This is the Handbook for the 4-year CDT Programme in Computer Science offered by the School of Computer Science in the University of Manchester. You are expected to make yourself familiar with the contents of this Handbook as it contains the regulations for your programme, assessment rules, descriptions of the facilities of the School and University, as well as guidance on undertaking your studies here.

Although the information contained in this handbook is believed to be correct at the time of going to press, the School reserves the right to make appropriate changes without prior notice; however the School will endeavor to inform students of any substantial changes made affecting the programmes. This disclaimer does not affect any statutory rights which you may have under English law.

Jonathan Shapiro, PGR Director and CDT Manager, Manchester, September 10, 2014

Please email any errors or suggestions to [Jonathan Shapiro] with “Handbook corrections” in the subject.
Chapter 1

Welcome to the CDT

Welcome to Manchester and to the Centre for Doctoral Training in Computer Science. Our Centre was the first EPSRC Doctoral Training Centre in core computer science. You are our fourth cohort of students, so there are some other CDT students around who can help you along the way. We are very excited to have you here on this programme. We hope your time here is challenging, fulfilling and enjoyable.

Welcome, too, to the start of your research careers. You are here to learn to carry out research. During the next four years you will be learning the skills of a researcher: how to choose the problem to work on which is important yet tractable. How to evaluate and communicate research. How to carry out effective investigations using the techniques of particular research fields. During the first six months, this will be largely through classroom and group activities. During the remaining three and half years, this will be working under the direction of one or more world-class researchers. You will also have opportunities to apply your research skills to work with users to solve problems they care about, and possibly to spend time in other research or R & D labs. By the latter half of your time here, we expect you will be contributing to our research, writing papers, making presentations at scientific conferences, and helping to shape the future of computer science.

Our goal in setting up the Centre is to create a new model of PhD training which combines the deep technical training of the traditional UK PhD with explicit training in research skills: creativity and innovation, scientific evaluation, communication across research and academic boundaries, impact planning, and problem-solving in groups with users. We really believe in this programme, and we feel that you are a group of students with great potential as researchers. Together, I hope we will make this a great programme and a great experience for you.

Dr Jonathan Shapiro, CDT Manager.
Chapter 2

Getting Started

**Location:** School of Computer Science
The University of Manchester
Oxford Road
Manchester M13 9PL
United Kingdom
Tel: (+44) 161 275 6181
Fax: (+44) 161 275 6204

The School is located in the Kilburn Building, and the IT building behind it (accessed via the internal first floor walkway). Due to the interdisciplinary nature of computer science, several of our staff are located elsewhere, most notably at the Manchester Institute of Biotechnology (MIB). MIB is building number 16 on University interactive map. Plans of the building are included at the end of this document.

**Figure 2.1:** From Oxford Road, the ground floor entrances to the Kilburn building are on the left, then up the staircase inside, or to the right, and through the loading bay (the only access out of normal office hours). There is also an entrance on the first floor via the elevated walkway to the left.

**The Student Support Office (SSO):** is located in Room LF21 (Lower First floor), Kilburn Building, email: sso@cs.man.ac.uk. They provide administrative support for all students, from registration to graduation.

**Induction Week (Week 0):** 15 - 19 September 2014
A number of very important induction events run during this week, explaining how the school, the programme, taught course units, assessments, email accounts, computer accounts, etc. work. This should set you up to start with your studies which start the following week. It is vital that you attend these, as well as meet and make friends with staff and other CDT students, and familiarise yourself with the layout of the School and of the University.

**Personal Tutor:** Each student will be assigned a personal tutor, with whom they will have regular contact. The personal tutor will provide general advice, as well as advising on specific aspects of the course, such as the selection of taught modules, and assisting in the choice of a PhD research project. You should meet with them during welcome week.
Programme Handbook (this document): This is intended as a useful initial reference, and you are expected to consult it. It can be found online on the School’s PGR internal webpages. Further information can be found on the School of Computer Science PGR web-site: http://studentnet.cs.manchester.ac.uk/pgr/.

Important Dates, 2014 – 2015: University dates can be found at www.manchester.ac.uk/discover/key-dates/. Relevant dates are:

Welcome Week: 15 September – 19 September 2014.


January Exams: 12 January – 23 January 2015. Courses from Periods 1 and 2 will have exams during this period.


Spring Exams: 14 May, 2015 – 3 June, 2015. Courses from Period 3 will have its exams during this period.

Teaching Periods 2014 – 2015: Deadline for Course Unit Registration: 19 September, 2014

Period 1: 22 September – 24 October 2014

Period 2: 3 November – 5 December 2014

Period 3: 26 January 2015 - 6 March 2015

Within Computer Science, undergraduate teaching occurs in 12-week semesters. The MSc teaching occurs in 6-week blocks which divide the 12 week semesters in half. The 6-week block is divided into 5-coursework/lecture block followed by a one-week catch-up. During the Foundation part of the PhD, you will take courses which run on this 6 week cycle, from periods 1 – 3. A detailed timetable for the Foundation part of the course is given on page[13] The supervised research part of the programme runs throughout the year.

Teaching Assistant role: After the taught part of your programme is finish, you will have the opportunity to get involved in many activities of the School including UG or PGT laboratory teaching by becoming a Teaching Assistant[1].

Mentors: The Mentors are research students in their second or further years. They can help with queries about the School or University, or other aspects of the PhD experience. They also organise social activities. Find out more about them and how they can help from their web page:
http://mentors.cs.manchester.ac.uk/
or join their Facebook group:
CS Research Students (University of Manchester)

Identity Cards: All students will be issued with a photographic University identity card (swipe card/student card). You should have this card on you at all times whilst on University premises. It is used to access various restricted areas, as well as acting as your library entry/borrowing card for the central university library.

To be in the building outside normal working hours, you will need a School out of hours pass. These are issued in the Student Support Office (SSO). You will need to show both

[1]Previously, these were called “demonstrators”
cards to get into the building out of hours. You will be issued with a **provisional** pass at registration. You will need to take and pass an on-line Health and Safety course. Once you do this, the card become fully valid. To take the Health and Safety course, go to [https://moodle.cs.man.ac.uk/course](https://moodle.cs.man.ac.uk/course) and log in using your University credentials. Click on the “Out of Hours Induction course (PGR Students). Read the document and then take the test. You can take the test as many times as you need to, until you get all questions correct.

**Internal Telephone System:** External phone numbers for the University are usually of the form 0161-275****. From an internal phone, you just have to dial the extension number, which is 5 followed by the last four digits of the external phone number. Some internal phones also allow you to make external calls, you dial 9 to get an external line, followed by the usual external phone number.

**Emergency Phone Numbers:** In the event of any emergency, medical or otherwise, please contact the emergency services by calling 9999 internal or 999 external line. The University Security Office must also be informed once the emergency services have been alerted by calling 69966 internal or 0161 306 9966 external line. This number is on the back of your University Identity Card.

**Computing Facilities:** Each CDT student will be given a desk and a computer in the dedicated CDT lab. The CDT lab is located on the Lower First floor of the Kilburn building (Rooms LF7 & LF8, see plan on page 45). All machines in the CDT lab support Linux and MS Windows. For many of the taught programmes, you will need to be familiar with both systems. There is an introductory Linux lab during Welcome Week for those who need to familiarise themselves with our Unix based system.

**Computer Science Information Systems (CSIS):** The University has an IT services section; their website is [www.itservices.manchester.ac.uk](http://www.itservices.manchester.ac.uk). The group who work within our School are called CSIS. They are very helpful. However, if there is some fault with your equipment or with your CS account, you should “raise a ticket” with the IT service desk. Follow the link on this page, [http://www.itservices.manchester.ac.uk/help](http://www.itservices.manchester.ac.uk/help) which says contact the IT Service Desk. Other useful places to get information are

- The [CS studentnet pages](http://www.itservices.manchester.ac.uk/help) under the “Technical support” drop down menu, and
- The School Wiki, in particular the [StudentFAQ/IT](http://www.itservices.manchester.ac.uk/help) pages.

**Computer Accounts:** You will have two computer accounts, a School account, and a University account.

**School:** Your username/log-in name will usually be your family name (truncated to the first 7 letters if necessary), followed by the first letter of your given name (or sometimes the second initial as well if there is a clash with another student or staff member). Your initial password is your date of birth in **yyyymmdd** format. For example, Mrs Alice Smith, born on the 2\textsuperscript{nd} of January 1950, would have the username **smitha**, and password **19500102**. You should **change** your password as soon as you have successfully logged in for the first time. Obviously, do not give your username and password to anyone, and do not send it over email.

**University:** You will need to set up a University account. Central username and password allows you to access various university-wide systems, as well as giving you access (via the Central Authentication System (CAS)) to online journal content to which the University
Library has a subscription. It also serves as your username and password for your teaching domain account. You can sign-up for your account by visiting:

https://iam.manchester.ac.uk/initial_login/overview

You will need your personal details and University ID number (the number on your swipe card) to sign-up.

Email: You will have a computer science email account, with an address of the form:

<user>@cs.man.ac.uk

as well as a University email account usually of the form:

<user>@postgrad.manchester.ac.uk

Detailed instructions on how to send and receive emails, both locally and remotely, for both Linux based and windows based systems, are to be found on the Wiki at the Student-FAQ/IT pages mentioned above, as well as the University’s Student email page.

It is important to note that you should read your email frequently as there may be important messages from the staff or from the School or University. If you use other (external) email accounts (e.g. gmail or hotmail), you may wish to set up a forwarding to automatically forward mail from your School mail account to your external account.

Warning: If your School account becomes over quota, then mail will not be received and you may miss important messages. Always ensure that you clean up your account regularly, deleting large files and junk (especially in your email box and web browser caches).

Intranet: There is a School Intranet which is divided in sections for students (StudentNet http://studentnet.cs.manchester.ac.uk) and for staff (StaffNet http://staffnet.cs.manchester.ac.uk). StudentNet has sub-sections on the post-graduate taught (PGT) and post-graduate research (PGR) programmes. These both contain material of interest:

PGT: http://studentnet.cs.manchester.ac.uk/pgt/
PGR: http://studentnet.cs.manchester.ac.uk/pgr/

CDT: website:

http://cdt.cs.manchester.ac.uk/

eLearning: The School of Computer Science makes use of various eLearning systems for teaching and assessment (Moodle and Blackboard). There is also an online system for post-graduate students (eProg), which enables students to plan and track their progression, and provides online listing and booking of various skills training programs. You will need to use eProg as part of your assessment. Full details of these three services are provided in Chapter 8.

