

Faculty of Computer Science and Technology

2011-12

Ph.D. in Computer Science

Information Booklet

Welcome

On behalf of the Head of Department, the Graduate Education Committee and Applications Panel, may I welcome to the Faculty of Computer Science and Technology as a research student and we hope you enjoy your time in Cambridge.

During your time in Cambridge it is likely that you will have many queries. We hope that this brief guide will be of some help but if you have further questions you are welcome to ask me, Lise Gough, the Student Administration Manager and Secretary of the Degree Committee, by phone (3)34656, e-mail at img30@cl.cam.ac.uk or just pop in to FS03 at the William Gates Building.

Lise Gough
August 2011



Contents

1.	The Faculty: What and where?	4
2.	Being a Research Student – The Basics	5
	Responsibilities and mutual expectations	6
	(i) Research students	6
	(ii) Supervisors.....	6
	(iii) Head of Department	7
	(iv) Degree Committee and the Board of Graduate Studies	7
	(v) Graduate Education Committee	8
	(vi) Colleges.....	8
3.	CPGS, Registration, Research Skills, Second and Third-Year Reports, and Transferable Skills	9
	Certificate of Postgraduate Studies (CPGS) Regulations	9
	Approved Courses of lectures.....	10
	Registration.....	10
	Second-year Report and Thesis Schedule	10
	Third-year Report.....	11
	Transferable Skills Log-sheet.....	11
4.	Academic Staff and Research Areas	12
	Academic Teaching staff.....	12
	Key research areas	13
5.	Important Dates 2011/2012	14
6.	Who's Here to Help.....	15
7.	Libraries and On-Line Access to Publications	16
8.	Student Administration.....	18
9.	Publications, Conferences and Travel	19
10.	Student Representation	20
11.	WOMEN@CL	21
12.	Graduate development	22
13.	Supervising Undergraduates	23
14.	Getting To the Lab	24
15.	First Aid.....	25
16.	PAT testing and recycling	26
	Map of West Cambridge Site.....	27

1. The Faculty: What and where?

The Faculty of Computer Science and Technology consists of a single academic department, known as the Computer Laboratory. The Laboratory was founded in 1937 as the Mathematical Laboratory, then part of the Faculty of Mathematics. The name was changed to the Computer Laboratory in 1969 and the Laboratory was set free of oversight by any Faculty. This continued until about 2000, when the Faculty of Computer Science & Technology was created. The Faculty is part of the Graduate School of Technology along with Engineering, Chemical Engineering, Biotechnology, and the Judge Institute of Management.

The Computer Laboratory was originally housed on the New Museums Site in the city centre. It moved out to West Cambridge in 2001, to the purpose-built William Gates building.

Our address is:

Faculty of Computer Science and Technology
William Gates Building
15 JJ Thomson Avenue
Cambridge, CB3 0FD

The Computer Lab occupies the whole of the William Gates Building.

Rooms are labelled by a four character code:

Floor (**G**round, **F**irst, **S**econd)
Corridor (**N**orth, **C**entre, **S**outh, **E**ast, **W**est)
Number (two digits, increasing from North to South or West to East)

For example room FS03 is on the first floor, south corridor, near the west end of the corridor. FE23 is on the first floor, east corridor, near the south end of the corridor.

The large central entrance corridor is known as The Street and comprises the **W**est corridor. The Intel Lab in SW11 is a large computer room for undergraduate students.

You will be allocated a room with other research students in your research group and, within reason, close to your supervisor's room.

2. Being a Research Student – The Basics

The Faculty of Computer Science and Technology is part of the School of Technology, one of Cambridge's six Schools. In Cambridge, a Faculty is '*a body of persons...for the purpose of furthering the study of a subject or subjects*' – and it is not used to describe either an individual member or group of academic staff, they are instead *members* of the Faculty. The Faculty is run by a **Faculty Board** and is largely self-governing. Certain aspects require reference to the Council of the School of Technology, the Board of Graduate Studies, or the University's central governing bodies.

The Faculty has a **Degree Committee**, which is the principal administrative committee with which you will have to deal. The Degree Committee comprises academic representatives from across the Faculty. It is the Degree Committee that has oversight of supervision, graduate education, and examinations in the Faculty.

Research students are admitted on a **probationary** basis in the first instance. All research students are initially registered for the **Certificate of Postgraduate Studies in Computer Science (CPGS)**. They are transferred to the Ph.D. Degree after a successful completion of the first-year registration process, which includes passing the CPGS. See Section 3.

Each student is assigned an individual who acts as his or her **principal supervisor**. A second person is appointed to act, in a less formal capacity, as **second advisor** for the student. Usually the second advisor provides informal backup support, but sometimes will be the main person supervising the student. An independent assessor is also appointed to assess the first and second-year reports.

Every graduate student is a member a **College**. Colleges are social and academic communities, offering moral support, companionship and enrichment through intellectual diversity. They provide some of the key practical services and infrastructure that help students to flourish in Cambridge, such as accommodation and communal meals. These enable students to focus on their work and to make the most of their time in Cambridge. Each graduate student is assigned a **Graduate Tutor** or equivalent (the title may vary) at the College, who is intended to be a source of personal advice and pastoral care. The Graduate Tutor is unlikely to be familiar with their student's subject areas, but is likely to be able to help with information about financial support, counselling, medical services, accommodation, and other practical matters.

Research students in the Faculty of Computer Science and Technology are admitted on a **full-time basis** only. It is not possible to take paid work while you are studying full-time at Cambridge, and you must not expect to provide additional income in this way. The only exception is:

If you are a full-time graduate student reading for the PhD, MSc or MLitt Degree you may, without obtaining special permission, undertake teaching work for the Colleges ('supervisions') or your Department or Faculty for up to 6 hours a week including necessary preparation. A further 4 hours a week including preparation (10 in all) may be undertaken if the permission of your Supervisor has been obtained. No larger portion of your time may be devoted to teaching work and no time may be devoted to work other than research upon the approved subject without special permission from the Board.

The Faculty of Computer Science and Technology recommends that in your first year you do no more than three hours per week supervisory work. See Section 12.

Responsibilities and mutual expectations

(Board of Graduate Studies Code of Practice)

(i) Research students

Any student whose medical or other specific requirements might affect participation in any part of the course must inform their supervisor at the start of the course.

