

School of Computer Science

Undergraduate Programme Handbook

2008/2009



Disclaimer: The information contained in this handbook is correct at the time of your receiving it but the University, while retaining proper regard for the interests of students who have begun their programmes, reserves the right to alter the programmes or the timetable if the need arises.

Date: 03 October 2008

Electronic Version: http://intranet.cs.man.ac.uk/Study_subweb/Ugrad/

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Welcome to the School of Computer Science (SCS) in the University of Manchester. The purpose of this *Handbook* is to provide information for students who have been admitted to undergraduate degree programmes in the School. This information will be of importance throughout your programme of study and so you should read the *Handbook* carefully and keep it available for future reference. It is issued once, but certain parts of the information (i.e. dates) will change, so you should refer to this information on-line at: http://intranet.cs.man.ac.uk/Study_subweb/Ugrad/

It includes information about the Degree Programmes in the School but not descriptions of individual course units. Details of the course units you may take are given in the separate School of Computer Science Undergraduate Course Unit Directory. An electronic version can be consulted on the School web pages at www.cs.manchester.ac.uk/ugrad

Degree programmes taught mainly in Computer Science are referred to as Single Honours programmes, those joint with other Schools as Joint Honours. Computer Science with Business and Management and Computer Science and Mathematics are the principal Joint Honours programmes.

Your degree programme is subject to regulations contained in the Credits and Qualifications framework at www.campus.manchester.ac.uk/medialibrary/policies/ugregulations.pdf. This Programme handbook interprets the regulations and your tutors may give advice but the University framework defines the regulations.

1 GENERAL INFORMATION

This handbook contains a great deal of information, so please consult it regularly. In particular, Section 1.1 & Appendix 1 lists various points of contact. Much official information including copies of this handbook, the undergraduate course unit directory and timetables is available on the Computer Science Web pages <http://intranet.cs.man.ac.uk/>. This includes directories of staff and students for internal use, complete with photographs.

1.1 Key Academic Staff

Head of School

Professor Chris Taylor (until 31/10/08)	2.127	Chris.Taylor@manchester.ac.uk
Professor Norman Paton (from 01/11/08)	2.127	Norman.Paton@manchester.ac.uk

Director of Undergraduate School

Graham Gough	2.115	Graham.Gough@manchester.ac.uk
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Deputy Director of Undergraduate School

Dr Toby Howard	2.93	Toby.Howard@manchester.ac.uk
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Programme Directors

All Programmes, except those listed below

Graham Gough	2.115	Graham.Gough@manchester.ac.uk
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All MEng 4-year Programmes

Dr Linda Brackenbury	IT414	Linda.Brackenbury@manchester.ac.uk
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AI, AI with Industrial Experience

Dr Jon Shapiro	2.34	Jonathan.L.Shapiro@manchester.ac.uk
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All continuing Informatics programmes including Internet Computing and Computing for Business Applications

Professor Allan Ramsay	1.8(Lamb)	Allan.Ramsay@manchester.ac.uk
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1.2 Tutors

First Year Tutor

Dr Paul Nutter IT112 Paul.Nutter@manchester.ac.uk

Second Year Tutor

Dr Steve Pettifer 2.95 Steve.Pettifer@manchester.ac.uk

Second Year Tutor – ex Informatics programmes

Dr Sandra Sampaio 1.12(Lamb) S.Sampaio@manchester.ac.uk

Third Year Tutor

Mr Toby Howard 2.93 Toby.Howard@manchester.ac.uk

Third Year Tutor – ex Informatics programmes

Dr Chris Harrison 1.21(Lamb) Christopher.J.Harrison@manchester.ac.uk

M Eng CS, ECS, CE, AI (All Years)

Dr Linda Brackenbury IT414 Linda.Brackenbury@manchester.ac.uk

CM (All Years)

Dr Len Freeman IT404 Len.Freeman@manchester.ac.uk

CSwBM (All Years)

Dr Len Freeman IT404 Len.Freeman@manchester.ac.uk

CSE (All Years)

Dr Doug Edwards IT210 Douglas.Edwards@manchester.ac.uk

Industrial Placements

Ms Alex Walker 2.76 Alex.Walker@manchester.ac.uk

Disability Coordinator

Dr Ning Zhang 2.113 Ning.Zhang@manchester.ac.uk

Learning Enhancement Officer

Mr Pete Jinks 2.272 Peter.J.Jinks@manchester.ac.uk

Examinations Officer

Mr Pete Jinks 2.272 Peter.J.Jinks@manchester.ac.uk

Plagiarism and Academic Malpractice Officer

Mr Pete Jinks 2.272 Peter.J.Jinks@manchester.ac.uk

1.3 Laboratory Managers

1st Year Laboratories

Dr John Latham 2.81 John.Latham@manchester.ac.uk

1st Year Engineering Laboratory

Dr Paul Nutter IT112 Paul.Nutter@manchester.ac.uk

2nd Year Laboratories

Dr Chris Kirkham IT204 Christopher.Kirkham@manchester.ac.uk

Dr. Andy Carpenter 2.119 Andy.Carpenter@manchester.ac.uk

2nd Year Engineering Laboratory

Dr Paul Nutter IT112 Paul.Nutter@manchester.ac.uk

3rd Year Projects

Dr Ian Pratt-Hartmann 2.38 Ian.Pratt@manchester.ac.uk

There is a UNIX command, "csinfo", which gives information about all staff, including their mailnames, room number and telephone number. (See appendix 1, p80, for teaching and support staff contact details)

1.4 Key dates and timetable

Registration: First year students must attend at 9.00 am on 22nd September 2008 when they will be given a full timetable for the introductory activities. School and University registration must be completed at the times specified in the introductory timetable. Returning students must also register at the times specified during introductory week. Other teaching activities may be scheduled during this week for all years.

The 2008-2009 session begins on Monday 22nd September 2008.

First Semester

First Year Registration	Tuesday 23rd September 2008
Second Year Registration	Friday 26th September 2008
Third Year Registration	Wednesday 24th September 2008
Fourth Year Registration	Monday 22nd September 2008
Lectures	29th September – 19th December 2008
Last date for change of course units	Friday 10th October 2008
Reading Week	3rd November – 7th November 2008
Christmas Vacation	20th December 2008-18th January 2009
Examination Period	19th January – 30th January 2009

Second Semester

Lectures	2nd February 2009 – 27th March 2009
Last date for change of course units	Friday 10th February 2009
Easter Break	28th March 2009 – 19th April 2009
Examination Period	21st May 2009 – 10th June 2009
Last date for information about special circumstances	11th June 2009
Bank Holidays (University closed)	10th April 2009, 13th April 2009, 4th May 2009, 25th May 2009
Graduation	July 2009
Resit Examinations	24th August – 4th September 2009

Programme timetable

Lecture timetables are published separately from this book and are available on the School web pages: <http://www.cs.manchester.ac.uk/undergraduate/timetable/>

Whilst every attempt is made to timetable reasonable combinations of course units, various constraints make some combinations and outside options impossible. If you have a timetable difficulty, consult your tutor in the first instance.

1.5 Position and use of notice boards and pigeonholes

Official notices are posted on the year notice boards on the lower first floor. Notices are often also posted on the message board on the computer systems. Electronic mail is also used extensively for communication with the School and University.

Pigeonholes are located on the lower first floor near to the Resource Centre.

1.6 Health and Safety

The School has a Health & Safety Committee which is made up from representatives of all sections within the School. It is the responsibility of this committee to investigate complaints and potential hazards, to examine the cause of all accidents and to carry out periodic inspections of all areas of the School. At registration you will be required to assent to the School code of behaviour which relates to health and safety in the School buildings as well as the responsible use of Computer equipment.

1.6.1 Emergency Evacuation

It is the responsibility of every individual to familiarise themselves with the School's buildings and be aware of the fire exits (which are clearly marked).

- During evacuation of buildings do not use the lifts.
- In the event of an evacuation proceed to the Emergency Assembly Points which are as follows and do not block any exits:
 - IT Building – Grassed area on North Side of building behind Chaplaincy
 - Kilburn Building - 1st Floor Precinct Centre or Ground Floor beyond Chaplaincy steps
 - Lamb Building - West end of Prospect House
- Do not return to any building until authorised to do so.

1.6.2 Fire Action

Fire Action notices are located at, or adjacent to, fire alarm actuation points, and all staff and students should make themselves acquainted with this routine.

Operating the Fire Alarm

The manual fire alarm system can be activated by breaking the glass in the red contact boxes sited at strategic points throughout the premises.

To call the Fire Brigade

Dial 9-999 on the nearest available telephone and give details of the location of the fire, i.e. Fire at Kilburn Building, University of Manchester, Oxford Road.

Use of Fire Appliances

Fire appliances are sited at strategic points throughout the School to deal with fires. Fires should only be tackled provided there is no personal danger and after the alarm has been set off.

Training

A full evacuation drill will be carried out at least once per year to ensure that all staff and students become fully conversant with the emergency procedure.

Action when the Alarm rings

On hearing the intermittent alarm you should prepare yourself to leave the building. On hearing the continuous alarm you should evacuate the building immediately by the nearest exit.

The alarm is tested at 2 p.m. every Wednesday in the Kilburn Building, at 2 pm every Thursday in the IT Laboratories and at 11.30am every Friday in the Lamb Building - no action is required. After 17.30 (Mon-Fri) and at weekends the building should be evacuated as soon as the intermittent alarm rings.

1.6.3 First Aid

There are several first-aiders in Computer Science. These people are listed on the (green) First Aid notices posted around the School and also in the Health & Safety document posted on the Health & Safety notice board. If none of the First Aiders can be located then contact Security on 52728 or 69966.

The Student Health Officer (ext. 52858) can also render assistance, as can the emergency call-out service of the Occupational Health Unit (ext. 56972).

Personal Difficulties

Please inform the School's Student Support Office, or your tutor, of any difficulties with which the School can be of assistance. The University's Counselling Service is also available to you. counsel.service@manchester.ac.uk

1.7 Buildings

The School comprises three buildings: the Kilburn Building, the IT Laboratories and the Lamb Building.

The buildings are generally open between 08.00 and 17.30 (Mon - Fri). If you are working outside these hours in the Kilburn or IT Building then you are required to sign in at the loading-bay porters' lodge and show your out-of-hours pass. These passes are available from the Resource Centre and you will need a passport photo and your registration card to obtain one. To remain in the building between 5.30 p.m. and 8.45 p.m or enter on Saturday 10 am - 3.45 pm (term-time only), you require your registration card and the out-of-hours pass.

To access the Lamb Building out of hours you can access using your University student card.

In accordance with University policy, smoking is prohibited throughout all buildings.

2

PROGRAMME OVERVIEW

2.1 Programmes offered by the School in 2008/09

2.1.1 Single Honours

MEng (Hons) Computer Science (4 years)
MEng (Hons) Distributed Computing (4 years)
MEng (Hons) Artificial Intelligence (4 years)
MEng (Hons) Software Engineering (4 years)

BSc (Hons) Computer Science (3 years)
BSc (Hons) Distributed Computing (3 years)
BSc (Hons) Artificial Intelligence (3 years)
BSc (Hons) Software Engineering (3 years)
BSc (Hons) Computing for Business Applications (3 years)

BSc (Hons) Computer Science with Industrial Experience (4 years)
BSc (Hons) Distributed Computing with Industrial Experience (4 years)
BSc (Hons) Artificial Intelligence with Industrial Experience (4 years)
BSc (Hons) Software Engineering with Industrial Experience (4 years)
BSc (Hons) Computing for Business Applications with Industrial Experience (4 years)

2.1.2 Joint Honours with a minor subject

BSc (Hons) Computer Science with Business and Management (3 years)
BSc (Hons) Computer Science with Business and Management with Industrial Experience (4 years)

2.1.2 Joint Honours

BSc (Hons) Computer Science and Mathematics (3 years)
BSc (Hons) Computer Science and Mathematics with Industrial Experience (4 years)
BSc (Hons) Computer Systems Engineering (3 years)
BSc (Hons) Computer Systems Engineering with Industrial Experience (4 years)

The Single Honours and Joint Honours with a minor subject programmes are managed entirely by the School of Computer Science. The Joint Honours schools are the joint responsibility of two or more Schools, one of which is Computer Science.

2.2 Aims and learning outcomes of the programmes

The School of Computer Science, with its broad range of high quality (5*) research and excellent teaching quality, provides a very rich learning environment for undergraduates. All Undergraduate programmes in the School of Computer Science share the following general aims and learning outcomes.

2.2.1 Aims

The programmes aim to:

1. Enable graduates to exhibit a high level of practical and theoretical skills over a broad range of Computer Science together with a knowledge of currently available techniques and technologies.
2. Explore the principles that support developments in a rapidly changing subject.
3. Provide opportunities for students to understand the wide range of research challenges facing Computer Science, as well as the breadth and depth of research undertaken in this top-rated school, so they are prepared to embark on research here or elsewhere.
4. Develop competent professionals able to play a leading part in many different commercial, industrial and academic activities and adapt rapidly to changing technology.
5. Meet industry demand for high calibre graduates who will take a lead in continuing technological change.
6. Prepare students for the social, organisational and professional context in which they will be working.
7. Meet the educational requirements of the Engineering Council thus enabling graduates to progress to professional membership of the BCS and IET and attain the highest professional status of Chartered Engineer.

In addition, the '**with Industrial Experience**' programme aims to:

1. Give extensive practical experience of an industrial or business environment where students are able to apply and develop their skills, both technical and personal.

In addition, the **MEng** programme aims to:

1. Prepare high fliers for professional practice in Computer Science by enhanced depth and breadth of study together with increased emphasis on industrial relevance through industrially related group projects.

2.2.2 Learning Outcomes

The programmes provide opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas. In the individual course unit syllabii, the categories of learning outcomes (A, B, C, D) and the individual learning outcomes appropriate to the course unit are identified. You will see the following codes used within the individual on-line course unit syllabus pages.

A: Knowledge & Understanding

- A1)** Know and understand the essential mathematics relevant to computer science.
- A2)** Understand and apply a wide range of principles and tools available to the software engineer, such as design methodologies, choice of algorithm, language, software libraries and user interface techniques.
- A3)** Demonstrate a grasp of the principles of computer systems, including architecture, networks and communication.
- A4)** Recognise and appreciate the professional and ethical responsibilities of the practising computer professional, including understanding the need for quality.
- A5)** Know and understand the principles and techniques of a number of application areas informed by the research directions of the subject, such as artificial intelligence, databases and computer graphics.

