O X F O R D U N I V E R S I T Y

DEPARTMENT OF COMPUTER SCIENCE

RESEARCH STUDENT HANDBOOK

2012

Research in the Department of Computer Science

The Department of Computer Science is at the heart of computing and related interdisciplinary activity at Oxford. It is a centre for research in Computer Science, Computational Biology, Foundations, Logic and Structures, Information Systems, Programming Languages, Software Engineering, Verification and Computer Security. Cross disciplinary research is carried out in areas such as Linguistics, Biology, Medicine, Quantum Foundations and Quantum Computation. It is also a place where students obtain an outstanding education in computer science through a variety of undergraduate and graduate programmes, including a part-time, professional programme in software engineering.
Our central aim is to be among the world's leading Computer Science departments. Oxford usually ranks as the top university in the UK. The Department's research strength derives from its firm grounding in core Computer Science disciplines, a relatively high degree of mathematical sophistication among its researchers, and its committed engagement with applications and interdisciplinary work. Over the past several years we have significantly broadened the spectrum of computing research in the Department, and we plan to reinforce this in future, always conscious of the need to do work which is both relevant and of a high intellectual quality. In the 2008 Research Assessment Exercise (RAE 2008), 80% of our research was judged either 4* (world leading) or 3* (internationally excellent). More information on the research in the Department can be found at:

http://www.cs.ox.ac.uk/research

Training research students is integral to what we do; it is perhaps the most vital contribution we make to the future of our subject. The training combines individual supervision with a selection of lecture courses, transferable skills training and opportunities to participate in leading-edge research activities. We recruit students from Oxford's high-quality undergraduate and Masters' degrees, as well as nationally and internationally, and are involved in Doctoral Training Centres in Systems Biology and Life Sciences Interface. Admissions into graduate programmes in the Department have sharply increased in the last few years, reaching well over 100 D.Phil. students today.

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Welcome

Welcome to Oxford University Department of Computer Science.

You have chosen to study at one of the world's leading centres for the development, application and teaching of computer science. You join an expanding group of researchers, lecturers, visitors and students who have been attracted to Oxford from all over the world. The Department's reputation ranges from its fundamental research into computing methods and languages through to practical solution of engineering and scientific problems on the latest highly parallel computer architectures. Our wide-ranging collaborative work with leading industries in this country has been twice recognised by the rare honour of a Queen's Award for Technological Achievement.

During your study at Oxford, we hope to share with you some of the excitement we have about the topics we investigate, and of the understanding we have gained, both by our research into basic theory and by industrial collaboration. The development of computer science at Oxford has been heavily supported by research grant funding from the government, EU and science foundations, as well as donations and sponsorship from our industrial partners. We are committed to offering our research students the best supervision and to providing a stimulating research environment.

This handbook aims to save time by giving you a certain amount of basic information which you would otherwise have to ask for or learn by experience, but it cannot tell you all you need to know. Do not be afraid to ask for further information or advice.

Luke Ong
Director of Graduate Studies

David Kay
Deputy Director of Graduate Studies

Shoshannah Holdom
Academic Administrator

Julie Sheppard
Graduate Studies Administrator

1. Sources of information

This handbook is designed as a guide for graduate research students in the Department of Computer Science. It does not replace the official regulations relating to your degree, which you will find in the *Examination Regulations*, but it is a less formal and more easily understood guide to being a research student in the Department of Computer Science. It also contains general information about the Department, people, facilities and safety. There is an edition of this handbook on the Department of Computer Science's website at:

http://www.cs.ox.ac.uk/teaching/dphil/

In addition to this handbook there are some other important sources of information that you should ensure you are familiar with

1.1 The Grey Book

The *Examination Regulations*, usually known for obvious reasons as the "Grey Book", is the authoritative document on the regulations for the University degrees and examinations. You should receive a free copy of the relevant part of this book through your College at the beginning of your first term. The *Grey Book* defines the rules for admission to and progression through the programmes of study and the syllabus for examinations. The regulations are available online at:

http://www.admin.ox.ac.uk/examregs/contents.shtml.

1.2 The Proctors' and Assessor's Memorandum

The University has two Proctors, the **Senior Proctor** and **Junior Proctor**, who are responsible for making sure that the University operates according to its statutes. As well as being members of key decision-making committees, they deal with

- university (as distinct from college) student discipline
- complaints about university matters
- the running of University examinations

They also carry out ceremonial duties, e.g. at degree ceremonies. The **Assessor** is the third senior officer, responsible particularly for student welfare and finance.
The Proctors' and Assessor's Memorandum is the document relating to the rules and the statutes of the University which you are expected to follow. This can be found at:

http://www.admin.ox.ac.uk/proctors/info/pam/index.shtml

1.3 Statements of Provision for Research Students

These detail the provisions that have been made for you by the University and the Colleges. The statement that is applicable to you is written by the Department of Computer Science; this can be found at:

http://www.cs.ox.ac.uk/teaching/dphil/provision.pdf

1.4 The Mathematical and Physical Life Sciences Division Graduate Handbook

The division also produce a graduate handbook which you should make sure you are familiar with. This can be found at:

http://www.mpls.ox.ac.uk/studying/postgraduate/useful-resources

2. Finding your way around

Your academic life in Oxford will involve two intimately connected but distinct institutions.

You are a member both of a college and of the University; your supervisor is a member of the Department of Computer Science and possibly a member of a different college to you. Your college will also allocate a college advisor to you.

In principle, the University exists to enable you to study for a research degree, to monitor your progress, to examine you at the end of that study, and to award you a degree. Your College exists to guide your study and to advise you. Admissions of graduate students to Oxford are the responsibility of the department, and their academic and personal well-being, are principally the concerns of the colleges. Traditionally, most of the teaching was organised by and between the colleges; however in science subjects in particular the central provision of expensive equipment has led to an increased role for departments like the Department of Computer Science.

2.1 The Department of Computer Science

The Department of Computer Science houses lecture theatres and seminar rooms in which most of the university lectures in Computer Science take place. It also runs a network of computers and other facilities devoted to the teaching requirements, and administers lectures, practicals, projects and some University-wide classes in Computer Science.

The head of department of the Department of Computer Science is Prof. Bill Roscoe, and the Academic Administrator is Shoshannah Holdom.

The building

The postal address for the Department is:

Oxford University
Department of Computer Science
Wolfson Building
Parks Road
Oxford, OX1 3QD
England

After having occupied a succession of adapted buildings in and around the University Science Area, the Department of Computer Science is now housed in a building specifically designed, constructed and equipped for it, largely funded through the generosity of the Wolfson Foundation and the Wolfson Family Trust. The **Wolfson Building** stands at the south-eastern corner of what is known as the Keble Road Triangle consisting of Keble Road, Banbury Road and Parks Road. The new **e-Science building** next to it houses OeRC (Oxford e-Research Centre), and the Software Engineering programmes.

Lecture Theatres A and B are on the lower ground floor and first floor respectively: they can be reached through the door to the right of the main Parks Road entrance (in the new extension set back from the road), as can the seminar room 051.

Room numbering

The number system for rooms is made up of a three digit number which designates the floor level in the building as well as the actual room number. Hence room numbers beginning with 0 are in the basement, room numbers beginning 1 are on the ground floor, room numbers beginning 2 are on the first floor, and so on up to room numbers beginning 5 which are in the attic.

Opening hours

The Wolfson Building opens at 8:30 and the doors are locked at 17:15, Monday to Friday, excepting closed periods (i.e. Bank Holidays, out of term time). Detailed rules governing access to the Department of Computer Science are as follows:

Access to the Department of Computer Science

An entry-card system controls access to the Wolfson Building outside normal opening hours. This applies to the main Parks Road entrances and the No. 11 Keble Road entrance of the Wolfson Building. The front door of No. 8 Keble Road has been alarmed and should only be used in an emergency. The cards also control access within the building from the Lecture Theatre areas. University cards, if you already have one, will be activated as the Department's entry card, when you have signed the enclosed declaration (yellow sheet included in your information pack). To activate your entry card you will need to take your University Card to Brenda Deeley (106). You will need to select a four digit pin number. You will also need a card to be able to access your pigeon hole.

Rules

The rules for using this system are:

1. A card and individual PIN will be issued to all staff and graduate students who require access to the Wolfson Building. In the case of graduate students, a University Card is required. Please complete the yellow form in your induction pack.
2. The PIN must be kept secret and under no circumstances should be written on the card or in the wallet where the card is kept. (Should an entry card be lost, access cannot be affected without knowledge of the PIN. The card can also be barred when it is reported lost).
3. Each card will be set to operate for the period of the student's stay in Oxford.
4. Cards will be issued on a personal basis and must not be loaned or passed on to another person.
5. No-one should allow access to another person unless they are prepared to make sure they are around to "escort" them throughout their stay in the building
6. When a card is used to gain access to the building, the system keeps a record of that use for a period of approximately six months.

Keys

Keys are required for D.Phil. offices. These are issued by Brenda Deeley (Room 106). Keys for other departments are usually obtained from that department. If you lose a key or entry card you should report it immediately to the Administrator or Jo Leggett (Room 106) who will advise on any further action and arrange for a replacement to be issued. There will be a charge of £20.00 for any replacement key.

Social area

Although much of the social and domestic life of the University takes place in colleges, the Department does have a Common Room which is located on the ground floor. Social events usually take place in the Atrium and there is a vending machine in the Atrium near to the Lecture Theatre B

It is forbidden to take food or drinks into lecture rooms, seminar rooms or computer rooms.

Pigeon holes

All students and staff are allocated a pigeon hole in room 157 (near Reception). All post will be put in your pigeon hole, together with any messages. **It is extremely important that you check them regularly.** Please note that the room can only be accessed with your entry card.

Communication and electronic mail

The University Computing Service automatically provides e-mail facilities for all new students, at the same time as you are given a University Card. You will also register with the Department of Computer Science to use departmental computers, and can use these accounts to send and receive e-mail.

E-mail is, generally speaking, a good way of contacting members of the Department of Computer Science and most of the other academic staff you will need to reach.

We have two main ways of communicating with graduate research students:

- **Email:** Please read your email frequently as there may be an urgent/important message for you from one of us. This will go automatically to the address the Department sets up for you. If you regularly use a different email address then you must ensure that your cs address is forwarded to it. Instructions on how to do this can be found at:

  https://wiki.comlab.ox.ac.uk/wiki/support/ForwardYourEmail

- **Paper copy to your pigeon hole:** You will be allocated a pigeon hole in the post room which is just inside the main door of reception. Your pigeon hole will actually be a file within one of the filing cabinets at the back of the room. Again, please check your pigeon hole on a frequent basis as there may be important information waiting for you.
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Messages for staff may be left with the receptionist of the Wolfson Building or in their pigeon hole (Room 157).

Access to course material pages from outside ox.ac.uk

There is a lot of course material on the Departmental web pages. This can be accessed from outside the Oxford domain, though it is password-protected.
If you try to access these pages from outside ox.ac.uk you will reach a page saying:

> "Teaching material pages are only accessible to registered students and staff of Oxford University connecting from a host in the ox.ac.uk domain. Web access to the teaching material pages from outside the University is restricted to a limited number of colleagues

(such as external lecturers and external examiners) who have been registered with a 'course materials' username and password (who should use this link please)."

You should use your Single-Sign on username and password to access this material.

This material is made available for your use only (it is copyright of the authors). You should not pass it on to anyone else, nor should you reveal the password to anyone.

2.2 The Staff

The academic staff you will encounter are likely to be in three kinds of job. There are college tutors and college lecturers; there are University Lecturers and other university staff who are employed to give lectures, to organise the degree courses and to examine; and there are departmental staff who are employed to run practical work and organise Laboratory work and classes. However, most of the academic staff that you meet will be in at least two of these categories.

You have been assigned a supervisor, or perhaps joint supervisors, who are normally members of the Department of Computer Science. Your college has allocated someone as your college advisor: this person should be your primary source of advice about collegiate matters. Your college advisor may be a computer scientist, a mathematician or an engineer and should meet you each term to hear about your progress. You will also be allocated a departmental advisor who would act as a replacement if your supervisor went on sabbatical or left. Again you should meet your advisor each term to discuss your progress.

You will find the list of staff in Appendix [A].

2.3 Other departments

Oxford University Language Centre

The language centre provides courses and other resources to help you learn modern foreign languages, or to keep up and develop your skills. It is situated on the Woodstock Road just north of St Giles church, and at the back of the Computing Services building. It also provides academic writing courses for students whose first language is not English. Details of courses offered can be found here: http://www.lang.ox.ac.uk/

The Examination Schools

The Examination Schools is the department of the University which administers public examinations. It is housed in a building on the south side of High Street, east of University College.

3. Terminology

Matriculation

Matriculation is the formal University admission procedure and is organised by your college.

University terms

The three University 'full' terms are:
Michaelmas (October December),
Hilary (January–March)
Trinity (April–June)

Each term lasts eight weeks. But terms simply set the periods during which formal instruction is given by way of lectures, seminars and tutorials. The University functions throughout the year and as a research student you will need to work in vacation as well as in term time (apart from reasonable breaks).

Subfusc

The University Examination Regulations state that all members of the University are required to wear academic dress with *subfusc* clothing when attending formal university events such as matriculation and university examinations. It consists of:

For women A dark skirt or trousers, a white blouse, black tie, black stockings and shoes, and, if desired, a dark coat

For men A dark suit and socks, black shoes, a white bow tie and plain white shirt and collar
Candidates serving in HM Forces are permitted to wear uniform together with a gown. (The uniform cap is worn in the street and carried when indoors.)

Graduate terminology

The following are some of the terms that are particular to graduate research students.

PRS (Probationer Research Student) – The name given to students when they are admitted to study for a research degree, usually held for the first year.

Transfer of Status – The name given to an examination that allows the student to progress from PRS to advanced status, such as D.Phil. or Master of Science by Research.

Confirmation of D.Phil. Status – The name given to an examination that allows the student to progress to the submission of the D.Phil. dissertation. Confirmation usually takes place after two years and must be within nine terms.

GSS (Graduate Supervision System) – An on-line system for termly reporting by graduate students and their supervisors regarding the progress of the research degree.

Graduate Studies Office (GSO) – An administrative centre for graduate studies, located in the Divisional Office, which manages the process of monitoring student progress, application for suspension and final examination. These applications are made on GSO forms which are available from:

http://www.ox.ac.uk/students/academic/graduates/forms/

DGS (Director of Graduate Studies) – The person responsible for graduate studies and students in the department. He/she manages the administrative arrangements for supervision, transfer/confirmation of status, extensions of time, and thesis submission and examination, including appointment of examiners. In the Department of Computer Science currently the DGS is Luke Ong and he is assisted by the Graduate Studies Administrator, Julie Sheppard. The Deputy Director of Graduate Studies is David Kay who is responsible for admissions.

4. Studying for a research degree

You have chosen to study for a research degree, either D.Phil. or M.Sc. by research. You may have just completed an undergraduate degree, or perhaps a taught Masters course. If so, your study has so far been organised for you – the courses were designed, lectures and practicals prepared, textbooks selected, and examinations set. A research degree is very different, in that you will have the responsibility for managing your learning, including determining a problem to study and carrying out the work. Your *supervisor*, or in some cases joint supervisors, will guide you in your research, and further support will be available from the academic and college *advisors*.

4.1 The Nature of Research

Some students arrive in Oxford knowing precisely what their research topic will be; others have little more than an idea of its general area. Someone once described research as 'Finding out something to find out, then finding it out'; the first part is often harder than the second.

Consequently some students focus rapidly on their thesis work whilst others spend much of the first year before beginning to do so. However, it is important for all research students—even those who know precisely what their field of research is going to be—to acquaint themselves with as much as possible of the work going on in the Department. It is vital for life-after-graduation that you be able to relate different areas and views. There are many points in common between research fields and many useful ideas can be borrowed from fields other than your own. The Department's seminar series and advanced courses are held partly for this purpose.

What characterises research in the Department of Computer Science at Oxford? It is based on the intelligent gathering of evidence in the discipline of Computer Science, achieved by asking and answering questions. That activity normally results in a novel and productive view being taken that supports a number of new results whose importance can be demonstrated in the computing or numerical systems whose study led to their discovery. There is usually a theoretical component that endures beyond the examples considered, and a practical component, important because it justifies and inspires study of the theory.

Research thus does not consist merely of completion of a program, even a complex one—a view favoured by amateur programmers! Nor does it consist of the discovery of a piece of unapplied mathematics. The blend of theory and practice is fundamental to our view of research. It is one we wish, above all else, to convey to our students.

Research is not easy! Sometimes long periods can pass without any progress seeming to take place; at other times everything seems to happen at once. You should not get too down hearted if the going appears to be hard at times—most of the lecturers and research staff have had a similar experience so there is always someone sympathetic to talk to. But you need to be proactive in seeking help, from staff and peers.

4.2 Roles and Expectations

Supervisor: When you arrive in Oxford you should already know the name of the supervisor provisionally allocated to you (on the basis of interest and previous experience). It is up to you to make contact soon after you arrive. As your first year progresses, if both you and your supervisor are content with it, the arrangement will become permanent; otherwise it will be changed. It will also be changed if it becomes clear that your interests are converging on a research topic which can be supervised more appropriately by another member of staff. In some cases joint supervision is arranged. The close working relationship with your supervisor is likely to be the most important element during your research life in the department, and much of the first year will be spent on arriving at a good working relationship. The nature of this relationship will depend to a large extent on individual work patterns, but some useful guidelines can be found in the EPSRC booklet *Guide to Good Supervisory Practice which is found in your information packs.*

In spite of the range of styles of interaction between supervisor and research student, it is important that you meet on a regular basis. We advise that you should meet with your supervisor *at least* 4 times per term. A more typical pattern is *weekly*, at least until you reach the stage of writing up your dissertation.

Appendix [D] includes an extract from the regulations describing the responsibilities of the student and supervisor.

Academic advisor: You have also been allocated an *advisor*: a member of staff of the Department of Computer Science with whom you may talk, as an alternative to your supervisor, about research or problems unrelated to work. Your advisor may be involved in monitoring your progress and may stand in if your supervisor is absent. Thus you should keep your advisor informed of your interests and progress and meet with your advisor each term to discuss your progress. Nearly everyone finds that the process of explaining their work clarifies it, and your explanation will benefit by your having to assume less background knowledge when explaining to your advisor.

College advisor: Your *college advisor* is a member of your college who has been assigned to you to provide an additional source of support.

If something goes wrong… If you find any aspect of your supervision unsatisfactory and you feel unable to discuss it with your supervisor, you should contact your advisor, the Director of Graduate Studies, the Graduate Studies Administrator, or the Head of Department.

Research Supervision

The research supervision website is intended as a convenient resource for supervisors and other audiences. It was developed following discussions with Directors of Graduate Studies and supervisors about the developmental needs created by the changing context of doctoral education at Oxford:

http://www.learning.ox.ac.uk/supervision/

There is much useful information on this website including:

- Life as a doctoral student: more than research: http://www.learning.ox.ac.uk/supervision/dphil/experiences/
- International students: http://www.learning.ox.ac.uk/supervision/dphil/international/
- New supervisors: http://www.learning.ox.ac.uk/supervision/supervisor/new/

- Problems: avoiding and dealing with them: http://www.learning.ox.ac.uk/supervision/supervisor/problems/
- Stages of the doctorate: http://www.learning.ox.ac.uk/supervision/stages/
- Reading and writing in the doctoral journey: http://www.learning.ox.ac.uk/supervision/stages/readwrite/
- Clarifying expectations: http://www.learning.ox.ac.uk/supervision/stages/expectations/

4.3 Holidays

The DPhil in Computer Science is a full time course and should be viewed in the same way as a full time job with regard to holidays. You are expected to work during vacations and the eight week terms are for undergraduates. You are entitled to take a reasonable amount of holiday over the course of a year, in the region of six weeks total. Any holiday taken should be agreed in advance with your supervisor.