Each graduate student is expected to:

- take full advantage of the facilities, teaching and supervision offered, and to keep his/her supervisor informed of any circumstances affecting his/her academic performance;
- meet regularly with his or her supervisor keeping him or her informed of progress, and handing in work at the agreed times; students experiencing difficulties in meeting with the supervisor, or other staff members, should contact their Faculty/Department Director of Graduate Studies without delay;
- manage submission of his or her progress reports, dissertation and, if required, training log to an agreed timetable;
- access his or her own supervision reports through his/her CamSIS self-service pages and discuss them with the supervisor;
- manage his or her applications for allowances and for continuation; and keep the University apprised of changes in contact details through his/her CamSIS self-service pages;
- take ultimate responsibility for the final quality of all his or her academic work submitted; following the advice and guidance of the supervisor carries no guarantee of success at examination, nor will encouraging advice, or the approval of a piece of work, by a supervisor constitute grounds for complaint in the event of failure in the examination;
- seek advice and help from the sources identified (*section 7*), should problems arise;
- inform his or her College and supervisor promptly if he or she ceases to attend through ill health or other grave cause, or withdraws from the course;
- pay fees and College bills in a timely manner;
- abide by the University's regulations concerning Graduate Students, including those concerning discipline and avoidance of plagiarism
<http://www.admin.cam.ac.uk/univ/plagiarism/>

(ii) Supervisors

The person appointed as the principal **supervisor** of a graduate student is expected to:

- be familiar with the advice provided by the Degree Committee and Board of Graduate Studies;
- attend supervisor training and support courses and events as required by the Degree Committee (the body that appoints and is responsible for supervisors);
- participate in graduate admissions as required by the Faculty/Department;
- be aware of any minima for the number or frequency of supervisions set down by the Faculty or Department;
- establish an effective means of communication with the student; for example making clear the frequency and timings of meetings, making sure that the student knows how to make contact at other times. Supervisors should be aware that some students will not, on the strength of their previous experience, expect to make the first approach to set up a meeting, but will expect the supervisor to take the initiative. Supervisors are advised to make firm appointments for students at least in the first instance and to be alert to the possibility of misunderstanding if the student does not make contact regularly;
- respond promptly and appropriately to requests from students to meet and to comment on work at various stage of development; if a supervisor is to be away from Cambridge for an extended period, he or she should ensure that students are aware of this and should inform them of back-up supervisory arrangements;
- establish the suitability of the topic proposed for the degree sought, in the light of resource availability, the University's timescale for submission of the thesis, and the student's background and aptitude;
- guide the student in planning, focusing and developing the study by encouraging the student to make a written timetable and plan at a very early stage to ensure that a manageable piece of work is undertaken;
- ensure that the terms of any sponsorship agreement and any implications regarding the ownership of intellectual property rights are made clear to the student at the outset and are honoured during the course and the examination of the thesis;

- monitor progress against the agreed timetable and plan for the work and take appropriate action by referring the student to the Degree Committee if the student does not keep in contact, or progress is poor;
- report termly on the student's progress through the Cambridge Supervision Reporting System CSRS:

CSRS: the Board of Graduate Studies' online reporting system for graduate supervisors.

CSRS reports, once submitted, are available to the student. They are also read by the Course Director (if applicable), the Graduate Education Committee, Degree Committee, College and Board of Graduate Studies, who all take an interest in the student's progress. Supervisors are encouraged to give an honest appraisal of the student's progress but to do so in a manner that can be used positively to provide useful feedback.

- if a student is in danger of failing an assessment or examination, or is not likely to make the standard for progression to the next stage, it is important to say so in the report providing this can be done in a way that does not cause the student to lose heart. In such circumstances, supervisors should not wait till the termly report is due to make this apparent but should take action earlier to try to remedy the situation. Supervision reports will be considered by the Degree Committee and Board of Graduate Studies in evaluating any applications for examination allowances or in cases of dispute;
- make sure the student has access to resources required to complete the projected work; any plan that envisages the use of resources beyond what can reasonably be made available must be discouraged;
- advise the student on relevant literature, methodology and academic conventions pertaining in the field (in particular, how to avoid plagiarism – see above);
- read and comment on draft chapters; most supervisors will specify that they wish to see at least some draft chapters at an early stage, as they are written, so that the student can incorporate any feedback into subsequent writing;
- provide an academic commentary on students' applications for allowances, such as: leave to work or reside away from Cambridge; intermission of studies; deferral of submission of the thesis; restriction of access to the thesis; and for funding etc;
- make sure that Research Council and other major sponsor is informed promptly if a student's work is delayed or seriously affected by illness or other grave cause;
- where relevant, advise on ethical and safety implications of the work;
- advise on personal development planning and skills development;
- encourage students to attend training provided (and may *require* them to do so in the case of Health & Safety training);
- advise on publication of the research and offer advice on further study or careers in the specific research area;
- respond promptly to reasonable requests for references for his or her students.

(iii) Head of Department

The Head of the institution takes responsibility for agreeing to admit students and, in doing so, confirms that the resources required for the study as envisaged at the outset are available either within the institution or by arrangement elsewhere, and that a suitable supervisor is available.

(iv) Degree Committee and the Board of Graduate Studies

The conduct and governance of each course is under the oversight of the Degree Committee for the Faculty concerned. The Degree Committee reports to the Board of Graduate Studies in the following respects:

With respect to research students:

- Recommending candidates for admission and setting suitable entry criteria, special conditions etc (on recommendation of Head of institution);
- Monitoring students' progress;
- Recommending continuation to a research degree from a Masters or other course;

- Recommending registration of a probationary research student for a PhD, MSc/MLitt or MPhil degree or Certificate of Postgraduate Studies;
- Recommending/commenting on applications for allowances and exemptions;
- Recommending candidates for the qualification (on recommendation of the Examiners).

With respect to Supervisors and Examiners

- Appointing supervisors (on recommendation of Head of institution, and bearing in mind the existing load carried by the individuals concerned);
- Monitoring students' progress through their supervision and other reports;
- Academic 'line-management' of supervisors including resolution of academic problems between students and supervisors if not resolved at a more local level;
- Appointing examiners (on recommendation of Head of institution) and providing them with advice and all documentation as required;
- At the request of the Board of Graduate Studies, investigating and responding to complaints about examinations, supervision etc.
- Registering new supervisors with CamSIS.