For the **`with Industrial Experience'** programmes:

- A6)** Apply their knowledge of computing in a commercial or industrial context.

For the **MEng** programmes:

- A7)** Show a critical understanding of the broad context within which Computer Science resides, including issues such as quality, reliability, enterprise, employment law, accounting and health and safety.
- A8)** Have a comprehensive knowledge and critical awareness of selected specialist fields at the forefront of computer science, studied at masters level.

B: Intellectual (thinking) skills - able to

- B1)** Solve a wide range of problems related to the analysis, design and construction of computer systems.
- B2)** Design and implement a software or hardware system of significant size.
- B3)** Identify a range of solutions and critically evaluate and justify proposed design solutions.

For the **`with Industrial Experience'** programmes:

- B4)** Solve computer science problems with pressing commercial or industrial constraints

For the **MEng** programmes:

- B5)** Generate an innovative design to solve a problem containing a range of commercial and industrial constraints.

C: Practical skills - able to

- C1)** Plan and undertake a major individual project.
- C2)** Prepare and deliver coherent and structured verbal and written technical reports.
- C3)** Give technical presentations suitable for the time, place and audience.
- C4)** Use the scientific literature effectively and make discriminating use of Web resources.
- C5)** Design, write and debug computer programs in appropriate languages.
- C6)** Use appropriate computer-based design support tools.

For the `with Industrial Experience' programmes:

- C7)** Apply computer science skills in a commercial or industrial environment

For the **MEng** programmes:

- C8)** Demonstrate initiative taking, innovation and self-management in an industrially related group project.
- C9)** Integrate previously acquired skills and apply them to new, demanding situations.

D: Transferable skills - able to

- D1)** Display an integrated approach to the deployment of communication skills.
- D2)** Use IT skills and display mature computer literacy.
- D3)** Work effectively with and for others.
- D4)** Strike the balance between self-reliance and seeking help when necessary in new situations.
- D5)** Display personal responsibility by working to multiple deadlines in complex activities.
- D6)** Employ discrete and continuous mathematical skills as appropriate

For the `with Industrial Experience' programmes:

- D7)** Demonstrate significantly enhanced group working abilities.
- D8)** Further develop career plans and personal objectives.

For the **MEng** programmes:

- D9)** Communicate effectively with non-specialist as well as computer scientist professionals at a range of levels.
- D10)** Undertake a range of technical roles within a team and be able to display leadership.

2.3 Summary of the programme structure

Compulsory course units and course unit options are set for each programme, and can be found here: http://intranet.cs.man.ac.uk/Study_subweb/Ugrad/

Occasionally, options are restricted by timetabling difficulties. Most externally available options are not listed here. For most Single Honours Degree programmes one 10 credit external option is permitted in each semester.

2.4 Course Unit Organisation

2.4.1 Credit Rating

The University attaches a credit rating to each course unit. It is intended that every student should take course units adding up to a total credit rating of 120 credit points in each year. The course units should also be at an appropriate level: at least 100 points must be at level 3 for an Honours degree. The level and credit rating of each course unit is shown in the course unit directory. The credit rating is intended to reflect the time spent on each course unit and will normally determine the weighting in the examination process. To pass each year you must take enough course units at the correct level. The requirements for course unit choices are designed to ensure that students meet these regulations.

In this handbook there are many references to individual course units. In the web version, these are linked individually to the corresponding course unit description and so you should refer to this for course unit details (this Handbook does not contain this information).

Course units are identified throughout by a course unit identifier which is a sequence of four letters and four digits. The four letters identify the School that is responsible for the unit, as follows:

COMP	-	Computer Science
BMAN	-	Manchester Business School
EEEN	-	Electrical Engineering
ECON	-	Economics
MATH	-	Mathematics
MSEC	-	Manchester Science and Enterprise Centre

Study Abroad

It may be possible to spend part of your second year studying in a foreign country (ie not in the UK and not in the country in which you were brought up in if this was not the UK). Please see your year tutor for more information.

The School of Computer Science numbers its course units in the form COMPyxps. The significance of the numbering scheme is as follows:

COMP indicates the unit is taught by Computer Science

y is the level (1, 2 or 3), usually corresponding to the year of study

x generally indicates the origin of the course unit: a 0 means that it is SCS, whereas a 7 means that it is ex-School of Informatics

p is the stream as described below

n is used to give each course unit a different number

s is the semester (1 or 2, 0 means both)

The streams are

0: core

1: Computing Science

2: Computer Engineering and Electronic Systems

3: Information Systems

4: Artificial Intelligence

5: Non-specialist (course units offered specifically for students from outside the school)

Core (stream number 0)

- Fundamental material taken by all single honours students on programming, algorithms and software engineering. The structure and operation of computer systems including a high-level view of processing, memory, data communication and input/output devices, plus operating systems and compilers. Graphics and user interfaces.

Computing Science (stream number 1)

- The theoretical foundations of computing, including programming languages and formal analysis of algorithms and machines.

Computer Engineering and Electronic Systems (stream number 2)

- Technology and techniques for designing and constructing digital core, including VLSI architectures, digital electronics, hardware engineering design, computer aided design, embedded systems and signal processing. These subjects are studied at both the system level and at the integrated circuit (IC) level. Communication Systems.

Information Systems (stream number 3)

- The engineering of large software systems for information processing, including the design process, data storage and retrieval, human-computer interfaces and knowledge-based systems.

Artificial Intelligence (stream number 4)

- Knowledge representation, search, inference; decision trees, learning algorithms, neural nets; understanding, modelling, problem solving, learning; logic programming; equivalence between representation, complexity of methods, power of heuristics; various applications of AI: knowledge-based systems, knowledge-based interfaces, natural language, perception, robotics.

Each programme in the Computer Science School consists of a set of related course units in each of the three years. Details of formal prerequisites for each course unit are set out in the detailed syllabus in the Course Unit Directory.

2.4.2 Course Unit Availability

The course units described here and in the Course Unit Directory are those course units we expect to offer in the coming year. However course units may be cancelled if they are chosen by too few students or for other necessary reasons. The portfolio of course units is reviewed every year and the availability of a particular course unit in the coming year is not a guarantee of availability in subsequent years. However we do guarantee that an adequate portfolio for every degree programme will continue to be provided.

MEng 4th Year course units

Most course units available to MEng Computer Science and MEng Electronic and Computer Systems are numbered COMP6xxxx. The course unit descriptions appear in the separate MSc in Advanced Computer Science Syllabus rather than here.

2.4.3 URL for outlines of courses

The full list of Unit Outlines can be found in the course unit directory:
<http://www.cs.manchester.ac.uk/undergraduate/programmes/courseunits>

2.5 Programme Structures

2.5.1. Computer Science (BSc programme)

The BSc Computer Science programme, the most popular and most flexible of our programmes, offers the opportunity for students to choose a study pathway which reflects their own changing and developing interests. It aims to develop strengths in both the principles and practice of Computer Science, and gives the opportunity for extensive practical work.

A graduate of this degree programme should have a good understanding of the architecture of hardware and software systems and the process of system design. A graduate will meet all the general aims of programmes in the School listed in section 2.2.

2.5.2. Computer Science (MEng Programme)

The MEng Computer Science programme, the most flexible of our MEng programmes, offers the opportunity for students to choose a study pathway which reflects their own changing and developing interests. The MEng extends and enhances the three year programme so that graduates:

- Possess a greater breadth of technical knowledge, together with in depth specialist knowledge in chosen areas
- Gain experience of working as part of a group in an industrial project
- Enjoy a wider knowledge of enterprise and managerial issues including employment law, accounting, and health and safety

The programme aims to produce graduates who will:

- Exhibit a high level of skills over a broad range of computer science, together with an awareness and knowledge of currently available techniques and technologies
- Have depth as well as a breadth of knowledge of computer science principles to be able to meet confidently future developments on a rapidly changing subject
- Have completed a programme of study informed by the wide range of research taking place in this top rated School
- Be competent professionals, able to play a leading part in many different commercial, industrial and academic activities and adapt rapidly to changing technology
- Meet industry demand for high calibre masters level graduates who will stimulate and initiate technological change
- Have an awareness of the social, organisational and professional context in which they will be working
- Have studied on a programme which has achieved Engineering Council accreditation at MEng level through following SARTOR guidelines

First Year

The first year of this programme is identical to the first year of the 3 year programme.

Progress to second year

As a general rule, to progress into the second year of the 4 year programme students must obtain an overall level equivalent to a 2i at the end of the first year, and will be expected to continue to perform at this level, although they may be allowed one or two individual course unit failures at the discretion of the Examiners Board. Students who fail to reach 2i standard or who do not pass at the first attempt will be required to transfer to the 3 year programme.

Progress to third year

As a general rule, to progress into the third year of the 4 year programme students must obtain an overall level equivalent to a 2i at the end of the second year, although they may be allowed one or two individual course unit failures at the discretion of the Examiners Board. Students who fail to reach 2i standard or who do not pass at the first attempt will be required to transfer to the 3 year programme.

Industrial Placement

All students are strongly recommended to undertake an industrial placement for at least 8 weeks of the Summer vacation after the second year. For sponsored students this will be chosen by their sponsor.

Fourth Year

Progress to the fourth year is normally conditional upon an overall mark of 60%, ie 2(i) standard. If the third year overall mark is less than 60%, the marks will be used to award a BSc degree.

The fourth year comprises 135 credits, 25 from the summer industrial project COMP40901, 90 credits from taught course units and 20 credits from the COMP40922 Business feasibility study.

Summer Industrial Project

The fourth year commences immediately after the third year with an industrial project (of at least 8 weeks) between July and mid-September. This project work will be formally assessed on the return to the University and will contribute to the fourth year mark, COMP40901 (25 credits).

The assessment of this industrially related project COMP40901 worth 25 credits is based on a report from the employer (3 credits), the project write-up (handed in at the start of term) (15 credits) and a seminar given during Freshers week (7 credits).

Taught Course Units

During the next six months, students will undertake a total of 6 courses with five masters courses comprising courses on advanced topics offered by this School and a module on technology transfer and enterprise offered by the Manchester Science and Enterprise Centre. The masters courses given by the School are worth 15 credits each with the Enterprise course worth 15 credits. In the 1st semester students will do three of the School's master courses plus the Enterprise course, and two masters courses in the 2nd semester.

Business Feasibility Study

In the summer term, students will undertake a business feasibility study in groups (COMP40922, 20 credits). This will be formally assessed as 65% a group presentation mark, including an element of peer review, and 35% as an individual contribution and contribute to the overall 4th year mark.

2.5.3 Software Engineering

As a graduate of this programme, you will have the knowledge and skill to apply a structured approach to the development and deployment of solutions to problems of real world scale and complexity.

The programme aims to produce graduates who, in addition to achieving the general aims for all graduates from the School, will:

- Exhibit a high level of skills in software engineering and computer science, together with an awareness and knowledge of currently available techniques and technologies
- Have sufficient knowledge of software engineering and computer science principles to be able to meet confidently future developments on a rapidly changing subject
- Have completed a programme of study informed by the wide range of research particularly in software engineering taking place in this top rated School

Note that your choice of course units is constrained by your choices in the first year (see the notes about course unit dependencies in the detailed syllabuses).

You must choose a project in which there is substantial application of Software Engineering methodology. The Director of the Software Engineering degree programme (Dr N.P.Filer) will approve the project choice. You may choose up to 20 Level 2 or Level 3 external options for which you have the pre requisites. At least 100 units must be at Level 3.

2.5.4 Artificial Intelligence

What is Artificial Intelligence?

Artificial Intelligence is at the interface between Computer Science, Psychology, Philosophy, Linguistics and Mathematics. On the one hand it seeks to develop systems which appear to behave intelligently and interact naturally and intuitively with users. Examples commonly found in organisations are expert systems and neural networks. On the other hand it seeks to understand human intelligence through simulations of behaviour at all levels of complexity.

Aims

Graduates of the Artificial Intelligence degree program in addition to developing core Computer Science skills, will be capable of designing and developing AI systems, or AI components of information systems.

The programme aims to produce graduates who, in addition to attaining the general aims for all graduates from the School, will:

- Exhibit a high level of skills in artificial intelligence and computer science, together with an awareness and knowledge of currently available techniques and technologies
- Have sufficient knowledge of principles to be able to meet confidently future developments in the rapidly changing subject of artificial intelligence
- Have completed a programme of study informed by the wide range of research particularly in artificial intelligence taking place in this top rated School

Studying Artificial Intelligence at Manchester

Artificial Intelligence students follow the core computer science modules, some modules in Psychology and modules designed specifically for the Artificial Intelligence honours degree. In the third year they complete a project with one of the AI members of staff.

In the second year, emphasis will be on the design processes for AI systems. Study will include:

- Algorithms and software engineering;
- The two main paradigms in AI: neural nets and rule-based systems;
- AI programming languages;
- Options in Cognitive Psychology.

Third Year

In the third year the emphasis is on depth. The study will include:

- The fundamentals of AI in depth, showing how the current state of the art has arisen and how it is likely to develop in the future;
- Options in the many different areas in which AI methods are being used;
- A large scale project tackling a realistic problem, to prepare you for a career in this area. You will be assisted by a member of the AI research staff in doing this.

2.5.5 Computing for Business Applications

Information regarding the 3 year Computing for Business Applications and 4 year Computing for Business Applications with Industrial Experience programmes can be found here:

<http://www.cs.manchester.ac.uk/undergraduate/programmes/>

2.5.6 Distributed Computing

Information regarding the 3 year Distributed Computing and 4 year Distributed Computing with Industrial Experience programmes can be found here:

<http://www.cs.manchester.ac.uk/undergraduate/programmes/>

2.5.7. Computer Science with Business and Management

Graduates of the Computer Science with Business and Management programme will have a good overall grasp of the disciplines of computer science and business management and the inter-relationships between the two subject areas. Being equipped with both business and computing skills will give them a broad problem solving ability in an organisational setting.

The programme aims to produce graduates who, in addition to their achieving the aims for all graduates of the School, will:

- Exhibit a high level of skills in computer science, business and management, together with an awareness and knowledge of currently available techniques and technologies
- Have studied computer science, business and management and have an appreciation of the subjects themselves and their relationship.

2.5.8. Computer Science and Mathematics

Graduates of this joint honours degree programme will acquire a very useful combination of mathematical and computer science knowledge and skills. They will be in an ideal position to appreciate and exploit the role of mathematics in computing and the application of computing in mathematics.