International Students & English Language Courses: If English is not your first language, you may need to further develop your skills throughout the course of the programme. As with other aspects of training and development within the CDT, students are encouraged to further develop their skills throughout the course of the programme. Further English language courses are hence available during the course of the CDT programme, to enable students to fulfill their full potential as they progress with their study and research.

Further information about these courses will be provided at registration. A full guide to the courses provided by the University Language Centre can be found at:

http://www.langcent.manchester.ac.uk/english/

International students may also find it useful to participate in activities arranged by the International Society

\(^2\)John Rylands University Library of Manchester (JRULM or JRUL).
The university’s International Advice Team offers help and advice to international students on a wide range of issues:

http://www.manchester.ac.uk/international/support/advice/

Student Societies: The University of Manchester Students’ Union (UMSU):

http://manchesterstudentunion.com
is an organization, independent of the University, to which all students automatically belong. As well as the facilities within the Student Union building itself, UMSU also supports an enormous range of student societies, where you can meet students with similar interests:

http://manchesterstudentunion.com/groups#club-society#all

Faculty Support: The Faculty of Engineering and Physical Sciences has a set of web pages supporting PhD students, at this address:

http://www.researchsupport.eps.manchester.ac.uk/postgraduate_home
This contains information about short courses events run by the Faculty, advice, and links to the Faculty and University policies relevant to PhD students.

Help and Advice: Starting a new course can be daunting for anyone. In many cases, students will have moved from a familiar university and course, where they were seen as an experienced and knowledgeable student, someone who others came to for advice. Compared to this, being a new student, at an unfamiliar university, in what may also be an unfamiliar city or country, can be a big change that isn’t always that easy to deal with. If you do experience difficulties, remember that even if all the other students in your cohort seem to be having a wonderful time, with no problems at all with the course or anything else, things aren’t always exactly as they may seem, and many other people may be having similar problems to yourself!

It is important that if you are experiencing any difficulties, whether they be academic, personal, or university related, that you seek advice at the earliest opportunity. Any matter whatever that affects your work and progress can and should be brought to the attention of your Programme Director or other suitable member of staff, or to the Student Support Office in room LF21. The CDT Managers, Jon Shapiro and Rizos Sakellariou, the Mentors, your tutor (during the Foundation period), your advisor and your supervisors are all here to help you succeed.

In general, if your difficulties involve carrying out your research you need to make this clear to your supervisors, who are here to help you and train you on how to be a researcher. Other members of your research group can also be very helpful. Issues concerning resources required to do your research also must be resolved with your supervisors, who are authorised to decide what resources are appropriate.

If you are having difficulties communicating with your supervisors, or are having other problems with your relationship with your supervisors, you may discuss this with your advisor, or the PGR Tutor (Alvaro Fernandes) or CDT Managers (Jon Shapiro, Rizos Sakellariou). The mentors may also be able to offer advice. Any information will be treated as strictly confidential if you request it.

If you need help with an administrative issue, such as registration, payment of funds, or form filling, the Student Support Office (LF21) should be your first port of call.

During the taught part of the course, when it comes to academic help on particular course units, you should initially consult the course lecturers on that unit. For help deciding what courses you should or could take, your personal tutor or the CDT managers should be consulted.
See also Chapter 7 on **Student Support and Guidance**.

Members of university staff (whether administrative or academic) have a wealth of experience in dealing with the issues that effect students, and if they can’t help you themselves, can often assist you in finding the help you need. Academic staff will always advise on management of work, and in many cases, any problems or disruptions you may have had can be taken into account when it comes to assessment of your work and progress.
Chapter 3

The CDT Training Programme

3.1 Overview of the Programme

One obvious aim of any PhD programme is that students complete a substantial period of supervised research at an appropriate level, which is then written-up as a PhD thesis, examined, and then leads to the awarding of the desired degree. Such research obviously forms a major part of the CDT programme (see purple region on the diagram). An understanding of the relevant academic literature and the development of research skills is obviously required if you are to complete such a period of research.

However, as students on the CDT, you will also gain training and experience in all of the research steps: creativity and innovation, thinking about impacts of research at the outset, and understanding through collaboration with industrial and outside users how research can have big impacts in non-academic ways. The extended nature of the CDT programme, when compared to the more-traditional 3-year programmes, means that you will also have the time to gain a broader range of experiences in research problem-solving. You will also gain a broader knowledge of the field by taking technical courses.

The CDT programme consists of an initial six-month ‘foundation period’, consisting of various taught components. CDT students have the advantage that they will be trained as a cohort, and undertake a wide range of activities together. After this, you will begin your three and a half years of supervised research. However, further skills training (ST1 & ST2), and other activities such as Public Engagement (PE), study groups with industrial partners (SG), and Research Symposia (RS2, RS3, & RS4) continue throughout the entire programme, which will maintain the cohesion of CDT students as a group.

3.1.1 Foundation Period

Foundation Course Units (FCU1 & FCU2) These two modules are to be chosen from the Foundation Modules within the School of Computer Science’s Taught MSc courses, and are taught in Teaching Block 1 (weeks 1-6).

Advanced Course Unit (ACU) This is an advanced module, to be chosen from the list of advanced MSc modules available to CDT students, and is taught in Teaching Block 2 (weeks 7-12). These course units are divided into themes, and students should make sure they take the required prerequisites for the advanced module that they plan to take. The list of advanced modules that are available to CDT students during their first year are listed on the CDT webpages:

http://cdt.cs.manchester.ac.uk/programme/modules/

Normally, we expect CDT students (for timetabling reasons), to take MSc modules which are presented in the first semester, during teaching blocks 1 and 2. However, it is possible
to take the advanced course unit from teaching block 3. In this case, you must do your taster project during teaching block 2 during the first semester. If you wish to use this option, you will need to get that approved when you choose your courses during Welcome Week. There are two disadvantages to doing this. First, you might have a more limited choice of taster projects. Second, you will need to take any exam for this course in May, when you will also be starting on your supervised research. However, we recognise that the courses on offer may be more appropriate in some cases.

Other MSc modules which are delivered in the second semester can be also taken in the second year if the your research requires it and your supervisor recommends this.

Scientific Methods (SM1, SM2, & SM3) All students are required to take this sequence of courses. These courses will give students a thorough grounding in scientific evaluation for all phases of a research project, from evaluation of the quality and importance of a research proposal, to the experimental verification and analysis of the outcome. These courses will teach scientific methods, scientific evaluation, experimental design, data analysis and the elements of statistics.

The Scientific Methods courses are organised as follows:

- **SM1 (COMP80131): Scientific Evaluation, Experimental Design and Statistical Methods**
- **SM2 (COMP80122): Fundamental Aspects of Research Methodology**
- **SM3 & IS (COMP80142): Scientific Writing and Impact Studies**

Research Seminars Science in Practice (SIP) seminars will also take place in weeks 1-12 (1 hour per week). These will inform CDT students of the variety of PhD research opportunities available within the school, and the nature of the work involved. They will be delivered either by the heads of the research groups themselves, or by a suitably-qualified representative. The basic idea is that CDT students will be exposed to the full range of research opportunities within the school before they have to start making decisions as to their desired PhD project.

Research Symposium (RS1) The School Research Symposium takes place over Tuesday 28 — Thursday 30 Oct 2014 (in Week 6), and part of the content will be a set of presentations and posters that outline ongoing research programs within the School. It will hence give you an opportunity to meet more senior research students and their PhD supervisors, and discuss possible PhD projects.

CDT students are given a specific task to carry out during the Research Symposium as part of the Scientific Methods Course (SM2), and there will be a meeting to discuss this, probably on the day before. Watch for this.

Course Unit Assessment (exams) The January exam period takes place during weeks 13-14. CDT students (along with MSc and other post-graduate students) will be assessed on the modules they have taken during Teaching Blocks 1 & 2. See Chapter 4 for further details. For any student taking a course unit in teaching block 3, the exams will most likely take place between the 14 May — 3 June, 2015.

Short ‘Taster’ Research Project (STRP) This project, usually undertaken during Teaching Block 3 (weeks 15-20), gives students a chance to undertake a short supervised research project. As well as giving you an introduction to research, it also gives you the opportunity to investigate areas related to a possible choice of PhD project, or to just broaden your experience.
**Supervised Research** By week 21, each CDT student will have been assigned a supervisory team, and will be ready to start their programme of research. Teaching Block 4 overlaps with this period, where students will be taking the third Scientific Methods course (SM3 & IS). This research contributes to COMP80900.

**Creativity Workshop** This is a workshop that will occur around about week 26. It has not yet been scheduled for 2015. The aim of this workshop is to introduce CDT students to the creative approach needed to solve research problems. Earlier education tends to emphasise analytic skills, which are usually sufficient to solve textbook or exam problems when you are being taught. But the problems encountered during research are different, in that if we already knew the answers and the best approach, there would be little point doing the research!

**Plagiarism Course** All CDT students are also required to complete a course on plagiarism. See the Section on Plagiarism & Academic Malpractice in the Assessment chapter.

### 3.1.2 Supervised Research Period

After the Foundation period, CDT will enter a period of supervised research. This begins during the second half of the first year and continues throughout the remainder of the program. During this phase, the student will carry out research under the supervision of a main supervisor and possibly one or more co-supervisors. The co-supervisors may be from different schools if the work is interdisciplinary, or may even be industrial partners.

During this period, the student will move from the CDT room to a space in the relevant research group. It is very important that the student develop a good working relationship with the supervisors, and also interact with other members of the relevant research group, particularly postdocs and more senior postgraduate students. This is the best way to learn about the relevant research area and how to carry out effective research in that area.

In addition to the supervisory team, each student will also have an advisor. The role of the advisor is to help ensure that the student-supervisor relationship is working well, and that the student is making good progress. The advisor does not give technical advice; but can help with communication between student and supervisor, or if the student needs other non-technical advice.
3.2 Structure of the CDT Programme By Year

3.2.1 Year 1

Goals of Year 1

At the end of the first year, the student should have acquired a strong background in his or her research area, defined a research topic, and should have accomplished the following:

1. Undertaken training in scientific methods, evaluation, research impact, creativity and innovation, and proposal writing and scientific literature skills.
2. Taken two Foundations modules and one Advanced Module.
3. Found a supervisor or supervisory team and a research topic.
4. Produced a research proposal, a significant literature survey and an impact survey on the topic of the PhD research.

Structure of year 1

Induction Week Each student will be assigned an tutor and will develop a training plan in consultation with their tutor. Research group leaders and/or other researchers will be available to help students decide appropriate pathway of courses for particular kinds of research.