4.4 Sickness and Compassionate Leave

If you are unwell or have need for compassionate leave you should inform your supervisor and the Graduate Studies Administrator who will be able to advise on whether you need to apply for suspension of status. If you are unable to study for more than seven days due to medical reasons you should get a letter or certificate from your GP so that it can be taken into consideration if your progress is affected.

4.5 Maternity, Paternity and Adoption Leave

The University Policy on Maternity, Paternity and Adoption Leave can be found in Appendix [L] at the end of this document.

5. First year

All DPhil and MSc by Research students are initially registered as Probationer Research Students (PRS). Students should note the MPLS Division requirement that PRS students must transfer to DPhil status within four terms. It follows that **PRS must apply for transfer by submitting the application form and all documents in fulfilment of the three transfer of status requirements no later than Friday of the 0th week of their fourth term.** This is a guide to the transfer of status requirements, and the work PRS are expected to do in order to meet the requirements. Students who have transferred from the DTC must apply by Friday of 0th week of their 6th term.

Transfer of Status Requirements:

I. A *portfolio* of courses and practicals attended (with marks where available) and training received by the PRS.

II. Three pieces of *assessed work*. An assessed work is either a lecture course, reading course or a term paper. At least one assessed piece should be a term paper and at least one should be a lecture course. PRS are expected to achieve an average mark of at least 65%. DTC Students do not require a Term Paper.

III. A *qualifying dissertation*, consisting of an extensive literature review and a thesis proposal. There is no formal word limit, but as a rough guide, the literature review should be around 5000 words (or more), and the thesis proposal should be around 6 pages.

The transfer requirements are designed to gather evidence in respect of the three *criteria* for transfer to DPhil status:

(i) knowledge of sufficient depth and breath
(ii) basic competence in independent research
(iii) a viable DPhil research programme.

Requirement I: Portfolio
The portfolio should be a list of lecture courses, departmental and research group seminars, and training courses (whether provided by the University or an external body) attended by the PRS. Marks (including marks for classes and practicals) should be included where available. PRS should note that the departmental seminars (and any relevant research group seminars) are an important part of their doctoral training. They are therefore expected to attend the weekly department seminars, and any relevant research seminars as directed by their supervisor.

It is a Divisional requirement that the research students should have given a presentation or talk whilst a PRS. The portfolio should include a brief account (no more than a paragraph) of the presentation. In addition, the portfolio should include any tutorial, class teaching and laboratory demonstration given by the PRS during the academic year.

Requirement II: Assessed Work
Choice of lecture courses and term papers should be made in consultation with the supervisor at the very beginning of the first term. By Monday of week 3 of the first term, the PRS must complete a form (headed *PRS Assessed Work*) indicating which courses they wish to attend and any term paper they plan to write. The form is to be signed by the supervisor and submitted to the Graduate Studies Administrator for approval by the Director of Graduate Studies (DGS). Students must register for each MSc course chosen, and seek permission from the lecturer to attend each advanced undergraduate course chosen, because of space restrictions. Any changes to coursework and term paper selection, as the year progresses and interests focus, should be recorded by resubmitting the *PRS Assessed Work* form.

If a supervisor deems a student to have adequate background already, they may apply for partial or complete exemption from Requirement II. It should be noted, however, that the fact that a student already has an MSc, from Oxford or elsewhere, is not an acceptable reason for exemption. Also, if a student has taken a course as part of an Oxford degree, they will not be able to count it towards Requirement II.

We expect that all DPhil and MSc by Research students who come to Oxford will want to take advantage of the broad range of courses available, and will sign up enthusiastically. A student's coursework and term paper performance is an early indication of their true level of ability and commitment. Supervisors or the DGS may recommend remedial action, or a change of research direction, on the basis of unsatisfactory performance.

Lecture Courses
We expect that all DPhil and MSc by Research students who come to Oxford will want to take advantage of the wide range of courses available. Requirement II should *not* prevent students from taking more than two taught courses, if their supervisor thought this appropriate (they would then submit their three best pieces, including a term paper).
Under Requirement II, lecture courses can be selected from the MSc (CS), or MSc (MFoCS), or advanced undergraduate courses in the Department of Computer Science. Students must register for each MSc course chosen, and seek permission from the lecturer to attend each advanced undergraduate course chosen, because of space restrictions. PRS are normally expected to complete the same practicals and coursework (including any continual assessment), following the same deadlines, as other course participants. However, if the same

form of assessment is not deemed appropriate by the supervisor (or lecturer), the supervisor should advise an alternative (such as essay, viva or end-of-course exam) and indicate it on the *PRS Assessed Work* form.

For MSc courses, the fortnightly problems, practical exercises and end-of-course assessment will be marked as for MSc students. The PRS's performance will appear in the register compiled and circulated by the Academic Administrator. For advanced undergraduate courses, it is the supervisor's responsibility to ensure that the student's solutions to any tutorial or class sheets and collections are marked.

PRS may also select advanced undergraduate or graduate courses offered by other departments, such as Mathematics, Statistics, Engineering Science, Physics, and Economics. Students who take such a course need to discuss with their supervisor how it will be assessed. If it is not possible for the PRS to sit an examination with other students on the course, the supervisor is expected to set and mark a piece of written work based on the course followed.
If you wish to take one of the one week courses on the Software Engineering Programme then it is essential that you complete PRS Assessed Work Form but also register separately with Jackie Jordan, room 471. Any such requests will be subject to approval from the Director of the Software Engineering programme and will need to be accompanied by a short justification from both student and supervisor as to why the course would be beneficial and how it is relevant to your DPhil topic.

A specially designed reading course, based on a selection of research papers on a theme related to a student's research, may provide an alternative to a lecture course.

Term Papers
A term paper is a mini-project set by the supervisor, completable in a term. Its aim is to test the student's ability to carry out advanced study and independent research; its format is intended to be flexible. A term paper may take the form of a case study, or an essay designed to explore and formulate a research topic, or an MFoCS-style mini-project. There is no formal word limit, but as a rough guide, it should be around 12 LNCS pages (or about 7000 words).

A term paper can be a workshop or conference paper (or an early version thereof) (co)authored by the PRS. However, there is no requirement that a term paper be publishable.

Term papers are usually assessed by the supervisor. An assessment proforma should be completed and submitted with the term paper when the PRS applies for transfer.

The following rough marking scheme should be used.

- 90-100: *Outstanding*. Publishable in first-ranked conferences in the field (e.g. LICS, STOC, FOCS, OSDI, POPL, PLDI, etc.)

- 80-89: *Excellent*. Publishable in good conferences.

- 70-79: *Very good*. Publishable in serious workshops.

- 60-69: *Good*. The candidate has demonstrated a good understanding of some state-of-the-art ideas and techniques, and an ability to apply his or her understanding.

- 50-59: *Adequate*. The work submitted, while sufficient in quantity, suffers from major defects to show a lack of adequate understanding or ability to apply results.

- 0-49: *Unsatisfactory*.

Reading Courses
Your supervisor may create a specially designed reading course, based on a selection of research papers on a theme related to a student‘s research which may provide an alternative to a lecture course. This would be assessed by a paper and would be expected to contain:

- a critical analysis of the development of ideas, and connections between ideas
- a view of the key questions driving the area
- a collection of open problems.

It should also contain

- worked examples and/or case studies

and maybe even contain

- problems and their solutions.

Requirement III: Qualifying Dissertation
The thesis proposal is the most important part of the transfer examination. It should be concise, and supported by an extensive literature review, demonstrating the candidate's command of related work in the literature. There is no formal word limit, but as a rough guide, the literature review should be around 5000 words, and the thesis proposal should be around 6 pages. The literature review should be a first-draft of the literature review chapter of the thesis. A well-written literature review should be a useful basis with reference to which the examiners can assess the originality of the thesis proposal

The *literature review* should survey the state of the art in the PRS's chosen area. It should explain the background of the proposed research, the results that have been obtained by other researchers, and the conclusions that may be drawn. The student is expected to give a clear and coherent account, demonstrating competence in organising ideas and presenting them in a scholarly manner.

The *thesis proposal* is expected to address the following questions:

i. What is your research topic? What are the fundamental challenges?

ii. What are you trying to do? Give a high-level description of your research goal avoiding any jargon.

iii. What is the state of the art? What are the limits of current practice? Why is the problem you are trying to solve hard?

iv. What is new in your approach? Describe your method with sufficient details to enable the assessors to form a view. Illustrate it using an example or two. Explain why you think it will be successful.

v. How do you intend to evaluate your results?

vi. What difference will it make if you are successful? What are the risks?

Your proposed research topic should be well-defined and specific. It should admit of novel treatment, and it must be significant enough to be worthy of a DPhil, if competently investigated. Your proposed research programme should be concrete, clearly explained, and of justifiable promise.

Your research report and thesis proposal may well be the first formal documents you produce under the guidance of your supervisor. It is important to realise that they will be assessed for style as well as technical content. Ability to write your ideas clearly and convincingly is an essential part of your training. For an excellent treatment of how to write technical documents, including LATEX tips, see **N. J. Higham, *Handbook of Writing for the Mathematical Sciences* (2nd Edition), SIAM**, which can be found in the Department of Computer Science library.

No degree is awarded on the basis of the transfer application, so the work described in your research report can (and normally will) form part of the final DPhil dissertation. (If, however, you have made a Category B application and used your MSc dissertation to qualify, this cannot be used as part of your final DPhil dissertation.)

6. Second and third year

It is usually during the second year that the bulk of the work for the thesis is done. The activities, as agreed with your supervisor, should be mainly focused on research, which may vary depending on the study being theoretical or experimental; reading the literature more broadly; participation in activities such as specialist and departmental seminars; and writing posters and the first research papers for submission to workshops and conferences, including the student conference. It is important, though, that you take a broader outlook of your training. DPhil students are expected to demonstrate a range of skills by the time they graduate. The skills training at Oxford (see Section [10]) offers a broad range of courses, including leadership, presentation skills and team work. In addition, in the Department of Computer Science we offer the following training:

- Presentation skills seminar – this will cover the art of making verbal scientific presentations. All students are expected to attend, as this will provide you with an introduction to an essential research skill.
- Class teaching seminar – graduate research students are expected to attend the half-day training session run by the Department in October. This was developed in collaboration with the Learning Institute and is devoted to teaching methods in computer science. It has been found useful, particularly by those wishing to develop their careers as academics.
- Demonstrating and tuition – on the undergraduate and MSc courses run by the Department.

During the second and third year, as they become more confident technically, many DPhil students choose to do a small amount of paid tutoring, class teaching or demonstrating on MSc or undergraduate courses. This is valuable experience for your future career. Attendance at the demonstrating and class teaching seminars are essential prerequisites for teaching in the Department. After discussion with your supervisor you should express your interest to the Academic Administrator, who will include your name and teaching preferences on a register. Your supervisor must give permission for you to undertake the amount of teaching work you propose to do. First year PRS students can also teach provided they have attended the relevant seminar and have their supervisor's permission.

Towards the end of the third year comes another milestone, Confirmation of Status (see Section [7]), which you have to have completed before submitting your thesis.

Following the confirmation viva, during which the contents of the thesis and the timetable for completing the DPhil is approved, the remaining time is usually devoted to finalising the thesis so that it can be presented as a coherent DPhil dissertation, as distinct from a research paper. This is also usually a phase where the research has come to full fruition, so you will probably be busy submitting research papers – and having them accepted for publication and perhaps presentation at conferences. Funding for conferences is available, either in your research group or from the Department, for which you need to make a special application; see Section [9]. You are also encouraged to investigate the funding available in your college.

Normally after three and a half years, you are ready to submit your DPhil thesis and be examined. See Section [7].

7. Monitoring progress

This section describes the mechanisms for monitoring progress of research degrees, including the main milestones that you will be expected to reach while studying for DPhil or MSc by Research.

These processes are managed by the Graduate Studies Office, the administrative centre for all graduates at Oxford. The specific office that you will be dealing with is the MPLS Graduate Studies Office, see http://www.admin.ox.ac.uk/gso/. In the Department of Computer Science, the person responsible for daily oversight of these processes is the Director of Graduate Studies, assisted by the Graduate Studies Administrator.

7.1 Termly Reporting: GSS (Graduate Supervision System)

All graduate students are asked to contribute to the termly reporting cycle, through the Graduate Supervision System (GSS). This is a useful tool to reflect on your achievements and provides an opportunity to communicate any concerns to your teaching staff. If you are here on a CAS number visa it is essential you complete your report each term as we have to report on attendance to the UKBA.

The Graduate Supervision System captures information reported by both student and supervisor(s), with details relevant to each student only being available to his or her supervisory team. The Graduate Supervision System will invite you to log on near the end of term and create a self-assessment report. You will be prompted to list completed training and training which is still required, as well as provide a comprehensive overview of your progress. You will also be able to set a flag to indicate if you have concerns with your progress, and this will be highlighted to your Supervisor, Director of Graduate Studies, and College Advisor. Your supervisor will then complete a report on your progress, and this will be available for you to view, as well as your Director of Graduate Studies, your College Advisor and the appropriate administrators.

Further details regarding use and access to the system will be communicated by email in Week 3 of Michaelmas Term.

7.2 Transfer to DPhil Status or MSc by Research status

DPhil and MSc by Research students are initially registered as Probationer Research Students (PRS). After a year you are expected to apply for transfer to advanced status, which will be examined by two assessors. One of the assessors is likely to be your departmental advisor; the other will be chosen based on suggestions from you and your supervisor. Your supervisor, however, is not allowed to act as an assessor.

If the assessors recommend transfer to advanced status, then you may be registered as a student for the degree of DPhil. If your application for transfer is unsuccessful, you will be given one opportunity to apply again. Alternatively your assessors may recommend that you be allowed to apply for transfer to the status of a student for the degree of MSc by Research.

It is important to ensure that you plan and carry out your work in the first year so that you will be ready to apply for transfer. **You must apply to transfer status by submitting the application form and all documents in fulfilment of the transfer requirements by Friday of 0th week of your 4th term.**

If you are unable to meet this deadline, you and your supervisor should apply to the Director of Graduate Studies for you to defer your application to transfer. Please note, however, that approval will only be granted in exceptional circumstances.

Students originally registered for MSc by Research must also apply for transfer of status by Friday of 0th week of the 4th term.

For details of the formal rules governing transfer, see Examination Regulations, 2012 (*Mathematical Physical and Life Sciences Division).*

7.3 Application for Transfer

When you are ready to apply for transfer, you should complete the appropriate forms (MAT.1 and GSO.2) These can be downloaded from:

http://www.admin.ox.ac.uk/gso/forms/

and these forms must be signed by both your supervisor and your College. Completed forms should be returned to the Graduate Studies Administrator for DGS approval.

There are two methods of transfer from Probationer Research Student to DPhil status. These are known as 'Category A' and 'Category B'. Category B applications are rare.

Category A (Normally all students in the Department of Computer Science): Your application must be submitted, together with all documents in fulfilment of Requirements I, II and III, no later than the Friday of 0th week of your *fourth term* as a Probationer Research Student.

Warning: Most funding bodies, including the Engineering and Physical Sciences Research Council, will discontinue a student's grant if the University does not provide a certificate of good progress each year. The provision of such a certificate by the University is contingent on success in the transfer examination. *The Research Council's deadline for such certificates is very soon after the University's deadline for Category 'A' transfer applications. Since it is almost impossible to arrange transfer examinations at short notice, such students are advised to submit their application for transfer as early as possible in the summer vacation after their third term.*

Category B: This normally applies to students who hold an MSc degree, either from Oxford or elsewhere, and who already have a clearly defined DPhil research programme, and are well-equipped to begin research immediately. Typically, the proposed programme builds on research that began during the student's MSc work. The transfer requirements for Category B candidates are a research report, and the qualifying dissertation (as per Requirement III). Such transfer applications should be submitted no later than the Wednesday of the fifth week in your *first term* as a Probationer Research Student. If you are such a student but do not feel ready to transfer to DPhil status so early in your research, you may submit a 'Category A' application instead.

Students who have transferred from the Doctoral Training Centre have a different timetable; they must transfer by the end of their sixth term (which means that they must submit their application and all documents in fulfilment of the transfer requirements by the end of their fifth term).

7.4 Transfer of Status Examination

The qualifying examination is informal (the regulations call it an 'interview') and so academic dress is not necessary. Usually there are just two assessors. The assessors must certify they have considered the documents you have submitted in fulfilment of all three requirements of the transfer of status—and they are satisfied that these demonstrate that you are capable of completing a DPhil in the time remaining. In making that decision they must be satisfied that the topic and approach proposed are suitable for study in the Department, and that you have a good knowledge and understanding of the background needed, a clear and appropriate plan of work, and can describe your results clearly.

In the examination itself, the assessors are likely to concentrate on the thesis proposal. They will want to be satisfied that you can explain and justify your research plan. They will also have a record of your coursework performance, and the term papers that you have written; you may expect the assessors to ask questions about your first year's work generally. Although there is no *formal* commitment to carry out the proposed plan in detail, and you are free to exploit discoveries made later and change direction, it is expected that by this stage you at least have a definite starting point.

In summary, the assessors must be sure that you have a specific, unsolved, and worthy problem to work on, that you have a plan for solving the problem, and that you have a reasonably good chance of completing the DPhil in your remaining time (usually a further two to two and a half years).

After the examination a report will be written to provide feedback to you, your supervisor and College. The report will include an assessment of the viability and suitability of the proposed research, and the prospect of its completion on a reasonable timescale. A copy of the report will be sent to your College, and a copy will be filed on your University records.

Please note that your assessors may recommend a range of possible outcomes, including transfer to degree of MSc by Research, subject to the opportunity to make a further application. If you pass the transfer examination, you will be formally allowed to transfer status. If your first application for transfer to DPhil status is not approved, you may make one further application. An extension of time of one term will be granted if necessary to make the second application. If you are transferred to MSc by Research status, you may have one further opportunity to apply to transfer to DPhil status, subject to (a) that a sufficient period of time has elapsed from the original transfer attempt to allow for the possibility of significant development; and (b) your supervisor being prepared to support a further application.

7.5 Confirmation of DPhil Status

The University Regulations require that doctoral students have their status *confirmed* before being permitted to submit a dissertation for examination. The Department and the University take very seriously their duty to monitor the progress of research students, and confirmation of status is one way in which we do this. *Moreover, most funding bodies—including the Science and Engineering Research Council—will discontinue a student's grant if the University cannot certify that progress has been acceptable each year.*

Confirmation of status is conditional on the preparation of a satisfactory research progress report and involvement in graduate activities such as attendance at seminars, publications, and presenting papers at conferences (see Section [8]). Evaluation of applications for confirmation of status takes the form of an oral examination with two assessors, based on your written progress report. The departmental policy is that your supervisor(s) cannot be assessors, and

one of your assessors must have successful experience of supervising doctoral students to completion. The progress report does not have to be long. Its most important ingredients are:

(a) a table of contents of your proposed DPhil dissertation,
(b) a clear plan for any research investigations that remain to be done,
(c) draft chapters of your thesis or papers you have written,
(d) and a timetable for completing the writing.

The purpose of confirmation is to ensure that, after having achieved the main body of results in your second year, you have a clear idea of how they constitute a DPhil dissertation (as distinct from conference or journal articles). It enables students to receive an assessment of their work and is intended to provide an important indication that if work on the thesis continues to develop satisfactorily, then consideration of submission of the thesis within the course of three further terms would appear to be reasonable. It therefore provides a second stage of formal progress review in the 3-4 years of the student's overall research programme.