The programme aims to produce graduates who will:

- Be competent professionals, who are able to take their place in many different commercial, industrial and academic activities
- Have studied Mathematics and Computer Science and have an appreciation of the subjects themselves and their relationship
- Exhibit a range of broad-based skills and abilities appropriate to computer professionals, as well as an awareness of appropriate techniques and technologies
- Have sufficient knowledge of Mathematics and Computer Science principles to be able to meet confidently future developments on a rapidly changing subject
- Have a good grounding in the core concepts and principles of Mathematics and be able to apply them in range of contexts
- Have studied on a programme at the forefront of both Computer Science and Mathematics which is informed by current research and in particular by the research specialisations of the teaching staff.

The course unit descriptions for Mathematics can be found in the Mathematics handbook for the relevant year or on the web at:

<http://www.maths.manchester.ac.uk/undergraduate/ugstudies/units/index.html>

Pathways

There are two recommended pathways through this degree programme: a theory pathway and an algorithms pathway. Pathways are advisory, rather than mandatory, and are intended to contribute structure to the programme. Selection of modules from a pathway will result in a coherent overall degree programme.

1) Theory Pathway

Second Year

In addition to compulsory units [COMP20012](#), [COMP20341](#), [COMP20920](#), [MATH20111](#), [MATH20201](#), [MATH20142](#), (All 10 credits each) students take:

[COMP20121](#) The Implementation and Power of Computer Languages (10 credits)

[COMP20142](#) Logic in Computer Science (10 credits)

[COMP20442](#) Artificial Intelligence Programming (10 credits)

[MATH20122](#) Metric Spaces (10 credits)

[MATH20302](#) Propositional Logic (10 credits)

[MATH20212](#) Algebraic Structures 2 (10 credits)

Third Year

In addition to [COMP30910](#) (20 credits), students take:

[COMP30112](#) Concurrency (10 credits)

[COMP30151](#) Understanding Programming Languages (10 credits)

plus another 20 CS credits

together with 60 MATH credits including:

[MATH31001](#) Linear Analysis (10 credits)

[MATH31011](#) Measure Theory & Fractals (10 credits)

[MATH31022](#) Number Theory: the Riemann Zeta Function (10 credits)

[MATH31051](#) Introduction to Topology (10 credits)

[MATH32001](#) Group Theory (10 credits)

[MATH32031](#) Coding Theory (10 credits)

[MATH32052](#) Hyperbolic Geometry (10 credits)

2) Algorithms Pathway

Second Year

In addition to compulsory units [COMP20012](#), [COMP20341](#), [COMP20920](#), [MATH20111](#), [MATH20201](#), [MATH20142](#), (All 10 credits each) students take:

30 COMP credits chosen from:

[COMP20021](#) Imperative Programming with C and C++ (10 Credits)

[COMP20072](#) Computer Graphics (10 credits)

[COMP20081](#) Computer Networks (10 credits)

[COMP20411](#) Subsymbolic Processing and Neural Networks (10 credits)

[COMP20442](#) Artificial Intelligence Programming (10 credits)

together with 30 MATH credits chosen from:

[MATH20411](#) Partial Differential Equations & Vector Calculus (10 credits)

[MATH20602](#) Numerical Analysis (10 credits)

[MATH20902](#) Discrete Mathematics (10 credits)

[MATH20912](#) Introduction to Financial Mathematics (10 credits)

Third Year

In addition to [COMP30910](#) (20 credits), students take:

40 COMP credits chosen from:

[COMP30071](#) Advanced Computer Graphics (10 credits)

[COMP30172](#) Advanced Algorithms (10 credits)

[COMP30191](#) Theory of Games and Game Models (10 credits)

[COMP30222](#) Quantum Computing (10 credits)

[COMP30432](#) Computer Vision (10 credits)

together with 60 MATH credits including:

[MATH32031](#) Coding Theory (10 credits)

[MATH34001](#) Applied Complex Analysis (10 credits)

[MATH34011](#) Asymptotic Expansions & Perturbation Methods (10 credits)

[MATH34042](#) Discrete Time Dynamical Systems (10 credits)

[MATH36001](#) Matrix Analysis (10 credits)

[MATH36022](#) Numerical Solution of Ordinary Differential Equations (10 credits)

[MATH36032](#) Problem Solving by Computer (10 credits)

[MATH39001](#) Combinatorics & Graph Theory (10 credits)

[MATH39011](#) Mathematical Programming (10 credits)

[MATH39032](#) Mathematical Modelling in Finance (10 credits)

2.6 Professional body requirements

The professional bodies (BCS and IET) accredit our degree programmes every 5 years. The most recent accreditation covers years of entry 2006-2010.

2.6.1 British Computer Society (BCS)

Student membership of the BCS is available. The single honours programmes and Computer Science with Business and Management are accredited for full exemption from the BCS professional exams, subject to achieving an honours degree and passing the final year project. The joint honours Computer Science and Maths programme is accredited for partial exemption (certificate, Diploma and Diploma Project) from the BCS exams.

2.6.2 Institution of Engineering and Technology (IET)

The single honours programmes and Computer Science with Business and Management give exemption from the IET professional exams, provided at least a II(ii) honours degree is obtained with at least 40% being gained for the final year project.

The MEng degree programme leads to Chartered Engineer (CEng) status and the BSc/BEng programmes to partial fulfilment of CEng requirements, as well as full professional membership of the bodies.

3 TEACHING, LEARNING AND ASSESSMENT

3.1 Study guidance

Throughout your studies, you will receive information and advice on general good practice study techniques and this will not be repeated in this Handbook.

See Section 5.3 for information if you encounter difficulties during your studies. You should discuss these with the School at the earliest opportunity, whether these are work-related or personal. All discussions will be confidential.

3.2 Coursework: Submissions, Deadlines and Extensions

In general, you will be instructed about the requirements, method of submission and deadlines for each piece of coursework by the course unit leader. In addition, the first and second year Laboratory manuals contain detailed information about lab management arrangements and procedures, including timetables.

You may be asked to submit coursework electronic-only, hardcopy-only or both. For hardcopy submission, you should attach to your work a completed Coursework Submission form, available from the Resource Centre (LF21). Submission of hardcopy work will normally be via the locked boxes inside the doorway to the Resource Centre.

A submission deadline will be issued for each piece of coursework or labwork. This will be the usual expected date of completion. Additionally, in general, an extension date may be specified and whether or not such an extension needs to be requested. If available, an extension could be taken if you require a little longer for some reason. There is no penalty for taking an extension. You would normally request an extension from the course unit leader or lab supervisor.

Further extensions are not normally possible, unless you have mitigating circumstances, including extended illness, or significant family or personal circumstances, for example, family bereavement. Please discuss with the lab manager or course unit leader. In general, you should also notify the School about any such mitigating circumstances (see Section 5.3).

3.3 Examination Guidelines

A description of Credit Rating
[Appendix 3 Credit Rating](#)

http://intranet.cs.man.ac.uk/Study_subweb/Ugrad/exams/

If your exam performance may be affected by mitigating circumstances, either directly or indirectly, you **MUST** complete and submit a mitigating circumstances form, available from the Student Support Office, giving details. The School cannot consider your circumstances otherwise. See Section 5.3 for further information.

3.3.1 Exam Timetable

- First Semester exams are in January
- Second Semester exams are in May/June
- Resit Exams in August/September (except final year students).
- Project for COMP30900, COMP30910 or COMP37900
 - Seminar near end of First Semester
 - Demonstration during Second Semester
 - Project Report near end of Second Semester

3.3.2 Return of marks

- First semester marks published for the guidance of students are provisional. They have not been confirmed by the external examiners. They may go up or down at the examiners meeting in June.
- Second semester marks will be published on the examinations noticeboard shortly after the Exam Board meeting.
- Results letters will be sent within one week of the Exam Board meeting to the home address registered on Campus Solutions.
- Results can also be viewed on the student records system Campus Solutions.
- RESULTS CAN NOT BE GIVEN OVER THE TELEPHONE OR BY E-MAIL.

3.3.3 Role of External Examiners

The standard of degree programmes is validated by external examiners. The external examiners are expected to look at the draft question papers, scrutinize a selection of scripts and project reports (particularly those on borderlines), take part in vivas if they are held, and attend the final examiners' meetings

3.3.4 Use of calculators in examinations

The University Policy on the Use of Calculators in Examinations is downloadable from:

<http://www.campus.manchester.ac.u1k/ssc/examinations/exampoliciesinformation/policyoncalculators/>

Most Computer Science examinations do not require the use of calculators and calculators are not permitted. The individual course unit descriptions in the undergraduate syllabus for the few papers which permit calculators state that calculators are permitted. Where calculators are permitted they are restricted to a basic type by the University regulations.

3.3.5 Use of dictionaries in examinations

The University Policy on the Use of Dictionaries in Examinations is downloadable from:

<http://www.campus.manchester.ac.uk/ssc/examinations/exampoliciesinformation/>

3.3.6 Criteria for assessing examination work

First Class

First class answers demonstrate depth of knowledge or problem solving skills which is beyond that expected from a careful and conscientious understanding of the lecture material.

Answers will show that the student:

- Has a comprehensive knowledge of a topic (often beyond that covered directly in the programme) with an absence of misunderstandings;
- Is able to apply critical analysis and evaluation;
- Can solve unfamiliar problems not drawn directly from lecture material and can adjust Problem solving procedures as appropriate to the problem;
- Can set out reasoning and explanation in a logical, incisive and literate style

Upper Second

Upper second class answers provide a clear impression of competence and show that the student:

- Has a good knowledge base and understanding of all the principal subject matter in the programme;
- Can solve familiar problems with ease and can make progress towards the solution of unfamiliar problems;
- Can set out reasoning and explanation in a clear and coherent manner

Lower Second

Lower second class answers will address a reasonable part of the question with reasonable competence but may be partially incomplete or incorrect. The answer will provide evidence that the student:

- Has a satisfactory knowledge and understanding of the principal subject matter of the programme but limited to lecture material and with some errors and omissions;
- Can solve familiar problems through application of standard procedures;
- Can set out reasoning and explanation which, whilst lacking in directness and clarity of presentation can nevertheless be followed and readily understood

Third Class

Third class answers will demonstrate some relevant knowledge but may fail to answer the question directly and/or contain significant omissions or incorrect material. Nevertheless, the answer will provide evidence that the student:

- Has some basic knowledge and a limited understanding of the key aspects of the lecture material;
- Can attempt to solve familiar problems albeit inefficiently and with limited success

Ordinary

Answers in the ordinary category represent the very minimum acceptable standard. Such answers will contain very little appropriate material, major omissions and will be poorly presented lacking in any coherent argument or understanding. However the answer will suggest that the student:

- Has some familiarity with the general subject area;
- Whilst unable to solve problems can at least formulate a problem from information given in a sensible manner.

3.4 Assessment and Progression

Consequences of unsatisfactory progress are detailed below.

Depending on the circumstances and type of degree you studying consequences may include:

- Failure to progress to the next year,
- Failing to graduate,
- Dropping from Honours to Ordinary degree,
- Dropping from a four year degree to a three year degree.

First Year

Most course units have some continuous assessment, such as essays or laboratory exercises, and an examination in January for first semester course units or May/June for second semester course units. The examination and continuous assessment marks are combined to form a single mark out of 100 for each course unit. The proportions of coursework and examination are set out in the detailed syllabus for each course unit. Coursework must be submitted by the due dates and in any case coursework submitted after the first day of the examination period will not normally be assessed.

Students who started their programmes from 2005 onwards are subject to the new University Credit and Awards regulations:

www.campus.manchester.ac.uk/medialibrary/policies/ugregulations.pdf.

Amongst other changes, these create new rules for progression from year to year. The rules described below for progression from first to second year will also be used for these students when considering progression from second to third year.

To progress to the second year, you must achieve a year average of at least 40%, and also reach 40% in individual units totaling at least 80 credits. In all other units, you must have a mark of at least 30%. Additionally, both the lab and exam components of COMP10081 and COMP10092 must be passed separately.

The examiners do not make any decisions about what first semester resits are required until the June examiners meeting. The marks published in February are provisional and are provided for information only. They may go up or down at the examinations board in June when all marks are confirmed by external examiners.

Students who fail at the first examination attempt must resit the required papers in August/September. A mark of at least 40% in each resit course unit is required. The examiners may, at their discretion, apply compensation similar to that described above in determining whether a student may proceed to the second year.

There is no automatic right to submit extra coursework; students who fail to submit coursework by the due dates without good reason may be refused the opportunity to resit. Students with failed coursework should consult the laboratory organiser about the possibility of submitting extra work before the resit examinations. The availability of laboratory facilities over the summer to complete such work cannot be guaranteed and may be restricted to specific dates. If a failed course unit comprises both coursework and examination, the examination must always be retaken even if the coursework mark has been improved to what would have been a pass at the first attempt.

Students who fail to satisfy the examiners in the September resit examination will not be permitted to proceed to the second year and will have to leave the course. Repeat years are not generally permitted unless there are exceptional circumstances such as extended illness. In such circumstances, a personal or year tutor must first be consulted and then special permission sought.

First year marks will appear in official transcripts of marks but they do not count towards the final degree classification. All students who pass into the second year continue as Honours students.

2nd Year

Most course units are examined at the end of the semester in January or May/June. Some course units have associated coursework contributing typically 10-20% to the assessment as discussed in the detailed syllabuses. A coursework mark is also returned for the [COMP20910](#) laboratory or ([COMP20920](#) for joint honours).

To progress to the third year, you must achieve a year average of at least 40%, and also reach 40% in individual units totalling at least 80 credits. In all other units, you must have a mark of at least 30%.

Also, failure in [COMP20910](#) or [COMP20920](#) is not normally compensated and will require submission of additional practical work. The availability of laboratory facilities over the summer to complete such work may be restricted to specific dates.

Bad failures (typically less than 30%) will require a resit unless there are exceptional circumstances. Students who fail particular course units are given one opportunity to resit the failed course units in August/September.

An overall second year mark is computed as the weighted average of all the course units taken, weighted by the credit rating. Typically for single honours students this is (10 taught unit marks *10 plus [COMP20910](#) mark *20)/120. The overall effect of the 10% lab component in each taught unit, together with the [COMP20910](#) mark, is that laboratory work contributes approximately 25% overall to the final mark. This final mark is carried forward to the 3rd year and counts for 25% of the final degree mark.

