Engineering I	Taolue Chen	None	5
Fri	Data Structures and Algorithms	Igor Razgon	ITP or SP1	5

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Computer Organisation and Systems Software	Cen Wan	ICS	5
Wed	Systems Analysis and Design II	Andrea Cali	SAD1	5

Students must select 30 credits of optional modules.

Year 3

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Information Security	Igor Razgon	None	6

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Database Management	Peter Wood	ITP, ICS, SAD1, SAD2	6
Tue	Software Engineering II	Jan Hidders	SE1	6

Students must select 45 credits of optional modules. Students will also complete a 30 credit project.

Optional Modules

Autumn Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Calculus 2 (The second half of this 30 credit module runs in the spring term)	Department of Economics, Mathematics and Statistics	A-Level Mathematics	5
Mon	Introduction to the Semantic Technologies (daytime teaching 14:00-17:00)	Michael Zakharyashev	None	6
Mon	JavaScript	Various	IWA, PSP	5
Mon	Wireless and Mobile Computing	George Roussos	SP1, SP2, CN, IS recommended	6
Mon	Mobile Web Application Development	Various	IWA, JavaScript	5
Tue	Introduction to Data Analytics using R (daytime teaching 13:30-16:30 or evening teaching 18:00-21:00)	Cen Wan	ITP or SP1	6
Wed	Programming Language Paradigms	Keith Mannock	SP2	6
Thu	E-business	George Roussos	None	5
Thu	Organizational Behaviour	Department of Organizational Psychology	None	5

Spring Term

Day	Module	Lecturers	Prerequisites	Level
Mon	Calculus 2 (The first half of this 30 credit module runs in the autumn term)	Department of Economics, Mathematics and Statistics	A-Level Mathematics	5
Mon	Web Data with XML, JSON and AJAX	Various	IWA, JV	5
Mon	Principles of Geographical Information Systems (30 credit module)	Department of Geography	None	6
Tue	Mobile Web Application Development	Various	IWA, JavaScript	5
Tue	Software and Programming III (daytime teaching 13:30-17:00)	Keith Mannock	SP2, primer course	6
Tue	Advanced Web Authoring	Various	IWA or knowledge of HTML & CSS	5
Thu	Concepts of Machine Learning	George Magoulas	Knowledge of mathematical concepts	6
Thu	JavaScript		IWA, PSP	5
Thu	Software and Programming III	Keith Mannock	SP2, primer course	6
Fri	Cloud Computing Concepts	Stelios Sotiriadis	SP2	6

Summer Term

Day	Module	Lecturers	Prerequisites	Level
Tue	JavaScript	Various	IWA, PSP	5
Wed	Web Data with XML, JSON and AJAX	Various	IWA, JV	5
Thu	Advanced Web Authoring	Various	IWA or equivalent, knowledge of HTML, CSS and web design	5
Fri	Commercial Law for Business	Karin Shields, Hazel Dawe	None	5

6 Compulsory Modules

The summaries of all the compulsory modules are given below. The information in the module summaries may change. In particular, you are advised **not** to purchase books until after the first meeting of any particular module. Confirmation of the recommended books should be provided in the first meeting.

6.1 Computer Networking (CN)

BUCI036H5

Level 5

15 credits

Lecturer

Andrea Cali

Outline

The module covers several fundamental aspects of modern computer networks, especially the Internet and its protocols. Foundations are given for networking at all layers, from the physical layer to applications, and the course topics are presented together with their real-world applications.

Aims

The module aims at providing the student the tools for understanding and building network applications, by analysing Internet protocols, the interaction among them, and their applications. There is an emphasis on real-world applications, so as to provide the basic tools to understand and design network hardware and software.

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

- Understand the fundamental network protocols and interfaces at any network layer
- Know basic design and performance issues in computer networks
- Write simple Java networking code with sockets

Syllabus

- Computer Networks and their applications
- The physical layer
- The data link layer, LAN and WAN
- The network layer and IP
- The transport layer and TCP
- The application layer, DNS, email, and FTP
- Network security and cryptography

Assessment

A two-hour written examination (90%) and programming coursework (10%).

Recommended reading

Andrew Tanenbaum, Computer Networks (fourth edition), Prentice Hall, Upper Saddle River, NJ, 2003, ISBN 0-13-038488-7. <http://www.phptr.com/tanenbaumcn4/>

Optional reading

Douglas Comer, Computer Networks and Internets with Internet Applications (fourth edition), Prentice Hall, Upper Saddle River, NJ, 2004, ISBN 0-13-143351-2.
<http://netbook.cs.purdue.edu>

6.2 Computer Organisation and Systems Software (COSS)

BUCI055H5

Level 5

15 credits

Lecturer

Cen Wan

Prerequisites

Passing the Introduction to Computer Systems module

Outline

During the module the students will become familiar with the main parts of the computer, their functions and interconnections. They will also learn the main functions of the operating system and how it interacts with the hardware.

Aims

The main aim of the module is to understand the basics of computer architecture and organisation, and the role and mechanisms of operating systems.