Both Computer Science students and those who have transferred from the DTC are expected to confirm your DPhil status by the end of your *ninth term* from admission as a Probationer Research Student. The Department therefore recommends that you apply for confirmation no later than the beginning of your ninth term. In order to allow enough time for your application to be assessed, your application, accompanied by the progress report, should reach the Graduate Studies Administrator by the end of 0th week of your ninth term.

If, for good reason, you are unable to apply to confirm status by the end of your ninth term you may apply to defer confirmation for a maximum of three terms with the support of your supervisor. This application has to be approved by the Director of Graduate Studies.

If you have not applied to confirm or defer your confirmation by the end of your ninth term your student status will lapse.

Students who defer their confirmation of status but who have still not applied by the end of their twelfth term will be subject to a formal review before any applications for extension of time are considered.

To apply for confirmation of status you need to complete Form GSO.14 and Form MAT.3. These can be downloaded from: http://www.admin.ox.ac.uk/gso/forms/ Once the forms are signed by your supervisor and your college, you should return them to the Graduate Studies Administrator for approval by the Director of Graduate Studies.

A student is allowed two attempts at confirmation. If a student fails both attempts it is likely that a recommendation would be made to submit for the degree of MSc by Research. If the assessors felt your work was not up to MRes standard then you would be withdrawn from the register of students.

7.6 Submission and Examination

When you and your supervisor are agreed that your thesis is within one term (and the vacation which follows) of completion, you should obtain form GSO.3 from the GSO website at http://www.admin.ox.ac.uk/gso/forms/ and arrange for its completion. The form has sections which should be completed by your supervisor, and by your College. Your supervisor must suggest the names of examiners on this form, after consulting you: one internal (normally a member of academic staff in the Department of Computer Science, but academics from other departments are also possible, depending on the topic) and one external (normally a member of another university or research institute, in the UK or abroad, who is expert in the area of the thesis) — plus a reserve for each. Examiners must be independent, and therefore cannot have been closely associated with the candidate or his/her work, for example through joint-authored publications, the sponsoring organisation(s), or previous colleagues of the candidate.

The departmental policy is that at least one of the examiners should have prior experience of examining theses at Oxford. Approval of the examiners rests with the Director of Graduate Studies who considers the balance of expertise and examining experience. When the form has been submitted to the Graduate Studies Administrator, room 112, it must be approved by the Director of Graduate Studies and two examiners will be formally appointed on the recommendation of the supervisor. Two copies of the thesis should be submitted *no more* than a term (and the vacation which follows) after this has happened.

Once the thesis has been submitted, the examiners will arrange a date for the *viva voce* (oral) examination. This is formal, so you must wear *subfusc*. After the examination the examiners will submit their report and recommendation to the Mathematical, Physical and Life Sciences Divisional Board. In many cases this decision is delegated to appropriate office holders under the aegis of the Board. It is because they can do no more than make a recommendation to the Board that the examiners are unable to comment to you on the outcome of the *viva*. No matter how much attention your supervisor or advisor has given to the technical details of the work, the final responsibility for the thesis rests with its author. It would be unwise of a student to expect the supervisor to *proof-read* a thesis; this is a task which can more properly be performed by friends.

For more detailed information on the regulations (in particular, for information on standards of typesetting and binding) consult the *Notes for the Guidance of Graduate Students in Mathematical Sciences*, issued by the Mathematical, Physical and Life Sciences Division, and the *University of Oxford Examination Regulations*. You should refer to Section [1] for how to access these materials.

After the viva there are three outcomes: pass outright, pass with minor corrections, referral back for resubmission or award of a lower degree. Most students have minor corrections and once these are completed to the satisfaction of the examiners you will be given leave to supplicate. At this point you should submit a hard copy of your thesis to both the Bodleian library and the Computer Science library and an electronic copy of your thesis.

7.7 Digital Theses

Once you have been granted leave to supplicate you are required to deposit a digital copy of your thesis in the Oxford University Research Archive. Further information on how to do this can be found here:

http://www.bodleian.ox.ac.uk/ora/oxford_etheses

The Oxford Thesis Working Group (which includes representatives from each Division, the Examinations Schools, Bodleian Libraries and others) has been working on procedures to ensure the smooth running of thesis deposit and management at Oxford. The Group has compiled some procedures and workflows which are listed below for your information:

1. Summary guidance for deposit of successful theses and dissertations for those programmes eligible to deposit digital copies in ORA
2. Procedures to be followed at the point when a student thesis is approaching the end of an embargo/dispensation from consultation and requests and extension to the embargo.
3. Thesis workflow – pre-submission and submission
4. An updated version of the ‘Digital copy of your thesis’ document

These documents can all be found on the “current students” web pages:

http://www.cs.ox.ac.uk/teaching/dphil/

and further information can also be found on the ORA website at:

http://www.bodleian.ox.ac.uk/ora

You can download a form to use as a record to enable you to keep track of permissions for use of 3rd party copyright materials from this website:

http://www.bodleian.ox.ac.uk/ora/oxford_etheses/copyright_and_other_legal_issues/copyright_held_by_third_parties__and__other_rights

7.8 Sensitive content in digital theses
Checks and procedures

Context

When depositing digital copies of theses into ORA it is crucial to take steps to ensure that sensitive information not intended for public release is not inadvertently made freely available on the open Internet. Errors could result in serious consequences for the University or third parties which could be of a legal, personal or financial nature. The following guidelines are intended to limit the possibility of an undesirable situation arising. Checks and suggested actions at each stage of the process are described.

What is sensitive content?

Sensitive content might fall into any of the following categories:

- Personal information: personal data (name, address, age, criminal record etc.); personal medical details; information that enables the identification of an individual; photographs etc.
- Commercially sensitive information: details of new products and processes; names of companies and collaborators; content covered by non-disclosure or other agreement
- Patentable information
- Research using animals, GM crops or other controversial processes
- Some political, security or similar content
- Other information which could be deemed to cause similar difficulties if made public

Authors should also be aware of content within the thesis where copyright is held by a third party. Making this type of material freely available on the internet without permission could infringe copyright. See ORA help and information at Copyright and Other legal issues

http://www.bodleian.ox.ac.uk/ora/oxford_etheses/copyright_and_other_legal_issues

Stage	Actions to reduce risk	Responsibility
Thesis/dissertation guidelines	Ensure information about sensitive content are easily available to students and supervisors and factored into training, publications (e.g. handbooks) and similar.	Directors of Graduate Studies
Supervision	Supervisors ensure students are aware at appropriate points in their programme. Be aware of potentially problematic content when reading drafts and advise student.	Supervisor/tutor
Writing thesis	Remain aware of and note any content being included in the work to which access should be	Author

	restricted.	
Transfer of status	Ensure student is fully briefed on types of sensitive content and their responsibilities. Check with the student whether there is any or likely to be any content which may fall into the category of sensitive content.	Supervisor/tutor
Deposit in ORA	Check with supervisor and/or Research Services if unsure about the sensitive nature of any content in your work. Indicate that access should be restricted to all or part of the content using the ORA embargo functionality. Indicate a date on which the content can be released if appropriate.	Author/depositor
ORA Review	Follow depositor instructions regarding embargo. Run quick check of content to identify any obviously potentially problematic content. If necessary contact author and/or supervisor.	ORA staff
Post-deposit	Retain a robust take down policy and procedure and take prompt action if necessary.	ORA staff

This information is also available online at

http://www.bodleian.ox.ac.uk/ora/oxford_etheses/copyright_and_other_legal_issues/sensitive-content

ORA general Help & Information is available at http://ora.ox.ac.uk or contact ORA staff at ORA@ouls.ox.ac.uk

8 Graduate activities

This section lists the main types of activities that every graduate research student should strive to engage in throughout the duration of their studies.

8.1 The Lecture List

The Division of Mathematical, Physical and Life Sciences publishes a lecture list for Mathematical Sciences just before the beginning of each term, as do all other Divisions of the University. Copies of the Mathematics list are usually available from the Receptionist in the Department of Computer Science or the Mathematical Institute and can also be found on the web at http://www.maths.ox.ac.uk/notices/lecture-lists. Lecture timetables for the courses given in the Department are also published on the pigeon-hole-room notice board. Depending on your interests it may also be useful to attend other courses—for example those of Engineering, Psychology, Physiology, or Philosophy. All members of the University may attend any publicly announced University lectures or seminars.

8.2 Seminars

Research seminars run weekly within the Department, see

www.cs.ox.ac.uk/seminars

for more information. All graduate students are *expected* to attend the following series of seminars:

- Departmental Seminar. It is held on Tuesdays at 4.30pm in term. This usually features an eminent researcher from outside Oxford as an invited speaker, and the talks are normally aimed at a general computer science audience. Attendance at these seminars will help you broaden your knowledge of Computer Science beyond the confines of your own research area.

- Specialist or group seminars; for listing see www.cs.ox.ac.uk/seminars The 'Cakes' Seminars, which are held on most Thursday afternoons at 12.30 in Room 105, in term time. Their purpose is to encourage discussion among members of different research groups, and to give an opportunity to research students to sharpen their presentation skills. These seminars now provide lunch for the speaker and the audience rather than cakes.

In addition, there are many informal seminars and discussion groups in the Department. Their meetings are usually publicised at relatively short notice on the notice-boards and electronic newsgroups and web pages. You should check www.cs.ox.ac.uk/news or the display at the Reception, Wolfson building.

8.3 Teaching

All research students are permitted to teach for up to six hours a week during the course of their degree. This teaching may include demonstrating in one of the department's software laboratories, usually arranged by one of the Departmental Lecturers, or giving College tutorials, usually arranged through one of the tutors. The teaching is paid for by the department or college. In both cases you should ensure that you get your supervisor's permission in advance.

Many of you will have no previous teaching experience, but to give you some insight into what teaching at Oxford involves, a half-day training session on teaching methods is held at

the beginning of each academic year. This is run by the Department and was developed in collaboration with The Learning Institute. It is expected that all new D.Phil. students will attend this course. D.Phil. students are not allowed to help with class teaching and marking unless they have attended the seminar on class teaching beforehand.

8.4 Student Conference

The Computer Science Student Conference is usually held on Friday of Week 6 of Michaelmas Term. It has been designed to be attended by all D.Phil. students, faculty and other interested students. It contains chaired sessions of talks, posters, a buffet lunch, and a reception with prize giving. The Conference is usually run by an organizing committee of D.Phil. students with administrative support from the Graduate Studies Administrator.

All D.Phil. and PRS students entering their second year are expected to submit an abstract of not more than 2 pages. D.Phil. students in later years are strongly encouraged to submit abstracts as well, and all newly-arrived PRS students should attend the conference. It is expected that students will submit an abstract of the work they have recently been doing.

They may have given a cakes talk on the work (all to the good) or perhaps are summarising new results which have not yet been presented (even better). Students completing their first years may find themselves submitting an abstract arising from their transfer dissertation. In all cases students will gain from the experience. The Organizing Committee will choose, from those abstracts, a programme of talks and posters. Chosen speakers will be notified in advance of the conference, to give them time to prepare.

The conference will end with a drinks reception, during which the prizes will be announced. Prizes will be awarded for the best presentation, the best abstract and the best poster; winners will be announced at the Conference Dinner, to be held in the evening on the day of the conference. The Conference Dinner is open to all students, not just those presenting a paper or poster.

Conference proceedings, containing all the abstracts, will be published on the Department website and will also be handed out to attendees.Further details of this year's conference schedule, location and times can be found here:

https://www.cs.ox.ac.uk/conferences/OXFORD-CS-2012/index.html

8.5 Summer Intern Positions

If you wish to take up a summer intern position you need to complete an internal application form which can be found here:

http://www.cs.ox.ac.uk/files/4630/Intern%20Application.pdf

You will need a case for support from your supervisor then return the form to the Graduate Studies Administrator for approval by the Director of Graduate Studies. You will be required to apply for suspension of status if the internship is for more than one month and not directly related to your research.

9 Graduate resources

9.1 Computers

The Department offers all PRS and D.Phil. students IT provision in the form of a desktop PC for their use in their office, or screen and keyboard if using own laptop. This is connected to the Department's network and backed-up user directory fileservers (the local desktop is not backed up by default). This equipment is supplied in order to give you a basic provision in information technology for the purposes of preparation of reports, papers, and your D.Phil. dissertation. It is also intended to provide you with what might be called the basic 'IT tools' for research: word processing, email, internet connectivity, connection to the World Wide Web, and backed up file store services.

For many students, their Department-supplied PC will also be sufficient to serve as their computing equipment for what might be called 'experimental use'—e.g. writing and testing computer programs, or running research software tools. Some students, however, will need access to more substantial computational resources or special software. There are several options. If you are working in a research group or are connected to a funded research project, then the group or project is likely to have experimental equipment that you can use. Consult your supervisor about this. There are also compute/application servers available for Computer Science research student use, currently linux.cs.ox.ac.uk running Linux which can be accessed by using SSH, and windows.cs.ox.ac.uk accessed by remote-desktop for Windows. The Department of Computer Science's teaching network (used by undergraduates and M.Sc. course students) comprises 83 PCs running Linux. Students requiring fast parallel computation may be able to access the machine clusters at the Oxford e-Research Centre; for details of the resources available and contact information please see their website,:

http://www.oerc.ox.ac.uk.

Finally, if a student's research needs to use exotic or specialised equipment, expensive commercial software, stand-alone machines with root access for systems programming, or any other special provision, then this should have been discussed and agreed with their supervisor before undertaking doctoral work with these requirements. Special equipment like this must be funded through external research grants obtained by the supervisor or research group. The Department is not routinely able to fund the unforeseen acquisition of specialised experimental equipment for individual student projects. For more details of the Department's computers, networks and technical support, see the web pages at:

https://wiki.cs.ox.ac.uk/support

You will need your university single sign on (SSO) details to log into these pages.

All computing equipment provision in the Department is overseen by the Department's IT Management Committee. See the internal web pages for details of the membership of this committee:

http://www.cs.ox.ac.uk/internal/admin/committees.html

The graduate student representatives attend the ITM Committee. All students need to complete an application form to use Department of Computer Science computing facilities. A form is enclosed with your information pack (see also Appendix [H]). Oxford University Computing Services (OUCS) runs introductory courses throughout the year. These courses will be helpful for those of you who have had less opportunity of hands-on experience with computers. They will also help you to explore facilities available at Oxford University which, although possibly not required for your research, may be of interest to you. OUCS is based at

13 Banbury Road—opposite the Department of Engineering Science. There you will find information on its courses, also available at http://www.oucs.ox.ac.uk.

9.2 Using your own Computer

You should not find it essential to have your own personal computer. On the other hand, the Department does not normally supply computers for use at home or in your college, and you may find it convenient to have your own. The Department 's computing facilities can be used remotely from personal computers attached to the University network or elsewhere on the Internet, provided they have an SSH client and either X server software or VNC client software. For Windows, the Exceed X server software is available from OUCS for a nominal charge and the PuTTY SSH client is available as a free download, as is VNC.

Before any personal computers may be used in the Department they must be tested for electrical safety and then checked for security patching and anti-virus software. Only after these checks have been passed will they be authorised for connection. The general workload at the start of the academic year is such that no appointments for the testing and checking of personal equipment will be available for the first couple of weeks. Machines running illegal copies of the Windows operating system or other software will not be connected to the Department network and should not be brought into the building. Similar rules probably apply to network connections in college rooms.

Please note that you will not be allowed to plug in a laptop in the Department of Computer Science unless this has been safety tested. Wireless connectivity is available in the department and most of the rest of the university as Eduroam. You self-register for this on-line with your university card and Single Sign-On (SSO). Details from OUCS – www.oucs.ox.ac.uk

9.3 Laser Printing

No restriction on the use of laser printer output is made, but we do monitor individual totals. Please make only single copies of output and use the photocopiers to duplicate them if required. Multiple copies of documents cause delays for other users, so please do not abuse the privilege. We reserve the right to charge for excessive use.

9.4 Photocopying

Photocopiers are available for use by staff and students on all floors of the Wolfson Building. The copier in the Library is only available to copy articles etc. from journals (subject to copyright laws) and must not be used for general copying. The other copiers can be used by anyone, but please seek instruction from Jo Leggett (Room 106) and always report any faults or problems so that we can get the machines repaired. Private copying is monitored and maybe chargeable. Copying in the Radcliffe Science Library or the Bodleian Library requires a special copy card. This can be obtained from Michael Neville (room 240) and will require you to pay an initial fee of £5 (for which a receipt must be obtained) to put a 'credit' on the card during your first visit to the Radcliffe Science Library. Michael will refund this £5 on production of the receipt. When you leave the Department you should return the card to Michael Neville. If you lose your card, you will have to pay the cost of a replacement 'credit' so please look after it carefully.

9.5 Conference Funding

Presentation of papers and attendance at scientific conferences and workshops is an important—perhaps even essential—activity for the practising scientist. It enables you to

communicate your results to the community, to keep up to date with the work being done by other researchers in the field and share ideas with them, and to get feedback on your research. The Department of Computer Science is often able to assist with funding to attend scientific conferences or workshops. Priority is given to students who are attending a conference in order to present a peer-refereed paper. You can apply for funding by completing a form available from the Graduate Studies Administrator, room 112. You must get your supervisor's written support and you must apply ***well in advance*** of the conference you want funding for. Requests from research students in computer science will be considered by the Director of Graduate Studies. If your request is approved, the Department of Computer Science will normally pay up to half of actual substantial costs (e.g. for international conferences) and all of actual small costs (e.g. approximately £100 for local or short events).

Students who have other sources of travel funding, notably students supported by research project funds, should normally seek support from those sources before applying to the Department. Similarly students funded by the DTC should check how much travel grant they have available before applying for departmental funding. Sometimes supervisors are also able to help fund travel costs. Colleges are often able to make a contribution to the cost of presenting papers at conferences and conference organisers also may have grants available to students.

Please ensure that you have explored all other options before applying for departmental funding and indicate on the application form other sources of funding.

9.6 Hardship Fund

The Department of Computer Science does not have any hardship funds but there is a fund available to help research students in Mathematical Sciences facing unexpected financial hardship. This consists of the income from the bequest to the University of William Esson (Savilian Professor of Geometry from 1897 to 1916). Applications may be sent at any time to the Departmental Administrator of the Mathematical Institute, 24-29 St Giles', Oxford.

9.7 Publications

Each group publishes a series of either Research Reports or Technical Reports and a series of Monographs. These are distributed within the Department and to the wider academic community, and provide a speedy way of publicising the work of the Department. Publication in these series can lead (and has led) to fruitful contacts with fellow-researchers and organisations who may wish to apply the research. Research students may be encouraged to publish results in the form of a Research Report before embodying them in their thesis or submitting them for journal publication. Feedback gained from members of the Department can be very helpful indeed in guiding further work. Guidelines for the typesetting of reports and monographs are available from the Librarian. Students wishing to publish their work in the form of a report should first show it to their supervisor, and obtain approval from the monograph editor.

9.8 Libraries

The Department of Computer Science Library

The Department of Computer Science Library contains books, monographic series, journals, technical reports and past theses covering the main research interests of the Department. It is principally for use by graduate students and staff, and is situated on Level 2 of the building.

Opening hours: Library staff are normally available from 09:00-13.00 and –14.00-16.30. The library remains unlocked at other times.

Registration: you will be pre-registered but you must confirm your registration by bringing your University Card to the library before you begin to borrow.

The Catalogue: books and journals are listed on SOLO (the University-wide online catalogue).

Borrowing: members are limited to 12 books at any one time. Books may be borrowed for 3 weeks at a time with possibility of renewal for a further three periods of three weeks unless a book has been recalled by another reader. Books are borrowed using the automated self-issue system. Please ask if you have problems using the machine. No journal or part of a journal may be borrowed.