Students who pass into the final year without resits continue as Honours students. Students who pass sufficiently well in the resits also continue as Honours students.

A student who, after the resit examinations, has insufficient marks to be allowed 240 credits after compensation may be admitted to the final year as a Ordinary degree student if at least 200 credits can be awarded. In this case up to 40 credits of (the worst) course units can be disregarded and a decision made on the basis of the remaining 80 or more credits.

3rd Year

Most course units have examinations at the end of the semester, in January or May/June. An overall examination mark is obtained.

The [COMP30900](#) or [COMP30910](#) project has three deliverables: a seminar given towards the end of the First Semester; a demonstration given during the second semester and a project report handed in towards the end of the second semester. These aspects are marked individually and combined with an assessment of the technical merit of the project to yield an overall project mark. Guidance on the expected levels of achievement and their relationship to marks awarded is given on the [COMP30900/COMP30910/COMP37900](#) web pages:

http://intranet.cs.man.ac.uk/Study_subweb/Ugrad/projects.php

The major determinant of the final degree classification is the final average mark. This is based on the overall second year mark, the overall project mark, and the final examination mark, combined in the ratio 1:1:2 respectively. A limited number of individual course unit failures are generally disregarded but a bad exam performance or bad project might result in the examiners awarding a lower class of degree overall. In particular only 20 credits of course units with marks below 20% are normally permitted for an Honours degree.

In the Final Year, the degree grade will be awarded on the basis of the final combined mark. The following nominal bands are used by the examiners:

over 70%	1st Hons
60 - 70%	2.1 Hons
50 - 60%	2.2 Hons
40 - 50%	3rd Hons
32 - 40%	Ordinary

although adjustment of the bands may occur at the discretion of the examiners.

Ordinary Degree

Ordinary degree students must obtain a 40% average on at least 80 credits of level 3 course units and obtain at least 300 compensated credits overall to be awarded the degree.

MEng Assessment

Progress to second year

As a general rule, to progress into the second year of the 4 year programme students must obtain an overall level equivalent to a 2(i) at the end of the first year, and will be expected to continue to perform at this level, although they may be allowed one or two individual course unit failures at the discretion of the Examiners Board. Students who fail to reach 2(i) (60%) standard or who do not pass at the first attempt will normally be required to transfer to the 3 year programme.

Progress to third year

As a general rule, to progress into the third year of the 4 year programme students must obtain an overall level equivalent to a 2(i) (60%) at the end of the second year, although they may be allowed one or two individual course unit failures at the discretion of the Examiners Board. Students who fail to reach 2(i) standard or who do not pass at the first attempt will normally be required to transfer to the 3 year programme.

Progress to the fourth year is normally conditional upon an overall mark of 60%, ie 2(i) standard. If the third year overall mark is less than 60%, the marks will be used to award a BSc degree.

A MEng (Hons) degree will be awarded computed as 50% of fourth year mark, 37.5% of third year mark and 12.5% of second year mark. The MEng classification will then use the normal borderlines i.e. 1st class = 70%, 2(i) = 60%, 2(ii) = 50%. In the case of a student failing to reach a 2(ii) standard, no award of the MEng (Hons) will be made but the overall mark obtained will be used to award a BSc degree at the appropriate level.

Computer Science with Business and Management Assessment

The general regulations set out above apply to this to this degree.

First and second year students must achieve an acceptable average both in Computer Science and in Business and Management as only very limited compensation across subject areas is permitted.

First or second year students may be required to transfer to Single Honours if their performance in the Business and Management component is unsatisfactory although compensated overall.

An overall second year mark is computed as the weighted average of all the course units taken, weighted by the credit rating. The overall effect of the 10% lab component in each taught Computer Science unit, together with the CS2920 mark, is that laboratory work contributes approximately 25%

overall to the Computer Science part of the final mark. This final mark is carried forward to the 3rd year and counts for 25% of the final degree mark.

The final average for Computer Science with Business and Management is computed as follows:

25%	from 2 nd year
75%	from 3 rd year made up of:
	29% Computer Science exams
	17% Computer Science project
	29% Business and Management

Computer Science and Mathematics Assessment

The general regulations set out above apply to this degree. However different compensation rules apply to First year Maths marks. You must achieve a mark of 33 on each Maths course unit, as these are core units, and an average of 40. If your Mathematics average is below 40 all Mathematics papers below 40% will require a resit, if it is above 40% all papers below 33% will require a resit.

First and second year students must achieve an acceptable average both in Computer Science and in Mathematics as only very limited compensation across subject areas is permitted. Second year averages for Computer Science and for Mathematics are carried separately into the final year.

Typically in Computer Science this is $(5 \text{ taught unit marks} * 10 \text{ plus } \text{COMP20920} \text{ mark} * 10) / 60$. The overall effect of the 10% lab component in each taught unit, together with the COMP20920 mark, is that laboratory work contributes approximately 25% overall to the final Computer Science mark. These final marks are carried forward to the 3rd year and count for 25% of the final degree mark.

The major determinant of the final degree classification is the final average mark combined from the Computer Science mark and the Mathematics mark. The Computer Science component is based on the overall second year mark, the overall project mark, and the final examination mark, combined in the ratio 1:1:2 respectively. Individual course unit failures are generally disregarded but a bad exam performance or bad project might result in the examiners awarding a lower class of degree overall. An overall average of 40% is required for a classified Honours degree.

3.5 Industrial Placements

3.5.1 Industrial Experience Year and Sponsorship

At present approximately 10% of the undergraduate students in the Computer Science School have sponsorship, often from industrial sources. Many of these students already have sponsorship when they join the School. There are also opportunities which arise from time to time to apply for sponsorship. Industrial sponsors normally invite students to apply for summer placements or year long placements during the course of the Lent Term.

Ms Alex Walker, a member of the Lecturing staff, has responsibility for industrial placements and advertises any contacts from industry giving opportunities for sponsorship, vacation placements or year-long industrial placements.

Each year a substantial number of students take a year out between the second and final year of their course in order to work for their sponsor. This can be done by transferring to an Honours School "with Industrial Experience" but you should do this by the start of the second year.

Students are required to satisfy the tutor responsible for industrial placements that the industrial experience is academically suitable. The placement must last for a minimum of nine months and students are required to produce satisfactory reports on their work throughout the period of industrial training. Students are assigned a primary personal tutor, who will be responsible for liaison during the year in industry. This will normally be the same member of staff who has acted as personal tutor during the first or second year.

Students must achieve a second class degree standard in first and second year exams to be permitted a placement and remain on the "with Industrial Experience" programme.

3.6 Prizes and Awards

The School offers a number of prizes for outstanding performance in each year of our programmes. Details of these prizes can be found on the web at:

http://intranet.cs.man.ac.uk/Study_subweb/Ugrad/prizes.php

3.7 Graduation

Graduation packs are usually sent out in May by the Student Services Centre. Full details regarding tickets, dates, robe hire and degree certificates can be found here:

<http://www.campus.manchester.ac.uk/ssc/graduation/>.

The School hosts a graduation reception either before or after the graduation ceremony: full details will be sent to you in June/July.

3.8 Academic Malpractice including Plagiarism

Attempting to cheat in examinations is treated severely by the University. The penalty is usually more severe than a zero in the paper concerned. One recent student of Computer Science did not graduate because of this.

Plagiarism, or copying of course or lab work, is also a serious academic offence, as explained in the University guidelines. In Computer Science these guidelines apply particularly to laboratory exercises and to final year project reports. Two Computer Science students were recently downgraded one degree class because of plagiarism in their project reports.

Guidance to Students on Plagiarism and Other Forms of Academic Malpractice

Introduction

1. This section describes the University and School of Computer Science Policy on Academic Malpractice. It is vital that you read and understand the following and that you are clear about its implications for yourself. Indeed, by signing your registration form you are declaring that you have done this. We hope that you will see this policy as fair and necessary.

2. The School will assume that you are familiar with this material on academic malpractice. If you have any problems or questions, please contact a member of staff to discuss them.

3. As well as reading this section, please refer to:

<http://www.eps.manchester.ac.uk/tlc/resources/guidance-and-templates/assessment/plagiarism/guidance-to-students-on-plagiarisms-for-inc-in-prog-handbooks.pdf>

The University policy on Academic Malpractice is given in University Regulation XVII: 'Conduct and Discipline of Students' available at:

<http://www.campus.manchester.ac.uk/medialibrary/policies/studentconductdiscipline.pdf>

4. Academic malpractice includes plagiarism, collusion, fabrication or falsification of results and anything else that achieves credit for a student when it not properly deserved.

5. As a student, you are expected to cooperate in the learning process throughout your programme of study by completing assignments that are the product of your own study or research. For most students, this does not present a problem, but occasionally, whether unwittingly or otherwise, a student may commit what is known as plagiarism, collusion or some other form of academic malpractice when carrying out an assignment.

6. Apart from being deliberate, this may also occur because students misunderstand or are ignorant of what is expected of them, or have been used to different conventions in their prior educational experience.

7. This guidance should help you understand what we regard as academic malpractice and therefore help you to avoid committing it. You should read it carefully, because academic malpractice is regarded as a serious offence and students found to have committed it will be penalized. At the very least, a mark of zero would be awarded for the piece of work in question, but it could be worse; you could fail the whole course unit, be demoted to a lower class of degree, or be excluded from the programme.

8. You should note that work you submit may be screened electronically to check against other submitted work and external material, for example from the Web. Your work may be submitted to external parties to undertake this. Copies may be retained to ensure that future works submitted at this institution and others are not plagiarized from your work. If you fail to submit your work in the

manner required, then it may be systematically treated as though you are guilty of Academic Malpractice.

9. You should also be aware that the process of detecting cheating is not necessarily a quick one. *Thus it may be a long time after you hand in your work, and have had marks back, that you are challenged on it.* Even after marks have been made official, if evidence comes to light of unfair practice, they can be challenged. The worst case of this could be that a student passes into the second or third year but only *then* finds out that an earlier year had actually been failed!

What is plagiarism?

10. **Plagiarism** is presenting the ideas, work, programs or words of other people as part of your own work without proper, clear and unambiguous acknowledgment. It also includes self-plagiarism (which occurs where, for example, you submit work that you have presented for assessment on a previous occasion), and the submission of material from software or paper banks (even if the authors of such material appear to be giving you permission to use it in this way). One blatant example of plagiarism would be to copy entirely another student's work.

11. Hence it is essential to make clear in your assignments the distinction between: the ideas and work of other people that you may have quite legitimately exploited and developed, and ideas or material that you have personally contributed.

What is Collusion?

12. **Collusion** occurs, intentionally or accidentally, when (1) students work together on an assignment when they are supposed to be working separately or (2) you allow someone to copy your work when you know that they intend to submit it as though it were their own, or (3) there is an agreement to hide the amount of work done by one or more students, in work done together, with the intention of securing a mark higher than the student(s) might otherwise deserve. Collusion will be subject to penalties similar to those for plagiarism and will lay *all* students involved open to a charge of academic malpractice.

13. On the other hand, **collaboration** is a perfectly legitimate academic activity in which students are **explicitly instructed to work in groups in the preparation for projects and similar assignments, or as part of their programme of research.**

14. If you are asked to carry out such group work and to collaborate in specified activities, it will always be made clear how your individual input to the joint work is to be assessed and graded. If it is not clear, you should always ask for clarification before undertaking the assignment, to avoid any risk of unwitting collusion.

What Is Fabrication or Falsification of Results?

15. If an assignment requires you to produce results or data (for example, the output of a program), then these should be produced as the outcome of the proper, prescribed process; you should not make them up or alter them. The results must be capable of verification, so that those assessing the work can follow the processes by which you obtained them. Otherwise, you lay yourself open to the charge of fabrication or falsification of results.

Why is Academic Malpractice a Bad Thing?

16. It is very easy to cheat in the laboratory or other assignments, by handing in somebody else's work, so it is nothing to be proud of.

17. In fact it is seriously damaging to your education, to other students and to the University. By getting marks which you do not deserve, you are attempting to trick yourself (and others) into believing that you are far better than you really are, that you understand something when you do not, or that you are coping with your work, when you actually have problems. Teaching staff will not be able to assess your individual abilities, nor give you the feedback you might have otherwise received. This is an extremely short-term strategy and will backfire on you sooner rather than later.

It is far better to be honest, to get the marks you deserve and/or to face up to any problems you may have -- you can then start to get help and to rectify these problems at an earlier stage.

18. For other students and for the University, you will be undermining the standard of University of Manchester degrees -- if your degree result is not a true reflection of your abilities, because you cheated, an employer will be suspicious of the standard of future University of Manchester graduates.

19. It is also easy to impress your friends, giving them 'help' by telling them the answers. However, you are not 'helping' them at all. In fact, you are holding back their education and undermining their confidence in learning and understanding for themselves.

The Consequences of Academic Malpractice

20. In an isolated case of academic malpractice, the default result will be for us to withdraw ALL marks for the work for ALL those involved in 'with-knowledge' malpractice, e.g. if you were knowingly involved in your work being similar to someone else's.

21. However, where such behaviour is repeated, or more than one exercise is involved, or there are other factors, we reserve the right to take further action, for example by withdrawing all marks across every course unit involved. We may inform the Faculty, or University Student Disciplinary Committee, which has wide-ranging powers, including the power to exclude a student from a degree programme.

22. By default, peer-to-peer plagiarism (where one student copies from their peers without their knowledge) will be treated more severely than collusion. The innocent party will have their marks restored, but the guilty party will by default receive zero for the plagiarised exercise plus a penalty of the same weight as that exercise.

- (a) **Do not** leave your work on printers
- (b) **Do not** give your passwords to other students
- (c) **Do** ensure that files permissions are appropriately set to restrict access to your data
- (d) **Do not** allow other students to access a machine to which you are logged in (lock the screen if you need to leave it temporarily)
- (e) **Do not** show any aspect of your coursework to other students in any form

23. Incidents of academic malpractice will be added to the student's record, and may therefore be included in any references produced by the School.

What Should You Do, or Not Do?

24. For Programming Assignments:

- (a) **Do** get the help you need, if you find yourself in some difficulty with an assignment, rather than be tempted to cheat, which would put you in more difficulty. It is never too late to get help, but the sooner you do the better it is.
- (b) **Do** ensure that any code derived from a third-party, e.g. code supplied as part of the labscript, or given in lectures, is clearly labelled and its source properly acknowledged. You should assume that you should develop all code and pseudo-code on your own, /unless/ you are instructed to do otherwise.
- (c) **Do** ensure that, if you work together in informal groups, you fully understand the difference between 'healthy' working together and academic malpractice. Ensure you fully understand your assignment work, and that you do all the work required of you yourself. Unless explicitly instructed otherwise, such working together should be restricted only to discussing ideas and getting the work off the ground. Anybody who cannot actually do the work, should get help from a demonstrator or supervisor.
- (d) **Do Not** attempt to disguise third-party code as your own work.