Syllabus

- Basics of Computer Architecture
- Memory Hierarchy
- Instruction Sets
- Pipelining
- Processes and Threads
- Scheduling and Resource Allocation
- Concurrency
- Input/Output
- File Systems

Coursework

Computational and algorithmic exercises

Assessment

Written examination (90%) and coursework (10%)

Recommended Reading

- J.A. Harris, Operating Systems, Schaum's Outline Series, McGraw-Hill, 2002
- N. Carter, Computer Architecture, Schaum's Outline Series, McGraw-Hill, 2002

6.3 Data Structures and Algorithms (DSA)

BUCI030H5

Level 5

15 credits

Lecturer

Igor Razgon

Prerequisites

ITP or SP1

Outline

Data Structures and Algorithms are fundamental to programming and to understanding computation. The aim of this module is to provide students with a coherent introduction to techniques for using data structures and some basic algorithms. Teaching and learning methods include lectures and reading materials describing techniques for analysing algorithms and applications of data structures. Students will have an opportunity to examine practical problem solving for this area.

Syllabus

- Introduction to Data Structures and Algorithms;
- Data structures: arrays, lists, queues, stacks, and sets;
- Trees: binary trees;
- Recursion - Traversing binary trees;
- Dictionary based data structures: binary search trees, hash tables, maps;
- Analysis of running time of algorithms;
- Algorithms for sorting and searching;
- Elementary tree and graph algorithms: depth first and breadth first search;
- Finite state machines (automata) and regular languages;
- Turing machines.

Assessment

Two hour written examination (80%) and coursework (20%).

Reading list

TBD.

6.4 Database Management (DM)

COIY028H6

Level 6

15 credits

Lecturer

Peter Wood

Prerequisites

ITP, ICS, SAD1, SAD2

Aims

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.

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
- Databases and the Web

Assessment

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

Reading list

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.

6.5 Information Security (ISEC)

COIY045H6

Level 6

15 credits

Lecturer

Igor Razgon

Aims

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.

Syllabus

- Overview of Information Security
- Access Control Matrix Model
- Security Policies
- Social Engineering
- Basic Cryptography
- Identity Management
- Access Control Mechanisms
- Confinement
- Assurance and Trust
- Network Intruders and Intrusion Detection
- Firewalls and Malicious Software
- Cryptographic Protocol Concepts

Prerequisites

None

Assessment

Two-hour written examination (80%) and practical coursework (20%).

Recommended Reading

Keith M. Martin, *Everyday Cryptography: Fundamental Principles and Applications*, 2012, ISBN 978-0-19-969559-1

Ross Anderson, *Security Engineering* 2nd edition, John Wiley & Sons, 2008, ISBN 978-0-470-06852-6

William Stallings, *Cryptography and Network Security* 5th edition, Pearson, 2010, ISBN 978-0136097044

Matt Bishop, Computer Security: Art and Science, Addison-Wesley, 2002, ISBN 978-0201440997

Bruce Schneier, Applied Cryptography, John Wiley & Sons, 1996, ISBN 0-471-11709-9

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6.6 Introduction to Computer Systems (ICS)

BUCI008H4

Level 4

15 credits

Lecturer

Keith Mannock

Syllabus

- history of computing
- number representations
- Boolean algebra
- data storage
- structure of a computer
- file management
- algorithms
- relational databases

Prerequisites

None

Assessment

One two-hour written examination (80%) and an in-class test (20%)

Recommended Reading

Brookshear, J.G. (2011), Computer Science: an overview, 11th edition, Addison Wesley

6.7 Introduction to Programming (ITP)

BUCI007H4

Level 4

15 credits

Lecturer

Tingting Han

Syllabus

- context of Java
- integrated development environment
- variables
- number types
- arithmetic and Boolean operations
- if and switch statements
- loops
- methods
- arrays
- examples of algorithms

Prerequisites

None

Assessment

One two-hour written examination (70%) and an in-laboratory test (30%)

Recommended Reading

Horstmann, C. and Nicaise, R. (2014), Python for Everyone, 2nd Edition. Wiley.

6.8 Introduction to Web Authoring (IN)

SSCS004H4

Level 4

15 credits

Prerequisites

- Basic PC and internet skills. IN is normally the first module studied
- File compression tools (compress files, extract compressed files using WinZip)
- Folder and file management (create, rename and organise folders, recognise filetypes from their file extension, change folder options)
- Searching the web using a browser (save a web page, view a page source, open local files, adding to favourites, change browser settings, use History menu, download resources)

Aims

- to design and build a website for a case study small business or optionally for an organisation of the students' choice
- to validate a website so that it complies with current web standards (HTML5 and CSS3)
- to publish a website online
- to encourage students to acquire self-study skills so they can keep up in the context of rapidly-changing technologies, tools, techniques and methods.

Syllabus

- Web Page Authoring: Web page authoring using web standards for HTML5 and CSS3. Browser differences. Validators.
- Web Design: Colour theory. Layout and typography. Accessibility. Storyboarding. Sitemap. Planning website architecture.
- Web Publishing: FTP File Transfer Protocol
- Legal issues: Copyright and IPR

6.9 Mathematics for Computing (MFC)

COIY040H4

Level 4

15 credits

Lecturer

Oded Lachish (FT) / Paul Newman (PT)

Outline

This module covers the fundamentals of mathematics commonly applied to computing. It aims to introduce the basic elements of discrete mathematics that provide a foundation for the understanding of algorithms and data structures used in computer science.