Short-loan Collection: books in the short loan collection are held in the Library Office and may be borrowed for 5 days. They are kept in locked bookcases and can only be borrowed when the library is manned or by email request. The short loan collection is mainly composed of books listed on Reading Lists for the M.Sc. courses.

Web Pages: See http://www.cs.ox.ac.uk/internal/library

Other services: The library also contains copies of the M.Sc. and D.Phil. theses submitted by students attached to the Department and past examination papers.

Contact the Library: Michael Neville (Librarian), Aza Ballard-Whyte (Library Assistant), telephone 73837, e-mail library@cs.ox.ac.uk.

Other Library Resources

The most relevant libraries elsewhere in the University are the Radcliffe Science Library, the Whitehead Library (at the Mathematical Institute for numerical analysts and formal mathematicians), the Engineering Science Library (especially for those interested in robotics and machine vision) and the Hooke Library. Material that is not held in Oxford may be available on inter-library loan. Please consult the Librarian about loans from outside Oxford.

Electronic Journals: see http://www.bodley.ox.ac.uk/elec-res.html

10 Skills training

Skills training is seen as an increasingly important element of your graduate course experience. The University provides a wide range of skills training opportunities.

10.1 University Skills Portal

The Skills Portal, http://www.skillsportal.ox.ac.uk, is a website for all research students, postdoctoral researchers and their supervisors at Oxford. It brings together a range of information about transferable skills development and has details of skills training courses, seminars and workshops offered throughout the University in a searchable database. There are links to online resources and tips on subjects such as leadership, team work, project management and teaching skills. It also gives advice on getting the most from your time at Oxford and putting yourself in the best possible position to succeed in your career, whatever it might be. The Skills Portal Forum is the place to ask questions, discuss issues with other researchers and make your views known to the people who organise the training. In addition, there are regular emails about Skills Training Bulletins. There is also a lot of useful information on the Research Skills Toolkit web pages:

http://www.skillstoolkit.ox.ac.uk/

It is your responsibility to record the training you have undergone and also to communicate your training needs.

10.2 Presentation Skills

The most important thing to keep in mind is that research presentations are meant to communicate your work to a general audience. A talk should therefore start by setting the scene, posing the questions you attempt to answer, and explaining why these questions are relevant. It is much more important that you give an intuitive feel for the field you're working in rather than show the technical details of a solution. You need a good understanding of where you are on the map of computing science, and why you're there.

Any talk, especially a short one, needs a lot of preparation. Unless you already have given dozens of seminars, you won't be able to tell whether your seminar fits the time limit simply by writing out some key points you intend to mention. The only solution is to practise for yourself, perhaps in your research group meeting, or for an audience that consists of a friend and your supervisor. That will also help you to think of the right formulations for your thoughts.

Finally, it makes sense to study the text of some 'model lectures' to learn the fine tricks of the trade that make a truly captivating presentation. Two examples you may find useful are **[1,2]**. More good advice can be found in **[3]**. Good luck!

References

[1] R.C. Backhouse. Making formality work for us. EATCS Bulletin, 38:219-249, 1989.

[2] D.E. Knuth. Theory and practice. Theoretical Computer Science, 90:1-15, 1991. http://www.sciencedirect.com/science/journal/03043975/90/1

[3] S.L. Peyton-Jones, J. Hughes and J. Launchbury. How to give a good research talk. (published in SIGPLAN Notices)
http://dl.acm.org/citation.cfm?id=165564.903972&coll=DL&dl=ACM&CFID=91970806&CFTOKEN=27535610

10.3 Good Practice in Citation and the Avoidance of Plagiarism: communication from the Graduate Skills Advisory Group

Plagiarism is an increasingly important issue for both undergraduate and graduate students. It may also be an issue for early career researchers new to the University. We wish to draw your attention to the existence of an online course that provides information on academic integrity and the avoidance of plagiarism. Upon completion of the 'Good Practice in Citation and the Avoidance of Plagiarism' course, participants may print off a certificate for inclusion in their skills training records.

Completion of the course provides proof that the participant has engaged with the material, while also demonstrating that the institution has made efforts to publicise the issue and provide guidance for students.

There is tracking in place to identify those who have completed the course and since this has been funded through the Skills Training agenda, there is no cost to the participant, Department, Faculty or College.

We would urge you to draw this to the attention of your students and staff as a useful source of basic information in this important area.

Website: http://www.skillsportal.ox.ac.uk/course_listing_details.php?code=OLC-1-1

11 The University and you

11.1 Joint Consultative Committee with Graduates

There is a graduate student representative, currently Hugo Nava Kopp, on the Faculty of Computer Science which meets on the Monday of sixth week. Please tell your representative of any matters or questions you would like raised at the Faculty meetings. The student representative also attends the Joint Consultative Committee with Graduates, the remit of which is printed below:

STANDING ORDERS
Joint Consultative Committee with Graduates

There shall be a Joint Consultative Committee with Graduates comprising the Director of Graduate Studies, the Academic Administrator, the Graduate Studies Administrator and representatives from the research and MSc students. Two students will be elected by the students from each year's cohort and will remain on the Committee for the duration of their studies. Students will be asked to put forward a short statement on why they should serve on the Committee and an election will be held by email and decided by a simple majority. The Committee may operate, if necessary, without its full complement of places having been filled. If only two students come forward, they will be elected by default. The committee shall be concerned with matters such as training, supervision, research facilities for research degree students and social events.

The Director of Graduate Studies shall chair the committee. The Academic Administrator or Graduate Studies Administrator will act as Secretary to the Committee. The minutes of the Committee shall be forwarded to the Graduate Studies Committee.

The Committee shall be able as of right to address a communication direct to the Departmental Management Committee or the Research Committee of the Department of Computer Science depending on the matters involved.

Unless the Chairman shall order otherwise the committee shall meet at 12.00 noon on Monday in the sixth week of each Full Term. Your representative will be happy to communicate to the committee any matters or questions you would like raised.

11.2 University Gazette and Oxford Blueprint

The Gazette is published weekly, in term time, and is the official publication for University business, regulation changes, meetings etc. It is available in all the University and College Libraries and in the Common Room on the ground floor. Oxford Blueprint, a newsletter for University and college staff and students, is published in 0th, 3rd, 6th and 9th weeks of term. It contains news, interviews and features reflecting the diversity of activity across the University, and an events diary will be included.

11.3 University Club

The University Club provides a social and recreational venue intended to serve the University's academics, post-doctoral staff, support staff, postgraduates, alumni and those who have retired from academic or staff positions. To apply to become a member of the University Club, please visit the Club's web site: http://www.club.ox.ac.uk/ and fill out the

on-line membership application form (accessible via the 'Membership' link). On-line applications are preferred, but if you do not have access to the Internet, please complete the application form in your graduate pack and hand in to the reception desk, or, send them to Reception at the University Club. Applications may take two weeks to process. Once processed your University card will admit you to the club.

11.4 CoGS

The **Co**mputer Science **G**raduate **S**ociety (COGS) is an organisation within the Department of Computer Science that provides organised events and outings for the graduate students and research assistants within the lab. In addition, a member of the COGS committee sits on a number of departmental and divisional committees including:

- Safety Committee
- IT Management Committee
- Library Committee
- Joint Consultative Committee

The current COGS committee consists of the following members:

- **President –** Hugo Nava Kopp
- **Treasurer –** Pengyu Wang
- **Secretary** - TBA
- **Social Committee –** David Quick
- **Geeks Night Coordinator** - Leopold Haller
- **MSc Representative** – TBA

Postdoc Representative – Klaus Drager

COGS was created with the following goals in mind:

- Increase the face-to-face contact in the Department of Computer Science
- Represent the graduate students at both the departmental and divisional level
- Increase the social uptake of the 1st year students.

If you have any suggestions for events or other social opportunities, please feel free to contact one of the committee members. In addition if you have any concerns about the Department of Computer Science that could be addressed in a departmental committee, please address them a member of the committee who will ensure they get heard

12 What next?

12.1 Becoming an academic

Many of our graduates continue on to successful research and academic careers, which typically begin with a postdoctoral research position. A number of Junior Research Fellowships are available at Oxford, and Engineering and Physical Research Council, Royal Academy of Engineering and the Royal Society each offer schemes to fund postdoctoral fellows. There are also many postdoctoral research positions and lectureships advertised at UK universities and abroad. Also talk to your supervisor and the Departmental research facilitators about your career plans.

12.2 Vitae - Online Career Development Resource

Vitae are an organisation that is committed to enhancing the quality and output of the research base in the United Kingdom through supporting the training and development of the next generation of world-class researchers. It is funded by the Research Councils UK, managed by CRAC: The Career Development Organisation and delivered in partnership with regional universities. Sections of the Vitae website are dedicated to career development options for e.g. early career research staff; for more information see:

http://www.vitae.ac.uk/1269/Research-staff.html

12.3 Careers in IT

Information about careers is provided by Oxford University Careers Service, 56 Banbury Road. The Careers Service organises many events to help you choose a career that suits you, and to put you in touch with recruiters. Their website is:

http://www.careers.ox.ac.uk/

You are urged to contact the Careers Service for detailed information on careers, and also for advice on compiling a CV, on how to apply, and on interview technique. Information on general job vacancies in the department can be found on our website at:

http://www.cs.ox.ac.uk/news/vacancies.html

Information on job vacancies elsewhere or secondments together with skills training are sent out in an email once a week and are advertised here:

http://www.cs.ox.ac.uk/admissions/dphil/newsindex.html

Safety Information

These notes give some information about the Department's safety arrangements. For further information, please contact the Departmental Safety Officer.

Action in case of emergency

To summon the FIRE BRIGADE, AMBULANCE SERVICE and/or POLICE, DIAL 999. Note that 999 can be dialled from any internal University telephone extension, even if it is otherwise barred from making outside calls.

For **SERIOUS ACCIDENTS** or **FIRES** on University premises, immediately after arranging for the emergency services, telephone again either the *University Safety Office* (ext. 70810), or if the Safety Office is unmanned, the *Security Services* (ext. 89999).

To summon the **SECURITY SERVICES**, dial 89999.

Remember that unless there is a continuing risk to others or to property, the law requires that in cases of serious accidents or fires the scene must remain undisturbed until it is examined by the Health and Safety Executive, the University Safety Office and Trade Union safety representatives. Some types of serious accident must be reported immediately. In those cases, the Safety Office is responsible for contacting the Health and Safety Executive.

First Aid

The department arranges in-house first aid training for new research students, normally through a two hour session in the week before Michaelmas Term. Any other member of the department interested in attending such a course should contact the Safety Committee Secretary. Several members of staff have taken part in extended first aid training, and a list of qualified First Aiders is posted in the entrance hall of the Wolfson Building; their names are also marked on the departmental telephone list. **First Aid boxes are located with each of the qualified** first aiders.

Fire

There are blue **FIRE ACTION** notices in each building. Please read these *before* there is a fire!

If you discover a fire, immediately operate the nearest fire alarm call point (these are red, and are situated in the stair wells and at each emergency exit), and then attack the fire, if possible, with the fire extinguishers provided **but under no circumstances putting yourself or others at risk**. The receptionist or the senior person present should call the fire brigade immediately.

On hearing the fire alarm, leave the building **immediately** – use the nearest available exit, close all doors as you leave, do not stop to collect personal belongings. Do not use the lift – if you are unable to use the stairs, please wait inside the stairwell nearest the lift for the fire brigade to rescue you. Do not re-enter the building unless authorised to do so. Familiarise yourself with fire exit routes from the buildings, and relevant assembly points. The assembly point for the Wolfson Building is on the south side of Keble Road by the chapel of Keble College – do not cluster at the exits to the buildings.

Fire alarms in the Wolfson Building are sirens. It is occasionally necessary to test the alarms, but notices are always posted beforehand, and the alarm sounds only for a few seconds – assume that any fire alarm sounding for more than five seconds is a signal that you must leave the building.

In the Wolfson Building, there are several sets of Fire extinguishers on each floor, including sets near each lift and staircase. Please take note of where the nearest fire extinguishers are to the rooms you normally use.

Fire extinguishers in the Wolfson Building are now in the European standard colours: they are all red! Carbon dioxide extinguishers are now identified only by a black panel, foam extinguishers by a cream label, and any remaining water extinguishers by a white label. Do not use water or foam on electrical equipment: use the CO2 extinguishers with the black label.

Escape routes

Please check that you know the **escape routes** from the buildings you use – again, *before* you actually need to use one in an emergency evacuation of the building. These are sign-posted in each building.

There are designated refuge areas for those unable to use the stairs in an emergency: on the Parks Road staircase, in the link between the north side of the Wolfson Building and the e-Science building, and on the external fire-escape at the western end of the atrium. The link and atrium refuge areas are equipped with (yellow) call points.

Corridors, stairwells and exits **must not be obstructed**. Anything left in corridors, stairwells or exits will be removed. Bicycles which obstruct any of the exits or emergency exits will be removed.

Smoking

Smoking is not permitted anywhere in the Department of Computer Science's buildings. Smoke detectors linked to the fire alarm system are in operation in the Wolfson Building.

Electricity

All electrical equipment (including personal property) must be tested for safety before it is used in the Department of Computer Science buildings. Equipment must not be dismantled. If equipment is faulty, do not attempt to repair it – please fill in a Fault Report Form (available from the pigeon-holes in the Wolfson Building, or from a tray in the Thom Building Software Laboratory). Do not tamper with electrical supply equipment – please report any problems to the Department’s technicians.

Equipment rooms

Electrical power in the various equipment rooms (including the Software Laboratory in the Thom Building) can be cut by an `emergency stop'. In the Thom Building, this is a white break-glass unit; in the Wolfson Building, it is a red button (either just inside or just outside the door to each equipment room); it is normally clearly labelled with a green `Emergency stop' sign. Please note that it will usually need the support staff to restart circuits.

Lighting

Do not switch off any corridor lighting at any time. Please report any faulty corridor or staircase lighting to the technical staff. Please advise the Administrator if there are any other areas which are poorly lit.

Hazardous Waste

The waste bins are for normal office waste only, and you have a responsibility not to dispose of anything hazardous in them. In particular: please dispose of batteries in the collection box in the post room (room 157); fluorescent (low-power) bulbs should be disposed of by contacting the Department's technicians.

Other Safety information

A Statement of the Department's Safety Organisation, a Statement of the University Safety Policy, and a collection of University and Departmental Guidance Notes are available on the web.

The University Safety Office has a library of safety publications and other material at 10 Parks Road.

Minutes of meetings of the Departmental Safety Advisory Committee are published, and are available on the department's notice boards.

[A] People

Academic staff of the Department of Computer Science and their research interests

Professor Samson Abramsky FRS, Christopher Strachey Professor of Computing,
Room 206, Tel: 83558
Semantics of computation, game semantics, logic, and programming; High-level methods for quantum computation.

Professor Michael Benedikt, Professor of Computing Science
Room 355, Tel: 73838
Database systems, web data management, finite and infinite model theory, database theory, software verification, information exchange

Dr. Phil Blunsom, University Lecturer in Information Systems
Room 408, Tel: 83606
Information Systems

Professor Kevin Burrage, Professor in Computational Systems Biology
Room 313, Tel: 83568
Computational Mathematics, Computational and Systems Biology, Stochastic modelling for the Life Sciences, Multiscale modelling and simulation

Dr. Helen Byrne, University Lecturer in Computational Biology

Dr Ani Calinescu, Departmental Lecturer
Room 317, Tel: 83527
Manufacturing complexity; information technology in manufacturing; conceptual and analytical tools to support the design, scheduling and control of manufacturing systems; the cost and value of information; distributed systems

Dr Stephen Cameron, Reader in Computing Science
Room 424, Tel: 73850
Geometric reasoning; robot programming and planning

Dr Alessandra Cavarra, University Lecturer in Software Engineering
Room 466, Tel: 83666
Model-based software engineering; Formal methods (ASMs); UML formalisation; integration of formal and semi-formal methods

Professor Bob Coecke, EPSRC Advanced Research Fellow, Lecturer in Quantum Computer Science
Room 210, Tel: 73829
Mathematical foundations of quantum physics; High-level methods in quantum computer science; Ordered structures, logic and category theory; Computer science semantics.

Professor Sadie Creese, Professor of Cybersecurity
Room 402, Tel: 73616
Human factors and risk perception; data privacy and dynamic consent models; usability of security technology; risk management; threat and vulnerability modelling; visual analytics;

situational awareness and information provenance; intrusion detection; security architectures and network defence

Bernardo Cuenca Grau, Royal Society Fellow & Departmental Lecturer
Room 305, Tel: 73887
Knowledge representation; ontologies and ontology languages; description logics; automated reasoning and applications in areas such as bio-medical information systems and Semantic Web

Professor Jim Davies, Professor of Software Engineering
Room 461, Tel: 73835
Model-driven architectures; e-Science; relationship between state- and event-based descriptions.

Dr. Andreas Doering, Departmental Lecturer in CPP & Quantum Computer Science
Room: 208 Tel: 73885

Dr Ivan Flechais, Departmental Lecturer in Software Engineering
Room 463, Tel: 83502
Computer security; secure system design; socio-organisational factors that affect secure systems, and finding ways of combining security design and this socio-organisational knowledge into a software engineering process.

Professor David Gavaghan, Professor in Computational Biology
Room 362, Tel: 10667
Mathematical modelling, numerical analysis and computation applied to problems arising in physiology, biology, chemistry and e-science.

Professor Jeremy Gibbons, Professor of Computing
Room 462, Tel: 83508
Theories of program derivation; program specification and transformation; algorithm design and functional programming

Dr Michael Goldsmith, Senior Research Fellow
Room 427, Tel: 10813

Professor Georg Gottlob, Professor of Computing Science
Room 358, Tel: 83504
Web data extraction, constraint satisfaction, computational logic, data bases, data base theory, query languages, and complexity theory.

Dr. Vicente Grau, Academic Fellow
Room 267, Tel: 10684

Dr Ralf Hinze, Reader in Software Engineering
Room 467, Tel: 10700
Functional programming, functional algorithm design, functional data structures, generic functional programming (Generic Haskell)

Professor Ian Horrocks, Professor of Computer Science
Room 304, Tel: 73939

Knowledge representation, ontologies and ontology languages, description and modal logics, automated reasoning, implementation and optimisation of reasoning systems

Professor Peter Jeavons, Professor of Computer Science
Room 354, Tel: 73853
Computational complexity theory and algebra; computational biology; constraint satisfaction problems; applications.

Dr Marina Jirotka, Reader in Requirements Capture
Room 268, Tel: 10613
Relating work place studies to the requirements, design and evaluation of technology. A main focus on eScience applications and eHealth.

Dr Geraint Jones, University Lecturer
Room 315, Tel: 73851
Design techniques that help give confidence in the correctness of hardware and of parallel programs; design by calculation.

Dr David Kay, University Lecturer and Deputy Director of Graduate Studies
Room 364, Tel: 10814
Mathematical modelling, numerical analysis and computation; Development and analysis of reliable and efficient numerical schemes for partial differential equations

Dr Andrew Ker, University Lecturer in Computer Science and Royal Society Fellow
Room 348, Tel: 83530
Information hiding: steganography, steganalysis, and steganographic capacity.

Professor Daniel Kroening, Professor in Computer Science
Room 323, Tel: 83506
Formal methods for the correct construction of hardware and software systems. This includes compositional reasoning, and automated methods for checking compliance of an implementation with a specification. I am particularly interested in applying these methods to practical hard and software implementations given in languages like C or C++

Professor Marta Kwiatkowska, Professor of Computing Systems
Room 453, Tel: 83509
Modelling, analysis and verification of probabilistic and real-time systems; Quantitative verification; Model checking; Software verification; Computational biology

Professor Gavin Lowe, Professor of Computer Science
Room 343, Tel: 73841
Concurrency, computer security (particularly security protocols and information flow); model checking.