Teaching block 1 (Teaching week 1-6) All students will take two Foundations modules and attend a series of seminars introducing students to research in the school and important research questions.

Research Symposium (Week 6) Year 1 students will attend the School Research Symposium at which PhD research is presented in posters and talks. This will opportunity meet more
senior researchers and to learn about possible research areas and topics. Students will also evaluate some selected research talks.

**Teaching block 2 (Teaching week 7-12)** All students take one Advanced technical module and Scientific Methods 1 (COMP80121) which introduces students to methods of research.

**Early January** A Poster session/open day will occur in which students to meet with potential supervisors and learn more about research projects.

**Teaching weeks 13–14** Exams for courses taken in Teaching Blocks 1 and 2 will take place.

**Teaching block 3 (Teaching weeks 15–20)** Each students will undertake a short “taster” research project (STRP) with the intended supervisor, or as an opportunity to try a particular research area. Students will also take Scientific Methods 2 (COMP80132) which teaches the rudiments of scientific evaluation, experimental design, and statistical methods.

**Teaching block 4 (Teaching week 21–26)** This overlaps with the start supervised research. CDT students all take the lecture course Scientific Methods 3 (COMP80142). This provides training in the writing of research papers and proposals, and the planning of research impact. An understanding of what leads to “impact” in research will be studied with the aid of case studies of previous research projects which were successful and others which were unsuccessful in generating significant impact.

**Supervised research (Teaching week 21–end of year 1)** By week 21, students will have put together a supervisory team and will start a programme of research.

**Creativity Workshop** A residential workshop which will take place between teaching blocks 3 and 4 or during teaching block 4.

**End of year assessment** By the end of year 1, each student is expected to have defined a research topic, and have produced report containing a clear statement of research aims, a substantial literature survey, an impact survey around that topic. These will be assessed by the supervisor(s) and an independent second reader. Each student is then required to a oral presentation based on the report to an assessment panel.

**Outcome of the assessment** Students who pass all the course units, including the Scientific Methods courses, have evidence of successful participation in the year 1 activities, submit a satisfactory Year 1 research report, and perform satisfactorily at the end of year assessment panel will be allowed to progress into year 2. Students are allowed to resit one Foundation or Advanced module, but must have reached a pass on all three courses before entering into year 2. Students who fail two or more modules or who fail to pass all modules on resit, may be eligible to leave with a Postgraduate Diploma if they have accumulated acceptable marks for 120 credits. Students who fail to reach the standard of a Diploma may be eligible to exit with a Certificate based on 60 credits. The examiners will take into account performance on all aspects of the student’s performance in deciding whether that student continues into year 2.
Figure 3.2: Detailed timetable for the first year of the course.
3.2.2 Year 2

Goals of year 2

At the end of the second year, each CDT student should have acquired a strong background in his/her research area, established the foundations of a research topic, and will have accomplished the following:

1. Have carried out a novel research project and produced a significant report comparable to an MPhil thesis on this research.
2. Will have produced a research proposal and project plan for the remaining two years of the research.
3. May have taken an additional Advanced (technical) course unit if deemed appropriate by the supervisor(s).
4. Have participated in a Study Group.
5. Will have taken further transferable skills courses according to their personal training needs.
6. Will have become integrated into their selected local research communities (research group, research project team, etc.)

Structure of Year 2

During this year, each student will work closely with the supervisor or supervisory team to further the defined research project. They are expected to become involved with their local research community. This will be augmented with the following additional activities.

**Advanced taught modules** As needed, the students may take an additional Advanced Course Unit from any of the four teaching blocks.

**Research Symposium** As in the first year, A School Research Symposium will be held during week 6. Each 2nd year CDT student will produce a poster describing their research proposal to be presented at a poster session attended by fellow postgraduate students (including new CDT students) and staff within the School.

**Skills training (years 2 – 4)** At the start of year 2, the student should consider their training needs, in consultation with their main supervisor. In addition to those courses offer by the University, EPSRC funded student should attend an EPSRC GRADschool: [http://www.researchsupport.eps.manchester.ac.uk/postgraduate_home/GRADschools/](http://www.researchsupport.eps.manchester.ac.uk/postgraduate_home/GRADschools/) in year 2 or year 3.

**Study groups** Students in year 2 and year 3 are expect to participate in Study Groups, which will take place around April. These will start with a week long workshop at which industrial partners present problems to students organised in groups. Students will then spend an addition three weeks producing a prototype, or defining a solution.

**Public Engagement** Each student is expected to participate in at least one public engagement activity. This will be coordinated by the School’s public engagement officer, and could happen at any time during the programme. Students will normally participate during their second or third year of study.

**End of year assessment** The end of year assessment consists of two parts. First, each student must produce a long report describing the proposed research, the results of research up to this point, and the plan for the final two years. This will be assessed by the supervisor
and an independent second reader. Second, each student will be given an oral viva by an examination committee, consisting of two independent assessors, the supervisor, and the advisor. For this, the student will produce a short report, which is an executive summary of the long report, give a formal presentation, and respond to detailed questions from the panel.

Outcome of the assessment If the performance during the second year has been satisfactory, the examiners will allow the student to continue into the third year. If performance has not been satisfactory, the student will be required to withdraw. If the student is not allowed to continue, the assessment panel may be allowed the student revise the long report and submit it as an MPhil thesis.

3.2.3 Year 3

Goals of year 3

The primary goal of year three is carry out the PhD research. By now, the student should be embedded in their local research community (research group or project team), and carrying out significant research. At the same time, the student will start to interact outside communities through presentations at conferences, academic visits, and engagement with industrial partners through secondments and study groups.

Structure of year 3

Research Symposium At the research symposium in week 6, students in the third year will present the results of their research at a poster session.

Skills training At the start of the year, the student will consider further training needs in consultation with their main supervisor. Courses offered by the University of Manchester and, for eligible students, EPSRC GRAD schools, will be available to meet these needs.

Secondments and exchanges Students will be encouraged to participate in secondments with industrial partners and student visits and exchanges with academic partners. Students will be encouraged to apply for internships.

Study groups Students in year 3 who are not participating in one of the above activities will participate in a study group.

Public Engagement Each student is required to participate in one public engagement (at least) activity during the programme. If this did not take place in the 2nd year, it should be done in the third year.

End of Year Assessment The end-of-year assessment at the end of year 3 is similar to that at the end of year 2 except no long report is required. Each student will submit an short report summarising the research goals and achievements to date. This report should include an up-to-date statement of aims and objectives of the research and a plan for producing an PhD thesis by the end of year 4. Any changes to the aims, objectives and planning that have been made since the previous assessment should be highlighted and discussed.

Outcome of the Assessment If the performance of the student is considered satisfactory, the student will be allowed to continue into year 4. If the performance is deemed to be not satisfactory, the student will be required to withdraw, although the assessment panel may allowed the student to submit an MPhil thesis based on the research carried out.
3.2.4 Year 4

Goals of year 4

In year 4 the student will complete the research and complete the writing of the PhD.

Structure of year 4

Research Symposium At the School Research Symposium, all final year students will give seminars presenting the results of their research.

Skills training Students will be encouraged to consider appropriate skills training, which may include courses on managing the final year, writing the thesis, as well as courses relevant to managing the transition to their careers ahead.

Final six-months During the final six-months, the students will write up their theses.

3.2.5 Other training opportunities

There are a number of short courses which are available to you. The Faculty of Engineering and Physical Sciences (EPS) and the University run short courses on a number of “transferable skills”, such as “time management”, and skills directly related to your course, such as “academic writing”, “planning the final year”, “viva survivor”. One course is required for all PhD students, which is “Introduction to Research — Essentials”.

You can access a catalogue of training courses via eProg (it should appear on the menu list on the left-hand side of the page, when My eProg has been expanded. If you want to see a list of available courses, leave search term blank, but select appropriate training provider. Many of these courses are for staff, but Faculty of Engineering and Physical Sciences runs courses for its PhD students.

The Research Computing is a part of the University’s IT Services, which offers computing services to researchers. They offer courses which are sometimes appropriate to PhD students. To have a look at what is on offer, have a look at Computational Science Community Wiki. However, this seems to list only elementary courses, but they also offer HPC courses. See also, the IT services website. Some of these courses may cost the School money, so you will need to get permission before you take them. Talk to your supervisor.

The Manchester Enterprise Centre offers a course in Innovation and the Commercialisation of Research, which may be available to PhD students. This costs the School money, so, as above, talk with your supervisor.

3.2.6 Public Engagement and STEM ambassadors

The School is very involved in “public engagement”, which means promoting science and computer science to the general public. Our school is particularly involved in two areas. The first is promoting computing in schools. The second is working with the Museum of Science and Industry (MOSI) to promote science in science fairs and events. MOSI provides training to scientists and science students in public engagement by qualifying them as “STEM ambassadors” (STEM stands for Science, Technology, Engineering, and Mathematics). As a CDT student, you should get trained as a STEM ambassador, and participate in at least one public engagement event. The School’s public engagement are run by Dr. David Rydeheard.

3.2.7 Teaching Assistantships (TA)

A teaching assistant is a postgraduate student who helps with teaching in some way, usually in a lab demonstrating some aspects of what needs to be done, helping the students understand it
and perform it, and marking the work. Teaching assistants are either paid to do this, or have to do it to fulfill a requirement of their funding.

The term *teaching assistant* is the School’s new term for the what we used to call “demonstrators”. So you will still hear the phrase “demonstrator” for a while until people get used to the new term.

In order to become a teaching assistant, you will need to respond to a call for the subjects you know about. This is so we can put the right students in the right labs (there is always a need for TAs to know JAVA). You will also need to take the [Graduate Teaching Assistantship](#) course which is put on by the Faculty of Engineering and Physical Sciences. The School is starting a section for TAs on the [School WiKi page](#).

### 3.2.8 Conference, Workshop, Summer School Travel:

It is not enough for researchers to do great research; we also must go out into our research communities to communicate it. The School provides a small amount of money for each student, which for a 3-year PhD student is £2.5K, for travel and the purchase of a machine. The policy of the School for spending this money is as follows:

**Guideline 1:** The money follows the student to the supervisor

It is up to the supervisor to decide the best use of the money. The student should not feel that they can spend anyway they like. The money is for the supervisor to use to best enhance the research training of the PhD student.