With respect to Administration

- Deliberating on, and responding to consultations by the Board of Graduate Studies and others on, matters of policy for graduate education in their field;
- bringing to the Board proposals for modification of existing courses, suppression of existing courses or provision of new ones (on recommendation of the Faculty and School concerned);
- ensuring that communications from the Board of Graduate Studies regarding policies and process are disseminated appropriately among the institutions for which the Degree Committee is responsible.
- The ultimate responsibility for these graduate qualifications lies with the Board of Graduate Studies and, through them, the General Board.

(v) Graduate Education Committee

The Graduate Education Committee provides support on matters pertinent to graduate education and graduate admissions within the Faculty of Computer Science and Technology. It reports to the Degree Committee and the School of Technology Graduate Education Committee, and it receives the minutes of the Advanced Taught Courses Management Committee and Graduate Students Forum.

(vi) Colleges

The 31 Colleges have agreed and adopted their own *Code of Practice* with regard to graduate students, <http://www.admin.cam.ac.uk/committee/seniortutors/>, which sets out the common core of provision that all Cambridge Colleges make for their graduate students. It explains how this provision works in the college setting, indicating at the same time the diversity that is built into the system. The document also sets out the responsibilities of graduates as members of colleges.

Further details are available in the Board of Graduate Studies *Code of Practice*
<http://www.admin.cam.ac.uk/offices/gradstud/practice/>

3. CPGS, Registration, Research Skills, Second and Third-Year Reports, and Transferable Skills

At the end of the third term following admission, research students are required to submit a **Report and Thesis Proposal** pursuant both to completion of the CPGS and to registration for the Ph.D. Degree. These reports should be contained in one single document of no more than 10,000 words.

The **Report** should cover the work done during the first year and should show that the student has made good use of their time to become familiar with background literature, identify a potential problem or topic to address, and do initial work on this by, for example, detailed analysis of an existing system, assembly of an investigative apparatus, conduct of a pilot experiment, etc.

The **Proposal** should present the intended thesis topic in more detail, and show there is a viable route to a dissertation in two years' time (i.e., by the end of the third year following admission). Thus it should say what the problem being addressed is, why it is important, what the proposed method of attacking it is, why this is new and interesting, and what the major steps to completion of the attack through the next two years are. Both documents should give sufficient information for the student's independent assessors to satisfy themselves that all is well.

Three soft-bound copies (stapled or comb-bound) of the document should be handed to the Secretary of the Degree Committee by 30 June (or the corresponding time for students who did not start in Michaelmas Term). The student will be invited to discuss the documents with two independent assessors. A student **may** invite the supervisor to attend if clarification of the report is required.

Where the initial Proposal is unsatisfactory, the supervisor must ask for a revised submission and arrange a further discussion. Where the Proposal is acceptable, it may still help the student to record suggested modifications in a final version of the Proposal.

There are three possible outcomes to the first-year scrutiny process:

1. Recommendation that the student is awarded the **CPGS** and **registered** for the Ph.D. Degree;
2. Recommendation that the student is awarded the **CPGS** but not to continue to the Ph.D. Degree;
3. Not recommended to be awarded the CPGS; not recommended to continue to the Ph.D. Degree.

Though the Report and Proposal documents are internal to the Laboratory, they form the base for formal progress reports and reports to funding bodies, the documents should be assessed and discussed by 30 September at the latest (or corresponding date). The Secretary of the Degree Committee informed of the result via CamGRAD.

In those cases where the student's progress is wholly inadequate, the supervisor should give them a written warning, by 30 September (or the appropriate corresponding date), that they are in danger of termination, with copy to the Secretary of the Degree Committee.

Certificate of Postgraduate Studies (CPGS) Regulations

Certificates of Postgraduate Study shall be awarded for advanced study and training in research in Computer Science.

1. The study and training shall include:
 - a. courses of lectures approved by the Degree Committee for the Faculty of Computer Science and Technology;
 - b. practical work carried out in one or more of the following ways:
 - i. organized experiments or theoretical exercises of an advanced type,
 - ii. assistance with a piece of research,
 - iii. small research investigation,
 - iv. training in some technique.

2. At the discretion of the Examiners the examination for the Certificate may include (in addition to the submission of a dissertation and an oral examination as laid down in General Regulation 5) one or two written papers on subjects cognate to the lectures attended by the candidate.
3. The dissertation shall be of not more than 10,000 words in length, exclusive of tables, bibliography, and appendices.

Approved Courses of lectures

Unless a student can demonstrate that similar material has been covered as part of a Master's degree, **all** research students in their first-year must attend and successfully complete the eight week **Research Skills** module.

Research Skills (Module code C00) – Module Leader: Prof. Neil Dodgson

This compulsory module provides training in the key skills required for research: reading, writing, presenting, and experimenting.

The core reading for this course, Zobel, J., (2004) *Writing for Computer Science*, will be available to borrow for a small deposit from Student Administration at the beginning of Michaelmas Term.

Additionally, all research students are expected to attend all **Wednesday Seminars** held in term time. Students may be advised by their supervisors to also attend lectures from the Part II Computer Science Tripos, the M.Phil in Advanced Computer Science or other courses offered by other University departments. **All** research students are also expected to attend courses from the **Transferable Skills** series including those on supervising undergraduates and presentation skills.

Registration

Students who have successfully passed the first-year scrutiny process have their recommendations for registration for the Ph.D. scrutinised by the Degree Committee. The Degree Committee usually ratifies all of the recommendations but does have the right to withhold ratification. The recommendations are approved formally by the Board of Graduate Studies.

Reports and recommendations submitted by the supervisor are visible on CamSIS self-service web pages once approved.

A student who has not been approved to progress to the Ph.D. Degree may be recommended for the Certificate of Postgraduate Study in Computer Science.

Second-year Report and Thesis Schedule

All research students must submit a Report and Dissertation Schedule at the end of their second year. This should be a single document, usually between 2000 and 4000 words.

The Report should indicate the progress made in relation to that intended in their first-year Thesis Proposal, including comment on significant changes to the original ideas and on their implications for the research as a whole.