Professor Tomasz Lukasiewicz, Professor of Computer Science
Room 348, Tel: 73896
Automatic web data extraction; knowledge representation and reasoning for integrating different sources on the Web.

Dr Andrew Martin, University Lecturer
Room 460, Tel: 83605

Applications of the Z notation; Z semantics; tactic language design and semantics; Ergo proof tool.

Dr. Ivan Martinovic, University Lecturer
Room 429, Tel: 10745
Distributed Systems and Network Security

Dr Steve McKeever, University Lecturer
Room 464, Tel: 83552
Automatic compiler generation; development of a declarative hardware description language, Pebble; refinement of advanced language features to core language; automation of endurance athletic coaching process.

Professor Tom Melham, Professor of Computer Science
Room 418, Tel: 73824
Applications of formal logic; mechanised reasoning, model checking and theorem proving; formal verification; digital circuit design; reconfigurable hardware; programming language semantics

Professor Oege de Moor, Professor of Computer Science
Room 005, Tel: 73878
Programming tools: compilers, IDEs, refactoring, aspect-oriented programming, meta-programming.

Dr. Boris Motik, University Lecturer in Computer Science
Room 308, Tel: 83544
Developing algorithms and techniques necessary for realizing advanced applications in the Semantic Web

Dr Hanno Nickau, Departmental Lecturer
Room 428, Tel: 83588
Semantics of programming languages; lambda calculus, types, proofs and categorical logic; game semantics for proofs and computation; computability and complexity theory; effectively given data structures

Dr Dan Olteanu, University Lecturer in Information Systems
Room 409, Tel: 10678
Database systems, web data management, uncertainty and inconsistency in databases

Professor Luke Ong, Professor in Computer Science and Director of Graduate Studies
Room 340, Tel: 83522
Semantics of computation, game semantics; verification and software model checking; logic in computer science; Internet routing protocols.

Professor Joel Ouaknine, Professor of Computer Science
Room 414, Tel: 73822
Modelling, analysis, and verification of real-time and hybrid systems; Software model checking; Concurrency; Probabilistic systems; Theorem proving

Dr Vasile Palade, Departmental Lecturer
Room 322, Tel: 83606

Hybrid intelligent systems, neural networks, genetic algorithms, fuzzy systems, multi-agent systems, rule extraction, applications of intelligent techniques in control and diagnosis.

Professor Stephen Pulman FBA, Professor of Computational Linguistics
Room 405, Tel: 10800
Research interests: formal and computational semantics for natural language; automated reasoning and language; combining statistical and symbolic models of language

Dr. Blanca Rodriguez, Career Development Fellow
Room 370, Tel: 10806
Investigating the mechanisms of cardiac arrhythmias and their diagnosis and therapies using advanced computational modelling

Professor Bill Roscoe, Professor of Computing Science and Head of Department
Room 256, Tel: 73859
Concurrency; semantics; VLSI; distributed databases; formal methods in hardware design; domain theory.

Dr. Mehrnoosh Sadrzadeh, EPSRC Career Acceleration Fellow
Room 217, Tel: 73825
Compositional distributional models of meaning in natural language

Dr Andrew Simpson, University Lecturer
Room 008, Tel: 83514
Modelling and analysis of critical systems, database design and security for e-science applications.

Dr Michael Spivey, University Lecturer
Room 242, Tel: 73854
Applications of discrete mathematics to the design of software and hardware systems; compilation of programs into hardware designs.

Mr Bernard Sufrin, University Lecturer and Emeritus Fellow in Computer Science
Computer-based support for Refinement and Proof.; Formal methods, Abstraction, and Patterns in system design; Programming language design and implementation; User Interface Design for Diagnostic and Therapeutic applications of computers; Instrument Design for Psychometric Experiments

Dr Niki Trigoni, University Lecturer
Room 469, Tel: 10681
Distributed data management in sensor networks: query processing, storage management, routing and MAC layers

Dr Irina Voiculescu, Departmental Lecturer
Room 425, Tel: 83501
Geometric modelling; constructive solid geometry; interval arithmetic; multivariate Bernstein-base polynomial forms.

Dr Jonathan Whiteley, University Lecturer
Room 365, Tel: 73858
Mathematical modelling, numerical analysis and computation applied to problems in physiology and biology.

Professor Michael Wooldridge, Professor of Computer Science
Room 330, Tel: 10812
Formal techniques for reasoning about multiagent systems; the computational aspects of rational action in systems composed of multiple self-interested computational systems. Current research is at the intersection of logic, computational complexity, and game theory.

Professor James Worrell, Professor of Computer Science
Room 416, Tel: 73843
Modelling and verification of infinite-state systems, including real-time and probabilistic systems. Semantics of computation.

Dr. Hongseok Yang, University Lecturer
Room 218, Tel: 10783
Programming language theory, Machine Learning and Testing

Teaching Assistants
Mr. Robert Fink
Room 351, Tel: 83596
Mr. Justin King Lacroix
Room 474, Tel 10716

Support staff of the Department of Computer Science

Room	*Telephone*	*Name*	*Position*
112	83559	Wendy Adams	PGT Course Administrator
142	73849	Emmanuel Apostolidis	Computing Officer
109	73888	Joe Atherton	Buildings Facilities Manager
240	73837	Aza Ballard-Whyte	Library Assistant
022	10637	Barbara Beattie	Auxiliary
140	73861	Terry Brown	Computing Officer
104	73820	Nycole Cain	Personnel Officer
104	73833	Leanne Carveth	Deputy Academic Administrator
142	83589	Ian Collier	Computing Officer
140	73836	Edward Crichton	Web Developer
106	83585	Brenda Deeley	Administrative Staff Secretary
114	73898	Katie Dicks	Finance Officer
215	83586	Liz Gresham	Project Administrator
113	73611	Casey Hambidge	Finance Assistant
	73838	Paul Hambidge	Receptionist
113	10731	Claire Hawtin	Finance Assistant
022	73845	Steve Hill	Facilities Technician
107	73863	Shoshannah Holdom	Academic Administrator
022	73845	Colin James	Technician
471	83521	Jackie Jordan	SEP Manager
106	83601	Jo Leggett	Academic Administration
116	83668	Sharon Lloyd	Administrator, Research Facilitator/ Project Manager
244	73821	Suzanna Marsh	Publicity & Schools Liaison Officer
240	73837	Michael Neville	Librarian
116	73861	Monica O'Kane	Finance Officer
140	83561	John Peachey	Computing Officer
006	10691	Kelly Ryan	Research Facilitator
471	83525	Shirley Sardar	Administrative Officer, SEP
112	73817	Julie Sheppard	Graduate Studies Administrator
113	10696	Jo Smith	Finance Assistant
142	10733	Ashish Thandavan	Computing Officer
148	83567	Craig Tranfield	Computer Operations Manager
017	73845	Peter Turner	Electronics Technician
253	83503	Elizabeth Walsh	PA to Head of Department
471	83667	Chris Williams	Admin Assistant, SEP
363	10782	Jennifer Wilkinson	Project Manager
107	73863	Maureen York	Operational Project Manager
		support@cs.ox.ac.uk	Computer Support Team

[B] Research Groups

Research in Computer Science at Oxford began with the *Programming Research Group* (PRG). The PRG obtained its early reputation for its pioneering research on programming languages, concentrating on their logical foundations including Scott-Strachey denotational semantics, for its development of the CSP approach to concurrent processes, and for the Z specification language and algebraic theories of programming. Other research (often in collaboration with other organisations) has developed the occam language, methods to ensure the correct production of software and hardware, the functional programming language Orwell, and the 2OBJ and Jape logical frameworks for theorem proving, hardware compilers and optimisers, and game-theoretic models of higher-order programming.

Today, Computer Science research in the Department continues in the spirit established by the PRG. Many of its research projects rely on a close interaction of mathematical theories with their experimental validation and evaluation. Others involve methods from other disciplines, such as the social sciences. All aim to achieve a high degree of intellectual rigour.

On the experimental side of Computer Science, the Department has a long-established policy of subjecting its theories to practical tests. Early tests are often conducted as student projects; they range from significant case studies on paper to prototype implementations designed to answer specific questions of feasibility, to explore the range of application and to evaluate acceptability of interfaces. In many cases a project has been set up under the sponsorship of local industry or of another department of the University and the delivered programs have been of recognised benefit to their sponsors.

One important characteristic of the Department is the spirit of free interchange among its members working on different theories or on different applications. Problems of practical importance are often solved with the assistance of a theorist—or perhaps such problems reveal a gap or deficiency in the theory and the remedy leads to a yet more elegant and comprehensive theory. It continues to vindicate the wisdom of Christopher Strachey's remarks.

The Department has more than fifty research partners throughout the world. One project, with INMOS Ltd., won the Queen's Award for Technological Achievement in 1990; a second Queen's Award was gained in 1992 on the basis of the Department's long-term collaboration with IBM UK Ltd on the re-engineering of its CICS transaction processing system.

Further information on departmental research groups can be found here:

http://web.cs.ox.ac.uk/research/

[C] Applying for Computer Resources

The Department network connects dozens of real and virtual servers, several hundred workstations (mostly Linux but also Windows), and many other machines. Facilities elsewhere are accessed via fast connections to the Internet. Details of the facilities available on the network may be obtained from any of the Department's Computing Officers or on the web at:
http://www.cs.ox.ac.uk/help/

The University has formal regulations and a code of conduct which govern the use and misuse of Computers and Networks. In addition to this, members of the Department of Computer Science are expected as a matter of honour to respect the privacy of other users of the networks to which they have access, and to refrain from actions which will cause others' work to be damaged or delayed. Any member of the Department seeking to explore the letter, rather than the spirit, of the University regulations would be well advised to consult the Director of Graduate Studies beforehand.

For an account on the Department's own network you should complete the Application for Computer Resources form included in your induction pack, and bring it to the first practical class. If this is not possible, please consult the support team (user accounts), Room 142, Tel: 83589

If you experience difficulties in using any of the machines or networks, please send electronic mail to support@cs.ox.ac.uk

The following notes are to help you to complete your Application for Computer Resources.

The Data Protection Act

The Data Protection Act 1998 defines "personal data" as data which "relate to a living individual who can be identified- (a) from those data, or (b) from those data and other information which is in the possession of, or is likely to come into the possession of, the data controller, and includes any expression of opinion about the individual and any indication of the intentions of the data controller or any other person in respect of the individual;"

The University has issued a statement on its Data Protection Policy, and you are requested to read and take note of this; a copy is appended. By signing the application form you are agreeing that you will not misuse personal data. If you are in any doubt about this, or other aspects of data protection, you should contact the support staff.

Other Notes

These notes are to help you to interpret the Application for Computer Resources form. If you need any additional help or information, please contact the support staff at the Department of Computer Science, Wolfson Building, Parks Road, support@csox.ac.uk

Nobody may use the resources of the Department of Computer Science without signing an application form, nor continue to do so once their account has expired.

Queries about the conditions imposed by particular software licence agreements should be addressed to the support staff.
Heads of University departments issue rules and regulations which apply to all whose use facilities in their departments. The use of Department of Computer Science facilities based

in the Thom Building is governed by the rules of the Department of Engineering Science (as they apply to the Thom Building) and by the rules of the Department of Computer Science (as they apply to use of practical facilities). You must comply with any such rules which are brought to your attention. The University has issued a policy on data protection and computer misuse which you should read and take note of, copy attached. **By signing the application form you are agreeing that you will not misuse any of the resources.**

Referenced documents are available at or based upon:

> http://www.admin.ox.ac.uk/dataprotection/policy/ (University Policy on Data Protection)
>
> http://www.legislation.gov.uk/all?title=Data%20Protection (Data Protection Acts)
> www.ict.ox.ac.uk/oxford/rules (Regulations and Policies applying to all users of University ICT facilities)

Returning the application form

Please bring the completed form to the Introduction to the Computing Facilities talk or one of the practical classes arranged for you during the induction week where you will be asked to hand it to one of the Departmental Lecturers in exchange for details of your username and password.

Declaration

This is a copy of the declaration which each student who requires computing facilities is asked by the Department of Computer Science to sign:

> I accept that all software systems and software packages used by me are to be regarded as covered by software licence agreement, with which I agree to abide, which unless specifically stating otherwise will prohibit me from making copies of the software or transferring copies of the software to anyone else, other than for security purposes, or from using the software or any of its components as the basis of a commercial product or in any other way for commercial gain. I indemnify the Chancellor, Masters and Scholars of the University of Oxford, and the Oxford University Department of Computer Science, for any liability resulting from my breach of any such software licence agreement.
>
> I will not use personal data as defined by the Data Protection Act on computing facilities made available to me in respect of this application other than in the course of my work as per the University's registration. I accept that the Oxford University Department of Computer Science reserve the right to examine material on or connected to any of their facilities when it becomes necessary for the proper conduct of those facilities or to meet legal requirements and to dispose of any material associated with this application for access to its resources upon termination or expiry of that authorisation.
>
> I agree to abide by any code of conduct relating to the systems I use and the University policy on data protection and computer misuse. In particular, I will not (by any wilful or deliberate act) jeopardise or corrupt, or attempt to jeopardise or corrupt, the integrity of the computing equipment, its system programs or other stored information, nor act in any way which leads to or could be expected to lead to the disruption of the approved work of other authorised users.

[D] Student and Supervisor Responsibilities

UNIVERSITY OF OXFORD

MEMORANDUM OF GUIDANCE FOR RESEARCH STUDENTS AND THEIR SUPERVISORS

[This is an extract from the *Examination Regulations 2012, pp. 852-856.* If this note should differ from the *Examination Regulations* in any respect then the *Examination Regulations take precedence*.]

Responsibilities of the student

1. The student must accept his or her obligation to act as a responsible member of the University's academic community.
2. The student should take ultimate responsibility for his or her research programme and endeavour to develop an appropriate working pattern, including an agreed and professional relationship with the supervisor(s). The student should discuss with the supervisor the type of guidance and comment which he or she finds most helpful, and agree a schedule of meetings.
3. He or she should make appropriate use of the teaching and learning facilities available within the University.
4. It is the student's responsibility to seek out and follow the regulations relevant to his or her course, including faculty/departmental handbooks/notes of guidance, and to seek clarification from supervisors and elsewhere if this is necessary.
5. The student should not hesitate to take the initiative in raising problems or difficulties, however elementary they may seem. He or she should ensure that any problems regarding the project are drawn to the attention of the supervisor so that appropriate guidance may be offered.
6. The student should seek to maintain progress in accordance with the plan of work agreed with the supervisor, including in particular the presentation of the required written material in sufficient time for comment and discussion before proceeding to the next stage. As groundwork for the thesis, the student should as soon as possible write rough drafts of possible chapters. Students in the sciences should keep a systematic record of all that has been attempted and accomplished. Both the student and the supervisor will want to keep a record of all formal, scheduled meetings. They may well want to agree a record of what has been discussed and decided.
7. The student should recognise that a supervisor may have many competing demands on his or her time. The student should hand in work in good time to the supervisor and give adequate notice of unscheduled meetings. The need for adequate notice also applies to requests for references from the supervisor.
8. The student should be aware that the provision of constructive criticism is central to a satisfactory supervisory relationship, and should always seek a full assessment of the strengths and weaknesses of his or her work.
9. If the student feels that there are good enough grounds for contemplating a change of supervision arrangements, this should first be discussed with the supervisor or, if this seems difficult, with the appropriate head of department, director of graduate studies or their deputies, or the college advisor.
10. Where problems arise, it is essential that a student gives full weight to any guidance and corrective action proposed by the supervisor.
11. The student should provide regular reports on his or her progress to the board in accordance with any requirements of the Educational Policy and Standards Committee. The student must satisfy the supervisor on his or her progress at least once a year and should inform the supervisor at once of any circumstances that might require his or her mode of study to be modified or his or her registration as a graduate student to be extended, suspended or withdrawn.

12. The student should ensure that the standard of his or her English is sufficient for the presentation of a thesis. Students whose first language is not English should take advice on this.
13. The student should make full use of the facilities for career guidance and development, and should consult their supervisor for advice and encouragement where appropriate.
14. The student should ensure that he or she allows adequate time for writing up the thesis, taking the advice of the supervisor. Particular attention should be paid to final proof-reading.
15. It is the student's responsibility to decide when he or she wishes to submit the thesis for examination, after taking due account of the supervisor's opinion, though this is only advisory. It is in the student's interests to ensure that the final version has been made available to the supervisor in good time before the intended date of submission.

Responsibilities of the supervisor

1. In considering an invitation to supervise a research student, the supervisor must recognise and accept the responsibilities both to the student and to the relevant board or committee implicit in the supervisory relationship.
2. Where practicable, the supervisor should assign the student some directed reading before arrival. This might be of a general background nature so as to put the student in a position to discuss the topic with the supervisor soon after arrival, or it might form the start of a survey of current literature. The supervisor is required to meet with the new student not later than the second week of Full Term.
3. The supervisor is responsible for giving early advice about the nature of research and the standard expected, and about the planning of the research programme. The supervisor should ensure that, where the student's research forms part of a funded research programme, sufficient financial support will be available for the duration of the student's period of study; if there is any doubt, he or she should agree with the student an alternative fall-back project at an early stage. The supervisor is also responsible for advising the student about literature and sources, attendance at classes, and requisite techniques (including helping to arrange instruction where necessary). The supervisor should discuss with the student the lecture list for his or her subject and related lecture lists. The supervisor should identify with the student any subject specific skills necessary for the proposed research.
4. Where during his or her first year of research a student wishes, in addition to contact with his or her supervisor(s), to have limited consultation with one or two other academics the supervisor should try to identify (in conjunction with the Director of Graduate Studies) such colleagues and to arrange for an approach to them by the student.
5. Where a supervisor operates as a co-supervisor or as a part of a supervisory team, it is important to clarify the responsibilities of each supervisor and to coordinate advice and guidance.
6. Where the thesis is likely to involve statistical analysis or tabulation of numerical results, the supervisor should arrange for the student to obtain advice, *at an early stage*, about the design of any experiment or the collection and storage; of data, and about its subsequent analysis.
7. The supervisor should ensure that the student works within a planned framework which marks out the stages which the student should be expected to have completed at various points in his or her period of study. The nature of the framework will of course vary widely from subject to subject, but in all subjects the formulation of the topic, planning and management of time should begin at an early stage. Particular attention should be given to the selection and refinement of the research topic, which in the case of the D.Phil. should be one which a diligent student may reasonably be expected to complete within three (or at most four) years of full-time study.

8. The supervisor should meet with the student regularly. Supervisor and student should agree a formal schedule of meetings on a termly or annual basis. The supervisor should also be accessible to the student at other appropriate times when advice is needed. The supervisor should also request written work as appropriate and in accordance with the plan discussed with the student. Such work should be returned with constructive criticism and in reasonable time.
9. The supervisor should tell the student from time to time how well, in the supervisor's opinion, work is getting on, and try to ensure that the student feels properly directed and able to communicate with the supervisor. It is essential that when problems arise, corrective action is clearly identified and full guidance and assistance are given to the student.
10. The supervisor is required to report to the board on the student's work three times a year, once at the end of each term. Each report should state the nature and extent of recent contact with the student, and, if there has been none, state why this is so. The report should also make clear whether the student is making satisfactory progress, bearing in mind that a D.Phil. thesis should normally be completed within three (or at most four) years of full-time research. Any student who has not satisfied his or her supervisor on at least one occasion in an academic year that he or she is making progress will be liable to have his or her name removed from the register.
11. The supervisor should aim to ensure that by the end of the first year the topic or goal of the student's research is clearly defined, that the student has the necessary background knowledge, and that the required resources are available. The supervisor must have ascertained by then that the student can write a coherent account of his or her work in good English.
12. The supervisor should try to ensure that unnecessary delays do not occur. These have been known to arise, for example, for reasons such as:
    (a) insufficient effort at the outset in choosing and formulating the research topic;
    (b) a slow start because of the time taken to adjust to research work;
    (c) distractions from the main line of inquiry;
    (d) superfluous attempts to tie up every loose end; (and mainly in the sciences)
    (e) inadequate and delayed planning and assembly of apparatus and equipment;
    (f) insufficient collection or recording of data at an early stage, so that work has to be repeated in the later stages.
13. The supervisor should arrange for students to have the opportunity to discuss their research with other staff and students in their subject area (see also (4) above) and to communicate to others in the wider academic community, both orally and in writing, his or her research findings.
14. Where a student undertakes research as part of a team or group the supervisor should ensure that this is in full awareness of the way in which the student's own contribution fits into the work of the remainder of the group.
15. The supervisor should not be absent on leave unless he or she has ensured that appropriate temporary supervision has been arranged for the student.