**Guideline 2:** Every student should be provided with a new machine of the standard school spec or higher

Every student should receive a new machine when they arrive. This should have a specification which is equivalent to or exceeds the School’s standard desktop PC. There is no expectation that this be upgraded in subsequent years, unless the supervisor deems that necessary. Of course, the supervisor may judge that a particular student’s project requires a much higher spec desktop, or other equipment, and may spend more of the budget on that student. We want to avoid students being given three year old machines which happen to be lying around the lab.

Current (June 2014) standard-spec desktop PC is HP 800 G1 Small Form Factor, Intel Core i5-4570, Memory: 8GB DDR3-1600 DIMM (1 x 8GB) HardDisc: 500GB 7200 RPM + 23" Iiyama monitor which costs about Â£500. Macs are fine, too. If the student is going to use a laptop, consider purchasing a monitor and keyboard to protect them from upper limb disorders, repetitive strain injuries, and so forth. Machine purchases should be discussed with IT services.

**Guideline 3:** Every student should have the opportunity to attend at least one conference or workshop

It is an important part of research training that students get the opportunity to participate in conferences and workshops and network with other researchers in their fields. It is preferred that some of these experiences are outside the UK. Although it is reasonable to wait until the student has a poster or oral presentation accepted, this is not a requirement. The supervisor and student might together decide to send the student to a workshop or summer school in an early stage in the student’s research. The fact that a particular student has not managed to get a conference or workshop paper accepted by the end of the PhD should not preclude the opportunity to attend one.
Chapter 4

Progression and Assessment

Note: The procedures described here represent a proposed change in CDT policy, caused by a change in University policy. However, they have not been approved yet by the CDT Management Committee, which will consider them in the October meeting. Points which are subject to change are marked **.

During the foundation period the taught components are assessed in a conventional fashion, by coursework and examination. In addition, each CDT student will go through assessment procedures near the end of years 1, 2, and 3, in order to demonstrate that they are making satisfactory progress towards production of novel research results leading to a PhD. At the end of each of these years, the student will produce a Summary report which is a short report updating the research problem and summarising progress, and a plan for the subsequent years. For year 1, this will be a Background report, which is essentially a research proposal, the research problem, its background and importance, and a brief summary of progress. During year 2 a substantial Research report will be produced describing the research up to that point. More details on these reports are given below.

After producing these reports, the students then go through an end of year assessment with the supervisors, and one or more independent assessors. This lasts for about 40 minutes, and starts with an oral presentation by the student, followed by questions from the examiners.

Although for most students, these activities are an opportunity to take stock and get feedback, it is an exam. Possible outcomes are: progress into the next year, progress but with some remedial action required, or do not progress. In which case of non-progression, the possibility of submission for a lesser degree may be offered.

In Year 1, students are also taking courses at postgraduate level; these and participation in other activities also contribute to assessment.

Assessment of taught components

Teaching Blocks 1 & 2: FCUs and ACU Students will be assessed on the Foundation and Advanced MSc units according to the assessment scheme used on that particular course. Part of this assessment will be by means of examinations, but in many cases, the overall assessment for that module will also include various assessed tasks performed during the course itself. For example, this could include assessed laboratory sessions, multiple-choice papers taken at some point in the course (either online or paper-based), coursework such as an essay, or some assessed group-work, such as preparing and delivering a short presentation based on a set of research papers connected with the course. The exact weighting and nature of each assessed component depends on the module, and students should consult the relevant module webpages for this information by clicking on the course unit from this webpage:
General information on exams can be found at: 
http://www.cs.manchester.ac.uk/assessment
To get past papers for exams, go on the University studentnet website MyManchester and follow the menu items to

Crucial Guide → Academic Life → Exams.

Other Courses Students will also be assessed on their performance in the Scientific Methods courses, and the Creativity Workshop.

End of First Year Assessment By the end of the first year, each CDT student is required to produce a Background report a clear summary of their research aims, objectives, and anticipated methodology on their chosen research project. It should highlight the relevant literature, and motivate the work via its potential impact. This written report will be assessed by the student’s supervisors, as well as by an independent second reader. Deadline**: 31 July, 2015.

Progression To progress into the second year, students will normally be expected to:

- Pass all their FCU and ACU course units. The pass mark for these courses is 50% and above.
- Pass the Scientific Methods courses, and hence the Scientific Methods Unit (SMU)
- Participate in a satisfactory manner in the Creativity Workshop as judged by the convener.
- Have evidence of successful completion of the taster project.
- Submit a satisfactory Background report.

Students who fail any of their units will be required to repeat and pass the examination before being allowed to progress into Year Two. Similarly, students may be required to perform further work, or fulfill other special requirements, if their progress on any other of the above assessment requirements is judged to be not of the required standard.

Students may be awarded a compensated pass when they receive a mark between 40% and 49% for a failed credit. No more than 15 credits can be compensated.

Students who fail at their second attempt will not be allowed to progress to Year Two. They may still be eligible to leave with a Postgraduate Diploma provided that have achieved acceptable marks for courses totalling 120 credits. For a Postgraduate Diploma, the pass mark is 40%, and students may be awarded a compensated pass when they fail in units totalling no more than 30 credits and receive a mark of at least 30%, but less than 40% in those failed units. Failing that, students may be awarded a Postgraduate Certificate. For the University Regulations, see http://documents.manchester.ac.uk/DocuInfo.aspx?DocId=7327

A list of the credit assignments of the foundation period courses is below.
<table>
<thead>
<tr>
<th>Code</th>
<th>Abbrev.</th>
<th>Description</th>
<th>UK Credits</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP80131</td>
<td>SM1</td>
<td>Scientific Methods 1</td>
<td>5</td>
<td>Combined to form the 15 credit Scientific</td>
</tr>
<tr>
<td>COMP80122</td>
<td>SM2</td>
<td>Scientific Methods 2</td>
<td>5</td>
<td>Methods Unit (SMU)</td>
</tr>
<tr>
<td>COMP80142</td>
<td>SM3</td>
<td>Scientific Methods 3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>FCU1</td>
<td>FCU1</td>
<td>Foundation MSc Unit</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>FCU2</td>
<td>FCU2</td>
<td>Foundation MSc Unit</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>ACU</td>
<td>ACU</td>
<td>Advanced MSc Unit</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>COMP80900</td>
<td></td>
<td>Six months research, taster</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>project, Background reports</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Expectation at End of Year 1**

**Expectations:** With respect to the supervised research phase of the year, by the end of year 1, the student should have a research topic, and be able to argue its importance and put it into context. The student *may* have identified the approach they are going to take, and *may* have made some progress on it.

**Background report:** During the first six-months of research, the student is clarifying the problem they are going to work on for the remaining three years. This document should describe the outcome of that process. In particular, it should address,

1. What is the research problem?
2. Why is the problem important? What would the wider impact be from a solution to this problem.
3. To what extent is the problem unsolved? What attempts have been in the past to solve this problem; what are their successes and deficiencies?
4. What is your approach to addressing this problem and why will this have a chance of contributing to the solution to the problem*.
5. What work have you done towards this so far*.

(It is possible that the questions marked with * have not yet been answered.) Thus, this report should be like a research proposal, in which there is a clear statement of the problem, there is a survey of the possible impacts that solutions of this problem could have, and a convincing review of what has already been done on this problem and why more needs to be done. The length of the report should typically be around 10-20 pages, but the strength of the arguments are more important than the quantity of words.

**Deadline:** July 31, 2015.

**End of Year Examination:** The goal of this is to ascertain whether the student has made a good start to the research and is on track to succeed. The panel will use the presentation, the Summary report, the marks of the 3 MSc courses and Scientific Methods courses, and the evaluation of the Background report.

**Possible outcomes:** Near the end of year 1, the supervisors and independent assessor will make a recommendation whether the student’s progress is satisfactory, marginal, or insufficient. In the latter two cases, a panel of independent examiners will ask for a presentation by the student, followed by questions from the panel. The panel and supervisors will use all the evidence to decide whether to recommend that the student be allowed to proceed to year 2. If not, the recommendation may be to resubmit or retake some parts of the first year, take some other remedial action, or if eligible leave with a diploma or a certificate.
End of Year 2

**Research report:** A long report will be produced and read by a second reader. This should be a substantial document at the level of a journal paper with no page limit and ample space for literature review and technical details. The latter is particularly appropriate if an alternative format thesis is planned.

**Deadline** July 31, 2016.

**Summary Report:** A short report will also be produced, which should summarise clearly the goals and achievements for the examiners, who may not be specialists in the student’s research area. In addition to the summary, the report should include:

1. a list of publications, published or submitted,
2. a research plan for the next year, concerning how the research should be carried out,
3. A plan as to how this will lead to a thesis, (e.g. proposed structure of a thesis at the level of chapter and section headings).
4. a plan for other activities, including any visits, internships, targeted conferences or journal publications, and public engagement activities.

**End of Year Examination:** Each student will then give an oral presentation based on this report at their ‘End of Year 1’ assessment panel interview, and should be prepared to answer questions on this. Students will receive feedback on both their written report and their presentation before the panel.

**Possible outcomes:** The student may progress into year 3, or fail to progress. In cases of non-progression, students may be offered the opportunity to submit for MPhil.

End of Year 3

The end of year process for the end of year 3 is similar to the end of year 2, except no long reports are required. A Summary report is required summarising the progress and achievements of the past year, and a plan for producing a thesis over the next year. This must be submitted 6 weeks prior to the scheduled interview.

Six months into Year 4

Student should submit a draft of the thesis to the supervisor. Student should submit to the CDT Manager a Table of Contents indicating which sections are written with a plan for producing the remaining sections.

Conduct in Taught Course Examinations

**Conduct in Taught Course Examinations** The General University regulations for conduct in examinations are here: [http://www.studentnet.manchester.ac.uk/crucial-guide/academic-life/exams/conduct/](http://www.studentnet.manchester.ac.uk/crucial-guide/academic-life/exams/conduct/) and explain the basic details of how the University conducts written examinations (e.g., use of answer books) and the way that students are expected to behave in the examination room.

Some examinations within the School are **Open Book**, in which case written or printed materials may be taken into the examination room. However, most examinations are **closed book**, in which case no such materials may be taken into the examination room. The penalties for breaching these regulations can be extremely serious, for example, receiving a mark of zero for that examination.
with no opportunity to resit:

http://www.studentnet.manchester.ac.uk/crucial-guide/academic-life/exams/conduct/cheating/

See also Section D in: http://www.campus.manchester.ac.uk/tlso/map/

The examination may also have restrictions on the use of electronic calculators. Even if permitted, this permission may be restricted to those which do not store text and are not programmable. Students should also note that even if permitted, calculators should have no method of transmitting or receiving information, hence PDAs, mobile phones, laptops etc cannot be used in examinations as calculators. Further details of the University regulations on calculators can be found by going to:

http://www.studentnet.manchester.ac.uk/crucial-guide/academic-life/exams/conduct/ and following the link marked Calculators and Dictionaries.