The Schedule should outline the planned content of the dissertation. This can be most usefully done by providing a chapter-by-chapter outline, with a review of what work has been completed for each chapter and what work remains to be done during the third year. A timetable must be included, that schedules this work and, in particular indicates when the draft and final versions of the dissertation will be produced.

As with the first year Report and Proposal, the student should submit three copies of the document(s) to the Secretary of the Degree Committee by 31 July (or corresponding date) for assessment and discussion by their supervisor and senior colleague.

Supervisors should pay particular attention to the plan for the remaining research and timely completion of the dissertation, and may request a revised Schedule. The assessment should be completed by 30 September and the Secretary of the Degree Committee notified of the outcome via CamGRAD.

Where progress has been poor and it appears the chance of successful completion is low, the student should be given written notice of the danger, with copy to the Secretary, and warned that the lack of progress may lead to termination of funding.

Third-year Report

It is expected that the PhD will be substantially completed by the end of the third year. Ideally, all practical work should be finished and the dissertation should be close to completion. In order to monitor progress, all research students submit a progress review at the end of their third year. This comprises either (a) showing your supervisor a complete draft of your dissertation or (b) submitting a brief report of 500 words (maximum), giving an overview of your work since submission of your second year report and a schedule for the next one to three terms' work. The 500-word report must include chapter headings, the status of each chapter, and a timetable for completion.

At the end of your third year, your supervisor will be asked to submit a progress review via the Cambridge Supervision Reporting System on CamSIS. If you submit (a), your draft dissertation, then your supervisor's progress review must include a statement that he or she has seen the draft and an evaluation of its state. If you submit (b), the 500-word report, then this will be read by your supervisor, the Chairman of the Graduate Education Committee and the Head of Department. You must submit three copies of (b), the 500-word report, to the Secretary of the Degree Committee by 30 September (or corresponding date), unless your supervisor has seen (a), a complete draft of your dissertation, before that date.

Transferable Skills Log-sheet

Every student is required to complete and submit a log of his or her activities that could constitute transferable skills. Transferable, generic skills are more general than those associated with your specific research topic. A full record of these will be useful for you in maintaining an accurate CV, and is also required by the University for Research Council audit purposes. No information which identifies an individual will be supplied outside the University.

Submission of the log-sheets should accompany your first, second or third-year reports.

Examples of transferable skills training which should be included are:

- attendance at lectures or courses, or less formal training, on:
 - health and safety
 - risk assessment
 - first aid
 - writing or presentation skills
 - IT skills
 - intellectual property
 - research and project planning and management
 - generic research methods (incl. statistics)
 - research ethics
 - literature searching and library skills
 - laboratory demonstrating or supervision of undergraduate students
 - career planning and development
 - languages
- preparation and delivery of presentations within or outside Cambridge
- attendance at conferences and seminars (in Cambridge as well as elsewhere, whether presenting material orally or as a poster, or participating as a listener)
- preparation of posters, reports, papers etc.

The above list is not exhaustive – if in doubt, it is better to include an item than to omit it.

4. Academic Staff and Research Areas

The Faculty of Computer Science and Technology has a staff of 39 teaching staff, 25 support staff, 40 post-doctoral workers and about 150 research students at any one time.

Academic Teaching staff

Prof.	Ross	Anderson	rja14	GE19	Security
Prof.	Jean	Bacon	jmb25	FN15	OPERA
Dr	Alastair	Beresford	arb33	SN13	DTG
Dr	Alan	Blackwell	afb21	SS04	Rainbow
Prof.	Ted	Briscoe	ejb1	GS18	NLIP
Dr	Stephen	Clark	sc609	GS17	NLIP
Prof.	Ann	Copestake	aac10	GS20	NLIP
Prof.	Jon	Crowcroft	jac22	FN13	SRG
Prof.	John	Daugman	jgd1000	FC04	AI
Prof.	Anuj	Dawar	ad260	FE20	PLS
Prof.	Neil	Dodgson	nad10	SS10	Rainbow
Dr	Marcelo	Fiore	mpf23	FE15	PLS
Dr	Richard	Gibbens	rg31	FE05	PLS
Prof.	Mike	Gordon	mjcg	FE19	PLS
Dr	David	Greaves	djg11	FN12	PLS, SRG, CompArch
Dr	Timothy	Griffin	tgg22	FE25	SRG
Dr	Steven	Hand	smh22	FN04	SRG
Dr	Robert	Harle	rkh23	SN09	DTG
Dr	Sean	Holden	sbh11	FC06	AI
Prof.	Andy	Hopper	ah12	GC10	DTG
Dr	Mateja	Jamnik	mj201	FC18	AI, PLS
Dr	Markus	Kuhn	mgk25	GE16	Security
Prof.	Ian	Leslie	iml1	FN16	SRG
Dr	Pietro	Lio'	pl219	FC20	AI, Bioinformatics
Dr	Cecilia	Mascolo	cm542	FN08	SRG
Dr	Andrew	Moore	awm22	FW16	SRG
Dr	Simon	Moore	swm11	SE13	CompArch
Dr	Robert	Mullins	rdm34	SE15	CompArch
Prof.	Alan	Mycroft	am21	FC15	PLS
Prof.	Larry	Paulson	lp15	FE18	PLS
Prof.	Andrew	Pitts	amp12	FC08	PLS
Dr	Andrew	Rice	acr31	SN13	DTG
Prof.	Peter	Robinson	pr10	SS14	Rainbow
Dr	Peter	Sewell	pes20	FS10	PLS
Dr	Frank	Stajano	fms27	GS22	Security
Dr	Sam	Staton	ss368	FS08	PLS
Dr	Simone	Teufel	sht25	GS14	NLIP
Dr	Ian	Wassell	ijw24	SN06	DTG
Prof.	Glynn	Winskel	gw104	FE23	PLS

The Faculty of Computer Science and Technology can be generally broken down into the following research groups but there tends to be some overlapping.