Responsibilities of departments

1. Departments should provide information about:
    (a) any induction provided on a departmental, divisional or University basis;
    (b) welfare arrangements within the University, e.g. the Counselling Service, Student Hardship and Access funds, the provisions for support offered by the Proctors and the Assessor.
    (c) any general transferable skills from which the student is likely to profit during the course of his or her research, and the available provision at departmental, divisional and university level;

2. Departments should ensure that there is appropriate monitoring of a student's work and progress and that reports are submitted on a termly basis in accordance with the University's requirements.
3. Departments should endeavour to provide opportunities for a student to:
    (a) defend his or her findings to appropriate research seminars and respond to potentially critical questioning;
    (b) at an appropriate stage to present his or her findings to national, and if appropriate, international conferences;
4. *Departments should*
    (a) help the student to present work in a clear and professional manner;
    (b) help the student to develop his or her communication skills, especially for different audiences;
    (c) provide some guidance in oral examination techniques.

Safety and Health

Supervisors of all students, whether in the arts or in the sciences, should consider carefully the safety implications of their students' research. Those supervising students (particularly those in the sciences) are responsible for all aspects of safety under their control, and in particular for the safe conduct of all experiments carried out in the course of their students' research. In the event of an accident, inadequate supervision may render the supervisor liable to prosecution. Supervisors should also ensure that their students are made aware that in the event of injury to other persons as a result of their negligence, the student could be subject to civil claims for damages. Advice on the legal responsibilities for safety may be obtained from the University Safety Officer. For their part, *students* must carry out research with proper regard to good health and safety practices. Supervisors and students should be aware of the need for adequate health insurance and health precautions when travelling abroad. In case of doubt, reference should be made to the University Occupational Physician.

OUCL GS
Rev 1/10/12

[E] Regulations Relating to the Use of Information Technology Facilities

http://www.admin.ox.ac.uk/statutes/regulations/196-052.shtml

ICTC Regulations 1 of 2002

Made by the ICTC on 6 June 2002

Approved by Council on 24 July 2002

Amended on 2 October 2003, 23 October 2003, 16 February 2006, 1 June 2006, 3 June 2010 and 19 July 2012

1. In these regulations, unless the context requires otherwise, 'college' means any college, society, or Permanent Private Hall or any other institution designated by Council by regulation as being permitted to present candidates for matriculation.

2. University IT and network facilities are provided for use in accordance with the following policy set by Council:

(1) The University provides computer facilities and access to its computer networks only for purposes directly connected with the work of the University and the colleges and with the normal academic activities of their members.

(2) Individuals have no right to use university facilities for any other purpose.

(3) The University reserves the right to exercise control over all activities employing its computer facilities, including examining the content of users' data, such as e-mail, where that is necessary:

(*a*) for the proper regulation of the University's facilities;

(*b*) in connection with properly authorised investigations in relation to breaches or alleged breaches of provisions in the University's statutes and regulations, including these regulations; or

(*c*) to meet legal requirements.

(4) Such action will be undertaken only in accordance with these regulations.

3. These regulations govern all use of university IT and network facilities, whether accessed by university property or otherwise.

4. Use is subject at all times to such monitoring as may be necessary for the proper management of the network, or as may be specifically authorised in accordance with these regulations.

5. (1) Persons may make use of university facilities only with proper authorisation.

(2) 'Proper authorisation' in this context means prior authorisation by the appropriate officer, who shall be the Chief Information Officer or his or her nominated deputy in the case of

services under the supervision of IT Services (ITS), or the nominated college or departmental officer in the case of services provided by a college or department.

(3) Any authorisation is subject to compliance with the University's statutes and regulations, including these regulations, and will be considered to be terminated by any breach or attempted breach of these regulations.

6. (1) Authorisation will be specific to an individual.

(2) Any password, authorisation code, etc. given to a user will be for his or her use only, and must be kept secure and not disclosed to or used by any other person. Exceptions may be made for accounts set up specifically to carry out business functions of the University or a unit within it, but authorisation must be given by the head of the unit.

7. Users are not permitted to use university IT or network facilities for any of the following:

(1) any unlawful activity;

(2) the creation, transmission, storage, downloading, or display of any offensive, obscene, indecent, or menacing images, data, or other material, or any data capable of being resolved into such images or material, except in the case of the use of the facilities for properly supervised research purposes when that use is lawful and when the user has obtained prior written authority for the particular activity from the head of his or her department or the chairman of his or her faculty board (or, if the user is the head of a department or the chairman of a faculty board, from the head of his or her division);

(3) the creation, transmission, or display of material which is designed or likely to harass another person in breach of the University's Code of Practice on Harassment;

(4) the creation or transmission of defamatory material about any individual or organisation;

(5) the sending of any e-mail that does not correctly identify the sender of that e-mail or attempts to disguise the identity of the computer from which it was sent;

(6) the sending of any message appearing to originate from another person, or otherwise attempting to impersonate another person;

(7) the transmission, without proper authorisation, of e-mail to a large number of recipients, unless those recipients have indicated an interest in receiving such e-mail, or the sending or forwarding of e-mail which is intended to encourage the propagation of copies of itself;

(8) the creation or transmission of or access to material in such a way as to infringe a copyright, moral right, trade mark, or other intellectual property right;

(9) private profit, except to the extent authorised under the user's conditions of employment or other agreement with the University or a college; or commercial purposes (including advertising commercial services) without specific authorisation;

(10) gaining or attempting to gain unauthorised access to any facility or service within or outside the University, or making any attempt to disrupt or impair such a service;

(11) the deliberate or reckless undertaking of activities such as may result in any of the following:

(*a*) the waste of staff effort or network resources, including time on any system accessible via the university network;

(*b*) the corruption or disruption of other users' data;

(*c*) the unauthorised access, transmission or negligent loss of data;

(*d*) the violation of the privacy of other users;

(*e*) the disruption of the work of other users;

(*f*) the introduction or transmission of a virus or other malicious software into the network;

(12) activities not directly connected with employment, study, or research in the University or the colleges (excluding reasonable and limited use for social and recreational purposes where not in breach of these regulations or otherwise forbidden) without proper authorisation.

8. Software and computer-readable datasets made available on the university network may be used only subject to the relevant licensing conditions, and, where applicable, to the Code of Conduct published by the Combined Higher Education Software Team ('CHEST').

9. Users shall treat as confidential any information which may become available to them through the use of such facilities and which is not clearly intended for unrestricted dissemination; such information shall not be copied, modified, disseminated, or used either in whole or in part without the permission of the person or body entitled to give it.

10. (1) No user may use IT facilities to hold or process data relating to a living individual save in accordance with the provisions of current data protection legislation (which in most cases will require the prior consent of the individual or individuals whose data are to be processed).

(2) Any person wishing to use IT facilities for such processing is required to inform the University Data Protection Officer in advance and to comply with any guidance given concerning the manner in which the processing may be carried out.

11. Any person responsible for the administration of any university or college computer or network system, or otherwise having access to data on such a system, shall comply with the provisions of the 'Statement of IT Security and Privacy Policy'.

12. Users shall at all times endeavour to comply with policies and guidance issued from time to time by ITS to assist with the management and efficient use of the University's ICT facilities.

13. Connection of any computer, whether college, departmental, or privately owned, to the university network is subject to the following additional conditions:

(1) (*a*) Computers connected to the university network may use only network identifiers which follow the University's naming convention, and are registered with ITS.

(*b*) The University's Trade Mark and Domain Name Policy specifies, *inter alia*, that all university activities (other than those within OUP's remit) should be presented within the ox.ac.uk domain. Any exception to this requires authorisation as defined in that Policy.

(2) (*a*) Owners and administrators of computers connected to the university network are responsible for ensuring their security against unauthorised access, participation in 'denial of service' attacks, etc. In particular they are responsible for ensuring that anti-virus software is installed and regularly updated, and that rules and guidelines on security and anti-virus policy, as issued from time to time by ITS, are followed.

(*b*) The University may temporarily bar access to any computer or sub-network that appears to pose a danger to the security or integrity of any system or network, either within or outside Oxford, or which, through a security breach, may bring disrepute to the University.

(3) (*a*) Providers of any service must take all reasonable steps to ensure that that service does not cause an excessive amount of traffic on the University's internal network or its external network links.

(*b*) The University may bar access at any time to computers which appear to cause unreasonable consumption of network resources.

(4) (*a*) Hosting Web pages on computers connected to the university network is permitted subject to the knowledge and consent of the department or college responsible for the local resources, but providers of any such Web pages must endeavour to comply with guidelines published by ITS or other relevant authorities.

(*b*) It is not permitted to offer commercial services through Web pages supported through the university network, or to provide 'home-page' facilities for any commercial organisation, except with the permission of the Chief Information Officer (ITS); this permission may require the payment of a licence fee.

(5) Use of file-sharing technology and participation in distributed file-sharing networks may be subject to additional regulation and restriction in order to prevent excessive use of university network resources, or the use of those resources for purposes unconnected with the University. If a user has any reason to suppose that an application employs peer-to-peer (p2p) or other file-sharing technology, they should seek the advice of the IT officer responsible for the college or departmental network on which they propose to use the software.

(6) (*a*) No computer connected to the university network may be used to give any person who is not a member or employee of the University or its colleges access to any network services outside the department or college where that computer is situated.

(*b*) Certain exceptions may be made, for example, for members of other UK universities, official visitors to a department or college, or those paying a licence fee.

(*c*) Areas of doubt should be discussed with the Head of ITS.

(7) Providing external access to University network resources for use as part of any shared activity or project is permitted only if authorised by the IT Committee (ITC), and will be subject to any conditions that it may specify.

(8) If any computer connected to the network or a sub-network does not comply with the requirements of this section, it may be disconnected immediately by the Network Administrator or any other member of staff duly authorised by the head of the college, section or department concerned.

14. (1) If a user is thought to be in breach of any of the University's statutes or regulations, including these regulations, he or she shall be reported to the appropriate officer who may recommend to the appropriate university or college authority that proceedings be instituted under either or both of university and college disciplinary procedures.

(2) Access to facilities may be withdrawn under section 42 of Statute XI pending a determination, or may be made subject to such conditions as the Proctors or the Registrar (as the case may be) shall think proper in the circumstances.

Examining Users' Data

15. All staff of an IT facility who are given privileged access to information available through that facility must respect the privacy and security of any information, not clearly intended for unrestricted dissemination, that becomes known to them by any means, deliberate or accidental.

16. (1) System Administrators (i.e. those responsible for the management, operation, or maintenance of computer systems) have the right to access users' files and examine network traffic, but only if necessary in pursuit of their role as System Administrators.

(2) They must endeavour to avoid specifically examining the contents of users' files without proper authorisation.

17. (1) If it is necessary for a System Administrator to inspect the contents of a user's files, the procedure set out in paragraphs (2)-(5) below must be followed.

(2) Normally, the user's permission should be sought.

(3) Should such access be necessary without seeking the user's permission, it should, wherever possible, be approved by an appropriate authority prior to inspection.

(4) If it has not been possible to obtain prior permission, any access should be reported to the user or to an appropriate authority as soon as possible.

(5) For the purposes of these regulations 'appropriate authority' is defined as follows:

(*a*) in the case of any university-owned system, whether central or departmental: if the files belong to a student member, the Proctors; if the files belong to any member of the University other than a student member, the Registrar or his or her nominee; or, if the files belong to an employee who is not a member of the University, or to a visitor to the University, the head of the department, college, or other unit to which the employee or visitor is responsible, or the head's delegated representative;

(*b*) in the case of a departmental system, either those named in (*a*) above, or, in all circumstances, the head of department or his or her delegated representative;

(*c*) in the case of a college system, the head of the college or his or her delegated representative.

20/8/12

[F] University Policy on Intellectual Property

The University of Oxford has in place arrangements governing the ownership and exploitation of intellectual property generated by students and researchers in the course of, or incidental to, their studies. These arrangements are set out in the University's *Statute*s 2000 (page 121 refers) under which the University claims ownership of certain forms of intellectual property which students may create. A full version of policy can be found at:

http://www.admin.ox.ac.uk/statutes/790-121.shtml#_Toc28143157

The main provisions in the *Statutes* are as follows.

PART B: INTELLECTUAL PROPERTY

5. (1) The University claims ownership of all intellectual property specified in section 6 of this statute which is devised, made, or created:

(a) by persons employed by the University in the course of their employment;

(b) by student members in the course of or incidentally to their studies;

(c) by other persons engaged in study or research in the University who, as a condition of their being granted access to the University's premises or facilities, have agreed in writing that this Part shall apply to them; and

(d) by persons engaged by the University under contracts for services during the course of or incidentally to that engagement.

(2) The University's rights under sub-section (1) above in relation to any particular piece of intellectual property may be waived or modified by agreement in writing with the person concerned.

6. The intellectual property of which ownership is claimed under section 5 (1) of this statute comprises:

(1) works generated by computer hardware or software owned or operated by the University;

(2) works created with the aid of university facilities including (by way of example only) films, videos, photographs, multimedia works, typographic arrangements, and field and laboratory notebooks;

(3) patentable and non-patentable inventions;

(4) registered and unregistered designs, plant varieties, and topographies;

(5) university-commissioned works not within (1), (2), (3), or (4);

(6) databases, computer software, firmware, courseware, and related material not within (1), (2), (3), (4), or (5), but only if they may reasonably be considered to possess commercial potential; and

(7) know-how and information associated with the above.

7. The University will not assert any claim to the ownership of copyright in:

(1) artistic works not listed in sub-section (2) of section 6 of this statute, books, articles, plays, lyrics, scores, or lectures, apart from those specifically commissioned by the University;

(2) audio or visual aids to the giving of lectures;

(3) student theses, exercises and answers to tests and examinations save to the extent that they contain intellectual property claimed by the University under subsection (6) of section 6 of this statute; or

(4) computer-related works other than those specified in section 6 of this statute.

8. For the purpose of sections 6 and 7 of this statute, 'commissioned works' are works which the University has specifically employed or requested the person concerned to produce, whether in return for special payment or not. 'Commissioned works' explicitly exclude (i) lectures delivered by University Lecturers, Departmental Lecturers and the holders of University Chairs in fulfilment of obligations in their contracts of employment and (ii) works commissioned by the University Press in the course of its publishing business (save as may be separately agreed between the University Press and the person concerned).

9. Council may make regulations:

(1) defining the classes of persons or naming individuals to whom section 5 (1) (c) of this statute shall apply;

(2) requiring student members and such other persons as may be specified in regulations to sign any documents necessary in order to give effect to the claim made by the University in this Part and to waive any rights in respect of the subject-matter of the claim which may be conferred on them by Chapter IV of Part 1 of the Copyright, Designs and Patents Act 1988; and

(3) generally for the purposes of this Part.

10. This Part shall apply to all intellectual property devised, made, or created on or after 1 October 2000 and is subject to the provisions of the Patents Act 1977.

Last modified 20 August 2012

[G] University Policy on Data Protection and Computer Misuse

Data Protection Policy

The primary purpose of current data protection legislation is to protect individuals against possible misuse of information about them held by others. It is the policy of the University to ensure that all members of the University and its staff are aware of the requirements of data protection legislation under their individual responsibilities in this connection.

The Act covers personal data, whether held on computer or in certain manual files.

The University is obliged to abide by the data protection principles embodied in the Act. These principles require that personal data shall:

- be processed fairly and lawfully;
- be held only for specified purposes and not used or disclosed in any way incompatible with those purposes;
- be adequate, relevant and not excessive;
- be accurate and kept up-to-date;
- not be kept for longer than necessary for the particular purpose;
- be processed in accordance with data subject's rights;
- be kept secure;
- not be transferred outside the European Economic Area unless the recipient country ensures an adequate level of protection.

Definitions and guidance on what constitutes fair and lawful processing (principle 1) may be found at http://www.admin.ox.ac.uk/councilsec/dp/defs.shtml

The Act provides individuals with rights in connection with personal data held about them. It provides individuals with the right to access data concerning themselves (subject to the rights of third parties). It also includes the right to seek compensation through the courts for damages and distress suffered by reason of inaccuracy or the unauthorised destruction or wrongful disclosure of data. Information on how to make a request for access to personal data under the Act may be obtained from data.protection@admin.ox.ac.uk.

Under the terms of the Act, processing of data includes any activity to do with the data involved. All staff or other individuals who have access to, or who use, personal data, have a responsibility to exercise care in the treatment of that data and to ensure that such information is not disclosed to any unauthorised person. Examples of data include address lists and contact details as well as individual files. Any processing of such information must be done in accordance with the principles outlined above. In order to comply with the first principle (fair and lawful processing), at least one of the following conditions must be met:

- the individual has given his or her consent to the processing;
- the processing is necessary for the performance of a contract with the individual;
- processing is required under a legal obligation;
- processing is necessary to protect the vital interests of the individual;
- processing is necessary to carry out public functions;

- processing is necessary in order to pursue the legitimate interests of the controller or third parties (unless it could prejudice the interests of the individual).

In the case of sensitive personal data, which includes information about racial or ethnic origins; political beliefs; religious or other beliefs; trade union membership; health; sex life; criminal allegations, proceedings or convictions, there are additional restrictions and explicit consent will normally be required.

In relation to security (Principle 7), the Data Controller (the University) must take appropriate technical and organisational measures against unauthorised or unlawful processing of personal data and against accidental loss or destruction of or damage to personal data and sets out specific considerations for ensuring security. Staff and other individuals should be aware that guidelines and regulations relating to the security of manual filing systems and the preservation of secure passwords for access to relevant data held on computer should be strictly observed.

Staff should also note that personal data should not normally be provided to parties external to the University. Special arrangements apply to the exchange of data between the University and the colleges. For further guidance on this, please contact data.protection@admin.ox.ac.uk.

Under principle 8, which restricts the transfer of material outside the European Area, personal data about an individual placed on the world wide web is likely to breach the provisions of the Act unless the individual whose data is used has given his or her express consent. It is important that all those preparing web pages, address lists and the like, are aware of these provisions, and seek advice from the Data Protection Officer if in doubt.

The Act specifies arrangements for the notification of processing undertaken by the Institution. The University has a wide ranging notification under the 1998 Act, which can be accessed online. Any members of staff who are uncertain as to whether their activities or proposed activities are included in the University's notification should contact the Data Protection Officer in the first instance.

A failure to comply with the provisions of the Act may render the University, or in certain circumstances the individuals involved, liable to prosecution as well as giving rise to civil liabilities. Individuals are encouraged to familiarise themselves with the general aspects of Data Protection contained in the University's guidelines to the Act, referred to above and with any specific measurements recommended by the University or their Department relevant to the particular nature of their work. Further information and advice may be obtained from Departmental Data Protection Representatives or from the University's Data Protection Officer – please send enquiries to: *data.protection@admin.ox.ac.uk*

Computer Use and Misuse

The University regards computer misuse as a serious matter which may warrant disciplinary action.