It should be obvious that copying the work of another student in an examination, attempting to do so, or taking action designed to allow another student to copy your work, or any similar actions designed to assist another student are strictly prohibited. The issue of copying as regards other methods of assessment will be dealt with later, in the Plagiarism section.

Mitigating Circumstances When assessing a students overall performance, or their performance in a specific examination or unit of assessment, the School can sometimes make certain allowances or admit a certain flexibility. So, for example, this could include extended coursework submission deadline, rescheduling a presentation, or allowing the student to sit a special examination paper.

Grounds for mitigation are unforeseeable or unpreventable circumstances that could have a significant adverse effect on the academic performance of a student. Possible mitigating circumstances include:

- Significant illness or injury
- The death or critical/significant illness of a close family member/dependent
- Family crises or major financial problems leading to acute stress
- Absence for jury service or maternity, paternity or adoption leave

Circumstances that will not normally be regarded as grounds for mitigation include:

- Holidays and events that were planned or could reasonably have been expected
- Assessments that are scheduled close together
- Misreading the timetable or misunderstanding the requirements for assessments
- Inadequate planning and time management
- Failure, loss or theft of a computer or printer that prevents submission of work on time – students should back up work regularly and not leave completion so late that they cannot find another computer or printer
- Consequences of paid employment
- Exam stress or panic attacks not diagnosed as illness

Students should note that the Student Support Office should be informed as soon as possible when possible mitigating circumstances occur. Students will normally be expected to submit written evidence to support their claim of mitigating circumstances.

For example, declaring after the exam results have been published that you were actually ill on the day of the examination will be unlikely to achieve the desired result. Whereas a student who felt ill on the day of the examination, but nevertheless attended, and was then later diagnosed with a significant illness, will have this taken into consideration, provided
that the relevant written medical evidence is submitted. If you are unwell, and attend the assessment, but nevertheless feel that you performance may have been impaired, you should inform the Student Support Office about this on the day of the assessment or examination. In all medical cases, students should complete the appropriate form (Certification of Student Ill Health).

If you receiving occasional but ongoing medical attention which affects your studies, you should obtain a letter from your general practitioner or hospital doctor. This should be given to the Student Support Office before the examination period or assessment, if you wish your ongoing condition to be taken into account.

All cases for Mitigating Circumstances will be dealt with, in confidence, by the School Postgraduate Mitigating Circumstances Committee, who will then make their recommendations to the course examiners.

The University Guidance for Students on Mitigating Circumstances can be found by following the appropriate link at:

http://www.campus.manchester.ac.uk/tlso/map/teachinglearningassessment/assessment/

The Mitigating Circumstances form can be found at:

http://intranet.cs.man.ac.uk/Intranet_subweb/Postgrad/mitigatingcircsform.pdf

Students should note that if they are found to have been deceitful or dishonest in completing the Certification of Student Ill Health form, they could be liable to disciplinary action under University General Regulation XVII: “Conduct & Discipline of Students Regulation XVII Sept 2010”

**Other Circumstances Effecting Assessment**

The website:

http://www.campus.manchester.ac.uk/tlso/map/teachinglearningassessment/assessment/

also details the University Procedures and guidance for assessing students with disabilities, and for possible timetabling problems for students based on Religious Observance.

For religious observance where dates are known in advance, the School will make every effort to not timetable examinations that clash with religious festivals or days. However, it should be noted that the School is only able to accommodate the needs of students if their requirement for particular religious observance is strict. The School will not take any notice of casual preferences or of social or domestic reasons.

If your religious observance affects your ability to attend normal teaching and learning activities to an extent that will cause problems, you should discuss this with the School. It may be possible to make adjustments, but these will only be possible if they do not effect the standard of your degree (i.e., students will not, in general, just be excused from parts of the programme affected by religious observance). Please note that whilst the School will make all reasonable efforts to re-schedule (provided adequate notice is given), the ability of the School to re-schedule timetabled events can be rather limited, and such adjustment may not always be possible.

**Re-Marking of Examination Papers or Coursework**

It is the policy of the School of Computer Science that we do not selectively remark examination papers or coursework on request.

Examination papers and coursework will only be remarked where the school officers (Chair of the Board of Postgraduate Studies or Examinations Officer) have good cause to believe that there has been a marking irregularity and, under such circumstances (which would be exceptional), all examination papers or coursework would be remarked.

The School will not remark work simply because you believe that you should have obtained a better mark than that shown on your transcript.
Plagiarism & Academic Malpractice  The University, and academia in general, relies to a
great extent on students and researchers reporting their work fairly and truthfully. For
example, when reporting on your work, whether in an examined assessment, your thesis,
or in an academic conference or journal paper, it is expected that you report truthfully both
on what you actually did, and the results that you achieved. As part of this, it is expected
that you make clear what is actually your own work (or the work of your co-authors, in a
multiple-author paper, or of your group, in a groupwork project), and what is the work of
others.

The consequences of academic malpractice can be very serious. For an assessment, you
may receive a mark of zero for that unit, with no opportunity to resit. At a higher level,
as the recent case of a German defence minister shows (http://www.bbc.co.uk/news/
world-europe-12566502), people can be stripped of their degree and their reputation.

Plagiarism also affects others aside from the culprit; a university where it is suspected
that standards are not sufficiently rigorous will find that the worth of its degrees is doubted.
This is obviously a great disadvantage to students from that institution who obtained their
degree classification honestly. A research group where a member has been found guilty of
academic malpractice will find that their reputation suffers, and their management practices
will be questioned, perhaps to the extent that the group will be disbanded. Finally, students
who allow others to copy their work, or who lend their work to others not expecting that
someone is going to copy it, may find themselves charged with collusion.

The basic dictionary definition of plagiarism is easy to understand. It is presenting the
ideas, work or words of other people without proper, clear and unambiguous acknowledge-
ment. Presenting such items without acknowledgement can give the mistaken impression
that such work or ideas are your own, and hence can be considered as an attempt to gain
credit for work which is not your own.

Some obvious examples of plagiarism include:

- Copying work from another student, either with or without their permission.
- Copying work from the Internet, or from a book, or from any other source, without
  proper acknowledgement. This includes using work from online essay banks.

However, there are also incidents of plagiarism which are less obvious. These include not
copying someone else’s words directly, but using a close paraphrase of their words, without
acknowledging it as such. The same criteria also apply not just to words, but to diagrams,
illustrations, graphs, or computer code. For instance, taking someone else’s code, altering
it slightly, but not acknowledging this, may be judged as plagiarism, as well as being
extremely annoying to the person that was kind enough to make their code available to
you in the first place.

Another less obvious case is that of self-plagiarism. Most people would consider it unfair if
someone took their own thesis, that had been submitted as part of a post-graduate degree
assessment at one university, and then tried to get a further degree by submitting the same
thesis at a different university!

Many academic journals and conferences take a similar view of self-plagiarism. They may
count as self-plagiarism submitting a paper which has also been submitted elsewhere1 or by
submitting a paper where substantial sections have already appeared elsewhere in a similar
form. This often happens with the introductory sections of some papers, and reviewers
typically take a dim view if these sections are just a cut-&-paste from other papers written

1Some conferences do allow dual submissions, but the standard requirement is that the work you are submitting
is not being submitted elsewhere, and this is clearly stated in the instructions for authors.
by the same authors. As well as leaving you open to possible claims of self-plagiarism, it also tends to make the paper more difficult to read, if it has not been composed as a single entity, but stitched together from old bits and pieces, with a few new sections added at the end.

Basic guidance from the university can be found at: http://documents.manchester.ac.uk/display.aspx?DocID=2870

A basic student guide to referencing and avoiding plagiarism, and links to more comprehensive resources, can be found at: http://www.studentnet.manchester.ac.uk/crucial-guide/sgs/referencing-and-plagiarism/

All CDT students should make sure they are familiar with what the university expects from its students. All CDT students are also required to complete a plagiarism course.

In view of the serious consequences of plagiarism and academic malpractice, it is essential that all students familiarize themselves with the accepted format for referencing work in their discipline, and that they start using the accepted form as soon as possible. Ignorance of the proper format, or ignorance of the definitions of plagiarism and academic malpractice used by the university, is not a valid defence against a possible claim of plagiarism or other instance of academic malpractice.
Chapter 5

The Dissertation Format

All PhD students must produce a PhD thesis, which describes in full detail the wider context of the research field including a literature review, the motivation for the research, the research which was carried out, an evaluation of the results, and a discussion of the contribution made to the field by the research and what should be done in the future. This needs to be submitted by three days before the end of the fourth year. For the relevant University policies, see Section 6.

There are two formats in which the thesis can be produced: traditional format and alternative format. Traditional format is probably what most people imagine a thesis is like, a very substantial report presented as a self-contained exposition. The alternative format thesis "... allows a postgraduate doctoral or MPhil student to incorporate sections that are in a format suitable for submission for publication in a peer-reviewed journal."

The alternative format thesis is often thought of as a collection of publications, with a short commentary associated with each one, tying the works into a unifying thread, or "thesis".

Which you use is a decision you will need to make with your supervisor.

The advantages of the alternative format thesis are that if you already have several papers, you can more easily produce a thesis out of them. Also, if you have plans to write several papers, you can write your thesis in such a way that it will be easier to facilitate these plans, because writing the thesis will be build around writing papers. The papers can be submitted after the thesis.

The disadvantage of the alternative format is that it is less widely used in the UK, so many supervisors and examiners may be less comfortable with it.

A QandA on the alternative format thesis can be found here http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=15216

Note that it says in Section 4,

"...it may not be until year 2 or 3 that you feel you are in a position to use the alternative format."

but it says in Section 5 that a request must be made in writing by the end of year 2. Thus, if you are considering using alternative format, apply for it by the end of year 2. You can revert to traditional format without asking permission formally.

Writing Advice Whichever format you choose, you must give yourself sufficient time to produce the thesis. You must know yourself, and how quickly you are able to write. Six months is a minimum time for most people. Some may need nine.

Do not feel that you need to write it in order; start with the easiest parts first. Usually the technical sections on the research done by you are the easiest, because you know them well. The literature review may be next easiest. The introduction is usually the hardest to write, and many advise that it be written last.