Key research areas

- **Wireless Engineering**
http://www.cl.cam.ac.uk/~ic231/wirelesscomms/wct_main.html
- **Architectures**
<http://www.cl.cam.ac.uk/research/comparch/>
- **Widely Distributed Systems**
<http://www.cl.cam.ac.uk/research/srg/opera/home/home.html>
- **Networks and Operating Systems**
<http://www.cl.cam.ac.uk/research/srg/netos/>
- **Graphics and HCI**
<http://www.cl.cam.ac.uk/research/rainbow/>
- **Security**
<http://www.cl.cam.ac.uk/research/security/>
- **Natural Language and Information**
<http://www.cl.cam.ac.uk/research/nl/>
- **AI and Bioinformatics**
<http://www.cl.cam.ac.uk/research/ai/>
- **Programming, Logic and Semantics Group**
<http://www.cl.cam.ac.uk/research/pls/>

5. Important Dates 2011/2012

1. THE CALENDAR 2011/12

The Terms are:

Michaelmas:	Full Term	Tues 4 October – Fri 2 December 2011
Lent:	Full Term	Tues. 17 January – Fri 16 March 2012
Easter:	Full Term	Tues. 24 April – Fri 29 June 2012

2. IMPORTANT DATES TO NOTE

Registration Michaelmas	From 4 October 2011 (No later than 3 Nov. 2011)
Induction Day	Friday 14 October 2011
Happy Hour	Friday evening events in the Common Room

Health and Safety Courses (Compulsory)

Tuesday 4 October, register at Babbage Lecture Theatre, 9:30 New Museums Site

Research Skills Module (Mandatory) Starts Mon. 10 October at 14:00
Mondays at 09:00 in Room Lecture Theatre 2 and Thursdays at 10:00 in FW26,
Michaelmas Term only

Recruitment Fair Thursday 17 November 2011

FIRST YEAR REPORT AND THESIS PROPOSAL/CPGS

Date of commencement	Report submission date
October	30 June
January	31 October
April	31 January

SECOND YEAR REPORT AND THIRD YEAR PROGRESS REPORT

Date of commencement	Report submission date
October	31 July
January	31 October
April	31 January

TRANSFERABLE SKILLS LOGS Due annually on 31 July

PBI CONTACT DATES Please see your College Office if you are required to make contact under a CAS.

3. LAB CLOSURE DATES

Christmas	4 p.m. 23 December until 3 January 2012
Easter	5 p.m. 5 April until 10 April 2012

Assistant staff (Reception, Student Admin, Accounts, and Secretarial) also takes the following Bank Holidays: 7 May, 4 and 5 June, and 27 August 2012.

6. Who's Here to Help

The Head of Department is Prof. Andy Hopper. He is the final authority for most internal matters. However, he delegates almost all responsibilities to people in other positions, and you should contact the appropriate person in the first instance.

Your **Supervisor** is the key person for advising you about your research, and is the person to whom you should go first. Your **Second Advisor** is also available to discuss your research with you. Your College Graduate Tutor can often help with matters of a personal or financial nature.

In addition to these, the following people are here to help in the Computer Laboratory. Add "@cl.cam.ac.uk" after the user ID.

Prof. Andy Hopper	Head of Department	GC10	ah12
Caroline Matthews	PA to Head of Department	GC08	cb210
Margaret Levitt	Departmental Administrator	GC07	mal
Prof. Jon Crowcroft	Graduate Students Advisor	FN13	jac22
Nicholas Cutler	Librarian	GN04	ncc25
Carol Nightingale	Dept. Secretary of Finance	GC12	cs219
Lise Gough	Student Admin. Manager	GC06	lmg30
Megan Sammons	Student Admin. Assistant	GC04	ms725
Jennifer Underhill	Student Admin. Assistant	GC04	jcu21
Louis Massuard	Building Services	Stores	lm342
Ian Burton-Palmer	Building Services Manager	GW04	ib253
Reception staff	Reception Office	GC03	lab-reception
Dr Martyn Johnson	Senior Systems Administrator	GC09	maj1
	Managers of the e-mail system		postmaster
	Computer problems (Linux, etc.)		sys-admin
	Windows problems		win-admin
	Printer problems		printing

Computer Lab website

<http://www.cl.cam.ac.uk/>

Board of Graduate Studies (including welfare)

<http://www.admin.cam.ac.uk/offices/gradstud/current/>

Self-service web page

<http://www.camsis.cam.ac.uk/public/gradss/>

Graduate Union

<http://www.gradunion.cam.ac.uk/>

Disability Resource Centre

<http://www.cam.ac.uk/cambuniv/disability/>

University Counselling Service

<http://www.counselling.cam.ac.uk/>

7. Libraries and On-Line Access to Publications

Computer Laboratory Library The library principally serves the staff and students of the Faculty, although other members of the University may use the library for reference purposes on application to the librarian.

Opening hours The library is open and staffed between 9am and 5pm, Mondays to Fridays. The librarian is normally away for lunch from 1 until 2pm, and users visiting for the first time, or needing assistance, are advised to avoid those hours. Current members of the Faculty, including Ph.D. students, gain access to the library outside of these hours using their University card.

Location of collections

All of the library's collections are housed either on the open shelves to the left of the main entrance, or, for less frequently used material, in the mobile stacks running along the back of the library. The shelves are numbered such that case 1 is to the left of the main entrance and case 2 is the other side of that shelf unit cases 3-4 the next unit and so on.

Case no.	Contents
1	Book Locker (Undergraduate course texts)
2-6	Monographs and other published material
9-10	Oversize items
13-20	Periodicals
22	M.Phil dissertations
23	CL Tech reports; Ph.D. Theses; Standards

Betty & Gordon Moore Library (BGML) This is on the Faculty of Mathematics site. It contains most of the journals in which a computer scientist might be interested. Access can be gained during working hours without a University card, or 24 hours a day on application at the desk.

Scientific Periodicals Library (SPL) This is in town, on the New Museums Site. It contains some relevant journals and other periodicals.

University Library (UL) This is the main university library and the key source for books. It is a UK copyright library, which means that every book published in the UK should be in here. It also has a few relevant journals that are in neither the Computer Science Library nor the BGML. In particular, the Springer Lecture Notes in Computer Science (LNCS) series is stored in the UL. Access to the UL is by University card but you will need to register at the UL the first time you try to use it.

College Libraries are mainly useful as a source of undergraduate text books.

The University Library maintains a searchable catalogue of the contents of the UL, a list of serials (e.g. journals), most of which are physically stored in the BGML, and a "Union Catalogue" of all College and departmental libraries including the Computer Lab Library. This catalogue can be searched via the web, or using SSH.