- (e) **Do Not** allow your (so-called) friends to tell you the answer, or to give you `too much help'. Equally, do not tell your friends the answer, or give them `too much help'.
- (f) **Do Not** let other students have access to your code, pseudo-code, algorithm descriptions, logbooks and so on, in any shape or form.

25. For Written Assignments:

- (a) **Do** get lots of background information on subjects you are writing about to help you form your own view of the subject. Make a precise note of the source of every piece of information at the time you record it, even if it is just one sentence.
- (b) **Do Not** construct a piece of work by cutting and pasting or copying material written by other people, or by you for any other purpose.
- (c) **Do** properly reference other work, when you need to include someone else's words or diagrams, in order to analyse or criticize them. A quotation of text must be enclosed in **quotation marks** to show that it is a direct quote, **and** it must have the source properly acknowledged at that point. Any omissions from a quotation must be indicated by an ellipsis '...' and any additions for clarity must be enclosed in square brackets, e.g. "[These] results suggest...the hypothesis is correct." However, constructing large parts of an assignment from a sequence of quotes, even if they are acknowledged, is another form of plagiarism. It is also important to remember that it is not sufficient to include a reference to a source *only* in your assignment bibliography. You should always indicate precisely where and to what extent you have made use of such a source, at the point of use.
- (d) **Do** attribute all ideas to their original authors. A good rule of thumb is that each idea or statement that you write should be attributed to a source unless it is your personal idea or it is common knowledge. (If you are unsure if something is common knowledge, try asking other students: if they don't know what you are talking about, then it is not common knowledge!)
- (e) **Do** learn the acceptable styles of including and referencing others' material or ideas. Consult the separate guidance given for essay-writing and project reports:
 - First Year Essays:
http://www.cs.manchester.ac.uk/Study_subweb/Ugrad/readingWeek/howto.php
 - Second Year Essays:
http://www.cs.manchester.ac.uk/Study_subweb/Ugrad/year2/readingWeek
 - Third Year Projects:
<http://intranet.cs.man.ac.uk/ugrad/projects/year07/handbook.html>

If you are uncertain how to properly acknowledge others' work in your own, then ask.

Finally

- 26. **Remember** - no matter what pressure you may be under to complete an assignment, you should never succumb to the temptation to take a short cut and use someone else's material inappropriately. No amount of mitigating circumstances will get you off the hook, and if other students let you copy their work, they will be disciplined as well.

3.9 Appeals

If you have good reason to question a laboratory or coursework mark you have been given, you should in the first instance approach the course unit leader or supervisor responsible for the work. Problems with examinations should be discussed with your year tutor.

If the matter cannot be resolved informally, complaints or appeals should be submitted in writing to the Undergraduate Director, School of Computer Science. They will be considered by the internal and external examiners.

If matters cannot be resolved at School level it is possible to make a formal appeal. An appeal, in the form of a written statement which sets out the grounds of the appeal, must be submitted to the appropriate Faculty Office within 20 working days of notification of the result or decision. The grounds of such an appeal are limited, you cannot appeal against the academic judgement of the Examiners. Any possible appeal should be discussed with the Director of the Undergraduate School to ascertain whether the matter can be resolved at School level and whether grounds for an appeal exist.

Regulation XIX 'Academic Appeals' can be found at:

<http://www.campus.manchester.ac.uk/medialibrary/policies/academicappeals.pdf>

Note:

- (i) The purpose of this Regulation is to safeguard the interests of all students. It may be used only when there are adequate grounds for doing so (as specified in paragraph 2 below) and may not be used simply because a student is dissatisfied with the outcome of his or her assessment or other decision concerning their academic position or progress.
- (ii) Any reference in these procedures to named officers should be read also as a reference in each case to a delegated nominee.

3.10 Complaints

Regulation XVIII 'Student Complaints Procedure' can be downloaded from:

<http://www.campus.manchester.ac.uk/medialibrary/policies/studentcomplaintprocedure.pdf>

The Complaints Form can be downloaded from:

<http://www.campus.manchester.ac.uk/medialibrary/policies/studentcomplaintform.pdf>

If you have a complaint, please discuss the problem with the course unit leader or supervisor concerned. If this does not resolve the problem, consult your personal tutor or the year tutor.

Unresolved problems can be put on the agenda of the Staff Student Committee via your student representatives or submitted in writing to the Director of the Undergraduate School.

Problems concerning examinations should be discussed with your year tutor. If the matter cannot be resolved informally, complaints or appeals should be submitted in writing to the Undergraduate Director, School of Computer Science.

4 STUDENT PROGRESSION

4.1 Attendance requirements

Regulation XX 'Work and Attendance of Students' can be downloaded from:

<http://www.campus.manchester.ac.uk/medialibrary/policies/workattendancesstudents.pdf>

Full attendance is required at all lectures, laboratories, examples classes and any tutorials which may be scheduled. Completed laboratory work should be handed in on time. Attendance at laboratories and examples classes, and at many lectures, is monitored and attendance registers kept. Please note that the expectation is that students will be required to undertake approximately forty hours per week of study i.e. an average of one hour's private study will be required for every scheduled hour of lectures, laboratories etc. and some students may require much more time than this. BEING A STUDENT IS A FULL-TIME OCCUPATION! Absence for holidays is not permitted in term-time.

It is the experience of the School that lack of attendance leads to study problems and any student with problems should consult his/her subject tutors, personal tutor or year tutor. In addition, failure to attend can result ultimately in refusal by the University to allow a student to sit the degree examinations.

It is the duty of the programme committee to keep under continuous review the work and attendance of the students with whom it is concerned. In the case of Single Honours students the Undergraduate Committee is the programme committee; in the case of Joint Honours students the Board of Studies is the programme committee.

The work and attendance of students is continually monitored by year tutors and may be acted upon by the relevant programme committee at any suitable time. A formal process is defined to tackle the problem of any student whose work and attendance appears unsatisfactory. Direct approaches by year tutors to solve the problem is followed by a report to the programme committee if the problem persists. The programme committee may then choose to issue an "informal" warning which has a precisely defined format and permits recovery of the situation. The programme committee will insist on a second report and, if this is unsatisfactory, a "formal" warning is issued. This is again of a precisely defined format. A copy of all of this correspondence is held in a student's file.

If you have not fulfilled the Work and Attendance regulations prescribed for your programme of study, and you have been formally notified of this, you will not be allowed to sit University examinations.

4.2 Progression through the programme

4.2.1 Organisation of Teaching

An individual course of lectures is known as a "course unit".

1st Year

You must take 60 credits worth of course units in each semester. The last digit of each course unit code tells you the semester in which it is offered. During each 12 week semester students will normally attend 6 course units. Each course unit has a credit weighting (usually 10) and students take 60 credits per semester or 120 in the full year. Each course unit has lectures each week, normally 2 for a 10 credit course unit. In addition, most course units are supported by tutorials or examples classes (usually one hour per fortnight) and some continuous assessment, such as essays or laboratory work, usually amounting to another 2 hours per fortnight. Some course units have a different mix of work - e.g. more examples classes instead of laboratories - and some course units have more continuously assessed work during the semester instead of an end-of-year examination. You are allowed to take the equivalent of up to 2 course units outside the School (one per semester), which should have a similar credit rating (see Section 4.2.2 below). Thus, each teaching week contains about 21 hours of scheduled work. In addition, each scheduled hour typically requires an extra hour of unscheduled work (e.g. writing up lecture notes, preparing for a tutorial, finishing off a laboratory exercise etc.).

Your selection of compulsory and optional course units depends upon your registered Degree Programme as described in the Undergraduate Syllabus.

2nd Year

The number and size of course units is similar to the first year except that the practical work is organised as a separate course unit. You should take 60 credits of course units in each semester.

3rd Year

Most Computer Science course units consist solely of two lectures per week for one semester with no associated practical work. Some course units replace some of the lectures with a small amount of practical work. Single honours students take 9 taught units for 90 credits.

The Single honours [COMP30900](#) (30 credits) and [COMP37900](#) (40 credits) are expected to occupy four afternoons a week for twenty weeks. Each student is normally supervised by one member of academic staff; indeed the project supervisor acts as a 3rd year tutor to the student and should be met at least once a week. The project book gives full details of the projects on offer and is issued after the Easter vacation prior to entry to the 3rd year; project choice should be made before the summer vacation.

The balance of workload between Computer Science taught course units, project and other subjects for Joint Honours students is set out in the Undergraduate Syllabus.

The 3rd year workload may be adjusted for students for the Ordinary degree of BSc after consultation with the year tutor.

4th Year

Each taught MSc module normally occupies one day per week over a 6-week teaching block and involves substantial practical work. Students only undertake courses in the first three teaching blocks.

An industrial project (25 credits) is undertaken in the summer vacation after the end of the third year. This is formally assessed after the first teaching block, mainly by a seminar and report. Full time project work for 6 weeks on a group business feasibility investigation follows the third teaching block.

4.2.2 External Options for Single Honours Students

1st Year

You are permitted to take the equivalent of at most two 10 credit course units (one per semester), from other Schools. Students should consult their year tutor on such choices.

2nd Year

As in the first year, you are permitted to take the equivalent of at most two level 1 or level 2 10 credit course units from other Schools. Students should consult their tutor on such choices.

3rd Year

As in the first and second year, you are permitted to take the equivalent of at most two level 2 or level 3 10 credit course units from other Schools. It is not possible to take level one (first year) course units in the final year. Students should consult their tutor on such choices.

Students on joint honours programmes are usually required to choose course units only from the participating Schools, as set out in the Undergraduate Syllabus.

4.2.3 Course Unit Choices

The detailed requirements for course unit choices for each degree programme are set out earlier in this handbook. An initial choice is made before or at School Registration. After that changes can be made as follows:

1. The deadline for changing course units in each semester is two weeks after lectures start. Normally, no changes of course unit will be permitted after these dates.
2. In the first instance, you should discuss any plan to change course units with one of your tutors. You must check that the new course unit you wish to take is a valid option for your degree programme and find out if there are likely to be any timetable problems. If there are timetable clashes this will probably prevent you from changing course unit.
3. You should register your course unit choices within the University online Campus Solutions Systems [<http://www.studentnet.manchester.ac.uk/selfservice/>]. If you do not enter the correct course units on Campus Solutions you will be entered for the wrong examinations. If you have any difficulties choosing course units please e-mail the Student Support Office (sso@cs.man.ac.uk).
4. If you wish to register for an external course unit from another School that is not in your optional list, you must consult your year tutor and obtain formal permission.
5. For the 2008/9 academic year, the following people are responsible:

Year	CS Programmes Year Tutor	Ex-Informatics Programmes Year Tutor
1st	Dr. Paul Nutter	Dr. Paul Nutter
2nd	Dr. Steve Pettifer	Dr Sandra Sampaio
3rd	Mr Toby Howard	Dr Chris Harrison
4th	Dr Linda Brackenbury	
'With IE'	Alex Walker	Alex Walker

4.3 How to change, interrupt or withdraw from a programme

If you are thinking of changing, or interrupting, a programme, you should first discuss this with your tutor or year tutor to seek advice and guidance, including to check that the desired change is possible. You should then obtain the relevant form, usually available on-line or from the School's Student Support office, and complete and return the form.

4.3.1 Transfer between Degree Programmes

1. Transfer to another degree programme at the end of the year is always conditional on successful completion of your present year.
2. If you are contemplating any change of degree programme, consult your primary tutor or the year tutor as soon as possible.
3. Some Local Education Authorities may refuse moves into MEng or 'with industrial experience', that is from 3 to 4 year courses, more than 15 months after the start of the course. The Student Services Centre can provide further information on this.

Some transfer rules are given below. Other transfers may be agreed but usually special Faculty permission is required for these.

Transfer Rules

At the start of the first year: Consult one of the admissions officers who will advise whether a change of degree programme is possible.

Into CS and CS with Industrial Experience: no general rule, each case is considered on its merits.

Into 'with industrial experience' at any time subject to at least 2nd class performance.

From 'with industrial experience' or MEng to BSc. At any time in first 2 years.

Into M Eng programmes: from a related Honours School at the end of first or (second) year provided required options have been taken, a minimum 2.1 standard attained and a suitable industrial summer placement has been obtained.

Into CM: at end of successful first year in any honours school which offers an appropriate preparation.

Into Maths: at end of first year from CM, with both Schools' consent.

From Joint Honours: Into CS: joint honours can transfer into CS at the end of the first year provided they demonstrate some competence at [COMP10031](#), usually by taking the January or September exam informally.

4.3.2 Interruption or Repetition of Degree Programmes

Any interruption (taking a year out) or repetition (repeating a year) of your degree programme requires special permission from the School. Regulations state that an Honours degree is a continuous 3- (or 4-) year period of study. Permission will only be granted if good reasons are given. A written case with supporting evidence must be presented.

The application form, together with guidelines for repeating the year, can be found at: http://intranet.cs.man.ac.uk/Study_subweb/Ugrad/interrupts/

Reasons might include a year of industrial experience or prolonged illness. Consult your year tutor for advice.

4.3.3 Withdrawal from Degree Programmes

If you are contemplating withdrawing from your degree programme, please discuss the situation with your personal tutor or year tutor at the earliest opportunity.

Students who have passed their exams in the First Year of one programme and decide that they wish to start a programme in another School or University as a First Year student may do so. The Awards Office must be informed and the LEA will require a statement from the Head of School that the change of programme is recommended on educational grounds.

You must notify the Director of Undergraduate School, School of Computer Science, in writing if you actually withdraw. Your letter must give your last date of attendance at the University. It should also give your reasons for withdrawing and your future plans if known. A withdrawal form can be obtained from the Student Support Office (LF21) and there is also a copy on page 64.

The University Academic Advisory Service based in the Williamson Building, will give advice to students on complete changes of degree programme or University (0161 275 3033).

Alternative Awards

If you withdraw from your degree programme you may be eligible for an alternative award.

The award of the Certificate of Higher Education requires 120 credits , with at least 100 credits at level 1 or above.