1Presentation of Thesis Policy
Chapter 6

University Policies

The University Ordinances and Regulations: Degree of Doctor of Philosophy (PhD) can be found here:
These are the regulations for your programme.

6.1 Submission and Completion

A crucial policy for you to know is that you must submit your thesis within 4 years of starting, unless you have an approved extension or interruption (see next section). This holds for any student who started Sept 2012 or later. An electronic copy is required at least three days before the final submission date; hard-bound copies are no longer required.

As you are on a four-year programme, you cannot take longer than your degree time. Students on a three year course have the option to extend the time by requesting permission to register as “submission pending”. This is not an option for CDT students, however. You must finish within four years.

6.2 Attendance Monitoring

With respect to attendance, in general, you are required to be engaged in the programme. Of course, you need to be in attendance at the Scientific Methods courses, the technical course units, and other scheduled events that are part of the CDT, such as the Creativity Workshop, Research Student Symposium, Science in Practice seminars, etc. Outside of this, there are no specific hours you are required to be in attendance. I quote here from and advice document for new PhD students written by Dame Professor Nancy Rothwell, who is the President of the University,
Doing a PhD: What you should expect and what is expected of you

Working hours

These are not fixed — some people start early and leave early, some the other way round, some seem to work long hours but take many breaks. The important thing is that you get things done. A PhD is a very demanding workload and you will need to manage your own working hours. You will need to work flexibly around the demands of your experiments and this may involve work in evenings or weekends.

During the Foundation Period, students are expected to attend all scheduled lectures, classes, laboratory sessions, tutorials, and so on. Students will also be expected to submit coursework assessments on time (where these occur), and to attend all the examinations, tests, presentations etc that form part of their overall assessment.

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Please note that lecturers/tutors/organisers of laboratory sessions can refuse to admit students who arrive late, and that persistent lateness may be viewed as not fulfilling the attendance requirements.

The University Policy as regards students’ attendance can be found under ‘Work and Attendance’ in the documents listed at:
http://documents.manchester.ac.uk/display?DocID1895

The Student Support Office should be notified of any absences due to illness. Illnesses longer than 7 days will require you to submit a medical note signed by your general practitioner or by a hospital doctor. As noted in the Assessment section, it is in your interest to keep the School fully informed of medical or other problems, so that these can be fully taken into account when assessing your progress.

After the Foundation Period, your supervisor(s), should make clear what attendance is expected of you. For example, students should not assume that the only aim of undertaking research in a research group is completing the research, and that this can be done as well by working from home as by working in the School. In most cases, a research group will expect your attendance at research group meetings, seminars etc. Working within the School also allows you to interact with other members of your research group, and discussions with other students and researchers can often be very fruitful when it comes to problems you may have with your own work, as well as giving you the opportunity to assist others and gain a better picture of the research within your group as a whole. Most supervisors will also expect good attendance when it comes to any summer schools or conferences you may later attend, and it is usually not judged as sufficient if you are there for the presentation (poster or oral) on your own work, but you don’t attend any presentations by other attendees at the conference.

Your attendance will be monitored in different ways during the Foundation period and the Supervised Research period. During the Supervised Research period, when you have a supervisor, it will work as follows. Once a month, your main supervisor will be sent a form on your eProg account. This asks two questions: have you been present during the last month, and have you been engaged during the last month. The supervisor can provide free text to support his answers; usually filled in only if the answers to the preceding questions are “No”. If your supervisors know you are away, working in another lab as part of your research for example, this is not a problem. It is indicated in the free text box. However, we expect you and your main supervisor to be seeing each other on a regular basis and certainly more than once per month.

During the Foundation period when you are taking courses, your attendance or absence is noted for each session of each course. The monthly attendance monitoring will be based on your attendance in the technical modules. If you miss two or more more consecutive events without excuse, your funding or Visa (if an international student) may be in jeopardy.

If you are an international student on a Tier 4 Visa, we have a responsibility to the UKBA to monitor your attendance, and to be able to demonstrate that you are here and actively engaged as a student. This is done as described in the previous paragraph, but there is an additional responsibility on you. Four times a year, you must come in to the Student Support Office to sign a form documenting that you are present. The following table shows the periods that you can do this; the latter date of the period is the deadline. If you are going to be away during any of those periods, please let members of the student support office know sso@cs.man.ac.uk.

<table>
<thead>
<tr>
<th>Census Point</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 2014</td>
<td>29 September – 13 October 2014</td>
</tr>
<tr>
<td>January 2015</td>
<td>12 January – 26 January 2015</td>
</tr>
<tr>
<td>May 2015</td>
<td>13 May – 3 June 2015</td>
</tr>
<tr>
<td>July 2015</td>
<td>17 July – 3 August 2015</td>
</tr>
</tbody>
</table>
6.3 Extensions and Interruptions

If you become unable to function as a research student for any reason, the first thing you should do is to make sure your main supervisor knows. Alternatively, you may choose to talk with your advisor, the PGR tutor or PGR director, someone from the counselling service, or your GP, as appropriate. If you need to interrupt your studies for a period of time, you can request an interruption. The relevant policy is also in [Circumstances Leading to Changes to Postgraduate Research Study Policy]. You need to apply to EPS Faculty Graduate Panel and some documentary evidence may be required. This may be due to your own ill health, illness or death of someone close to you, or similar types of issues which prevent you from carrying on with your research for a time. It cannot be for reasons associated with your research not going well and cannot be used just to extend the time to get the degree.

http://studentnet.cs.manchester.ac.uk/pgr/submissionandinterrupt.php

There are also circumstances where it may be appropriate to extend the 4 years. This could happen, for example, if you have a breakdown of equipment or are unexpectedly awaiting delayed equipment which is essential to your research. In these circumstances, an extension can be requested to EPS Graduate Panel. Again, look at the policy document for more details.

6.4 Plagiarism and Academic Malpractice

Reputation is the most valuable commodity a researcher has. By extension, it is most valuable to a research-led University. Therefore, the University of Manchester takes academic malpractice including plagiarism extremely seriously. So, don’t do either of the things mentioned in the title of this section.

Examples of academic malpractice are: presenting work of others as your own, and presenting work which has not really been done as having been done (e.g. falsifying data). Remember, plagiarism can mean copying words, but also copying ideas. Also, you will need to discuss with your supervisors how to deal with their ideas in your thesis, since only your name is on the title page.

The relevant policy documents are “Academic Malpractice (Collusion, Fabrication and Plagiarism)” and “Conduct & Discipline of Students Regulation XVII Sept 2010”.

Apparentely, some students want to run their theses through TurnItIn to see if there is too much overlap with their publish work or other works they have cited. The University will not allow students to use its license for this, but you can do it from the TurnItIn student site [https://www.writecheck.com/static/home.html](https://www.writecheck.com/static/home.html). You have to pay for this. You should do this in such a way that your thesis does not get stored in the TurnItIn database, otherwise if you (or anyone) ever runs it through again, it will return a 100% match. This information is not a recommendation for you to do this; it is simply here in case you want it.

6.5 Finding a policy document

Unfortunately, the University has a host of policy documents pertaining to Postgraduate Research Students, and it can be daunting to go through them to find what you are looking for. Here are some useful places to look.

University PGR Code of Practice The University has a code of practice which is sort of a road map of the relevant policy documents which describe what you can expect from the School and your supervisors, and what is expected of you. This is very worth reading and is located at [http://www.staffnet.manchester.ac.uk/services/rbess/graduate/code/](http://www.staffnet.manchester.ac.uk/services/rbess/graduate/code/)
School Charter: The School has produced a PGR student charter, which gives the School’s view on what can be expected from us and from you. It is located at [http://studentnet.cs.manchester.ac.uk/pgr/charter.php](http://studentnet.cs.manchester.ac.uk/pgr/charter.php) It is short and worth reading.

eProg expectations form: During your first few weeks here, a form will appear on eProg (see Chapter ??) called the expectations form. The first part of this contains links to 9 relevant policies, which you are asked to read and discuss with your supervisor. This will help ensure you know what the policies are.

Other places to look for policies: If you need to search for a specific policy and the above places are of no help, you can try,

- Faculty Graduate Education Pages [http://www.staffnet.eps.manchester.ac.uk/academicservices/graduateeducation/policies/index.html](http://www.staffnet.eps.manchester.ac.uk/academicservices/graduateeducation/policies/index.html)
- University student-related documents (you will need to guess the starting letter) on the University’s Studentnet pages, [http://documents.manchester.ac.uk/studentrelatedlist.aspx](http://documents.manchester.ac.uk/studentrelatedlist.aspx)

6.6 Student Representation

There are several ways in which students can give feedback to the School and University. First, there are the mentors; and mentors act as student representatives. So, if you have an issue about how the school is run, you can bring it up to one of the mentors. Or become a mentor. You can also discuss it with the PGR tutor or PGR director. There are quarterly PGR Staff-Student Consultative Committee (PGRSSCC) meetings, at which mentors raise issues of concern to the PGR Director, PGR Tutor, IT Manager, and the Environment Manager. Minutes of previous meetings are found at [http://intranet.cs.man.ac.uk/csonly/committees/C_PGRSSCC.php](http://intranet.cs.man.ac.uk/csonly/committees/C_PGRSSCC.php).

There is a Postgraduate Research Experience Survey (PRES) conducted yearly across all Universities. We get the results broken down by school. In the past the University has changed its procedures (notably its orientation procedures) based on the outcome of this, so do fill it in when you hear about it. It usually takes place in the late spring.

6.7 Ethical Approval

All research involving human or animal subjects has to be approved by the University Ethical Approval mechanism. This includes usability studies for software and hardware systems and HCI evaluation of systems. To get approval, contact the Ethical Approval Officer in the School, [http://ethics.cs.manchester.ac.uk/](http://ethics.cs.manchester.ac.uk/).

6.8 Complaints Procedure

The University has a formal Complaints Procedure, which can be found here, “Complaints Procedure (Student) (Regulation XVIII)”. Most complaints are most quickly and effectively dealt with locally. Contact your supervisor, advisor, PGR tutor, or PGR Director. If it is of a general nature (e.g. resource allocation), mention it to one of the mentors, so it can be raised at a PGRSSCC meeting. If it involves the environment (e.g. heating), send an email to environs@cs.man.ac.uk. If it involves an IT problem, raise a ticket on the CSIS system (see section 2). If you are dissatisfied with the response, put the complaint in writing to the Head of School, unless it involves actions taken by the Head of School, in which case put it in writing to the Dean of the Faculty of
EPS. If you still dissatisfied, you should refer the matter formally and in writing to the University Registrar and Secretary. See the complaints procedure document for instructions how to do this.