The Computer Lab library maintains its own set of pages on the Web, along with access points to other online libraries. Searching it or any other departmental library is most easily done via the UL Newton online catalogue, using "apply limits" button to narrow the search. You will typically be allowed to read in other departments' libraries, if they have material you cannot obtain elsewhere, but it is courteous to ask the librarian first, typically by email. If for some reason you don't find what you're looking for in Cambridge, you may order an inter-library loan from the Scientific Periodicals Library.

Photocopiers are available in most libraries, and are operated by means of cash or photocopier cards of several types: if you are unsure, ask the librarian. You should also read and obey the restrictions on copying posted by each photocopier, though also note that they do not apply to certain publications: ACM papers, for example, are freely redistributable under certain conditions.

Most journal and conference articles are available on the internet. The University of Cambridge has subscriptions to a wide range of on-line databases that provide the full text of articles in

PDF format. Provided you are accessing these databases from within the cam.ac.uk domain, you should automatically get free access. If you are asked to pay for an on-line article, please check first that you are within the cam.ac.uk domain, and also check whether the author has provided a free copy of the article on his or her own website. Google Scholar seems to be efficient at finding all possible sources for papers. If it proves impossible to find a free on-line version of something that you need to read, please check whether a paper copy exists in one of the Cambridge libraries. As a last resort, the librarian can arrange an inter-library loan, if there is no on-line version; or you can ask your supervisor whether there is some way to pay for the on-line version.

8. Student Administration

Student Administration is based in the Computer Laboratory, William Gates Building, JJ Thomson Avenue, Cambridge, CB3 0FD.

- Undergraduate supervision material from GC04

Graduate Education Offices:

- Letters: certificates of attendance
- Submission of all coursework
- Collect copies of Zobel's *Writing for Computer Science*; £10 refundable deposit
- Degree Committee administration

All Research Skills coursework must be submitted to Mrs Dinah Pounds in FS05 and should have a completed green cover sheet attached. These are available from FS05. Marked work will be returned to your pigeonholes in the GC corridor.

Opening hours

The Undergraduate Student Admin hatch is in the "Street":
Monday to Friday 09:30 - 12:00 13:00 - 16:30

Graduate Education Offices FS03, FS05:
Monday to Friday 09:00 - 12:30 14:00 - 16:45

Please note that tea-breaks between 10.30 – 11.00 and 15.30 – 16.00 are sacred to Student Admin team. We also take bank holidays as part of our annual leave. If the Graduate Education or Student Admin offices are closed, you can always drop correspondence off at Reception staff or leave it in the pigeonhole marked 'Student Administration'.

Student Administration Staff

Graduate Education Manager and Secretary of the Degree Committee

Ms Lise Gough (3)34656 Room FS03
lmg30@cl.cam.ac.uk

Graduate Education Assistant

Mrs Dinah Pounds (3)34652 Room FS05
dp341@cl.cam.ac.uk

Undergraduate Student Assistant

Mrs Megan Sammons (7)63505 Room GC04
ms725@cl.cam.ac.uk

Accounts

Departmental Secretary for Finance

Mrs Carol Nightingale Room GC12
cs219@cl.cam.ac.uk

Mrs Tanya Hall Accounts Clerk (7)63797 GE05
tnh23@cl.cam.ac.uk

9. Publications, Conferences and Travel

New research results should be disseminated through conferences presentations and journal publications. Writing and presenting papers is an important part of your training as a research student. Everyone—student, supervisors and the Laboratory—wants publication submissions to be successful, so here are some practical guidelines publishing your work.

- You must discuss possible publications with your supervisor, to establish that there is good material for a publication and to help choose an appropriate conference or journal for the work. Make sure that contributions by others (and sponsors) are properly acknowledged.
- Start work in good time and do not leave submission to the final deadline.
 - Every paper should be read by at least one colleague and one member of the academic staff before submission, and you will need time to accommodate any suggestions that they may make. Your supervisor may well want to see the revised version before submission as well.
 - If appropriate, check that any intellectual property has been protected before publishing.
 - Clearance from industrial sponsors may take even longer.
- Think about the cost of attending a conference before submitting a contribution.
 - Students attached to research projects may be able to charge conference attendance to the research grant. Check with the grant's Principal Investigator before you even start to write!
 - Students with industrial sponsors should ask their supervisors to seek support from the company.
 - The Laboratory has a small fund that it uses to help students attend conferences. This fund has many calls on it, so help is not guaranteed. You need to apply well in advance using Part I of the standard expenses form (<http://www.cl.cam.ac.uk/forms/travel-expenses.pdf>) and attach a letter of support from your supervisor.
- Requests for support from research grants and from the Laboratory's fund will be considered more favourably if the cost is shared with others, such as:
 - a student travel grant from the conference,
 - your college,
 - the **Cambridge Philosophical Society** (but remember that applicants must have been Fellows for at least a year, so join early) <http://www.cam.ac.uk/societies/cps/studentship.htm#travel>,
 - professional bodies such as the **Royal Academy of Engineering** (for UK citizens) <http://www.raeng.org.uk/research/researcher/travelgrant/>,
 - similar bodies for those from other countries.
- If your paper is accepted, pat yourself on the back. Then:
 - Get even more people to read it and take even more care revising it before submitting the final copy. If English is not your native language, make sure that the text has been carefully reviewed by someone fluent. Your reputation and the reputation of the Faculty depend on it!
 - Practise conference presentations on a few members of your research group well in advance of going to the conference, and revise the presentation in light of their feedback.
 - If appropriate, prepare a **poster** and some handouts. Poster design is hard. Walk round the Laboratory to see some very good examples and some less good ones. Seek advice from the authors of those you like. Please contact Chris Hadley, ckh11@cl.cam.ac.uk, if you wish to use the poster printer "redwood." Remember that you are likely to have to carry the poster on an airplane so printing on a single A0 sheet of paper is unlikely to be a good idea

- and
 - Register early, and book travel and accommodation in good time for reduced rates. Check any visa requirements in good time. Reception will do all this for you, but will need to see the approved expenses form.
- Register your paper in the Laboratory's **publications database** (see <http://www.publications.cl.cam.ac.uk/>).
- Other publications by the organisers are often available cheaply at conferences. Please talk to the Librarian to see if there are any earlier conference proceedings or other material missing from our collection that you could buy. If the Laboratory has paid for (part of) your conference attendance, then remember to donate your copy of the proceedings to the Library when you return. The proceedings will be more useful in the Library than tucked away on your office bookshelf.