The award of the Diploma of Higher Education requires 240 credits , with at least 100 credits at level 2 or above.

5 STUDENT SUPPORT AND GUIDANCE

5.1 Student Support Office

The School Student Support Office (LF21) deals with all routine undergraduate enquiries. Problems which cannot be dealt with by the staff in that office will be referred to an appropriate member of academic staff.

5.1.2 Official Documents

Official documents, such as Council Tax exemption letters, confirmation of attendance or fees, and official academic transcripts are produced by the Student Services Centre, Burlington Street (<http://www.campus.manchester.ac.uk/ssc/officialdocuments/>)

5.1.3 Campus Solutions

Campus Solutions is the University's Student System which allows you to register, academically and financially online.

Course units should be selected on this system so that you are entered for the correct examinations. Any problems you meet registering your course choices with either of these systems should be reported to the Student Support Office (sso@cs.man.ac.uk) as soon as possible.

Contacts

Academic and financial registration
Log in problems
Payment and Advice

Student Services Centre
(0)161 275 5000 (Option 2)
(0)161 275 2350
ssc@manchester.ac.uk

Course Units:

Jean Davison, Undergraduate Assistant
Gavin Donald, Undergraduate Assistant
Kath Mullins, Undergraduate Administrator
(sso@cs.man.ac.uk)

5.2 Tutoring arrangements

Some of your course units will have tutorials. At the tutorial meetings you will be expected to discuss topics on a course unit and to run through exercises. There will be an opportunity for you to ask questions on matters you don't understand. It is important that you prepare for tutorials in order to gain full benefit from them.

During the first and second years, you will be assigned a primary (or personal) tutor with a small group of students. You will have regular scheduled tutorial meetings, usually weekly or fortnightly, mostly undertaking specific work from course units. In the third year, your personal tutor is your project supervisor, whom you will meet regularly as part of your project work. Your primary tutor is here to help you in your way through university life. S/he will watch your progress and offer help and advice where necessary. If you get into difficulties you should contact your primary tutor or visit the advice service at the earliest possible opportunity. Don't let things slide until it is difficult to retrieve

the situation, especially if you are getting behind with your work. Your primary tutor will also advise on your choice of course units, on School or university procedures and will supply references for jobs and other purposes.

Course lecturers are always available to discuss questions or problems with the course unit material. If you call at an inconvenient time they may arrange an appointment at another time.

Questions which cannot be resolved by one of your tutors may be referred to the year tutor. The names of these tutors are listed at the end of this booklet.

5.3 Mitigating Circumstances

It is important that any matter that affects your ability to work is notified to the School - through the Student Support Office, your primary tutor or through the advice service. The following are examples of matters that may affect your work: illness (see Section 8.2), personal or family difficulties (including illness in the family) or financial problems. In assessing your performance, the School has a policy of trying to compensate for difficulties you have encountered whilst studying. We can only do this if we are notified of difficulties and have some idea of their seriousness and extent, together with supporting evidence.

After the May examination period a Mitigating Circumstances Committee, consisting of a small number of academic staff, meets and carefully considers all submissions in confidence. It then makes a recommendation to the Exam Board solely in terms of any adjustment to the marks of a student. Any details of the circumstances are not revealed.

If you wish this committee to consider your case you **must** complete a Mitigating Circumstances form, available from the Student Support Office or at the following address:

http://www.cs.manchester.ac.uk/Study_subweb/Ugrad/

The deadline for submitting mitigating circumstances in 2008/09 is **11th June 2009**. The Committee is unable to consider your special circumstances unless you have submitted a Mitigating Circumstances Form.

University Policy on mitigating circumstances

The University publishes guidance for students on its policy regarding mitigating circumstances which can be found at:

<http://www.staffnet.manchester.ac.uk/policies/display/index.htm?id=122614&off=RegSec->AcaReg->TLAO>

We reproduce these guidelines below.

What is mitigation?

- 1.1 Sometimes circumstances or events beyond your control may adversely affect your ability to perform in an assessment to your full potential or to complete an assignment by the set deadline. In such cases **mitigation** may be applied, i.e. treating marks or results in a way that recognizes the adverse impact that may have resulted from those circumstances or events, or waiving penalties that would arise from late submission.
- 1.2 Mitigation **will not result in the changing of any marks**, unless penalties for late submission are waived after an assignment has already been marked. Instead, mitigation may result in some marks being disregarded and the assessment being excused because it was adversely affected. You may also be given a mark for a whole unit based on your performance in the parts that were not adversely affected. Mitigation may also mean treating your overall performance as borderline even though the marks you obtained would not normally be high enough, and so considering you for a more favourable result such as a higher degree class.

Approaching your School

- 2.1 Your School will normally grant an extension for self-certified illness within two weeks before a submission deadline. You should approach the appropriate officer in your School as soon as possible if you consider that some serious illness or misfortune has adversely affected your ability to complete one or more assignments even within the extended deadline, or if you believe that the results you might obtain from one or more assessments will be adversely affected.
- 2.2 You should first seek advice from the officer as to whether the adverse circumstances are sufficient to warrant consideration by your School's Mitigating Circumstances Panel. You should also seek advice as to whether it is in your interest to consider alternative remedies such as a deadline extension, re-scheduling of an assessment within a current assessment period, or sitting an examination at the next available opportunity. In very serious cases, you might even be best advised to interrupt your studies for a period.

Nature of mitigating circumstances

- 3.1 It is important to remember that, in order to qualify for consideration, the adverse circumstances or events must be *unforeseeable* or *unpreventable* as far as you are concerned, and sufficiently disruptive to have a *significant adverse* effect on your academic performance or your ability to complete assignments by the due date.
- 3.2 ***Circumstances or events that merit consideration*** may include: suffering a serious illness or injury; the death or critical illness of a close family member; a significant family crisis leading to acute stress; and unplanned absence arising from such things as jury service or maternity, paternity or adoption leave.
- 3.3 ***Circumstances or events that would not normally merit consideration*** include: holidays or other events that were planned or could reasonably have been expected; assessments that are scheduled close together or on the same day; misreading the timetable for examinations or otherwise misunderstanding the requirements for assessment; inadequate planning or time management; failure, loss or theft of a computer or other equipment, including inability to print off work for whatever reason; consequences of paid employment (except in some special cases for part-time students); exam stress or panic attacks not diagnosed as illness; and minor disruption in an examination room during the course of an assessment.

Claiming mitigation

- 4.1 If the School Officer confirms that your circumstances merit consideration by the School Mitigating Circumstances Panel, you should complete the attached ***Notification of Mitigating Circumstances*** form. This should be handed in to the School as soon as possible, together with independent third-party supporting or corroborative documentation. The nature of such documentation will vary according to the nature of the circumstances, but it must sufficiently independent to confirm the veracity of the case you are making (e.g. a letter or medical certificate signed by a medical practitioner, a document from an outside agency etc.). Information of a confidential nature should be included in a sealed envelope.
- 4.2 You must submit the form *as soon as possible and always before the beginning of an examination period* (except for circumstances arising during the course of that assessment period, in which case the application must be made in time for consideration before the relevant meeting of the Board of Examiners). *Late requests for mitigation* will not be considered without a credible and compelling explanation as to why the application was not made at the appropriate time. Requests made after the publication of results will be treated as appeals under Regulation XIX, but again there should be a credible and compelling explanation as to why you did not bring the circumstances to the attention of your School at an earlier stage.
- 4.3 The School Mitigating Circumstances Panel will need to agree that your circumstances were *unforeseeable* and *unpreventable* and that the effect on your academic performance would have been significant. If so, it will advise the Board of Examiners how serious it judges the effect was,

and the Board will then decide how to apply mitigation, on the evidence available on your performance (coursework marks and examination marks either for individual course units or for the assessment period as a whole, as appropriate). Mitigation will depend on how serious the adverse circumstances were and how far you are from any borderline on the basis of the existing mark, or profile of marks: the farther you are from a borderline, the more serious the adverse circumstances need to be to change the Board's overall decision. However, even if the decision does not change, a note will be added to the relevant marks on any transcript you receive to indicate that the assessment was subject to circumstances that may have had an effect on your performance.

5.4 PEER ASSISTED STUDY SESSIONS (PASS)

Aims:

- To enhance the quality, quantity and diversity of Student Learning within a School
- To provide you with a supportive environment to work through issues relating to their academic course
- To involve you as partners in the learning experience

Some of the many benefits to you involve:

- Training in facilitation and a certificate from the University
- Improved Communication skills
- Organisation and Time Management Skills
- Greater understanding of your academic subject and improved exam performance
- Improved cv and something to talk about at job interviews!

Details regarding PASS can be found at:

<http://www.cs.man.ac.uk/~embury/Teaching/PASS/>

5.5 Students Union

<http://www.umu.man.ac.uk/>

5.6 Student Support Services

Student Support Guide

<http://www.campus.manchester.ac.uk/studentsupportandservices/CrucialGuide/index.htm>

5.6.1 Advisory Service

The student advisory service is available daily to all students in the Computer Science School (including both single and joint honours, M Sc and Ph D students).

Time: 1.30 p.m. to 2 p.m. every Mon/Tues/Thur/Fri during term

Place: Nominated advisor's office – see rota at:

http://intranet.cs.man.ac.uk/Intranet_subweb/studentadvisory/

The service offers advice on School and university matters and help with anything that concerns you, whether in your studies, in the School, in the university or in your life outside the university. Each day a member of staff is available with knowledge of the School and university and who is willing to listen and help with whatever you bring along.

- All visits to the advice centre are strictly confidential.

- If you have difficulties with material on particular course units you should normally first approach your tutors (or lecturers/project supervisors). You may also consult your tutors on more general matters but you can equally well call in at the advice centre.
- If you have health problems you are welcome to consult an advisor in the School but may prefer to go directly to your doctor.

If you wish to contact one of the Advisors at any time other than in a lunchtime session, please do so. Feel free to make use of this service at any time on any matter. Don't let things stew - just call in for a chat and you will be assured of a friendly welcome.

5.6.2 Students with Disabilities

The School of Computer Science is committed to supporting students with disabilities and specific learning difficulties. We have a School Disability Co-ordinator, Dr Ning Zhang, who works closely with the University's main Disability Support Office. If you have any questions or would like to discuss anything to do with School support, Ning can be contacted by telephone (0161 275 6117) or email (nzhang@cs.man.ac.uk).

5.6.3 Academic Advisory Service

The University of Manchester Academic Advisory Service is a service of information and advice open to all University of Manchester students, who can use the service at any time. The advisers have extensive experience of dealing with student problems and offer confidential advice on any matters relating to students' academic work. Location: Second Floor, Williamson Building. Telephone: 0161 275 3033.

6 STUDENT REPRESENTATION AND FEEDBACK

6.1 Representation at programme, School and Faculty level

6.1.1 Staff Student Consultative Committee

Student representatives are elected onto the School Staff Student Consultative Committee at the start of the session. Any student may stand for election to the SSCC, and elections are held at the start of each academic year. The committee meets at least three times each year and may discuss any matter of concern which cannot be resolved informally. The staff members of the committee are the members of the School undergraduate committee, principally the year tutors.

There is also a Faculty Staff Student committee on which the School has one staff and two student representatives.

6.1.2 Role of the Staff Student Consultative Committee

Feedback from students on units and teaching has always been valued by us, particularly for the role it plays in ensuring and enhancing the overall quality of degree provision. The Staff Student Consultative Committee provides a forum for staff and students to discuss issues relating to a degree programme or a school. It is important because:

- It provides a unique forum of staff and students for the discussion of new ideas and for solving problems;
- It forms the basis for the representation of students' views within the department;
- It is a formal means of gauging student opinion on academic matters including degree programmes and syllabuses and form part of a school's quality assurance and enhancement procedures;
- It allows specific academic or environment problems to be raised, for example, with particular course units, or problems with the buildings or equipment
- It provides an opportunity for students to learn about and contribute to the development of quality assurance and enhancement procedures in their department.

http://intranet.cs.man.ac.uk/csonly/committees/C_Undergraduate_SSCC.php

6.1.3 Role of the Undergraduate Committee

The Undergraduate Committee is responsible for all undergraduate courses as authorised by Senate, including conduct of examinations, allocation of duties for lectures, laboratories and tutorials, monitoring of student progress and development of the curriculum. Feedback from the SSCC is discussed at this Committee.

The Committee is chaired by the Director of the Undergraduate School and comprises the Year Tutors, Laboratory Managers and Programme Tutors (for Joint Honours) the Undergraduate Administrator and the Undergraduate Examinations Administrator. Other academic staff with undergraduate responsibilities attend by invitation.

There is also an Admissions Group (which discusses matters relating to Admission and recruitment of students) and a Tutors group (which mainly discusses matters relating to Work and Attendance of students). Both of these groups report to the Undergraduate Committee.

6.2 Mechanisms for collecting and reporting back on feedback from students

6.2.1 Course Evaluation Questionnaires

The School attaches great importance to the opinion of students on the quality of the teaching provided, and every student is asked to complete a Course Evaluation Questionnaire for each course unit, for the laboratories and for the tutorials. The questionnaires are anonymous.

6.3 Other Committees

The School Board, which meets every six weeks during term time, has a mainly advisory role. Academic staff are full members of the Board. Some student representatives, selected from the elected members of the Staff Student Committee, are also invited to attend.

6.3.1 Computer Science Social Committee (CSSC)

The CSSC is a social committee formed by and run for computer science students. The main aims are to encourage socialising within the school and interaction with other schools. So far we have successfully organised several popular events and we have even won awards for our achievements.

For more information email cssc@cs.man.ac.uk or see: <http://intranet.cs.man.ac.uk/csonly/cssc/>

6.3.2 School Computer Society

This is run and organised by students. It arranges various activities from time to time. See the notice board on the Lower First Floor for more details.

Further information regarding student representation policy and guidance can be found at the following address:

<http://www.campus.manchester.ac.uk/medialibrary/tlao/Student%20Rep%20policy%20&%20guidelines%20April06.doc>

7 LEARNING RESOURCES AVAILABLE WITHIN THE SCHOOL AND FACULTY

7.1 Resource Centre

Photocopy facilities are available in the Resource Centre, Room LF21. Photocopy cards may be purchased at a cost of £3 per 100 copies.

Each student has a printing allocation each year; additional printing quota can be purchased from the Resource Centre (see Section 7.3).

Reference copies of textbooks are available for consultation. The Resource centre holds short loan copies of undergraduate textbooks. Lending copies of textbooks are available in the John Rylands University Library.