If you need help using the procedure or guidance on where to refer your complaint, you can seek advice from any of the following: The Academic Advisory Service, the appropriate Faculty or School Secretary, the office of Student Support and Services, or the Students’ Union Advice Centre (Students’ Union, tel. 275 2930).

The Complaints Procedure does not cover the following:

- disciplinary issues (for which a separate procedure exists)
- matters where other separate procedures apply, e.g. harassment, academic appeals relating to examinations or assessments, appeals against exclusion on academic grounds, or against refusal to be issued with a Certificate of Satisfactory Work and Attendance, or Complaints about the Students’ Union.

Information on these separate procedures can be obtained from the University’s policies webpage.
Chapter 7

Student Support and Guidance

School & Postgraduate Student Support Staff: Head of School: Prof Jim Miles,
Room: IT Building 114, Phone: 0161-275 4554,
Email: jim.miles@manchester.ac.uk

CDT Director: Prof Steve Furber,
Room: Information Technology Building IT208, Phone: 0161-275 6129,
Email: steve.furber@manchester.ac.uk

CDT Manager: Dr Jon Shapiro,
Room: Kilburn Building G16, Phone: 0161-275 6253,
Email: jonathan.l.shapiro@manchester.ac.uk

Deputy CDT Manager: Dr Rizos Sakellariou,
Room: Kilburn Building 2.109, Phone: 0161-275 6257,
Email: rizos@cs.man.ac.uk

Additional Staff:
Dr Carole Twining,
Room: G539B, Stopford Building, Oxford Road,
Phone: 0161-275 5140, Email: carole.twining@manchester.ac.uk

PGR Admissions Officer Michelle Ringwood,
Room: Kilburn Building 2.10. Phone: 0161-275 0699,
Email: pgradmissions@manchester.ac.uk

Student Support Office: Kilburn LF21,
General email address: sso@cs.manchester.ac.uk
Website: http://www.cs.manchester.ac.uk/student-services/

SSO Manager: Gill Lester, Phone: 0161-275 6210,
Email: Gillian.S.Lester@manchester.ac.uk

Postgraduate Administrator: Susannah Hymas, Phone: 0161-275 7520,
Email: Susannah.Hymas@manchester.ac.uk

Postgraduate Administrator: Chris Calland, Phone: 0161-275 6283,
Email: christopher.calland@manchester.ac.uk

School Student Disability Support Coordinator:
Dr Ning Zhang, Email: Ning.Zhang-2@manchester.ac.uk

School Student Advisory Service: The Student Advisory Service is available to all students in the Computer Science School.
The service offers advice on school and university matters and will try to help with anything that concerns you, whether in your studies, in the school, in the university or in your life outside the university.

http://studentnet.cs.manchester.ac.uk/student-services/student-advisory-service.php
Student Guidance Service (formerly known as the Academic Advisory Service): This offers confidential advice on any matter relating to your studies or any issue affecting you and your academic progress. It is independent from Faculties and Schools, completely confidential, and is run by a small team of part-time advisors, some of whom are members of academic staff.

http://www.studentnet.manchester.ac.uk/crucial-guide/

Disability Support Office: The DSO provides support for disabled staff and students in the University and also offers support and advice to prospective students and employees. They provide a confidential service and enable management of the level of disclosure within the University in order to provide agreed support. They work with a wide range of students, including students with specific learning difficulties (such as dyslexia), mental health difficulties (such as anxiety), medical conditions (such as epilepsy and arthritis), deaf and hard of hearing students, blind and partially sighted students, and students with autism/Asperger syndrome.

http://www.dso.manchester.ac.uk/

Student Guidance Service (formerly known as the Academic Advisory Service): This offers confidential advice on any matter relating to your studies or any issue affecting you and your academic progress. It is independent from Faculties and Schools, completely confidential, and is run by a small team of part-time advisors, some of whom are members of academic staff.

http://www.studentnet.manchester.ac.uk/crucial-guide/sgs/

Housing & Accommodation Issues: The Accommodation Office deals with student accommodation in the University Halls of Residence. Separate halls are available for undergraduates and postgraduates, but the University also has halls comprising a mix of both.

http://www.accommodation.manchester.ac.uk/

Manchester Student Homes is a service for students, owned and run by the University, along with Manchester Metropolitan University (MMU). The services are free to students. They list a large number of privately-rented accredited houses, flats and rooms and are also there to give you housing advice if you need it:

www.manchesterstudenthomes.com

Students Union: The University of Manchester Students’ Union (UMSU) is an organisation, independent of the University, to which all students automatically belong. The Student Union building houses a wide range of services for students, including welfare and legal advice.

http://manchesterstudentunion.com/
Health & Health Care: Upon arrival in Manchester, all students should register with a local General Practitioner (GP). In order to receive National Health Service (NHS) treatment whilst you are in Manchester, you must be registered with a local doctor.

Registering with the doctor will enable international students, their spouse and children (but not visiting relatives) to receive free medical care, provided that they are in the UK for six months or longer.

A list of GPs can be obtained from the staff in University Accommodation. Alternatively, a complete list of GPs, dentists, and pharmacies in Manchester can be obtained online from the NHS Services Directory:

http://www.nhs.uk/servicedirectories/Pages/ServiceSearch.aspx

Further advice on health issues and health services for students can be found on the StudentNet website:

http://www.studentnet.manchester.ac.uk/crucial-guide/personal-life/health/

Student Counselling Service: This is a team of professional counsellors and psychotherapists offering confidential help with any personal issues affecting work, self-esteem, relationships, mental health or general well-being. They are available to all University of Manchester students.

http://www.studentnet.manchester.ac.uk/counselling/

Careers Advice: The University Careers Service provides careers information, advice, and guidance to all Manchester students:

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

Immigration Advice: Advice on UK immigration legislation is offered by the International Advice Team based at the Student Services Centre:

http://www.studentnet.manchester.ac.uk/crucial-guide/academic-life/immigration/

International Students: International students at the University are especially fortunate to have the support of a dedicated International Advice Team based in the Student Services Centre:

http://www.manchester.ac.uk/ssc/internationalteam
and the International Society based on the Oxford Road:

http://www.internationalsociety.org.uk/

The Students Union provides the services of an International Students Officer:

http://manchesterstudentunion.com/adviceservice
as well as a large number of international societies:

http://manchesterstudentunion/studentactivities/

University Language Centre: The Manchester University Language Centre offers courses in some 18 languages for personal, professional and academic purposes at various levels to prospective and current students. In particular, it provides programmes for students wishing to improve their English language skills for academic or professional reasons.

http://www.langcent.manchester.ac.uk/
Chapter 8

eProg and other Learning Resources

There are 3 main eLearning resources that you will need to use during your course:

eProg: is the University-wide progression system and skills training catalogue for postgraduate research students. eProg is used to document your interactions with your supervisors and other members of your support and assessment teams, so its use will become central once you get past the Foundation period. It is located at: http://www.eprog.manchester.ac.uk.

You are required to use eProg. At various points in your programme, you will record your objectives and progress in eProg. For example, quarterly reports on progress are recorded here. When you have successes, such as publishing a paper, attending a conference, participating in a training programme, etc. you can also record this on eProg. It is also used by your supervisors to record any issues which they might have, and to record the attendance. Yearly review process also takes place through eProg.

Every student on eProg is on a pathway. Your pathway will be something like

PhD Comp CDT FT Sept 14

which means you are on a CDT PhD programme in computer science, studying full time, starting in September 2014. If you click on the Pathway menu item, it will show you the milestones for your pathway. If you click on the Progression menu item, it will show a table of links to the forms you need to fill out, as eProg tracks you as you progress. Most forms are filled out by you, following or leading on to discussions with your supervisor(s). However, there are also forms filled out by your assessors, and the attendance monitoring forms are filled out by your supervisor.

There is a facility to add documents and add meetings, and many supervisors will record every meeting in eProg.

As mentioned in Section 3.2.5 you can also access the training catalogue from eProg.

eProg was originally designed as a tool for self-monitoring and self-assessment and it should be used that way. It is also now used as a means of attendance monitoring, as described in Section 6.2. It also contains an expectation form, which you need to go through with your supervisor to ensure that you know the University policies and have discussed important issues with your supervisor such as IP and authorship.

Blackboard: is a university-wide eLearning environment. You may need to use it for some of your taught modules. It is used by (some) CS lecturers to make course material (e.g. lecture notes, handouts) available to students registered for a particular module, as well as allowing online assessment (e.g., multiple-choice questionnaires (MCQs)) and document submission, class-wide emailing and chat-services etc.
Blackboard can be accessed via the University Portal:

https://www.portal.manchester.ac.uk/

This enables you to login via the Central Authentication Service (CAS), for which you will need your central (university) username and password. If you have not yet activated your central account, the instructions for how to do this are on the University Portal page as well.

Instructions on using Blackboard can be found on the StudentNet page:

http://www.studentnet.manchester.ac.uk/blackboard/

Moodle: is the other virtual learning environment (VLE) used by Computer Science. You enter Moodle via:

http://moodle.cs.man.ac.uk/

A student guide is available within Moodle, and a useful introduction is also available outside Moodle at:

http://octette.cs.man.ac.uk/moodleintro/index.htm
Chapter 9

Health and Safety

This Health and Safety section provides a summary of the major Health and Safety issues of which all staff and students should be aware; for further details see the School Health and Safety Policy Document. The full School Health and Safety Policy Document is available at: http://staffnet.cs.manchester.ac.uk/committees/health/HealthPolicy2014.pdf

9.1 Fire, Emergencies and First Aid

9.1.1 Fire Safety Arrangements and Requirements

All staff and students are expected to respond promptly to all fire alarm activations (except the weekly tests at specified times). Staff who are responsible for groups of students or visitors at the time of an alarm are expected to stop teaching or speaking, and to lead the whole group in the evacuation procedure.

Fire Detection Kilburn and IT Buildings are fitted with automatic detectors supplemented by break glass points located throughout each building. These activate the buildings audible alarm in the event of fire or smoke. The automatic detectors allow early detection of any developing fire.

If you discover a fire and the building alarm is not sounding, activate the nearest break glass point on your escape route and evacuate the building immediately. Make your way to the building assembly point and await further instruction. If possible you should inform security of the event and supply them with as much information as possible in order for them to evaluate the risk and to take appropriate action.

Fire Alarm The audible alarm for Kilburn building is a two stage system:

Stage 1 An intermittent alarm prepare to evacuate the building.