10. Student representation

Ph.D. Students are represented on the **Faculty Board for Computer Science and Technology** by a student elected from amongst themselves. Elections for members are held in the November of each academic year. The Faculty Board receives the Minutes of the Staff Student Consultative Forum, the Committee for Advanced Taught Courses, the Tripos Teaching Committee, and the Forum of Directors of Studies, and itself reports to the General Board of the University. Copies of Faculty Board minutes are filed in the Departmental Secretary's office, GC07.

The junior members of the Faculty Board are two students on taught courses and one research student. They attend the unreserved business of each meeting of the Faculty Board. This is the bulk of the Board's business and includes things like the Head of Department's annual report, accreditation matters, examiners' reports, teaching matters related to the Tripos and M.Phil courses, the use of calculators in exams, new proposals for courses, etc. The junior members do not attend the reserved business, which is any business which deals with a named member of staff, such as promotions, leave of absence and the appointment of Examiners.

The election of a representative for the Faculty Board is, formally, independent of the Graduate Union (GU). However, under the terms of the GU Constitution (which has the approval of the University Council) the elected graduate representative is also a voting member of the GU's governing council. Further information about the GU Council is available at <http://www.gradunion.cam.ac.uk/gradunion/council/>

Research students are also represented on the **Staff Student Consultative Forum** and the **Graduate Students' Forum**. Both of these groups are relatively relaxed occasions and provide the opportunity for student and staff representatives to exchange comments about facilities and teaching. The **Graduate Students' Forum** is made up of research student representatives from research students and the M.Phil course, the Graduate Students Coordinator and a member of the Student Administrative team. The Forum has the opportunity to suggest courses and activities that fall within the remit of the Transferable Skills allocation as well as issues that are particularly relevant to research students in the Faculty. Meetings are held at lunch time once a term and the minutes are received by the Graduate Education Committee and Degree Committee.

The **Staff Student Consultative Forum** (SSCOF) is made up of student representatives from every year of the undergraduate course, an M.Phil student, a research student, and members of the academic, support and Student Administration team. Meetings are held at lunch time twice a term. See <http://www.cl.cam.ac.uk/local/committees/staff-student/>

We will email the student body about the elections at the beginning of term.

11. WOMEN@CL

Based at the Computer Laboratory, *women@CL* provides local and national activities for women engaged in computing research and academic leadership. The network was established because only one in four computing PhDs, one in eight computing academic staff and one in twenty computing professors are female, yet 33% of academic women, as opposed to 22% of men, aspire to leadership positions. The purpose of the *women@CL* network is to put in place a positive action programme for women in computing research, with a particular focus on interdisciplinary research, leadership and enterprise.



Our programme consists of a variety of local activities such as

- *women@CL* lunch talks that aim to provide role models to our students;
- coffee and cakes once a month;
- big/little sister events which have included formal halls at a variety of colleges; meals out at local restaurants; and more recently a countryside walk with cream teas.

women@CL events are open to all, women and men. For more information on our meetings and resources for and about women in computing, please visit the *women@CL* webpage <http://www.cl.cam.ac.uk/women/>.



12. Graduate development

The Faculty offers a number of courses throughout the academic year as part of its Graduate Development program. These may be counted towards your Transferable Skills: languages at beginners, intermediate and advanced levels (Japanese, Chinese, Spanish, French and German); “Supervising Undergraduates”; “Scientific Writing”; “Finishing your PhD”; and “Presentation Skills”. Student Administration will notify students of the dates of these courses. Language courses are presented by the Department of Engineering and run for two terms, and include oral and written examinations. See <http://www.eng.cam.ac.uk/teaching/language/indexLU.htm> for further details.

The Faculty requires all research students to attend the Wednesday Seminar series <http://www.cl.cam.ac.uk/seminars/> and their own research group’s seminar series. Students should also consider attending seminars offered by other research groups.

We encourage students to attend graduate workshops and conferences, and to attend relevant undergraduate and graduate lecture courses. As a student at Cambridge, you have the right to go to any course put on by the University in any subject. There are a couple of things to keep in mind if doing this: (1) if the number of students is relatively small, then it is polite to let the lecturer know that you are attending; (2) if the lecture theatre is overflowing with people, then it is polite to leave in preference for the students who are registered for that course.

13. Supervising undergraduates

Cambridge offers the opportunity for research students to teach undergraduates. This is principally done through the “supervision” system and the “demonstration” system.

An undergraduate *supervision* is where a *supervisor* teaches undergraduates (“*supervisees*”) in a small group of one to four students. Undergraduate students are generally supervised on their individual lecture courses. A student should expect one supervision for every three to six lectures. The supervisor will set exercises, based on the part of the course that the students have just completed, and will mark the submitted answers. In the supervision, the supervisor and students will spend some time going through the exercises and answers but will also spend time in general discussion of the course material, in addressing specific problems that the students have with parts of the course, in discussion of extensions or applications of the material, and in probing whether the students really understand the material or whether they are just regurgitating what they have been told.

An excellent introduction to supervision can be found in Frank King’s “Notes on supervising Computer Science” at:

<http://www.cl.cam.ac.uk/teaching/supervisions/notes/>

If you wish to supervise then there are two routes to arrange this. The details are in Frank King’s notes (see above). Briefly, in the first and second years of the undergraduate course, supervisions are co-ordinated by the Directors of Studies (DoS) at the individual colleges. You will need to be recruited by one or more of them, and you should start by talking to the DoS at your own College. Student Administration can also circulate your name and the courses you are interested in to the DoS mailing list, if you do not want to approach individual DoSes. In the third year, supervisions are co-ordinated by the Lab’s Student Administration, with advice from the course lecturers. Approach either the lecturer or Student Administration to be considered for supervising on third year courses.

Regardless of how it is organised, all undergraduate supervision is paid for by the students’ Colleges. The current rate of pay is around £30 per *contact hour*. This may sound a lot of money, but you must remember that each contact hour with students will require you to spend at least the same amount of time preparing for the supervision and marking the students’ work, so the real hourly rate is around half the quoted amount.