Aims

On successful completion of this course you will:

- Be competent with the basic elements of discrete mathematics
- Be familiar with algorithms
- Have an understanding of the data structures used in computer science

Prerequisites

Mathematical methods or equivalent

Assessment

Coursework (30%). One two hour written examination (70%).

Recommended Reading

Lipshutz, S, Schaum's Outline Essential Computer Mathematics

6.10 Project Computing (PROJCOMP)

BUCI026S6 (BSc Project Type 3)

BUCI027S6 (BSc Project Type 4)

Level 6

30 credits

Module leader

David Weston

Project Coordinator

Oded Lachish

Outline

The final year project, which is compulsory but not timetabled, has a value of 30 credits. There are two types of project a Computing student can take:

- Information Systems Development (type 3);
- Computing (type 4).

A proposal would have to be prepared at the start of your final year for both type 3 or type 4 project. For further information, see the project briefing document on the departmental intranet at

https://www.dcs.bbk.ac.uk/intranet/index.php/BSc_Student_Projects

Recommended reading

C.W. Dawson, *Projects in Computing and Information Systems: a students guide*. Pearson Education Limited, 2nd edition (2009).

6.11 Professional Issues in Computing (PIC)

COIY030H6

Level 6

15 credits

Lecturer

Brian Gannon

Aims

This module aims to raise awareness about social implications, rights and duties related to actions we take in our role as computer scientists. This will be achieved by a combination of lectures and seminars given by students.

Syllabus

- A brief history of commercial computing
- The role of IS in everyday life
- Data Protection
- Freedom of Information
- Intellectual Property
- Computer Misuse
- Software Contracts
- Information Services and the Law (defective software)
- Employment and Career Development
- E-commerce

Coursework

Essay, Presentation

Assessment

Examination (80%), Essay (10%), Presentation (10%)

Recommended Reading

Frank Bott: Professional Issues in Information Technology. BCS. 2005.

6.12 Software Engineering I (SE1)

BUCI066H5

Level 5

15 credits

Lecturer

Taolue Chen

Aims

Software Engineering I is designed to:

- Provide an introduction to software engineering as a professional discipline.
- Provide insight and understanding of the context and constraints within which software is developed.
- Provide a clear understanding of processes, methods, activities, tools and techniques involved in professional software engineering.
- Equip students with the theory, tools and techniques for professional software development and software project management.
- Provide students with the opportunity to participate in practical software engineering tasks.
- Empower students to be able to develop software in a systematic, structured rigorous, safe and secure manner.

Learning Outcomes

On successful completion of this module a student will be expected to be able to:

- Understand the role of software engineering and its importance in software development. Understand the main reasons for success and failure in software development.
- Explain issues of professionalism related to Software Engineering. Understand the social, ethical and legal context in which software engineers work.
- Enumerate the main software development process models, specifically plan based and Agile models, and explain the applicability of these models to the development of different software types.
- Evidence a thorough understanding of software process model activities, including analysis and design, implementation, testing and software deployment. Undertake core software development activities in a structured, competent and professional manner, using industry standard techniques.
- Explain how software is tested to ensure quality. Devise a test plan that includes elements of unit testing, system testing, functional testing, acceptance testing and release testing.
- Understand how systems adapt and evolve, and how systems are maintained throughout their lifespan.
- Understand the range of software project management tasks, including planning, resource and people management, and risk management. Understand standard project management techniques and tools, and be able to apply these techniques and tools to a software development project.
- Understand the role and importance of quality management activities in the software development process, including reviews and inspections. Undertake software quality assurance activities as part of the software development process.

- Explain how software configuration management helps ensure software quality. Undertake software configuration management activities, including version management, change management and release management.
- Use industry standard tools for all areas of the software development process, including tools for all areas of software development, including analysis, design, testing, project management and configuration management.

Syllabus

- Engineering/Software/Software Engineering
- Software Process Models
- Agile Software Development Approaches
- Systems Analysis and Design
- Software Implementation and Deployment
- Software Testing
- Software Evolution
- Software Project Management
- Software Project Planning
- Quality Management and Configuration Management

Prerequisites

None

Coursework

Portfolio of completed tasks.

Assessment

Examination (80%), Coursework (20%)

Recommended Reading

Sommerville, I (2016). Software Engineering. Pearson.

6.13 Software Engineering II (SE2)

BUCI067H6

Level 6

15 credits

Lecturer

Jan Hidders

Prerequisites

Software Engineering I

Outline

Software Engineering II covers a range of advanced topics in software engineering. The first part of the module focuses on software quality. It covers several key quality related issues, including software reliability, dependability, safety and security. The module also builds on the topic of risk management and mitigation previously introduced in Software Engineering I. The second part of the module focuses on several key topics in modern software engineering, including component-based software development, distributed systems engineering, service-oriented software engineering, and software documentation. At the end of the module, students will be able to understand the broader landscape of the discipline of software engineering, and be able to apply advanced techniques and theory to their software development activity.

Aims

Software Engineering II is designed to:

- Introduce and explore mechanisms for building safe, reliable, resilient, secure and dependable software systems.
- Explore in detail the concept of risk, risk management and risk mitigation.
- Provide a detailed understanding of key concepts in the areas of software procurement and implementation.
- Introduce and explore several advanced topics in contemporary software engineering: notably, distributed systems engineering, service-oriented software engineering, and software engineering for large complex systems.
- Provide students with the opportunity to participate in practical software engineering tasks.
- Empower students to be able to develop software in a systematic, structured rigorous, safe and secure manner.

Learning Outcomes:

- Understand how software engineering fits within the wider discipline of systems engineering. Understand the socio-technical and business context of information systems.
- Understand the key concepts of dependability and reliability in software engineering, and explain industry standard approaches for ensuring software dependability and reliability.

- Explain the concept of software safety, and understand the software engineering activities that ensure software safety.
- Understand the key concepts of cybersecurity and be able to undertake a cybersecurity risk assessment.
- Understand the software engineering processes and techniques that ensure software security and resilience. Explain how these processes and techniques are applied in industry.
- Understand risk and software engineering approaches for mitigating risk. Analyse risk and draw up risk management measures.
- Understand the concepts of embedded software and real-time systems software, and the challenges faced building embedded, real-time systems.
- Explain what a distributed system is. Understand the key challenges involved in creating distributed systems.
- Understand different approaches towards software procurement and implementation, including software reuse and component-based software engineering. development. Explain the affordances and constraints associated with component-based software engineering.
- Understand the concept of ‘software as a service’. Understand different approaches to implementing software as a service and the challenges of implementing software as a service.
- Understand the importance of software documentation in the development process. Be able to produce appropriate, accurate and well-written documentation.

Syllabus

- Systems Engineering
- Software Safety, Dependability and Reliability
- Software Security and Resilience
- Risk Analysis and Management
- Cybersecurity
- Real-time Software Engineering
- Distributed Software Engineering
- Component-based Software Engineering
- Service-oriented Software Engineering
- Documentation

Assessment

Examination (80%), Coursework (20%)

Reading list

Sommerville, I (2016). Software Engineering. Pearson.

6.14 Software and Programming I (SP1)

COIY018H5

Level 5

15 credits

Lecturer

Roman Kontchakov

Aims

On successful completion of this module, students should be able to understand and explain basic procedural and object-oriented features of the Java programming language. In addition, they will be able to edit, compile and run small Java programs using the BlueJ integrated development environment.

Syllabus

- review of primitive data types and arrays
- branching and loops
- objects and classes
- methods and constructors
- instance and static variables and methods
- public and private access
- inheritance and polymorphism
- exception handling
- strings and input/output
- basic data structures and algorithms

Prerequisites

None. However, a general familiarity with computer programming is assumed and successful completion of the module Introduction to Programming would be advantageous.

Assessment

Two in-class tests (25%) and Examination (75%)

Reading list

Horstmann, C (2010): Java for Everyone. Wiley. ISBN 978-0-471-79191-1

6.15 Software and Programming II (SP2)

COIY026H6

Level 6

15 credits

Lecturer

Carsten Fuhs

Module outline

This module is a continuation of the studies presented in Software and Programming I focusing on an introduction to the use of object-oriented methods for problem solving. Object-oriented programming languages require a different approach to software design from the traditional functional decomposition approach of procedural languages. Object-oriented systems are described in terms of independent objects, and their inter-relationships. Such systems can provide considerable potential for re-usability, extensibility, and robustness, assisting in the process of programming-in-the-large.

Syllabus

- Review of basic Java programming and the materials covered in Software and Programming I
- Objects and classes - Creating and manipulating objects. access modifiers: data hiding. Constructor methods and object creation. Static fields and methods.
- Passing objects and call-by-reference. Scope and the reference this. The qualifier final and class constants.
- Arrays, The Enhanced for Loop, Common Array Algorithms, Using Arrays with Methods, Two-Dimensional Arrays, and Array Lists
- Inheritance, polymorphism, and abstract classes - Overriding instance methods. The access modifier protected. The type Object. Inheritance and design. Abstract classes. Interfaces and multiple inheritance. The instanceof operator and casting non-primitive types. Parametric and ad-hoc polymorphism.
- Input and Output
- Test Driven Development
- Exceptions and exception handling - Exception handling with try and catch. Program correctness: throwing an exception. RuntimeExceptions and the throws clause. User defined exception classes.
- Object-Oriented Design - Discovering Classes, Relationships Between Classes, Cohesion and Coupling, Side Effects, Abstract Classes, Packages
- Linked data structures and recursion - Linking objects. Self-referential structures. Stacks and queues. Linked list implementation of stacks and queues. Other operations on lists. Generic data structures. Binary Trees.

Prerequisites

A pass in Software and Programming I.

Alternative qualifications, e.g., extensive industrial experience, need to be agreed with the module leader prior to taking the module.

Assessment

By three hour written examination (75%) and practical coursework (25%).