Stage 2 A continuous alarm - evacuate the building immediately.

The audible alarm for IT building is a single system. Upon hearing the fire alarm it is necessary to evacuate the building.

In the event of the alarm being activated Security will attend in the first instance.

Fire Evacuation Procedure On hearing the fire alarm all occupants should evacuate the building immediately by their nearest available exit.

- Do not use lifts.
- Do not return to offices to collect belongings.
• Go to Building Assembly Point.

Fire action notices are located throughout all buildings on campus summarising the specific local fire safety arrangements. Local fire notices also indicate the nearest fire assembly point. Evacuation Marshals are located throughout the building (identified by hi-visibility vests in an alarm situation) and are instructed to provide assistance and direction in the event of the fire alarm being raised.

DO NOT RE-ENTER THE BUILDING UNTIL THE EMERGENCY SERVICES OR SECURITY HAVE ADVISED YOU THAT IT IS SAFE TO DO SO.

Means of Escape  Means of escape are signed throughout the building. Green running man signs indicate the nearest emergency exit. You should familiarise yourself with the nearest means of escape within your local working area, as well as alternative routes should your main means of escape become inaccessible.

Fire Alarm Test  The fire alarm is tested weekly at the following times, and should last for no longer than 20 seconds:

• IT Building - Thursday at 2:00pm.
• Kilburn Building - Wednesday at 1.55pm.

Fire Extinguishers  Fire extinguishers are provided extensively through out all University buildings and should only be used by personnel specifically trained in their correct operation.

Automatic door closers  Throughout the Kilburn and IT buildings many of the fire doors are allowed to remain open during the day by means of an automatic fire detection door closing system. These units are designed to release the door following a continuous constant sound of 65 decibels and above, for a period of 20 seconds or more.

Link bridge  The Kilburn and IT buildings have separate fire alarm systems in place. The link bridge between the Kilburn and IT buildings has been fitted with a flashing beacon, connected to the fire alarm system, which is activated during an emergency situation. A Marshal will be stationed on the bridge to assist occupants of the vulnerable building to escape in an orderly manner and to prohibit re entry.

9.1.2 Emergencies

In the event of any emergency, medical or otherwise, please contact the emergency services by calling 9999 internal or 999 external line. The University Security Office must also be informed once the emergency services have been alerted by calling 69966 internal or 0161 306 9966 external line. The School Health and Safety Advisor must be notified of any emergency by calling 56118 internal or 0161 275 6118 external line.

University Security telephone number can be found on the reverse side of your University staff/student card.

The School Health and Safety Advisor must be notified of any emergency by calling 56118 internal number 0161 275 6118 if dialled externally (07917558862 mobile number).
9.1.3 First Aid

The School has a number of trained first aiders in the Kilburn and IT buildings able to provide basic first aid as required. Details of current first aiders are available on first aid notices located next to each fire notice and can be found near to every exit point of the building, on notice boards throughout the buildings and via the following link: [http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=11029](http://documents.manchester.ac.uk/DocuInfo.aspx?DocID=11029). If local first aiders are not available or assistance is required outside normal working hours, Security can be contacted to provide first aid by calling 69966 internal or 0161 306 9966 external line.

9.1.4 Emergency Evacuation Marshals

The University requires that all Schools appoint suitable numbers of emergency evacuation marshals to assist in the evacuation of all occupants from the buildings should an emergency situation arise. The criteria used for identifying the number of evacuation marshals required is one marshal per floor per protected stair case. In the school of Computer Science a Marshal is also required to be posted on the link bridge between the Kilburn and IT buildings to ensure no one enters one building from the other during an emergency situation.

9.2 Accidents and Incidents

All accidents, dangerous occurrences and near misses must be reported in the first instance to the School Safety Advisor and documented as necessary using the correct form. Accident and incident forms are available via the following link: [http://www.healthandsafety.manchester.ac.uk/topic_a-z/](http://www.healthandsafety.manchester.ac.uk/topic_a-z/)

Reporting of accidents and incidents are necessary for the following reasons:

- To comply with legal requirements depending upon the nature of the accident or incident.
- To investigate the accident / incident and take steps to prevent recurrence.
- To keep records in case of possible future litigation.
- To allow collation of accident statistics.

Near misses should also be reported to your School Safety Advisor as acting upon near misses will prevent accidents occurring.

9.3 Electrical Equipment

Any electrical equipment brought into the school for use in offices, laboratories or workshops must be suitable for the intended purpose, meet UK requirements for safety, and display the CE universal quality standard mark. The School Health and Safety Advisor must be informed if any electrical equipment is brought into the school other than via the normal purchasing system. For the school to comply with health and safety legislation it is essential for all portable appliances, including those built at The University of Manchester, to be checked and tested on a regular basis. The school carries out Portable Appliance Testing in accordance with university guidelines and maintains a database of all such equipment. Checks and tests are carried out at regular intervals. High risk portable appliances (Heaters, power supplies, electric drills, kettles, etc) are checked and tested annually. Lower risk items like computer workstations, which are classed as semi-permanent fixtures, are checked and tested every four (4) years.

All portable appliances, including separate mains cables will be clearly labelled upon completion of the test. A recommended retest date will be indicated on the label.
Please ensure that ALL heaters and high load non-essential appliances within your working area are switched off before you leave the building.

9.4 Lone Working and Out of Hours Working

Lone Working Lone working is defined as working without close or direct supervision, and without contact form others.

To reduce the risks associated with lone working it is the policy of the School of Computer Science not to permit any lone working activity beyond normal office based activities without first completing a risk assessment for the activity.

The requirements of the University guidance on lone working should be followed at all times. Details of these requirements and a definition of lone working are available at:

http://documents.manchester.ac.uk/display.aspx?DocID=13891

9.4.1 Out of Hours Work

Normal opening hours for the Kilburn and IT buildings are 8am to 6pm weekdays, excluding weekends, bank holidays and any other days when the building is closed (for example Christmas closure period).

On occasion it may be necessary to use the facilities available in the Kilburn and IT buildings outside normal working hours.

During this time the presence of security or school staff members cannot be guaranteed. It is therefore extremely important that all occupants know what to do should an emergency situation occur within the school such as a fire, or the need for medical attention.

9.4.2 Kilburn Building

Use of the Kilburn building outside normal working hours will be permitted following successful completion of the out-of-hours induction online training course. Upon successful completion of the out-of-hours induction training, the following access times will be made available for masters students: 6pm âĂŞ 11.30pm Monday âĂŞ Friday, 8am âĂŞ 11.30pm Saturday and Sunday.

Outside normal working hours the Kilburn Building is to be used for study and research (office based) purposes only. No social events or gatherings will be permitted unless an appropriate member of staff has been notified and has agreed to the event. Depending upon the details of the event it may be necessary to complete a risk assessment (see out of hours events section below). Please contact the School Safety Advisor, Tony McDonald via email (tony.mcdonald@manchester.ac.uk) for guidance and further Information.

9.4.3 Information Technology Building

Outside normal working hours access into the IT building is gained via the south entrance door only. Swipe access is required and the out-of-hours book must be signed by all users detailing name, work location and times of entry and exit. The swipe card access system for the IT building is only enabled for staff and postgraduate students based in the IT building who have undertaken the necessary local and health and safety inductions.

9.4.4 Occupants of the buildings remaining on site after normal working hours

Any person wishing to remain in the buildings outside normal working hours must sign the appropriate out-of-hours books. The out-of-hours book for the Kilburn Building is located at
the porter’s lodge; the out-of-hours book for occupants of the IT building is located in the foyer of the building by the main entrance.

This procedure is necessary should an emergency situation occur. Responding emergency services must be able to account for all personnel on site during an emergency situation such as a fire or bomb scare.

The school reserves the right to spot check anyone on site outside normal working hours to ensure that this procedure is being followed. Anyone found not to have followed the correct procedure may be asked to leave the building, and may be suspended from out-of-hours activities for a period. Decisions regarding the temporary exclusion from site during periods outside normal working hours of any student can be made by the Area Supervisor, the School Health and Safety Advisor or the Head of School.

Please remember that authorisation to use The Kilburn and IT buildings outside normal working hours is a privilege, and not an automatic right, and that there is no right of appeal for anyone excluded from out-of-hours access to these buildings.

9.5 Chemical Safety

Any chemical(s) brought into the School for experimental, practical or general use must be controlled and a risk assessment carried out to ensure that the chemical is used, stored and disposed of safely. University guidance on chemical safety is available at: [http://www.healthandsafety.manchester.ac.uk/toolkits/chemicals/](http://www.healthandsafety.manchester.ac.uk/toolkits/chemicals/) HSE guidance is available at: [http://www.hse.gov.uk/chemicals/index.htm](http://www.hse.gov.uk/chemicals/index.htm)

9.6 School smoking policy

To comply with current Government legislation The University of Manchester promotes a no smoking policy within all buildings, irrespective of their use or location. This policy also applies to e-cigarettes. To safeguard staff, students and visitors from the adverse effects of second hand smoke, and to show unity with other schools, the School of Computer Science has adopted a no smoking exclusion zone within 5 meters of all school entrances and exits of the school buildings. Smoking is also prohibited directly outside open windows where smoke may drift into school premises. Your assistance in keeping the school of Computer Science a safe and healthy place to work and study in is much appreciated.
Chapter 10

University Learning Resources

The University Library

The University of Manchester Library is both the University’s library and information service and supports all subject areas taught by the University. It provides its members with a large number of services and resources, including the most extensive range of electronic resources of any UK Higher Education library, including on-line subscriptions to journals and data sources. Many of these resources are only available to computers on the University network, so you should use them from on campus, or using the campus VPN.

The University Library consists of the Main Library and several site libraries. Locations, and full details of the services provided and how to access them can be found on their website: http://www.library.manchester.ac.uk/

Central Authentication Service

One advantage of this central system is that when accessing online journals, rather than having to remember a whole list of different passwords and usernames, you instead just use the CAS. The journal website typically directs you to the Manchester CAS page, where you login, and are then returned to the journal, where you can then access the journal content to which we have a subscription.

The login can also be accessed directly by going to the University Portal: https://www.portal.manchester.ac.uk/uPortal/Login and then pressing the login button.
Chapter 11

Building Plans

These are not necessarily totally up to date, but they do provide somewhere to start from when faced by the maze of magnolia corridors!
Kilburn Building: Ground Floor
CDT laboratory shown in grey, rooms LF7 & LF8

Kilburn Building: Lower First Floor
Main Entrance (swipecard access)

IT Building: Level 1