Undergraduate *demonstration* is what you might think of as being a teaching assistant. Demonstrators help to run laboratories in the first and second year hardware courses and help to mark software assignments in the first year programming courses. There are not many places available for these, as most out-of-lecture teaching is done through supervision, but contact student administration if you are interested.

Please note that, although it has been known to happen, it is rare for a PhD student to be asked to lecture at Cambridge.

Some further information from Student Administration

The Student Administrator is responsible for administering most Part II supervisions. She will send out a request in Michaelmas looking for supervisors in a variety of specialist subjects. You will be asked to provide her with information about how many groups you can manage and how large each group can be (usually two or three students at a time). “Sign-up” sheets are posted outside the Student Administration office hatch after the second lecture of each course and students will write their names in the available slots. The Student Administrator will then email all those supervisors who have agreed to supervise with the names of their supervisees.

Supervision rooms are in great demand and you will need to email lab-reception@cl.cam.ac.uk to book the rooms for your use. If you are unable to book a room, there are alcoves off each of the corridors which can be used for this purpose. We do ask that you respect other research students in offices working in the vicinity and conduct the supervision quietly.

Supervisors are not left to fend for themselves in setting work for students. Most lecture courses contain exercises that can be set for the students. Some lecturers provide considerable additional support for supervisors. See the course material pages on the Laboratory's website.

Past examination papers are online, but supervisors should not set past examination questions too early in the course. Solution notes to exam questions are available from the Student Administrator and may be photocopied for the supervisor's use but they should not be given to the students. The Faculty is clear that its solution notes are *not* model answers and that they are provided solely to help supervisors in assessing students' own attempts and in understanding what the examiners wanted.

14. Getting to the Lab

Students at the University of Cambridge are not permitted to have cars except under very special circumstances.

Walking or cycling

The William Gates Building is 2 km (1.3 miles) west of the city centre. From the city centre go west on Garret Hostel Lane, Burrell's Walk (past the University Library), Adams Road, the Coton Cycle-path, and then turn right into Clerk Maxwell Road then left beside the Centre for Applied Photonics and Electronics to the William Gates Building. The official university map should help you to trace this route. A map of the area surrounding the William Gates Building shows the final part of this route. Please see Appendix 2.

If you are cycling, please take care. The EMBS has a useful website for cyclists, old and new, at <http://www.admin.cam.ac.uk/offices/embs/travel/cycle/>. We also strongly recommend purchasing a strong D-lock.

Buses

Buses **Uni 4** and **Citi 4** offer reduced fares to University card holders. They run from the city centre to the West Cambridge Site. Both buses stop on the West Cambridge Site itself. In the city centre they stop on Silver Street (on the west side of Silver Street Bridge) and Trumpington Street (near the Fitzwilliam Museum and near Pembroke Street).

For more information about buses, see the links from the Bus Services page:
<http://www.admin.cam.ac.uk/offices/embs/travel/bus/index.html>

Anyone planning to make three or more journeys in a day on Stagecoach buses (other than the **Uni 4** or **Citi 4**) will find it cheaper to purchase a *Dayrider* ticket, which can be used on any Stagecoach route within the city.

15. First Aid

First Aiders

A list of First Aiders and how to contact them is posted by each First Aid box, on the **Health and Safety Notice Board** by the south stairs near Lecture Theatre 2 and the Student Entrance, and on the **Student Administration Notice Board** opposite the lifts. Read the notices and remember the nearest ones to the places where you work. If in doubt, phone reception on 63500, **tell them where you are**, and ask for a First Aider to attend.

Each First Aider has a private First Aid box, and public boxes are located:

- at the eastern end of the central corridors just west of the eastern corridor
- in reception
- in the First Aid Room, GE09, just north of the junction of GC and GE

If one is used, please contact someone to report the incident, and to allow the box to be re-stocked. Even if no First Aid equipment is used, please report any incident.

If an ambulance is called, give your location as

University of Cambridge Faculty , CB3 0FD off Madingley Road (towards the M11 junction, on the West Cambridge Site) and give the number you can be called back on -- during opening hours the number for reception is probably the best choice.

Finally, ask what resources (ambulance, paramedic, community first responder) they are sending and what the ETA is. If nothing arrives within 10mins (or the ETA if it is longer than 10 minutes) call 999 again.

Please send someone to the Madingley Road to greet the Ambulance and have someone waiting on JJ Thomson Avenue to direct them to the William Gates Building. Take the crew to the casualty.

16. PAT and Recycling

PAT (Portable Appliance Testing)

If you specifically want to use your own electrical equipment in this building you will not be allowed to until the equipment is PAT tested by a member of Building Services first. This will determine if the equipment is safe to use. The equipment must be taken to Stores (The Street, Ground Floor) for a PAT test to be carried out.

Recycling

The Computer Laboratory has a number of recycling facilities which we encourage you to use.

This building has facilities to recycle

- white paper
- cardboard
- glass bottles and jars
- aluminium cans
- batteries
- IT and other electrical items
- toner cartridges
- tubes and lamps
- mobile phones
- hazardous waste

All these recycle bins are in the Bin Stores or Stores areas.

Can, paper and food recycling points are throughout the building and in each of the kitchens.

The paper recycle points are the green plastic bins next to the printers throughout the building. These are for **white paper** only - **no newspapers, no glossy magazines or brown envelopes**. Quite often these bins contain the wrong type of paper and Stores staff members have to separate before putting into the skip which is very time consuming.

Map of West Cambridge site



3	Centre for Advanced Photonics and Electronics (CAPE)
4	Department of Physics Cavendish Laboratory
5	William Gates Building - Computer Laboratory
7	Hitachi Cambridge Laboratory
8	Kapitza Building (Optoelectronics, NanoPhotonics)
9	Department of Chemical Engineering and Biotechnology - Magnetic Resonance Research Centre
10	Merton Hall Farmhouse
11	Microelectronics Research Centre
12	Microsoft Research
13	Interdisciplinary Research Collaboration Nanoscience Centre
14	Department of Veterinary Medicine
17	University Nursery at West Cambridge
18	University Residences - West Cambridge
19	Whittle Laboratory, Department of Engineering
20	Institute for Manufacturing
21	Physics of Medicine
22	Cambridge Enterprise Limited, University Offices
ARB	Alan Reece Building
BB	Bragg Building
HF	Hauser Forum
MB	Mott Building
RB	Rutherford Building