Hard-copy of assignments should be handed in via the locked boxes in the Resource Centre, unless directed otherwise by the individual course unit leader. Generally, electronic copy will also be required to be submitted.

Copies of the previous week's tutorial solutions are also available, as is the facility for collection of lecture notes, slides and manuals.

7.2 Computers

At registration you will be required to assent to the following School code of behaviour which relates to the responsible use of Computer equipment. Misuse of the facilities is regarded as a serious disciplinary offence.

This code of practice is supplementary to Faculty of Engineering and Physical Science and University regulations concerning the use of computing equipment to which you are required to assent at Registration.

You are also bound by relevant legislation, including the Computer Misuse Act 1990.

1. You have been allocated one or more usernames for your own personal use: you must not use other usernames or permit other people to use your username. You must not use computers to which you have not been granted access, or attempt to access information to which you have not been granted access.
2. You must not deliberately hinder or annoy other computer users.
3. You must not use machines belonging to the School for commercial purposes without the prior written permission of the Head of School. You must not sell the results of any work you do using School facilities without the prior written permission of the Head of School.
4. You must not write or knowingly store, on machines belonging to the School, software which, if executed, could hinder or annoy other users, except with the prior written permission of the Head of School.
5. You must not make an unauthorised copy, in any form, of copyright software or data.
6. You must not store personal information, except in a manner permitted by the Data Protection Act 1998.

7. You must follow all rules, regulations and guidelines imposed by the Faculty of Engineering and Physical Sciences and the University in addition to the School's Code of Practice.

Explanatory Notes

The following notes indicate ways in which the Code of Practice applies to undergraduate use of computers. It is not intended to be a complete list of possible abuses of the equipment. Each note refers to the corresponding paragraph above.

1. Undergraduate students are not normally granted access to the computers in the research network, or to other students' files. You should not attempt to use another student's account even if they have not set a password. Of course, it is still important to set a password for your own privacy and security.
2. This will be interpreted very broadly. It includes:
 - Tampering with another user's files.
 - Tampering with another user's screen.
 - Setting up processes which persist after you log out and annoy subsequent users of the machine.
 - Broadcasting of offensive messages.
 - Display or storage of offensive pictures.
 - Abuse of the mail system. Guidelines on sensible use of electronic mail are published separately.
 - Occupying a machine to play games while other students need it to do their laboratory work.
3. Clearly the Head of School would have to be convinced that any such use of the machines would not conflict with their primary purpose.
4. Note carefully that this means you are not allowed to write or introduce a virus program, even if it is never executed.
5. Note that this does not prevent your taking copies of your laboratory work home, or making copies of non-copyright material, but does prevent your taking random pieces of software away on a floppy. You should assume that all material is copyright unless it specifically states otherwise. If in doubt, ask.
6. Personal information includes names, addresses, mailing lists, "dating agency" information etc. You should contact the Data Protection Officer, Mrs C. Dickinson, if you need to store such information.
7. In fact, you agreed to abide by the University and Faculty rules when you registered. For instance, the University statutes state:

"The Senate shall have power to suspend or to exclude from courses or examinations or to impose a fine or other lesser penalty upon any student reported by the Vice-Chancellor or by a committee empowered by the senate to investigate and report on such matters to have been guilty of misconduct or breach of discipline." (Statute XX, paragraph 2)

Please direct queries concerning the code of practice to the Director of the Undergraduate School.

7.2.1 Electronic Mail

Electronic mail is used widely for administrative purposes within the School. It is frequently useful for communicating between individuals and small groups (e.g. between a tutor and his/her tutorial group), and occasionally for broadcasting important messages to wider groups. It is important that you know how to use email. It will be covered in the introductory lab sessions. The code of practice for computer usage covers electronic mail, please note the points below.

You should read your mail regularly, at least once a day, preferably more frequently.

Obscene or offensive mail

DO NOT SEND OBSCENE OR OFFENSIVE MAIL. If you receive mail which you regard as offensive or obscene, you may wish to complain to a member of staff so that appropriate disciplinary action can be taken against the offender.

Group mailing

You are strongly discouraged from sending email to groups of people. The Forums such as Moodle should be used for this purpose.

Miscellaneous hints

- Be brief.
- Compose your message as if ALL of your recipients were physically present.
- Limit the distribution of messages to the people who are likely to be interested. You can find out email addresses either from the staff lists in this Handbook, or by using the Linux utility 'csinfo' which gives details of all people with an SCS user account.
- Keep a copy of the mail you send out, for future reference. Learn to use folders to keep useful messages.
- Read all your incoming mail before replying to any of it. There may be other relevant messages for you to read.
- Be careful when replying to messages. You probably want your reply to go only to original message sender - not to the whole of the distribution list.
- When you reply to a message, it is frequently helpful to include some of the original message to help your recipients to remember and understand the context of the reply.

7.3 Other facilities/resources as appropriate

Support for Computer Equipment

Students are encouraged to own their own machines and the School tries to offer as much support as possible. Please note, however, that you are NOT REQUIRED to own your own computer. The School has excellent facilities and undergraduate students are allowed to use the facilities of the Computer Science building whenever the building is open. See section 1.7 for opening hours.

Printing

According to the programme on which you are registered, you will be given an annual allowance for computer printout in the School for coursework printing, which may be revised year-on-year. When your allowance is exhausted, you may purchase additional printing from the duty office (dutyoffice@cs.man.ac.uk) at a cost of £5 per 100 sheets (minimum purchase £1 for 20 sheets).

For 08/09, the printing charges are:

4 th Year MEng students:	500 pages per annum
Single Honours and MEng students years 1 – 3:	400 pages per annum
CSwBM students:	330 pages per annum
CM students:	250 pages per annum
External students, including ABIS:	40 pages per 10 credit course unit

Software Links

Details of software available on Computer Science machines and links to documentation and supporting information can be found at the following: <http://www.cs.manchester.ac.uk/software/>.

7.4 URLs for University-wide learning resources

Academic Advisory Service

<http://www.manchester.ac.uk/academicadvisoryservice>

Tel: 0161 275 3033

caas@manchester.ac.uk

(Campus map ref: 53)

Computing Services

<http://www.itservices.manchester.ac.uk/>

John Rylands University Library of Manchester

<http://www.library.manchester.ac.uk/>

Tel: 0161 275 3738

Fax: 0161 273 7488

(Campus map ref: 56)

8 FURTHER INFORMATION AND REGULATIONS

8.1 University ordinances and regulations

You can read the University Ordinances at the following address:

<http://www.manchester.ac.uk/medialibrary/governance/ordinances.pdf>

You can read the University General Regulations at the following address:

<http://www.manchester.ac.uk/medialibrary/governance/generalregulations.pdf>

8.2 Reporting of Ill Health

Absence through illness must be reported to the School office in writing using the "Certification of Student Ill Health" form available from the Student Support Office (room LF21). See also Section 5.3 re Mitigating Circumstances.

- a. It is a requirement of your registration with the University of Manchester that you register with a local general practitioner. A list of GP practices can be obtained from the Student Health Centre, any University hall of residence or a local Pharmacy. According to guidance issued by the General Medical Council it would not be regarded as good practice for a family member to be the registered GP or to offer treatment except in the case of an emergency.
- b. **You should always consult your GP (or for emergencies the Accident and Emergency Department of a hospital) if your illness is severe, if it persists or if you are in any doubt about your health.** You should also consult your GP if illness keeps you absent from the University for more than 7 days including week-ends. If you do consult a GP and they consider that you are not fit for attendance at the University, then you should obtain a note from the doctor to that effect or ask them to complete Part III of the University form 'Certification of Student Ill Health' copies of which are available at local GP surgeries. You should hand this certificate to the Student Support office (LF21) at the earliest opportunity.
- c. If your condition is not sufficiently serious to cause you to seek medical help, then the University will not require you to supply a doctor's medical certificate unless you are absent from the University due to illness for more than 7 days (in which case see b. above). You **must** however contact your School as soon as possible and self-certify your illness (that is complete and sign the "Certification of Student Ill Health" form to state that you have been ill) as soon as you are able to attend your School. You should do this if your illness means you are absent from the University for any period up to 7 days (see d.i) or if you are able to attend the University but your illness is affecting your studies (see d.ii and iii).
- d. The following sub-paragraphs explain what you should do if your illness affects your attendance at compulsory classes or if you consider that your performance in your studies/examinations has been impaired.
 - i) If you are unwell and feel unable to attend the University to take a compulsory class, assessment or examination then you must seek advice by contacting your School immediately, in person, through a friend or family member, by telephone or by email (see contacts list in Appendix 1). This is to ensure that you understand the implications of being absent and the consequences for your academic progress, which might be quite serious. **You must do this as soon as possible so that all options can be considered and certainly no later than the day of your compulsory class, assessment or examination.** If you do not do this then you will normally be considered have been absent

from the class without good reason, or to be have taken the assessment or examination in which case you will be given a mark of zero. You must also complete and hand in a "Certification of Student Ill Health" form on your return.

- ii. You may be unwell but are able to proceed with an assessment or examination and yet you feel that your performance will have been impaired. If you wish this to be taken into account as an extenuating circumstance, you **must** inform your School about this on the day of the assessment or examination and hand in to your School completed "Certification of Student Ill Health" and Mitigating Circumstances forms. If you leave this until later it will not normally be possible to take your illness into account when assessing your performance.
- iii. If, as a consequence of your illness, you wish to seek an extension to a deadline for submitting assessed lab or coursework, you **must** complete a "Certification of Student Ill Health" form and discuss it with the appropriate lab manager. The application for extension must be made BEFORE, the deadline and not retrospectively.
- iv. You may be under occasional and ongoing medical attention which affects your studies. If so, you should obtain a letter from your physician which should be given to the School office together with a Special Circumstances form before the end of the January. May/June or August/September examination period, as appropriate, if you wish your condition to be taken into account as extenuating circumstance.

Notes:

- i) Certification of Student Ill Health forms are available in from the Student Support Office and halls of residence.
- ii) Your year tutor will give you guidance on the effect of any absence from your studies or if you consider your illness has affected your studies. If you have repeated episodes of ill health which is affecting your studies, your School may refer you to the Student Health Centre.
- iii) If you are found to have been deceitful or dishonest in completing the Certification of Student Ill Health form you could be liable to disciplinary action under the University's General Regulation: Conduct and Discipline of Students.
- iv) The use of the "Certification of Student Ill Health" forms by GPs as described above has been agreed by the Manchester Local Medical Committee. A GP may make a charge for completing the form.

APPENDIX 1 – CONTACT DETAILS

Teaching Staff

More up-to-date information may be available from the School Web Pages or by using the command csinfo.

<u>Members of Staff</u>	<u>Room No</u>	<u>Phone No</u>	<u>E-Mail</u>
Prof Peter Aczel	2.52	56155	PHGA@cs.man.ac.uk
Prof Howard Barringer	2.22	56248	HB@cs.man.ac.uk
Prof Andy Brass	2.87	55096	AMB@cs.man.ac.uk
Prof Carole Goble	2.28	56195	CAG@cs.man.ac.uk
Prof Steve Furber	IT208	56129	SBF@cs.man.ac.uk
Prof John Gurd	2.123	56964	JRG@cs.man.ac.uk
Prof Roger Hubbard	2.96a	56158	RJH@cs.man.ac.uk
Prof John Keane		63334	JAK@cs.man.ac.uk
Prof Norman Paton	2.30	56910	NWP@cs.man.ac.uk
Prof Allan Ramsay	1.8 (Lamb)	63108	ramsay@cs.man.ac.uk
Prof Alistair Rawsthorne	LF27	56161	AR@cs.man.ac.uk
Prof Alan Rector	2.88a	56188	ALR@cs.man.ac.uk
Prof Chris Taylor	2.125	56154	CJT@cs.man.ac.uk
Prof Jun'ichi Tsujii		65847	tsujii@cs.man.ac.uk
Prof Andrei Voronkov	2.46	56116	AV@cs.man.ac.uk
Prof Ian Watson	IT413	56247	IW@cs.man.ac.uk
Dr Sophia Ananiadou		63092	SA@cs.man.ac.uk
Dr Richard Banach	2.99	55720	RHB@cs.man.ac.uk
Mr Sean Bechhofer	2.14	56282	SB@cs.man.ac.uk
Dr Linda Brackenbury	IT414	56118	LEMB@cs.man.ac.uk
Dr Andy Carpenter	2.119	56168	AFC@cs.man.ac.uk
Dr Barry Cheetham	IT403	54534	BMC@cs.man.ac.uk
Dr Ke Chen	1.23 (Lamb)	64565	KCHENB@cs.man.ac.uk
Dr Tim Cootes	ISBE(Stopford)	55146	cootes@cs.man.ac.uk
Dr Doug Edwards	IT210	56191	DAE@cs.man.ac.uk
Dr Suzanne Embury	2.105	56128	SME@cs.man.ac.uk
Dr Alvaro Fernandes	2.36	56199	AF@cs.man.ac.uk
Dr Nick Filer	IT415	56171	NPF@cs.man.ac.uk
Dr Len Freeman	IT404	57190	TLF@cs.man.ac.uk
Dr Aphrodite Galata	2.101	56146	AG@cs.man.ac.uk
Dr Jim Garside	IT211	56143	JDG@cs.man.ac.uk
Mr Graham Gough	2.115	56277	GDG@cs.man.ac.uk
Dr Jim Graham	ISBE(Stopford)	55150	JG@cs.man.ac.uk
Dr Simon Harper	2.44	50599	SH@cs.man.ac.uk
Dr Christopher Harrison	1.21 (Lamb)	63316	harrison@cs.man.ac.uk
Dr Ernie Hill	IT118	54552	EWH@cs.man.ac.uk
Mr Toby Howard	2.93	56274	TLJH@cs.man.ac.uk
Mr Pete Jinks	2.72	56186	PJJ@cs.man.ac.uk
Dr Chris Kirkham	IT204	56221	CCK@cs.man.ac.uk
Dr John Latham	2.81	56250	JTL@cs.man.ac.uk
Dr Kung-Kiu Lau	2.103	55716	KKL@cs.man.ac.uk
Dr David Lester	IT203	55726	DRL@cs.man.ac.uk