A policy statement, rules and guidelines on the use of the University's IT facilities are published by the ICT Committee with the approval of Council. They appear in the Proctors' and Assessor's Memorandum, and may also be found at

http://www.ict.ox.ac.uk/oxford/rules/

[H] Use of Department of Computer Science Equipment and Premises

These are the formal conditions under which use may be made of OUCL equipment in the Department of Computer Science and on level six of the Thom Building. Users *must* abide by the rules; anyone wishing to use the facilities of the Department of Computer Science must sign a declaration to do so.

Copies of the rules are displayed in Department of Computer Science buildings and in the Practicals Laboratory on level six of the Thom Building.

Definitions

In these rules, 'users' are staff or students of the University who have been given accounts on the Department of Computer Science workstation network. The authorisation permits those involved to use the facilities of the department only for the subject of their course. Authorisation lapses on the completion of that course. A 'remote terminal' is any device that may be used to make a connection with the network. Any reference to equipment is assumed to include any Department of Computer Science equipment on level six of the Thom Building. A 'remote site' is any equipment, or building containing equipment, that is not covered by these rules. The 'Director' is the Director of the Department of Computer Science, the Head of the Department of Engineering Science or their agents.

Rules

1. The submission of a completed registration form to the Department of Computer Science implies that the user has read, understood and has agreed to comply with these rules.
2. No work of direct commercial application may be carried out without the written authorisation of the Director who shall specify any conditions to be observed. In particular, a charge may be made for the use of some or all of the facilities and restrictions may be made on the use of certain items of software.
3. The University will not be liable for any loss or damage sustained by any user in any involvement with OUCL.
4. It is the responsibility of a user to comply with the Data Protection Act 1998, and, in general, with all statutory and other provisions and regulations for the time being in force in the field of data protection and information privacy. Those whose work involves or may involve the storage of personal data as defined in the Data Protection Act 1998 are required to notify the Department of Computer Science in advance.
5. Equipment in the Practicals Laboratory on level six of the Thom Building is available to all users 09:00 to 18:00, Monday to Friday of Full Term. Equipment is available at all times from remote terminals (such as college PCs).

   If at any time any undergraduate is requested by an authorised member of the Department of Computer Science staff or graduate supervisor to leave the Practicals Laboratory, he or she must do so immediately.

   Undergraduate labs are locked and alarmed outside normal working hours when there is no authorised supervisor present.
6. The times that the Department of Computer Science equipment is available may vary from time to time at the discretion of the Director. In particular, users should note that at certain times, certain equipment is booked for practicals and the like. At these times, such equipment may not be used by other users.

   Users must comply with local rules of any building they use or that contains equipment that they use. In particular, users accessing the network through remote terminals must comply with the rules of the Computing Service and users accessing

remote sites must comply with the rules of the site that they are connected to as well as the Computing Service rules.

7. Departmental equipment (including workstations, printers and network switches) must not be unplugged, disconnected or switched off. **Students are not allowed to plug in laptops in either the Department of Computer Science or the Thom Building**.
8. Children under the age of 16 years and animals are not allowed in the Practicals Laboratory without prior written permission of the Director.
9. Meetings of any kind, other than authorised classes and practicals, may not be held in the Practicals Laboratory without the written permission of the Director, who shall specify any conditions to be observed.
10. Notices or posters may only be displayed if they are clearly marked with the name of the person posting and are placed on an appropriate board according to content. The Director reserves the right to remove any notice or poster without advance warning.
11. In the interests of safety and to prevent damage to the equipment, eating and drinking are prohibited in all equipment areas. Smoking is also prohibited in all rooms and corridors.
12. Fire alarms and fire extinguishers may only be used in case of emergency. Any tampering with fire alarms, fire extinguishers, room alarms, locks, key boxes or cabinets will be regarded as an offence against the rules.
13. Students are not permitted to use departmental telephone extensions for external calls on the BT network except in case of emergency. There is a pay phone in the reception area of the Thom Building.
14. No person may make use of OUCL facilities other than for an authorised course unless written permission is obtained from the Director.
15. No person may, by any wilful or deliberate act, jeopardise or corrupt, or attempt to jeopardise or corrupt, the integrity of the computing equipment, its system programs or other stored information. In particular, no user may:
    a. attempt to store files in any manner whatsoever that could be considered an attempt to evade file quotas;
    b. allow their password to become known to any other person (if a user suspects that some other person may know their password, they should change it immediately);
    c. log in, or attempt to log in, to any computer as another user;
    d. take on, or to appear to take on, the identity of another user or for their username to appear changed according to any process or piece of software;
    e. send unwarranted unsolicited e-mail to others;
    f. post inappropriate messages to newsgroups;
    g. knowingly send, or facilitate the sending of, offensive material or knowingly download or store or facilitate the downloading or storing of offensive material;
    h. send or propagate ‘chain e-mail’.
16. No person may act in any way which leads to, or could be expected to lead to, the disruption of the approved work of any other user.
17. The Director may suspend any person who is believed to be in breach of these rules from use of all or specified departmental facilities. The Director may also make subsequent use of the equipment and/or facilities subject to such conditions as he thinks fit. The Director may, at his discretion, report the matter to the University Proctors with recommendations for further action, except that if a suspension of

greater than two weeks is imposed, the matter shall be reported to the University Proctors.

In the case of the user being a member of a University other than Oxford, or of some other such institution, the matter will be reported to the Director of computing facilities at that University or institution.

18. Failure to discharge a debt to the Department of Computer Science shall be a cause for suspension from use of the facilities.
19. The Director may make such general conditions on the use of Department of Computer Science equipment as he thinks fit from time to time.
20. Appeal against the actions of the Director under rules 16, 17 and 18 shall be made to the University Proctors.

Use of Department of Engineering Science Premises

In addition to the rules of the University and of the Department of Computer Science, students using the facilities in the Thom Building should be aware of, and comply with, the following rules extracted from the Rules of the Department of Engineering Science:

5. Normal working hours of the department are Monday to Thursday, 08:15–13:00 and 14:00–17:15; and Friday, 08:15–13:00 and 14:00–16:45.
6. Undergraduate members of the department may use the buildings only during normal working hours except that during term, access to the library, staff rooms and lecture rooms are permitted during the following additional hours: Monday to Friday, after normal working hours up to 19:00; and Saturday, 08:15–13:00.
10. Except by permission of the staff member responsible, junior members may not remove tools or equipment from any part of the buildings.
12. Except by permission of the member of staff responsible, junior members of the department are not permitted to enter research laboratories, staff offices, stores, workshops (other than the staff/student workshop), roof areas, service areas, photographic darkrooms, the enquiry office and rooms carrying notices of special hazards. Except in the case of fire, junior members must not use the walk way round the outside of the Thom Building at the seventh floor level.
16. Permission must be obtained from the Head of Department before photographs or articles concerning the work of the department are communicated to the press.
17. Cars can only be parked in the university car parks in working hours if you hold a peak time parking permit. .
18. Motor cycles should be parked in the spaces provided and pedal cycles should be left in the racks, including those adjacent to the Department of Metallurgy and Science of Materials.
19. Those entrusted with a key or swipe card to any departmental building are responsible for ensuring that the building is properly locked if they leave outside normal working hours. The loss of a key must be reported immediately. The copying of keys is forbidden.

[I] Integrated Equality Policy

http://www.admin.ox.ac.uk/eop/missionstatement/integratedequalitypolicy/

Approved by Council on 13 July 2009 and published in the Gazette on 15 October 2009, amendments approved by Council on the 6 September 2010

The University's aims

1. The University of Oxford aims to provide an inclusive environment which promotes equality, values diversity and maintains a working, learning and social environment in which the rights and dignity of all its staff and students are respected to assist them in reaching their full potential. The University will work to remove any barriers which might deter people of the highest potential and ability from applying to Oxford, either as staff or students.

The University's commitment

2. No prospective or actual student or member of staff will be treated less favourably than any other, whether before, during or after their study or employment at the University of Oxford on one or more of the following grounds (subject to any legal constraints and in relation to the protected characteristics laid out in the Equality Act 2010): age; colour; disability; ethnic origin; gender reassignment; marital or civil partnership status; nationality; national origin; parental status; pregnancy or childbirth; race; religion or belief; sex; sexual orientation; or length or type of contract (e.g. part-time or fixed-term). The University has approved separate policies for race (Race Equality Policy) disability (Disability Equality Policy), and gender (Gender Equality Policy) to meet the specific obligations of the Race Relations (Amendment) Act, the Disability Discrimination Act 2005 and the Equality Act 2006. These are currently under review in light of the Equality Act 2010.

3. With regard to staff, this policy applies (but is not limited) to advertising of jobs and recruitment and selection, to training and development, to opportunities for promotion, to conditions of service, benefits, facilities and pay, to health and safety, to conduct at work, to grievance and disciplinary procedures, and to termination of employment.

4. With regard to students, this policy applies (but is not limited) to admissions, to teaching, learning and research provision, to scholarships, grants and other awards under the University's control, to student support, to university accommodation and other facilities, to health and safety, to personal conduct, and to student complaints and disciplinary procedures.

5. In order to realise its commitment, the University will:

- promote the aims of this policy, including the provisions for prevention of less favourable treatment laid out in paragraph 2;
- promote equality and good relations between people who share a relevant protected characteristic and people who do not share it;
- be proactive in eliminating discrimination, including harassment and bullying, through training and the production and dissemination of codes of practice and guidance;
- have regard to its obligations under relevant legislation, including the requirement to carry out impact assessments in certain areas, and ensure that its policies, codes of practice and guidance mirror the same, and reflect the provisions of new legislation;
- whilst acknowledging that they are not legally binding, have regard to any Codes of Practice issued or adopted by the Equality and Human Rights Commission;
- make this policy, as well as all codes of practice and guidance available to all staff and students; and
- regularly review the terms of this policy and all associated codes of practice and guidance.

Responsibilities

Council and its major committees

6. It is the responsibility of Council and its major committees to provide mechanisms through which the University's strategic objectives for equality and diversity can be delivered and also to work in partnership with colleges to agree a fair and equitable division of responsibility under current and future equality legislation.

Pro-Vice-Chancellor (Personnel and Equality)

7. The Pro-Vice-Chancellor (Personnel and Equality) is appointed by Council to provide leadership in all matters relating to Equality and Diversity and to oversee the development of equality policy frameworks and their application in the University, working as appropriate with those colleagues and bodies, including those committees with responsibility for student matters, that have specific mandates.

The Equality and Diversity Unit

8. The Equality and Diversity Unit has the responsibility of considering all existing and emerging equality legislation with a view to identifying relevant issues, which are then translated into key university policies for approval by relevant bodies. The Unit provides information and guidance to divisions, departments and faculties to enable them to discharge their responsibilities and to support senior members of the University in showing leadership on equality and diversity issues. The Unit facilitates central consultation with specific groups of staff and students. The Unit provides monitoring of key strategic issues and also drafts publications for approval by the relevant bodies as appropriate. The Unit also provides support services to staff and students with regard to harassment issues, childcare, and disabilities and specific access needs.

Divisions, Departments & Faculties

9. Heads of Divisions, Departments and Chairs of Faculty Boards, of both academic and administrative departments, are responsible for the day-to-day implementation and delivery of the University’s strategic objectives for equality and diversityin that division, department or faculty in accordance with the guidance attached to this policy.

The University Estates Directorate

10. The University Estates Directorate has primary responsibility for facilitating the accessibility of the University’s buildings for disabled users, in collaboration with the Head of the Department or Faculty concerned.

All staff and students

11. This policy applies to all members of the university community, both students and staff, whether permanent, temporary, casual, part-time, or on fixed-term contracts, to job applicants, to student applicants, current and former students, to associate members, and to visitors to the University.

12. These members of the university community have a duty to act in accordance with this policy, and therefore to treat colleagues with respect at all times and not to discriminate against or harass other students or members of staff, whether junior or senior to them.

13. The University expects all its staff and students to take personal responsibility for familiarising themselves with this policy and to conduct themselves in an appropriate manner at all times to respect equality of opportunity for all staff, students, applicants and visitors. The University regards any breach of this policy by any employee(s) or student(s) as a serious

matter to be dealt with through its agreed procedures and which may result in disciplinary action.

Complaints

14. Any prospective or current student or member of staff who has a complaint concerning a breach of this policy may bring such a complaint to the University. Information and guidance on complaints procedures is available at the end of this document.

Review

15. Council will review the integrated policy on a three year cycle, in tandem with the policies on race, disability and gender equality, the first such review to take place in Hilary Term 2012.

Departmental Disability Co-ordinator:
Shoshannah Holdom
Tel: 73863
Email: shoshannah.holdom@cs.ox.ac.uk

Updated 20/8/12

[J] PLAGIARISM

http://www.ox.ac.uk/students/academic/goodpractice/about/

What is plagiarism?

Plagiarism is the copying or paraphrasing of other people's work or ideas into your own work without full acknowledgement. All published and unpublished material, whether in manuscript, printed or electronic form, is covered under this definition.

Collusion is another form of plagiarism involving the unauthorised collaboration of students (or others) in a piece of work.

Cases of suspected plagiarism in assessed work are investigated under the disciplinary regulations concerning conduct in examinations. Intentional or reckless plagiarism may incur severe penalties, including failure of your degree or expulsion from the university.

Why does plagiarism matter?

It would be wrong to describe plagiarism as only a minor form of cheating, or as merely a matter of academic etiquette. On the contrary, it is important to understand that plagiarism is **a breach of academic integrity**. It is a principle of intellectual honesty that all members of the academic community should acknowledge their debt to the originators of the ideas, words, and data which form the basis for their own work. Passing off another's work as your own is not only poor scholarship, but also means that you have failed to complete the learning process. Deliberate plagiarism is unethical and can have serious consequences for your future career; it also undermines the standards of your institution and of the degrees it issues.

What forms can plagiarism take?

- Verbatim quotation of other people's intellectual work without clear acknowledgement. Quotations must always be identified as such by the use of either quotation marks or indentation, with adequate citation. It must always be apparent to the reader which parts are your own independent work and where you have drawn on someone else's ideas and language.
- Paraphrasing the work of others by altering a few words and changing their order, or by closely following the structure of their argument, is plagiarism because you are deriving your words and ideas from their work without giving due acknowledgement. Even if you include a reference to the original author in your own text you are still creating a misleading impression that the paraphrased wording is entirely your own. It is better to write a brief summary of the author's overall argument in your own words than to paraphrase particular sections of his or her writing. This will ensure you have a genuine grasp of the argument and will avoid the difficulty of paraphrasing without plagiarising. You must also properly attribute all material you derive from lectures.
- Cutting and pasting from the Internet. Information derived from the Internet must be adequately referenced and included in the bibliography. It is important to evaluate carefully all material found on the Internet, as it is less likely to have been through the same process of scholarly peer review as published sources.
- Collusion. This can involve unauthorised collaboration between students, failure to attribute assistance received, or failure to follow precisely regulations on group work

projects. It is your responsibility to ensure that you are entirely clear about the extent of collaboration permitted, and which parts of the work must be your own.

- Inaccurate citation. It is important to cite correctly, according to the conventions of your discipline. Additionally, you should not include anything in a footnote or bibliography that you have not actually consulted. If you cannot gain access to a primary source you must make it clear in your citation that your knowledge of the work has been derived from a secondary text (e.g. Bradshaw, D. *Title of Book*, discussed in Wilson, E., *Title of Book* (London, 2004), p. 189).
- Failure to acknowledge. You must clearly acknowledge all assistance which has contributed to the production of your work, such as advice from fellow students, Departmental technicians, and other external sources. This need not apply to the assistance provided by your tutor or supervisor, nor to ordinary proofreading, but it is necessary to acknowledge other guidance which leads to substantive changes of content or approach.
- Professional agencies. You should neither make use of professional agencies in the production of your work nor submit material which has been written for you. It is vital to your intellectual training and development that you should undertake the research process unaided.
- Autoplagiarism. You must not submit work for assessment which you have already submitted (partially or in full) to fulfil the requirements of another degree course or examination.

Not just printed text!

The necessity to reference applies not only to text, but also to other media, such as computer code, illustrations, graphs etc. It applies equally to published text drawn from books and journals, and to unpublished text, whether from lecture handouts, theses or other students' essays. You must also attribute text or other resources downloaded from web sites.

Updated 20 August 2012

[K] University of Oxford - Code of Practice Relating to Harassment

The University Policy and Procedure on Harassment and Bullying can be found at:

http://www.admin.ox.ac.uk/eop/harassmentadvice/policyandprocedure/

Guidance on taking action if you believe you have been harassed
Informal or formal resolution?

If possible, you should attempt to resolve the matter informally; it may be that the alleged harasser does not know what effect his or her behaviour is having on you. If an informal resolution can be effectively achieved, this will in many cases be advantageous to you. It is however recognised that, in some cases, only a formal procedure would be appropriate.

Regardless of whether you succeed in resolving the matter informally, or decide to bring a formal complaint, try to keep a factual record of the offending behaviour. It is easy to forget details after the event and such a record will help you when seeking advice, in deciding whether to make a complaint, in formulating the complaint and in giving evidence at any subsequent hearing.

The harassment adviser will discuss with you what steps you can take to try to reach an informal resolution. The first step may be to speak with the alleged harasser and let him or her know that you object to his or her behaviour, explain why you object and ask that they stop. You should keep a factual record of what is said and done and of any witnesses present. Alternatively, or as a second step, you could put your objections and a request to stop in a letter addressed to the alleged harasser. Again, keep a copy. It is not advisable to communicate with the alleged harasser by email as these are easily copied and all too quickly sent without proper consideration of the wording.

The harassment adviser cannot tell you what you should say, or write a letter for you, but he or she can guide you, discuss the steps to take and review the outcomes with you.

If the behaviour continues regardless of your requests to stop, or, if attempting an informal resolution is not appropriate in the first place, the next stage will be to make a formal complaint.

The Harassment Advisors for the Department of Computer Science are:

Shoshannah Holdom
Tel: 73863
Email: Shoshannah.homdom@cs.ox.ac.uk

And

Luke Ong
Tel: 83522
Email: Luke.Ong@cs.ox.ac.uk

And you should contact them in the first instance.

[L] University Policy on Student Maternity, Paternity and Adoption Leave

http://www.ox.ac.uk/students/shw/childcare/

In Michaelmas term 2010, Council adopted the policy framework on student maternity, paternity and adoption leave set out below. These policies aim to create an improved framework for student parents' interactions with the University in relation to data collection, defining entitlement to parental leave, arrangements for return to study, and access to University graduate accommodation and childcare services.
The agreed policy statements have been numbered and enclosed in boxes. Prefatory material has been included where this was thought to be helpful. Further information is available on request from Sara Smith at Education Policy Support (sara.smith@admin.ox.ac.uk; (2)80418).

THE ROLE OF THE COLLEGES

This policy framework does not seek to prescribe college policies towards students, though there are several areas in which student parents' interests will best be met by coordinated action by both the University and the College. It is anticipated that the main areas of impact on colleges would include:

- Advising students on the timing of leave and assisting them to make applications for suspension of study;
- Preparing for return to study (in the case of graduates, in cooperation with the appropriate department or faculty);
- Advising students on possible adjustments to mode of study;

It would be advisable for colleges to draw up their own policies on maternity leave to ensure consistency of practice in relation to access to college premises and facilities (Nuffield College's policy on student maternity leave might provide a useful template).
It is not proposed that polices relating to university graduate accommodation should be extended to college accommodation.

1. COLLECTING INFORMATION AT REGISTRATION

Collecting information on students' dependants will help the University to fulfil its responsibilities in relation to gathering equality data; monitoring the adequacy of its support mechanisms; and targeting student parents with relevant information and advice. The NUS Student Parent Project published a report in 2009 ('Meet the Parents: the experience of students with children in further and higher education') recommending that universities actively collect information on student parents.

1.1 Students will be asked to state during the annual registration process whether they have any dependants under the age of 18. This requirement is being incorporated into the design specification for the replacement student system which will be introduced in 2013.

1.2 The University will use the information collected at registration to inform student parents of the provision offered to them across the collegiate University, including OUSU's Student Parents Committee, mailing list and regular social events (e.g. Tea and Toys).

2. MATERNITY LEAVE

The University's policy is intended to harmonise with the frameworks operated by the Research Councils, enabling it clearly to differentiate maternity leave from suspension of study for medical or disciplinary reasons and to ensure consistent and fair treatment of pregnant students and new mothers. It also provides new mothers with the right to a protected period of leave after the birth.

Same sex couples

2.1 In cases which do not fall under the arrangements for adoption leave set out in section 5 below, the woman who gives birth to the child will be eligible to take maternity leave while her partner will be eligible to take paternity leave.

Undergraduate and postgraduate taught students

2.2 Students who give birth may choose to suspend their status, normally for no less than one year, before recommencing their studies. Where possible the leave period should be timed to take account of the academic requirements of the course (e.g. project work), and should commence at the end of rather than partway through a term. The policies described in 2.9 – 2.13 relating to access to University services and arrangements for return to study will also apply to undergraduate and postgraduate taught students. Maternity leave will be taken under current college arrangements for suspension of study. Postgraduate students should also submit an application for suspension of status (see 2.5 below).

Postgraduate research students

Maternity leave

2.3 Women students who give birth during their period of registration for a postgraduate research degree are automatically entitled to suspend their studies for up to 3 terms (1 year) of maternity leave. This period of leave is considered separately from the 6 terms of suspension that their faculty or departmental board may allow, and no special application to Education Committee is required. Terms of maternity leave must be taken consecutively and any unused terms may not be taken at a later date. Women who have been granted 6 terms' suspension of study by their board and who have taken additional maternity leave shall not be prohibited from seeking dispensation from Education Committee for further suspension of study. Such requests will be considered on their individual merits.

2.4 Students who hold Research Council or other sponsoring body awards must align their periods of University and funding body leave. Where there is a conflict of interest between the two policies, the sponsoring body's policy will be followed in relation to the area(s) of conflict.

2.5 Students should notify their college, supervisor and Director of Graduate Studies of their pregnancy (via the MATB1 form, available from a midwife) no later than the 15th week before the expected week of childbirth. Earlier notification may be necessary in some cases, for example where a student works in a potentially hazardous environment. Students should apply for maternity, extended paternity or adoption leave on a variant of form GSO 17 (Application for suspension of status) which has been drawn up for this purpose. The timing of maternity leave will depend on a number of factors, including term dates and the nature of the student's research work. It is usual for leave not to commence before the 29th week of pregnancy. New mothers must not return to work earlier than 2 weeks after the baby's birth.

2.6 Risk assessments must be made where the work environment (e.g. Department, clinical) might pose a threat to a pregnant woman. The University Occupational Health Service (UOHS) recommends that departments seek advice from their Departmental Safety Officer, the Area Safety Officer or the Safety Office. The OUHS can also assist with health

queries relating to pregnancy and breastfeeding at work. This may require a consultation with a doctor or nurse and a visit to the workplace. (Email enquiries@uohs.ox.ac.uk.)

2.7 The relevant Graduate Studies Assistant will update the student's OSS record to indicate that maternity leave will be taken and adjust the completion date accordingly. Students may take up to 3 consecutive terms of maternity leave. Such leave is calculated separately from the 6 terms of ordinary suspension of study faculties and departments may permit. The GSA will also notify Student Data Management and Analysis of any necessary fee amendments.

2.8 Suspensions of study are recorded on OSS as commencing at the start of the relevant term and concluding at the end of the subsequent vacation. As far as possible, students should align their maternity leave with the tripartite structure of university terms. If a student is obliged to suspend mid-term (e.g. for medical reasons), the date of suspension will usually be backdated to the start of term. A short period of exceptional suspension may be considered (as a dispensation from the regulations relating to suspension of study) where the expected date of childbirth falls during the Long Vacation and there are concerns about the impact on the student's submission date. (This might be the case where a student wishes to take a short period of maternity leave over the summer then return to study in Michaelmas term.) The relevant Graduate Studies Assistants will forward applications to the Secretary of the Education Committee.

Access to University facilities

2.9 Both undergraduate and postgraduate students on maternity leave will retain their university cards and access to their university email accounts, the university's electronic resources, and university libraries. Under current arrangements, suspended students are not normally supposed to be studying, and are not entitled to teaching, supervision and other academic provision (e.g. thesis chapter reading), or access to laboratories.

2.10 The terms of a general policy on access to university and college facilities for students suspended for non-disciplinary reasons are currently under consideration by the collegiate university.

Planning for return to study

2.11 Undergraduate and postgraduate students on maternity leave should be encouraged by their college or department to maintain occasional contact with their tutor and/or supervisor so that arrangements may be made for their return to study. This is likely to involve a limited amount of academic guidance and preparation, as necessary in each case.

2.12 Timely arrangements should be made to facilitate students' return to study after maternity leave, including a full assessment of their requirements in relation to e.g. training, updating, monitoring and additional learning support. Typically this assessment would be carried out by a college tutor, supervisor or other relevant academic staff.

2.13 Risk assessments must also be made where the work environment might pose a threat to a breastfeeding mother (see 2.6 above).

2.14 If ill-health prevents a postgraduate student from returning to work after completing her maximum period of maternity leave, this should be treated as sickness absence and notified accordingly (i.e. to the funding body). Students may be required to extend their period of suspension. If a student is unable to return to work due to the illness of her child, she should seek further suspension of study, if necessary by application to the Education Committee.

Overseas students

2.15 Under the terms of the student visa, overseas students who interrupt their studies will need to obtain an extension to their visa, and may be required to return to their home countries

while suspended from study. Students should consult the International Student Advisory Service for advice on immigration and visas (email student.immigration@admin.ox.ac.uk).

Paid maternity leave (postgraduate students)

2.16 The University aspires to provide a limited period of funded maternity leave for holders of all studentships funded or co-funded by the University, although currently this provision is available only to holders of Clarendon Awards (see the Clarendon Fund FAQs webpage for further details).

2.17 Provision for funded maternity leave should therefore be included in the fund-raising for and design of University studentships.

3. ADJUSTMENTS TO MODE OF STUDY

Although very few of the University's programmes of study currently offer students the option to read for a degree on a part-time basis, this policy provides an opportunity for student mothers returning to study after the birth of a child to apply for permission to alter their mode of study, usually for a limited period. The University has considered whether its policies on mode of study may have an adverse impact on student mothers' access to study and progression therein, particularly in light of the new Public Sector Equality Duty (Equality Act, 2010), which reinforces existing equality duties in relation to gender, disability and race. The Duty requires institutions to have 'due regard to the need to advance equality of opportunity'; to take steps to meet protected groups' particular needs; and to attempt to remove disadvantages that are connected to a protected characteristic. These characteristics include gender, pregnancy and maternity.

The University has agreed that in some cases, students might benefit from a period of flexible study to allow them to stage their return to full-time study. It is hoped that this will mitigate the disadvantages new mothers may experience if they are unable to study full-time upon their return from maternity leave.

Undergraduate students

3.1 Some undergraduate students returning to study after the birth of a child may find it difficult to pursue their course at the normal pace. Under such circumstances it may be possible to extend the duration of their studies, typically by studying the Final Honour School over one additional year. Such a proposal requires endorsement from both the College and the faculty or department. The student's College can then apply to Education Committee to request dispensation from the examination regulations concerning over standing for honours, the timing of multi-part examinations, or if it is proposed to split Finals over two years. Approval for the extension of study will also have to be obtained from Student Finance England or the relevant regional body. Applications for remission of the additional year's university fees can be considered by the Fees Panel on a case-by-case basis.

Postgraduate taught students

3.2 It is not feasible to study the majority of postgraduate taught courses on a part-time basis. If postgraduate students returning to study after the birth of a child encounter difficulties, faculties and departments should consider what alternative measures of support they might implement, e.g. agreed extensions to submission deadlines. However, in some cases the faculty or department may consider that it would be feasible for a student to complete the outstanding elements of a taught course – such as the dissertation – on a part-time basis. If the student's College endorses this proposal, it may make an application to Education Committee on the student's behalf to request dispensation from the relevant examination regulations. Dispensation from the regulations to transfer from full-time to part-

time status for the limited period involved will be considered provided that the student's faculty or department supports the request and can demonstrate that her educational and pastoral needs will be met appropriately. Where necessary, approval must also be granted by the student's funding body, and visa requirements must be met (overseas students must be studying for at least 15 hours per week). Where permission has been granted, students will be charged fees at the part-time rate. This is particularly relevant in the case of one-year master's courses, where fee liability extends for six terms.

Postgraduate research students

3.3 If a postgraduate research student returning to study after the birth of a child seeks permission to study on a part-time basis, it would be reasonable to consider the possibility of adjusting her mode of study. If it is agreed that the course can successfully be studied on a part-time basis, and the proposal is endorsed by both the College and the faculty or department, the student's College may apply to Education Committee for dispensation from the relevant examination regulations. Dispensation from the regulations to transfer from full-time to part-time status will be considered provided that the student's faculty or department supports the request and can demonstrate that her educational and pastoral needs will be met appropriately. In the first instance, permission will be granted to transfer to part-time status for a limited period of no longer than three terms to ensure timely review of the student's progress. Where necessary, approval must also be granted by the student's funding body, and visa requirements must be met. Where permission has been granted, students will be charged fees at the part-time rate and their thesis submission deadlines will be recalculated. The faculty or department will review the student's progress no later than three terms after her return to study, at which point a decision will be made on whether to transfer her back to full-time study or to continue on a part-time basis. (N.B. Some Research Council-funded students are not allowed to alter their mode of study more than once.) Neither course of action will require a further application to Education Committee.

4. PATERNITY LEAVE

Same sex couples

4.1 In cases which do not fall under the arrangements for adoption leave set out in section 5.1 below, the woman who gives birth to the child will be eligible to take maternity leave while her partner will be eligible to take paternity leave. (In this section, the term 'father' refers to the member of the couple who takes paternity leave.)

Undergraduate and postgraduate taught students

4.2 Student fathers are permitted to take 2 weeks' (10 working days) leave either at the time or within 3 months of the birth. This will not entail dispensation to miss exams. Students will also be eligible for a longer period of suspension, in line with the arrangements made for student mothers. This will normally last one full year so that the student may recommence his studies at the same point at which he suspended. The possibility of additional fee liability should be taken into account. If students wish to take up to 2 weeks of paternity leave during term time, departments and colleges may be able to assist them to make up lost time.

Postgraduate research students

4.3 Postgraduate research student fathers are permitted to take 2 weeks' (10 working days) leave either at the time or within 3 months of the birth. In line with the policy adopted by the research councils, this leave is not taken as a suspension of study and the submission date is not adjusted.

4.4 Students who are eligible for a further period of paternity leave from their research council or sponsor may request a matching period of leave from the University. The University will support student fathers' requests for a period of suspension where permitted by their funding body, up to a usual maximum of 3 consecutive terms (1 year). Where there is a conflict of interest between the two policies, the sponsoring body's policy will be followed in relation to the area(s) of conflict. Additional leave will be awarded as a suspension from study over and above the 6 terms their faculty or departmental board may allow, and must be taken within the first 12 months of the child's life. The submission date will be adjusted accordingly. No special application to Education Committee is required. If a father chooses to suspend his studies for fewer than 3 terms, the unused portion may not be taken at a later date. However, fathers who have been granted 6 terms' suspension of study by their board and who have taken additional paternity leave shall not be prohibited from seeking dispensation from Education Committee for further suspension of study, where permitted by their funding body. Such requests will be considered on their individual merits.

4.5 Self-funded student fathers will be permitted to take 2 weeks' (10 working days) leave either at the time or within 3 months of the birth of their child. This is not taken as a suspension of study and the submission date is not adjusted. In addition to this, the University will support student fathers' requests for a further period of leave of up to 3 consecutive terms (1 year). Additional leave will be awarded as a suspension from study over and above the 6 terms their faculty or departmental board may allow, and must be taken within the first 12 months of the child's life. The submission date will be adjusted accordingly. No special application to Education Committee is required. If a father chooses to suspend his studies for fewer than 3 terms, the unused portion may not be taken at a later date. However, fathers who have been granted 6 terms 'suspension of study by their board and who have taken additional paternity leave shall not be prohibited from seeking dispensation from Education Committee for further suspension of study. Such requests will be considered on their individual merits.

4.6 The timing of extended paternity leave will depend on a number of factors, including term dates and the nature of the student's research work. Suspensions of study are recorded on OSS as commencing at the start of the relevant term and concluding at the end of the subsequent vacation, so students should as far as possible align their paternity leave with the tripartite structure of university terms. Applications for extended paternity leave should be made on the variant of form GSO 17 (Application for suspension of status) which has been drawn up for this purpose. The relevant Graduate Studies Assistant will update the student's OSS record to indicate that extended paternity leave will be taken and adjust the completion date accordingly.

5. ADOPTION LEAVE

In drawing up comprehensive policies for maternity and paternity leave, the University would not wish to treat adoptive and biological parents unequally. It is customary for arrangements for adoption leave to parallel those made for maternity and paternity leave, in that the main carer takes 'maternity leave', regardless of gender, and the carer's partner takes 'paternity' leave.

5.1 The child's main carer will be eligible to take up to 3 consecutive terms' (1 year) leave in line with maternity leave provisions. Adoption leave may commence at any point after the student has been notified that s/he has been matched with a child.

5.2 A student who is the partner of an adopting parent will be eligible for leave in line with the relevant model for paternity leave. For postgraduate research students this includes the possibility of suspension for up to 3 consecutive terms (1 year) over and above the 6 terms their faculty or departmental board may allow. If a student chooses to suspend his or her studies for fewer than 3 terms, the unused portion may not be taken at a later date. However,

adoptive parents who have been granted 6 terms 'suspension of study by their board and who have taken additional adoption leave shall not be prohibited from seeking dispensation from Education Committee for further suspension of study. Such requests will be considered on their individual merits.

5.3 Postgraduate research students who are eligible for a period of adoption leave from their research council or sponsor may request a matching period of leave from the University, up to a usual maximum of 3 consecutive terms (1 year). Where there is a conflict of interest between the two policies, the sponsoring body's policy will be followed in relation to the area(s) of conflict. Additional leave will be awarded as a suspension from study over and above the 6 terms their faculty or departmental board may allow, and must be taken within the first 12 months after adoption. The submission date will be adjusted accordingly. Adoptive parents who have been granted 6 terms' suspension of study by their board and who have taken additional adoption leave shall not be prohibited from seeking dispensation from Education Committee for further suspension of study. Such requests will be considered on their individual merits.

5.4 The timing of adoption leave will depend on a number of factors, including term dates and the nature of the student's research work. Suspensions of study are recorded on OSS as commencing at the start of the relevant term and concluding at the end of the subsequent vacation, so students should as far as possible align their adoption leave with the tripartite structure of university terms. Applications for adoption leave should be made on the variant of form GSO 17 (Application for suspension of status) which has been drawn up for this purpose. The relevant Graduate Studies Assistant will update the student's OSS record to indicate that adoption leave will be taken and adjust the completion date accordingly.

6. ACCOMMODATION FOR POSTGRADUATE STUDENTS

All matriculated postgraduate students are eligible to live for up to two calendar years in university graduate accommodation. Accommodation is allocated according to length of time on the waiting list and availability of specific requirements (e.g. location, number of bedrooms). Students are allowed to retain their tenancies while suspended from study, up to the usual two-year maximum. A tenant who ceases to be a student will be given two months' notice to quit.

A student who is not already a tenant and who suspends his or her studies may apply for housing but cannot be offered it until they have re-enrolled. This means that suspended students may delay finding alternative accommodation while waiting to see whether university housing will become available in the month prior to their return to study. It was considered that this might impose a particular barrier on women returning to study after taking maternity leave, as they might not find it practicable to delay making accommodation arrangements. Therefore the policy has been amended to facilitate their access to subsidised university accommodation and allow more time to make arrangements for childcare or education before they resume their studies. Parallel arrangements have been made for adoptive parents and student fathers taking extended paternity leave.

The new policy will assist returning parents by allowing them to be offered university graduate accommodation – should it become available – up to three months prior to their reinstatement. Usual tenancy regulations will apply, though it should be noted that most overseas students will not be able to return to Oxford more than a month before the start of term and therefore should not be expected to commence their tenancy prior to their return.

6.1 The Accommodation Office will log the requirements of students who have suspended their studies in order to take maternity leave, and who have applied for university accommodation. If the student becomes eligible for family accommodation by virtue of her

position on the waiting list, no earlier than 3 months before her scheduled return to study, the Office shall offer her the tenancy.

6.2 This policy shall also apply to adoptive parents who have taken leave as the child's main carer and student fathers (of either sex) who have suspended their studies in order to take extended paternity leave (more than the standard 2 weeks' leave).

6.3 Overseas students who have suspended their studies are usually not permitted to remain in the UK so it is unlikely that they would be able to move into university accommodation more than a month prior to re-enrolment. However, some students may be able to remain in the UK (or reapply to enter the UK) as the dependant of their partner, provided s/he has an appropriate immigration status (e.g. British national, overseas student, indefinite leave to remain, Tier 1 or 2 working visa). They could therefore be eligible to move into family accommodation earlier than one month before they resume their studies.

6.4 This provision may be extended with good cause to students with children under 18 who have suspended for other reasons (e.g. illness), for example where new arrangements need to be made for the child's education or childcare.

6.5 If the student fails to return to study on the scheduled date, the tenancy will be terminated by the Landlord on giving two months' notice. In exceptional circumstances (e.g. serious illness of the student or child) an extension may be given.

6.6 It is not proposed at present to extend this policy to students without children who have suspended for other reasons, including illness and disability.

7. ACCESS TO CHILDCARE DURING SUSPENSION

Members of university staff who go on sabbatical leave may choose to retain their university nursery place (while continuing to pay fees) or give it up and rejoin the waiting list. However, there has been no similar policy in respect of students who have suspended their studies. These proposals formally codify and safeguard suspended students' access to university childcare.

7.1 Student parents whose child(ren) already attend(s) a university nursery may retain their nursery place(s) during suspension of study for a period of usually no longer than 12 months (while continuing to pay fees). Extensions may be considered in cases of demonstrated need, e.g. where suspension is due to maternity, illness or caring responsibilities.

7.2 Students who have suspended their studies (e.g. for maternity) may apply for a university nursery place and be placed on the waiting list. They do not need to wait until they are reinstated to take up a place if one becomes available.

[M] POLICY ON THE ETHICAL CONDUCT OF RESEARCH INVOLVING HUMAN PARTICIPANTS AND PERSONAL DATA

The University's aims

The University of Oxford seeks to protect the dignity, rights and welfare of all those involved in research (whether they are participants , researchers or third parties) and to promote high ethical standards of research. The University achieves this by:

- fostering a culture within the University that embraces the principles set down in this policy and the obligations contained in relevant legislation to protect the rights, dignity and welfare of those involved in research;
- providing ethical guidance that communicates regulatory requirements and best practice, and offering ongoing support and training to staff and students to maintain high ethical standards;
- maintaining a review process that subjects research to a level of scrutiny in proportion to the risk of harm or adverse affect.

Full details of the policy can be read here:

http://www.admin.ox.ac.uk/curec/policystatement/