Recommended reading

Java for Everyone: Compatible with Java 5, 6, and 7, 2nd Edition by Cay Horstmann
2012 published by John Wiley is the course text.

6.16 Systems Analysis and Design I (SADI)

COIY016H4

Level 4

15 credits

Lecturer

Felix Reidl

Outline

The goal of this module is to introduce the basic concepts of information systems and basic techniques for systems analysis & design.

Syllabus

- What Are Information Systems
- Problems in Information Systems Development
- Avoiding the Problems
- What Is Object-Orientation
- Modelling Concepts
- Requirements Capture
- Requirements Analysis
- Refining the Requirements Model
- Object Interaction
- Specifying Operations
- System Design
- Human Computer Interaction
- Software Development Methodologies

Prerequisites

None

Assessment

Coursework (20%) and Examination (80%).

Recommended reading

Bennet S, McRobb S & Farmer R (2010): Object-Oriented Systems Analysis and Design using UML, 4/e, McGraw-Hill. ISBN 0077125363

6.17 Systems Analysis and Design II (SAD II)

COIY019H5

Level 5

15 credits

Lecturer

Andrea Cali

Outline

This module serves as a link between the modules taught by management and those taught in the DCSIS by treating technical subjects from an organisational perspective.

Syllabus

- Architectures and Layers. Normalisation.
- Object Design.
- Detailed Process Design.
- Software Testing.
- Quality Management.
- Project Management Techniques.
- Managing Projects.
- Prototyping.
- Performance, Measurement & Evaluation.
- Knowledge Management.
- Cost-Benefit Analysis.
- Human-Computer Interaction.

Prerequisites

Systems Analysis and Design I

Assessment

75% examination and 25% in-class tests

Recommended reading

Bennet S, McRobb S & Farmer R (2010): Object-Oriented Systems Analysis and Design using UML, 4/e, McGraw-Hill. ISBN 0077125363

6.18 Web Programming using PHP (P1)

SSCS025H5

Level 5

15 credits

Lecturer

Various

Aims

- to introduce the PHP programming language
- to develop the PHP skills required to create dynamic websites, process forms, read and write external file data, and analyze and manipulate such data.
- to encourage good programming practice by writing efficient well-documented code that can be easily understood by colleagues.
- to help students to acquire the self-study skills and resources to enable them to further enhance their knowledge and capabilities with PHP.

Syllabus

- *Introduction to PHP*: Open Source origins. PHP syntax (variables, control structures, functions)
- *Data Analysis*: Using PHP to open, read, write and close external files and manipulate data. Pattern matching with regular expressions.
- *Form Processing*: Using PHP to process submitted form data. Validating and displaying data/redisplaying form.
- *Security*: Avoiding security pitfalls by careful coding.
- *Maintaining State With PHP*: Cookies. Session management.

Prerequisites

Introduction to Web Authoring.

Problem Solving for Programming and/or JavaScript.

Or equivalent web authoring (HTML/CSS) and programming skills.

Assessment

100% coursework

7 IT Services (ITS)

IT Services offer a wide range of modern computing facilities to support students in their academic work.

Facilities and Services

- Secure, up-to-date and easy-to-use network services including email and file storage
- Purpose-built computer workstation rooms equipped with high-speed internet access using networked PCs, fast colour and monochrome printing, and integrated audio-visual systems
- Campus-wide wireless network (eduroam) providing access to your files, email and other internet services using your laptop, tablet or smartphone
- Course management and collaboration software including the Moodle online learning environment where you can access information about your course, view and download teaching materials, and submit coursework
- Wide range of software applications including Microsoft Office, statistical, programming, web authoring and other specialist packages
- Access to a wide range of on-line video tutorials and self-paced training materials provided by Lynda.com

Software for Download

We currently offer the following software for you to download on to your own computer for the duration of your course at Birkbeck:

- Microsoft Office (both Office 365 and the latest Office version)
- IBM SPSS

Access to Computing Services

- A single username and password provides access to your personal file store and other services including the 'My Birkbeck Profile' where you can check and update your personal details
- You can obtain a Birkbeck email account, hosted for us by Google, or alternatively provide a current contact email address in your 'My Birkbeck Profile'
- A self-service password changing service is provided to enable you to reset a forgotten password

Support and Advice

Our Service Desk is located in the Student Centre on the ground floor of the Main Building on Malet Street for face-to-face support and is available Monday to Friday when the Centre is open.

We also offer telephone (020 7631 6543) and email support (its@bbk.ac.uk) usually from 9am to 7pm (6pm vacations) Monday to Friday. Please check our web site for details and variations to service times.

A full catalogue of our services, guides, and self-help services are available from our web site: <http://www.bbk.ac.uk/its/>

8 Library Services

Although lectures and computing sessions are essential elements of your programme, success in learning depends largely on the reading and research that you undertake. Most items on module reading lists can be found in Birkbeck Library and it is important that you familiarise yourself with the Library as soon as you can. You may also find it useful to use other libraries during your studies.

The entrance to Birkbeck Library is on the ground floor of the main building in Malet Street. Your College ID card gives you automatic access to the Library. The opening hours of the Library are designed to meet the needs of students in full-time work.

Open 7 days a week 8.30am – 11.45pm.

More details about opening hours can be found here: <http://www.bbk.ac.uk/lib/about/hours>

You can borrow up to 15 items and they can be renewed as long as no-one else requests them. Most books can be borrowed for 3 weeks. Some books for 1 week. A few items can only be issued for 1 day. Some key course readings are kept at the Issue Desk on the ground floor and can be borrowed for shorter periods of time and some material (marked Reference) cannot be borrowed at all. Books and other materials can be photocopied or scanned within the library.

The Library welcomes considerate users. Please remember to renew your items in good time, or return them if other users have requested them. You can find out more about borrowing, renewing and making requests at <http://www.bbk.ac.uk/lib/about/borrowing/>.

You can access thousands of e-books, electronic journals and databases online with your Birkbeck username and password.

The Library website is at <http://www.bbk.ac.uk/lib>. As well as giving comprehensive information about the Library's services and collections, you can also:

- Search the Library catalogue to find books and e-books, renew your books and place requests on items that are out on loan.
- Use Discover to search for and read articles in over 30,000 electronic journal titles and newspapers.
- Search databases to help you find out what has been written about the subject you are researching, including the ACM Digital Library, Proquest Business Collection, IEEE Xplore Digital Library and ScienceDirect see the subject guide for further information: (<http://bbk.libguides.com/computerscience>).
- Access past exam papers.

Birkbeck students can also use a range of other libraries. Students have reference access to most University of London college libraries. In addition, part-time students can join the SCONUL Access Scheme which allows limited borrowing rights at most other higher education libraries. Full-time students can join for reference access. See the subject guide for more information.

If a book you need is not available in the Library or you require any assistance using the resources or finding information, please ask at the Help Desk. Telephone: 020 7631 6063. Alternatively, contact your Subject Librarian, Aidan Smith, directly. Telephone: 020 7631 6062. Email am.smith@bbk.ac.uk. You can book a 1-1 appointment with him through the subject guide.

9 Examinations

Most examinations take place over a three week period (it can be slightly longer) beginning at about the middle of May of each year and are held **during the day** (not in the evening). **Examinations for some but not all modules taught by the Department of Management are held in the autumn or the spring terms, and may be examined in the evening.** Students need to ensure that they are able to attend the examinations for each module they are taking. The timetable for the summer examinations is usually available in late March or early April.

Examinations Regulations will be received from Registry prior to the examinations and must be strictly followed. Students should take care not to place themselves under suspicion in any way during examinations. Such care should include divesting themselves of all revision notes before entering the examination venue. Students who are found cheating will be severely dealt with.

9.1 Marking

All examination scripts are double marked. They are marked first by an examiner, usually the person who initially set the examination, and secondly by another examiner, usually someone else in the Department. The scripts are then approved by an external examiner (someone from outside the College, e.g. from another university). The external examiner is able to look at every script but generally only reviews a selection of scripts to see if the standard of marking is consistent with other universities.

9.2 Past Examination Papers

Past papers are available in electronic form via the library web site at:
<http://www.bbk.ac.uk/lib/elib/exam>.

9.3 Examination Entry Forms

As an enrolled student on the programme, you are not automatically entered for examinations. It is your responsibility to enter for the appropriate examinations each year. To enter you must fill in an *Examination Entry Form* on the MyBirkbeck web pages. The Examinations Office will contact students by email, to ask for confirmation of the modules in which they are to be examined. In cases of difficulty, advice should be sought from the Programme Director. Late submission of the Examination Entry Form may result in you being excluded from the Examination Halls.

If you have been advised to re-take a module there may be a timetable clash. In such cases you should discuss your situation with the Programme Director who will normally advise that you "knock forward" the module displaced by the re-take. The Programme Director may withdraw a module from your examinations if these rules are breached.

9.4 Results

Detailed examination results can only be communicated by the Registry. You should not ask the module lecturers, Programme Administrator or Programme Director about your examination marks. Module lecturers may supply coursework marks but these cannot be taken as the final coursework marks. Each student will receive a written statement of their module marks each year from the Registry and these should be preserved carefully.

You will also be written to by the Programme Director to inform you of the decision of the Progression Board as to whether you can proceed to the next year of study. If your results are poor then you may be excluded from the programme. Please note that if you have a debt with the College you will not be informed of your examination results or of your progression until the debt is paid. You will not be allowed to proceed with the programme. Delays may occur if you have not returned books to the library.

10 Other Information

10.1 Organisation of Terms

Birkbeck College operates a term system with three terms per academic year. Normally, teaching takes place in the autumn and the spring terms, but note that some modules are taught in the summer term. Modules that are taught in the autumn term, and that have a summer term examination, are revised in the first two weeks of the summer term. Modules that are taught in the spring term and that have a summer term examination are revised in weeks three and four of the summer term. The summer term revision classes are usually on the same week day as in the earlier terms. These rules may vary, for example if there is a clash with a bank holiday.

Revision sessions are very important, and you are strongly advised to attend them.

10.2 Returning to Study

Some new students will not have studied for some time, perhaps since school, and returning to education can prove difficult. The necessary study skills have sometimes been lost (or perhaps never obtained). For some these skills are easily developed but others need to study how to study. There are a number of books and guides on the subject which should prove helpful.

The following study guides are in the College library.

A. Northedge, *The Good Study Guide*, Open University Worldwide, 2005.

L. Marshall and F. Rowland, *A Guide to Learning Independently: basic approach*, Pearson Education Australia 2006.

The following book, which is also in the College library, covers essay writing,

G.J. Fairbairn and C. Winch, *Reading, Writing and Reasoning: a Guide for Students*. Third Edition, Open University Press 2011.

The College offers learning support and skills training. See

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

10.3 Communication and email

Information is communicated to students in a number of ways, including

- announcements in classes and on lecturers' home pages;
- Moodle virtual learning environment;
- student e-mail.

10.4 E-mail

All BSc students will be connected to the College e-mail system upon registration with IT Services (ITS) (Note ITS registration is not the same as College Registration/Enrolment.) Access to the e-mail software and your messages is made from the PCs in the various laboratories.

Because of the part-time nature of the degree much use is made of e-mail and the programme web site, including the circulation of important information about the programme and administrative arrangements. You should, therefore, regularly look at your e-mail messages. We make an assumption that you will do so. **Failure to read your e-mail is not a legitimate excuse for being unaware of information which has been circulated.** We find that students tend to look at their e-mail on a regular basis when they are undertaking a module that involves logging on to the PCs but they tend to forget when their modules do not involve use of the PCs. You should make sure that you regularly check your e-mail.

If you wish to send a message to another BSc Computing student, then you should address the e-mail to `username@students.bbk.ac.uk`. To send a message to a member of staff see their e-mail addresses which are available from <https://www.dcs.bbk.ac.uk/about/people/>

10.5 The Programme Web Site

The Programme home page, from which all the other BSc Computing pages can be reached easily, is <https://www.dcs.bbk.ac.uk/study/undergraduate/bsc-computing/>. Information which pertains to one module only, e.g. the times of in-class tests and coursework deadlines, is the responsibility of the module tutor and is likely to be announced in class or posted on Moodle. It is the responsibility of the student to find out the times for in-class tests. A list of useful web pages is included as the last item in this booklet.

10.6 Submission of coursework

Most modules include course work assessments which contribute to the overall mark for the module. Coursework should be handed in on time. The mark for coursework handed in after the deadline but within two weeks of the deadline will be capped at 40% unless a claim for mitigation has been accepted. Submission of coursework may be paper based or it may be electronic, via the Moodle virtual learning environment, as stipulated by the module tutor.

All paper based coursework for DCSIS modules should be prefaced with a completed copy of the form available at

<https://www.dcs.bbk.ac.uk/study/undergraduate/bsc-computing/>

A list of received coursework or of the marks for the coursework may be displayed in Moodle. It is your responsibility to ensure that receipt of your coursework has been logged.

Some items of coursework are received in electronic form e.g. program source code, web pages etc. The responsibility of ensuring receipt of such items still rests with the student. Students must also submit an appropriate coursework form even for electronically submitted coursework.

Coursework policies vary across the College. The above policies apply to modules taught by the DCSIS.

10.7 Personal Tutors

At the beginning of the autumn term new students will be allocated a Personal Tutor. Birkbeck College is committed to helping students achieve their full potential and the Personal Tutor is an important element of this commitment. The Personal Tutor is the first port of call for general advice and information. Specific difficulties should be

discussed with the Personal Tutor and any illness or personal problems that may affect students' performance should be communicated to the Personal Tutor. Questions and issues relating to a particular module would in the first instance normally be directed to the lecturer concerned with that module.

10.8 Financial Difficulties

Students who encounter financial difficulties should see the Programme Director to discuss a way forward. Students who fail to pay their fees are ineligible to continue the programme in any way and are ineligible to sit examinations. Any student who has a debt to the College at the end of the academic year will not be informed of his or her marks until the debt has been cleared. This may result in a delay in progression or a delay in the award of a degree.

10.9 Staff/Student Exchange Committees

Student representatives of each year of the degree programme sit on the Staff/Student Exchange Committee which usually meets once in the autumn term and once in the spring term. The Committee is a forum for an exchange of views, suggestions, feedback and the discussion of any problems, in relation to the degree programme and the various modules.

10.10 Locations

- MAIN BUILDING (MB) is the main College building in Malet Street. This houses the Library, some lecture rooms and the computer laboratories.
- The CLORE MANAGEMENT CENTRE (CMC) is where the Department of Management is located. It is in Torrington Square behind the Main Building.
- GORDON SQUARE is situated north of Malet Street towards Euston Station. RUSSELL SQUARE is to the east of Senate House.
- UCL. The Roberts building is opposite Waterstones on Torrington Place. Foster Court is off Malet Place which is North of Malet Street, The Rockefeller building is on the corner of Gower Street and University Street opposite the Cruciform building. See map available at: www.ucl.ac.uk/maps.

10.11 Contacts

Department of Computer Science and Information Systems

BSc Programme Administrator, bsc@dcs.bbk.ac.uk

Tara Orlanes-Angelopoulou, Assistant School Manager, tara@dcs.bbk.ac.uk

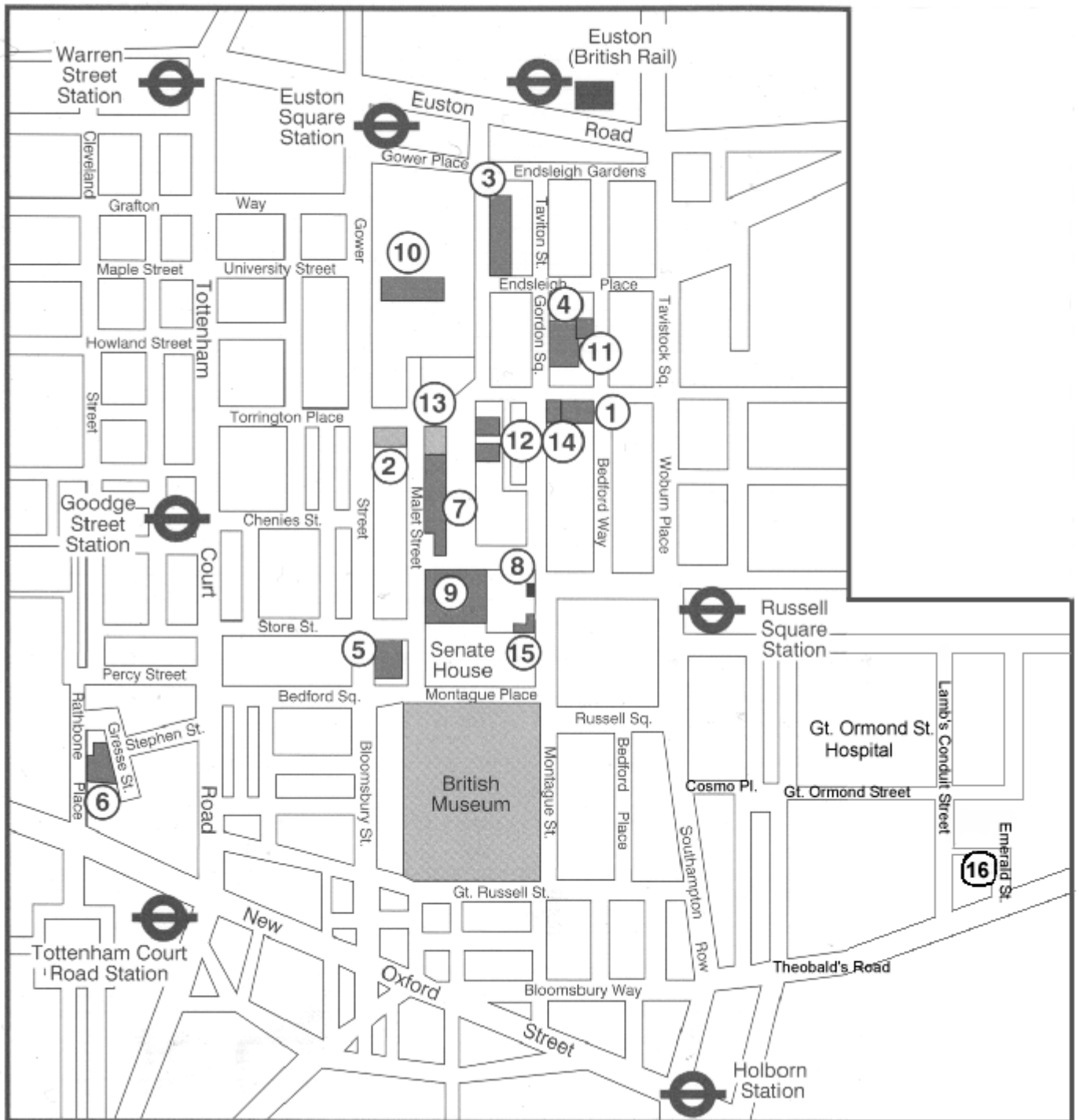
David Weston, BSc Computing Programme, dweston@dcs.bbk.ac.uk.

Useful Web Pages

Programme home page: <https://www.dcs.bbk.ac.uk/courses/bsecomp/>

Staff (Computer Science): <https://www.dcs.bbk.ac.uk/about-us/people/>

Department of Computer Science and Information Systems Birkbeck College University of London Malet Street London WC1E 7HX	https://www.dcs.bbk.ac.uk
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| <ul style="list-style-type: none"> 1) 26 Bedford Way 2) Waterstones Bookshop 3) Gordon House and Ingold Laboratories 4) 39-47 Gordon Square. 5) 10-16 Gower Street 6) 7-15 Gresse Street 7) Main Building 8) 26 Russell Square | <ul style="list-style-type: none"> 9) Senate House (North Block) 10) South Wing, UCL 11) 32 Tavistock Square 12) 27,28b,32 Torrington Square 13) University of London Union 14) Nursery, 59 Gordon Square 15) 30 Russell Square 16) London Knowledge Lab |
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