Dr John McNaught		63098	JM@cs.man.ac.uk
Dr Milan Mihajlovic	IT202	55722	MDM@cs.man.ac.uk
Dr Jim Miles	IT114	54554	JJM@cs.man.ac.uk
Dr Tim Morris	1.26 (Lamb)	63376	DTM@cs.man.ac.uk
Dr Goran Nenadic		65936	GN@cs.man.ac.uk
Dr Richard Neville	1.6 (Lamb)	63317	rneville@cs.man.ac.uk
Dr Paul Nutter	IT112	55709	PWN@cs.man.ac.uk
Dr Steve Pettifer	2.95	56259	SRP@cs.man.ac.uk
Dr Ian Pratt-Hartmann	2.38	56223	IEP@cs.man.ac.uk
Dr Magnus Rattray	2.40	56187	MAGR@cs.man.ac.uk
Dr David Rydeheard	2.115	56164	DER@cs.man.ac.uk
Dr Rizos Sakellariou	2.109	56257	RIS@cs.man.ac.uk
Dr Sandra Sampaio	1.12 (Lamb)	63305	ssampaio@cs.man.ac.uk
Dr Uli Sattler	2.32	56176	US@cs.man.ac.uk
Dr Jon Sargeant	2.69	55704	JS@cs.man.ac.uk
Dr Andrea Schalk	2.66	56174	ACS@cs.man.ac.uk
Dr Thierry Scheurer	1.7 (Lamb)	63360	scheurer@cs.man.ac.uk
Dr Renate Schmidt	2.42	56163	RENS@cs.man.ac.uk
Dr Jon Shapiro	2.34	56253	JLS@cs.man.ac.uk
Dr Robert Stevens	2.91	56251	RDS@cs.man.ac.uk
Ms Alex Walker	2.76	56127	ACW@cs.man.ac.uk
Dr Xiao-jun Zeng	1.11 (Lamb)	63362	XZ@cs.man.ac.uk
Dr Ning Zhang	2.113	56117	NZ@cs.man.ac.uk
Dr Liping Zhao	1.20 (Lamb)	63340	LZ@cs.man.ac.uk

Administrative Contacts

Student Support Office

Gill Lester	Manager, Student Support Office	LF21	glester@cs.man.ac.uk
Kath Mullins	Undergraduate Administrator	LF21	kath@cs.man.ac.uk
Jean Davison	Undergraduate Assistant	LF21	jeand@cs.man.ac.uk
Gavin Donald	Undergraduate Assistant	LF21	gdonald@cs.man.ac.uk
Jennie Ball-Foster	Examinations and Quality Assurance Administrator	LF21	jbf@cs.man.ac.uk
Michael Evans	Examinations and Quality Assurance Assistant	LF21	mevans@cs.man.ac.uk

APPENDIX 2 – UNIVERSITY STUDENT SUPPORT SERVICES

Accommodation

Accommodation Office

<http://www.accommodation.man.ac.uk/>

Tel: 0161 275 2888

Fax: 0161 275 3213

accommodation@manchester.ac.uk

Manchester Student Homes

<http://www.manchesterstudenthomes.com/>

Tel: 0161 275 7680

Fax: 0161 275 7684

info@msh.manchester.ac.uk

(Campus map ref: 32)

Careers

The Careers Service

<http://www.graduatecareersonline.com/>

Tel: 0161 275 2828

(Campus map ref: 33)

Childcare

Dryden Street Nursery

Tel: (0161) 272 7121

Echoes Nursery

Tel: (0161) 306 4979

Counselling Service

<http://www.intranet.man.ac.uk/counselling/>

Tel: 0161 275 2864

counsel.service@manchester.ac.uk

(Campus map ref: 33)

Disability Support

<http://www.manchester.ac.uk/disability>

Tel: (0161) 275 7512

Minicom: (0161) 275 2794

Text: 07899 658790

Fax: 0161 275 7018

disability@manchester.ac.uk

English Language Support

University Language Centre (<http://www.langcent.manchester.ac.uk/>)

englang@manchester.ac.uk

Equality and Diversity Unit

Tel: (0161) 200 8896
equalityanddiversity@manchester.ac.uk
(Campus map ref 1)

International Students Welfare Team

<http://www.campus.manchester.ac.uk/ssc/internationalteam/>
Tel: (0161) 275 2196
Fax: (0161) 275 2058
iswu@manchester.ac.uk

Nightline

Tel: 0161 275 2983/4

Religious Support

Details of services, facilities and all places of worship (Christian and non-Christian) adjacent to the University are available at:

St. Peter's House
<http://www.stpeters.org.uk/>
Tel: 0161 275 2894

Roman Catholic: Avila House
<http://orgs.man.ac.uk/Catholic/>
Tel: 0161 273 1456

Hilel House
Tel: 0161 226 1139

Sport

<http://www.sport.manchester.ac.uk/>
Tel: 0161 275 6991
Fax: 0161 275 6992
uniman.sport@manchester.ac.uk

Student Services Centre

<http://www.manchester.ac.uk/ssc>
Tel: 0161 275 5000
Fax: 0161 275 7860
ssc@manchester.ac.uk

Student Health and Safety Services

<http://www.campus.manchester.ac.uk/healthandsafety/studentOH.htm>

Student Occupational Health Service, Waterloo Place:
Tel: (0161) 275 2858
(Campus map ref 38)

Students' Union Advice Centre

<http://www.umu.man.ac.uk/advice/>
Tel: 0161 275 2946/7

APPENDIX 3 – Practice approved by Faculty in respect of University Credits and Awards Regulations

The University Credits and Awards Regulations, which can be found at www.eps.manchester.ac.uk/informationforcurrentstudents, permits the Faculty to exercise discretion on a number of matters. The following table states the practice approved by the Faculty in respect of the programmes to which this handbook relates.

Para	brief description	permitted discretion	approved practice
3.	non-standard year	All years of study are 'standard years' and require successful completion of 120 credits except for:	No such variations.
4.	non-standard credit multiples	All course units are multiples of 10 credits or 10 or 15 credits at level 4 except for:	No such variations.
8.	non-standard programmes, degree of bachelor	<p>a. The listed programmes include a year in industry or a year in a university abroad and are of four years duration and require successful completion of 360 credits and the industrial placement.</p> <p>b. The listed programmes include non-standard years and the number of credits to be successfully completed is increased to:</p>	<p>All 'with Industrial Experience' programmes.</p> <p>No such variations.</p>
9.	non-standard programme, degree of master	<p>a. The listed programmes include a year in a university abroad and are of four years duration and require successful completion of [480][480 + credits from non-standard years] credits:</p> <p>b. the listed programmes include a year in industry and are of [four][five] years duration and require successful completion of [480][600][480 or 600 + credits from non-standard years] credits.</p> <p>c. the listed programmes include non-standard years and the number of credits to be successfully completed is increased to:</p>	None.
10.	longer programmes	Entry through the foundation year extends the total programme of study by one year and the total credit requirements by 120.	
16.	minimum study period	In every case the award of a qualification requires the final year of study to be taken within the Faculty of Engineering and Physical Sciences of The University of Manchester.	
17.	without interruption	<p>a. Interruption and any consequential extension to the period of study shall require permission of the Faculty.</p> <p>b. If permission is given for a period of study to be extended or for transfer to a different programme the regulations subsequently applied shall be those pertaining to the student cohort now joined whether more or less favourable.</p> <p>c. If permission is given for a period of study to be repeated the programme or the programme of study may have changed from that which has been or would have been studied and re-examination will relate to the current programme.</p>	
21.	non credit weighted marks	The listed years of study include non-credit weighted marks as stated:	None.
22.	masters progression	<p>a. The minimum mark for progression from year 2 to year 3 of the integrated masters programme shall be 60%.</p> <p>b. The minimum mark for progression from year 3 to year 4 of the integrated masters programme shall be 60%.</p>	

Para	brief description	permitted discretion	approved practice
23a.	compensation for joint progs	Programmes of two subjects in combination will, in addition to the requirement for progression across the year of study as a whole, normally require each subject to be separately passed with approximately two-thirds of the course units of each subject passed.	
23b.	progress in a foreign language	Progression on a programme which includes a period in a country speaking a foreign language requires reasonable progress to be made in the study of the foreign language	Not applicable.
23c.	units with non-standard compensation	The listed units have a minimum compensatable mark as stated:	CS1081 and CS1092 are each assessed by a 2-hour examination (50%) and laboratory (50%). Both components must be passed in order to pass the course unit.
23d.	non-standard compensatable proportion	For the listed programmes and years of study the proportion of the total credits that must reach the pass mark is increased as stated:	No such variations.
23e.	programmes with a year in industry	a. Progression on a programme which includes a year in industry requires a minimum overall mark of 50%. b. Progression to the year in industry normally requires the preceding year to be completed satisfactorily at the first attempt (i.e. without any resits).	
23f.	programmes with a year abroad	a. Progression on a programme which includes a year in an institution abroad requires a minimum overall mark as stated: b. Progression to the year in the institution abroad requires the preceding year to be completed satisfactorily at the first attempt (i.e. without any resits).	No such programmes.
24.	Reassessment	a. Compensation shall be available on reassessment and shall be applied in the same manner as on first assessment. b. There is a limited opportunity to improve laboratory based coursework during the summer vacation, up to a maximum of 40%. Any student wishing to take advantage of this must make arrangements with the 1st or 2nd year laboratory manager. c. Reassessment is not normally possible in any study taken in industry or at an institution abroad and subsequent progression will require transfer to an alternative programme of study. d. Examinations at levels 3 or 4 are set once only in any academic session and the consequence of failure to take such examination at the single opportunity available is severe. Permission would need to be sought under para 13, founded upon a legitimate circumstance, for an interruption and for the programme of study to be extended by one year or for graduation to be delayed until the examination is taken at the next opportunity.	
25.	Higher requirements of professional body	In the course units listed reassessment may be required to satisfy the requirements of the relevant professional body:	No such requirements.

Para	brief description	permitted discretion	approved practice
28.	The 'carrying' of credits	Students will normally be permitted to progress to year 2 or year 3 of the honours programme if they have achieved 110 credits in the preceding year and a minimum overall mark of 50% and will then study additional credits.	
29.	Re-start of year 1	Re-start of the programme of study shall require permission of the School in the case of failure and of the Faculty in all other circumstances.	This regulation gives the School the power to allow students to retake the first year. Students do not have a right to such a retake, which will only be granted in exceptional circumstances.
32.	Third class masters	In the programmes listed the integrated degree of master shall be awarded in the third class:	None.
34a.	Title of ordinary degree	The ordinary degree shall be awarded only with the titles stated: Computer Science	
34b.	Cert HE and Dip HE	The Certificate of Higher Education and the Diploma of Higher Education shall be awarded without a programme title.	
36.	Compensation for award of third class degree	In the programmes listed a mark not less than 40% in at least two-thirds of the credits in the final year is required for award of a degree in the third class.	None.
37.	Award of the next higher degree class	The external examiner shall advise on award of a degree in the next higher class in accordance with Method B.	
40.	Higher requirements of professional body	In the course units listed reassessment may be required to satisfy the requirements of the relevant professional body:	No such requirements.
	Degree classification	The overall mark for degree classification is a weighted aggregate of the overall marks for each year in the proportions stated:	For the following programmes: All 3-year programmes: Y1 = 0%, Y2 = 25%, Y3 = 75% All with Industrial Experience programmes: Y1=0%, Y2=25%, Y4 = 75% All M Eng programmes: Y1=0%, Y2=12.5%, Y3=37.5%, Y4=50%

APPENDIX 4 – Study Regulations

a. Interrupt a period of study

Paragraph 17 of the Regulation makes it explicit that the expectation is that study proceeds without interruption and that there is no right to an interruption. In order to interrupt, and hence to continue on the programme at some later date, a student must obtain permission. Such permission may be sought because of medical or severe personal or family difficulties, in order to undertake a period of study at a different institution or in order to gain industrial experience. Application for such permission should be made on the appropriate form available on the Faculty website and requires a recommendation of the programme director. In making the recommendation the programme director will supply a full record of academic performance to the Faculty. Applications should be made in advance except where this is not possible because of the nature of the medical or personal problems.

b. Repeat a period of study

Permission to repeat a period of study is given only in exceptional circumstances and requires permission of the Faculty when:

- an associated interruption is sought under paragraph 17,
- all allowable attempts have been taken under paragraph 24.

c. Studying in a different institution (not as part of a previously approved programme)

A student may be permitted to satisfy the credit accumulation and assessment requirements for not more than 120 credits of the programme concerned, other than in the final year, by satisfying appropriate requirements in another University or institution approved for the purpose by Senate and on a programme of study approved by the Faculty.

A candidate wishing to satisfy requirements in this way, not as a prescribed part of a programme, must:

- i. apply for permission in advance of any proposed period of attendance elsewhere;
- ii. satisfy the Faculty that the number and level of credits awarded will be equivalent to that which would have been studied had the period been spent at the University of Manchester;
- iii. before proceeding to the next stage of the programme present appropriate evidence of having satisfied all assessment requirements in respect of which permission has been given.

At the time of the application the programme director shall inform the Faculty and the candidate of the requirements for assessment and the consequences for classification of the subsequent University of Manchester degree.

d. Gaining relevant experience in employment institution (not as part of a previously approved programme)

A student may be permitted to interrupt a programme of study to gain experience in industry. Such period will usually be of one academic year's duration. An appointment letter from the company concerned should usually be attached to the application.

e. Transfer between programmes

The Faculty permits students to transfer between cognate programmes that share a common core when all of the following are satisfied:

- on advice and with the consent of the programme director,
- where there is no repeat of study required,
- where optional units already taken and passed meet any prerequisite requirements of the programme to be joined,
- where progression requirements of the programme to be joined have been satisfied.

When these conditions have been met permission of the Faculty is not needed.

SCHOOL OF COMPUTER SCIENCE
UNDERGRADUATE STUDENT WITHDRAWAL FORM

NAME:.....YEAR OF STUDY:.....
ID NUMBER:.....
DEGREE PROGRAMME:.....
HOME/OVERSEAS STUDENT:.....
DATE OF WITHDRAWAL:.....

REASONS FOR WITHDRAWAL: (please indicate)

- Wrong programme (* see also below)
- Financial difficulties
- Emotional/Relationship problems
- Family difficulties
- Dislike of Manchester
- Medical reasons
- Other (give details)

*What made you think this course would be suitable for you? In what way did the course not meet your expectations?

FUTURE PLANS: (please indicate and give details)

Transfer to other School in the Faculty:.....
Transfer to other School in the University:.....
Transfer to other institution:.....
Leave higher education:.....
Other (give details)

Any additional information or comments:

Signature:

Date: