

# Professional Programme HANDBOOK

2019

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## Welcome to the Professional Programme at the University of Oxford

Welcome to the Professional Programme in the Department of Computer Science, University of Oxford. The Department of Computer Science is one of the world's leading centres for research and teaching, with an international reputation built up over many years. Our current research ranges from exploring the fundamental issues of the meaning of programming languages to machine learning to the engineering of software systems at large-scale. The people that teach on the Professional Programme are cutting edge researchers and industry leaders. This deep expertise influences and informs the courses we teach, which are continually evolving.

The Professional Programme is designed to provide an advanced, part-time, course of study for working professionals looking to broaden and deepen their understanding of the state-of-the-art in engineering modern information systems. Currently, two awards are offered:

- MSc in Software Engineering
- MSc in Software and Systems Security

Cognizant of the demands placed on working professionals, the Programme has specifically been designed with the following objectives in-mind:

- Part-Time: The teaching component of each module consists of an intensive week-long immersion into a particular topic, taught in our dedicated teaching rooms in Oxford.
- Flexible: There is no set path through the Masters degree students are free to choose modules, subject to the degree schedule, to customize their education.

This handbook is intended to act as a guide to the Department and the wider University. In addition to this handbook, you will find specific information on your course in a supplement on the Professional Programme website. If you think that the handbook could be improved in some way, please let us know.

## **Key contacts**

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## Disclaimer

This handbook applies to students starting the on the Professional Programme in Michaelmas Term 2019 and applies to the following degree courses:

- MSc Software Engineering
- MSc Software and Systems Security

The information in this handbook may be different for students starting in other years. The information in this handbook is accurate as at January 2020.

Version	Action	Date
Version 1.0	Published start of HT20	13/01/20

## 1. Sources of information

This handbook is designed to help you navigate the Department of Computer Science and the broader University of Oxford. It provides guidance as to what facilities are available to you, how teaching and learning are organised, how your course is structured, and how to find help if you've got any problems.

It does not replace the official regulations relating to your degree. If there is a conflict between information in this handbook and the Examination Regulations then you should follow the Examination Regulations.

The information in this handbook is accurate as at 1st October 2019, however it may be necessary for changes to be made in certain circumstances, as explained at <u>www.graduate.ox.ac.uk/coursechanges</u> webpage. If such changes are made the department will publish a new version of this handbook together with a list of the changes and students will be informed.

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

#### **1.1 Examination Regulations**

The *Examination Regulations*, are the authoritative document on the regulations for the University degrees and examinations. The regulations are available online at:

http://www.admin.ox.ac.uk/examregs/2019-20/softengiprog/

#### **1.2 University Student Handbook**

Each year you will receive the latest version of the *University Student Handbook*. It forms part of your contract with the University. <u>It is available online</u>.

#### **1.3 Oxford Students website**

This website is a central repository for information about student groups

Your college will probably also have detailed guidance about its own regulations and requirements. Your tutor and your college office will be able to point you in the right direction.

#### 1.4 Professional Programme Course Handbook

This handbook is designed to help you navigate the Department of Computer Science and the broader University of Oxford. It provides guidance as to what facilities are available to you, how teaching and learning are organised, how your course is structured, and how to find help if you've got any problems. This can be found at: <u>http://www.cs.ox.ac.uk/pro/handbook/</u>

## 2. Finding your way around

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

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

In principle, the University exists to enable you to study for a degree, to monitor your progress, to examine you at the end of that study, and to award you a degree. Your College exists to guide and advise you. Admission and supervision of graduate students to Oxford is the responsibility of the department, and their academic and personal well-being are principally the concerns of the colleges.

#### 2.1 The Department of Computer Science

#### 2.1.1 Access to the Department of Computer Science

An entry-card system controls access to the Wolfson Building outside normal opening hours. This applies to the main Parks Road entrances and the No.7 and No. 11 Keble Road entrances of the Wolfson Building. The front door of No. 8 Keble Road has been alarmed and should only be used in an emergency. University cards will be activated as the Department's entry card when you have signed the declaration form. The Programme Office will arrange for your card to be activated. You will need to select a four digit pin number. When entering the building you need swipe and enter your four digit code followed by the # key to gain entry.

The rules for using this system are:

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

#### 2.1.2 Communication and electronic mail

The University IT Services automatically provides e-mail facilities for all new students, at the same time as you are given a University Card.

The Programme will use your college email address to contact you. If you regularly use a different email address then you must ensure that you have your emails forwarded to it. As a student it is your responsibility to read and respond to emails from the Programme timeously.

#### 2.2 Matriculation

Students must be members of one of the colleges of the University. Students who are already graduates of the University may request renewed membership of their previous

college. Otherwise, students will become members of one of the colleges that are prepared to admit students from the Professional Masters Programme.

Each student will be required to attend a matriculation ceremony within two terms of starting on the Programme. Failure to attend will result in the offer of college membership being withdrawn, and the student's status as a student lapsing.

## 3. Understanding Oxford

As a student of the University of Oxford you will come across terminology that is unique to the institution and can cause confusion at first. In order to help you navigate these the University has produced a useful "Oxford Glossary"

https://www.ox.ac.uk/about/organisation/history/oxford-glossary?wssl=1

#### **University terms**

The three University 'full' terms are:

Michaelmas (October - December) Hilary (January–March) Trinity (April–June)

Each term lasts eight weeks. The Professional Programme runs modules throughout the year. Term dates set deadlines for submission of the project component and are used to calculate the length of time you have been registered in the Programme.

## 4. The University and you - Guidance, Responsibilities, Reporting

#### 4.1 Guidance for Students and their Supervisors

You will be allocated an academic supervisor, who is usually a member of academic staff in the Department of Computer Science. You are advised to remain in contact with your supervisor as and when required.

#### 4.1.1. Responsibilities of the supervisor:

The supervisor is responsible for assisting the student in the selection of options and providing guidance about particular modules. Supervisors also provide guidance and feedback on the work undertaken by the student in the project.

The supervisor is required to report on the student's work at the end of each term. The report should also make clear whether the student is making satisfactory progress.

#### 4.1.2. Your responsibilities as a student

You must accept your obligation to act as a responsible member of the University's academic community. You are ultimately responsible for your studies and need to develop an appropriate working pattern, including a professional relationship with your supervisor. You should make appropriate use of the teaching and learning facilities available within the University. It is your responsibility to seek out and follow the regulations relevant to your course, including faculty/departmental handbooks/notes of guidance, and to seek clarification from supervisors and elsewhere if this is necessary.

Don't hesitate to take the initiative in raising problems or difficulties, however elementary they may seem. For administrative matters the Programme Office (pro@cs.ox.ac.uk) should be your first point of contact. You should ensure that any problems regarding the project are drawn to the attention of the supervisor so that appropriate guidance may be offered.

If you feel there are good grounds for contemplating a change of supervision arrangements, this should first be discussed with the supervisor or, if this is difficult, with the Office Manager for Professional Programme, the Head of Student Administration or the Director of the MSc course.

#### 4.1.3 Responsibilities of the Director of Graduate Studies

The Director of Graduate Studies (DGS) is responsible for graduate studies and students. He/she manages the administrative arrangements for supervision, transfer/confirmation of status, extensions of time, and thesis submission. In the Professional Programme currently the DGS is Dr Alessandra Cavarra.

#### 4.2 Graduate Supervision Reporting

Graduate Supervision Reporting (GSR) is used by supervisors to review, and comment on their students' academic progress each term. Students are also given the opportunity to comment on their progress. Access to GSR will be via Student Self Service <u>https://www.ox.ac.uk/students/selfservice</u>. You will receive an email notification with details of how to log in at the start of each reporting window. For more information, see <u>https://projects.it.ox.ac.uk/edu-it-gsr</u>

You will be given an opportunity to complete a self-assessment report every reporting period. Your self-assessment report will be used by your supervisor(s) when completing a report on your performance, for identifying areas where further work may be required, and reviewing your progress. The GSR system will alert you by email when your supervisor or DGS completes your report and it is available for you to view.

Self-assessment reporting give you an opportunity to:

- Review and comment on your academic progress during the current reporting period;
- Measure progress against the requirements of your study programme;
- Raise any concerns regarding your academic progress to your supervisor;
- Outline your plans for the next term (where applicable).

If you have any issues with teaching or supervision please raise these as soon as possible so that they can be addressed promptly.

## 5. Your Course

#### 5.1 Aims

The Professional Programme provides advanced education in the methods, principles, tools, and techniques connected with both Software Engineering, and Software and Systems Security.

#### 5.1.1 MSc in Software Engineering

Software Engineering is the use of engineering methods and scientific principles in the development of software systems. It is an interesting and challenging field of study: the methods are constantly evolving, and many of the principles start to make sense only when seen in the context of professional practice. It is an interdisciplinary endeavour, bringing together aspects of computer science, engineering, and management. Software Engineering is about developing software alone or within a team for use by other people; using appropriate tools and technologies, and allocating appropriate time and effort, at every stage of development; building systems that meet requirements and expectations of users, even when those requirements—or our understanding of them—may change.

#### 5.1.2 MSc in Software and Systems Security

The systems of modern life are centred at the interface of physical, social, and technological domains. Ensuring their security requires strong technical measures, as well as an understanding of the behaviour of their users, together with an idea of the motives and methods of attackers. This field is variously called Cyber Security and Security Engineering: it aspires to be an engineering discipline, but necessarily incorporates theories, tools, and techniques which are still maturing. A central theme is the reduction of risk—through inhibiting unwanted outcomes or through lessening the impact of security events. This is often achieved through the careful design of hardware and software, but also depends on the construction of suitable procedures, training, and frameworks for regulation.

#### **5.2 Induction Arrangements**

As students will be attending courses in different weeks there is no general induction.

At the start of each module, on the Monday morning the administrative team will give an induction to students attending that week. This will include health and safety information, arrangements for lunch, where to find help in colleges and in department.

#### 5.3 Length of Course

This is a part-time Masters course and it is intended that students should complete the course in no less than 2 years and no more than 4 years. Students are required to attend and submit assignments for 10 modules. Students are also required to attend a project week which helps them structure their final project in discussion with their supervisor. At the core of each module is a single, intensive teaching week, requiring the same period of absence from the workplace as a typical training course. Modules are taught in small class settings with variable approach to the design of each module.

#### **5.4 Module Selection**

You can choose freely from a wide range of subjects within the software engineering and security courses, with dependencies kept to a minimum. You are able to choose, and continually refine, an

individual programme of study that best reflects your own interests and experience. You should plan to study at least 3 modules per year, in order to complete a satisfactory number before your final year, which should be spent working on the project.

If you wish to be examined for an award in Software and Systems Security, then you must choose at least 6 modules from the Security theme: enough to form the majority of the assignments considered by the examiners.

If you wish to be examined for an award in Software Engineering, then you must choose at least 6 modules from the Software Engineering theme: enough to form the majority of the assignments considered by the examiners.

Each subject is taught as a single, separate module, delivered up to four times a year, according to demand. You can book a place on a specific module up to 18 months in advance, allowing you to plan your studies around other commitments. You are permitted to cancel bookings, but are required to give at least 4 weeks notice.

Module bookings are restricted to 5 registered and 5 waiting list bookings per student. This is inclusive of the project week.

Each module is examined by an assignment, for which the submission deadline is six weeks from the end of the module. More information about examinations can be found below.

You can attend modules before deciding to apply for postgraduate study, and still use these modules (up to a maximum of 2) as credit towards a subsequent qualification. This allows you to determine, in advance, whether the Programme is a good match for your requirements, experience, and circumstances.

#### 5.5 Booking and availability

Modules can be booked via the Programme website. Full instructions can be found at: <u>http://www.cs.ox.ac.uk/pro/courses/booking.html</u>

The module fee is charged for each module attendance, and is payable strictly in advance. A set of terms and conditions for payment are published at

#### http://www.cs.ox.ac.uk/pro/courses/terms.html

To ensure the quality of course delivery class sizes are limited, and we do not permit overbooking. Students may join a waiting list and will be informed by the Programme office if a space becomes available. The Programme monitors module demand on a regular basis. The Programme calendar can be found at:

#### http://www.cs.ox.ac.uk/pro/courses/calendar.html

#### **5.6 Teaching Arrangements**

The current list of modules in each theme is posted on the Programme website at: <u>http://www.cs.ox.ac.uk/pro/courses/subjects.html</u>

Each module consists of three parts:

- pre-study: a period of preparatory study—this may entail reading chapters from a set text, studying relevant research articles, attempting preliminary exercises, gathering data, or preparing a brief presentation.
- teaching week: a single, intensive week in Oxford—comprising lectures, classes, workshops, and practical sessions; the balance between different types of activity depends upon the subject being taught.
- assignment: a written assignment, completed during the six weeks following the teaching week, allowing students to develop and demonstrate their understanding of the material.

#### 5.6.1 Pre-study

To get the most out of one of these weeks, some preparation is advised. A pre-study exercise will be sent to participants with confirmed registrations about a month in advance of the teaching week. Depending upon the subject, it may comprise a piece of recommended reading, some questions to answer, or a task to attempt. This part of the module represents a notional 10 hours of study time. From Michaelmas term 2019 the Programme has moved away from sending hard copy text books to all students ahead of the teaching week. Instead we will either send you electronic files, which maybe research papers or extracts from a text book, or we will ask you to use the online library system SOLO, you will need to use your Single Sign On (SSO) to gain access:

#### http://solo.bodleian.ox.ac.uk/primo-explore/search?vid=SOLO&lang=en\_US&sortby=rank

#### 5.6.2 Teaching week

The teaching weeks allow staff and students to explore a subject in depth, focussing exclusively upon a particular topic, and building up considerable momentum as the week goes by.

Please arrive at the teaching centre on the 4<sup>th</sup> floor of the Department of Computer Science before the start of the first teaching session: usually 9 a.m. on a Monday morning. Late arrivals should contact the Programme Office to gain admission, to be given a brief introduction to the facilities, and to be informed of any change in the module arrangements.

The schedule for the week includes 27 classroom hours, most if not all of which will be spent in the same, dedicated teaching suite. Teaching is normally from 9 a.m. to 5 p.m. Monday to Thursday, and from 9.00 to 12.30 on Friday. There are short breaks in the morning and afternoon, and a longer break over lunchtime—lunch is provided.

Students are expected to attend every morning and afternoon session of each teaching week. Students who are absent for more than two sessions will not normally be considered to have attended that course. In exceptional circumstances, with the approval of the Director of Graduate Studies, a longer period of absence may be allowed. Students should approach the Programme Office in the first instance.

For most subjects, the activities during the teaching week are directed by academic staff of the Programme. For the others, the Programme employs an external, subject specialist: an authority on the specific topic. Attendance is limited to a maximum of 12 to 20 students (depending on the subject), and assistants are employed to provide help with workshops and practicals.

Lecture or seminar sessions are used to structure the week, breaking the subject into a number of topics, and to introduce material for the first time. The small class size means that discussions can be conducted during lectures, and that each member of the class can be invited to participate.

The material introduced can then be explored through class exercises, workshops, and practical sessions. As well as promoting learning through application, these sessions provide feedback on individual progress; lecturers can then adapt their teaching to the needs of the current group of students.

At the beginning of the week, you will receive a copy of the course material. If there is a textbook for the module then copies will be given out at the start of the course. With the exception of textbooks, all material will be made available on the Programme web site. Students who attend will be able to download material at any time after the week begins. Any electronic resources, such as additional reading materials, reference documents, or software tools, will also be available from the web site.

#### 5.7 Written assignments

An assignment will be distributed to all attendees on the last day of the teaching week. This has a dual purpose: it continues the learning process of the week, allowing the student to test and extend their own understanding through application outside the classroom, in completing a personal "miniproject"; it also provides, through the subsequent submission, the basis for a formal assessment of ability and understanding.

The time required for the successful completion of an assignment should be no more than 25 hours. In many cases, students will be able to complete the assignment within a single weekend or the equivalent of about 2 days work. However the deadline for the submission will be set six weeks after the release date of the assignment.

The length of the period should be sufficient to allow you to address any backlog of work that might have resulted from your attendance on the teaching week, and to deal with any professional or personal commitments that might fall within the period, while also having time to complete and submit the assignment. **Late submissions will not be accepted.** 

If you have submitted work for an assignment, then you may not take a second assignment in the same subject, unless you withdraw your submission before the deadline. An exception to this applies in the case of failure to satisfy the Examiners in the first occasion of a final examination for an award.

Please find details on how assignments are marked in the Examination Conventions. You will receive a provisional result as soon it becomes available. Results will be finalised by the board of examiners. You will then also receive feedback on your assignment.

#### 5.7.1 Submitting assignments

Assignments must be submitted via the Programme website no later than the deadline stated, late submissions will not be accepted. Submission is via the Programme website and full instructions can be found at

#### http://www.cs.ox.ac.uk/pro

You can be view, replace, or delete any material you have uploaded at any time before the submission deadline.

Submissions may be handwritten, although you are asked to take care to ensure that the text is legible and that any diagrams or illustrations are clear. The same considerations apply to typeset submissions: a font size of at least 10pt is essential, as are adequate margins.

The assignment itself will include a clear specification of the allowed extent, and will detail any additional material to be submitted. The word count or page limit does not include images and diagrams, or any code submitted as part of appendices. Please submit your assignment as a Portable Document Format .pdf document. Source code and similar supporting material can be submitted as plain text files.

Students should keep a copy of any material that they upload to the system. If a document—as uploaded—is found to be unreadable, and the student is unable to supply a readable version, then no credit will be awarded for the submission.

The use of the Programme website for this (and for any other) purpose is subject to the University's standard regulations on the use of information systems. In particular, users must protect their passwords, and take care that only appropriate documents are uploaded to the system.

Assignments are treated as examinations of the University of Oxford, even if the individual undertaking it is not currently a registered student. Participants are asked to sign an assignment acceptance form to confirm that they will comply with the relevant parts of the University's examination regulations.

Specific guidance on the acknowledgement of sources is provided here. The full text of the University regulations is available at:

#### http://www.admin.ox.ac.uk/examregs/

#### 5.7.2 Assignment-only submissions

Sometimes work pressures mean that you cannot complete and submit an assignment before the deadline. Written assignments submitted late will not be accepted. If you fail to submit by the deadline for a particular assignment you will be deemed to have withdrawn from that part of the examination. You may register to take a subsequent assignment in the same subject, provided that another module in that subject is scheduled within your period of study, without the need to attend the teaching week for that module. Please note that the Programme cannot guarantee that a future iteration of a module will occur within your period of study.

You may choose to withdraw an existing submission for an assignment at any point before the deadline. In this case, you are deemed to have withdrawn from that part of the examination, exactly as if no submission had taken place. Again, you may register to take a subsequent assignment in the same subject, without the need to attend the teaching week for that module.

#### 5.7.3 Assessment criteria

Detailed assessment criteria are published for each of the subjects taught in the Programme, and for the project and dissertation.

Further details can be found in the examination conventions. http://www.cs.ox.ac.uk/pro/handbook/examinations.html

#### **5.8 Good Academic Practice**

You should not show your work to, or discuss it with, any other student. You should not ask or seek to look at anybody else's work.

If you use material from any other source such as textbooks, lecture notes or the web then you should reference it explicitly at the relevant point. Your supervisor can give you guidance on proper referencing, or for more guidance see www.cs.ox.ac.uk/files/3161/Referencing.pdf

You will not receive any credit for simply copying information verbatim because that displays very little understanding. The assessors will be more impressed if you synthesise information from a number of sources (properly cited, of course), and combine it with your own ideas.

If you fail an assignment, it is possible to remedy the situation later; but the consequences of copying can never be remedied. Please consult your supervisor or the Course Director if you are worried about any possible suspicion of any irregularity in examination procedures. The following link offers additional relevant advice:

#### www.ox.ac.uk/students/academic/goodpractice/

When matters of plagiarism are reported to the Proctors, the investigations can be protracted and involve serious stress for the candidate(s) concerned. Penalties imposed can result in the assignment(s) being disregarded and this could ultimately mean failure of the degree course.

#### 6. Projects

To obtain either of the MSc awards available from the Programme, you must complete an extended project. This differs from the module assignments—each of which contains an element of project work—in two important ways:

- it affords an opportunity to formulate your own problem or challenge;
- it may involve the application and integration of ideas taught in more than one module, or drawn from the wider software engineering curriculum

This is a taught Programme, and although the project needs to be an original demonstration of ability and understanding, there is no requirement to advance the state of the art in the field. You need only choose and apply an appropriate selection of existing ideas and techniques—provided that your choice, the process of application, and any outcomes are properly explained. New ideas and techniques are welcome but they are not expected.

#### 6.1 Project week module

The project component involves compulsory attendance at a project module in Oxford, at which you present and refine your proposal, and attend teaching sessions on: research skills; engineering in context; and social, legal and ethical issues. Six weeks later, you submit your proposal for formal approval.

Please see appendix E (Ethics) for more information.

#### 6.2 Process

- The student develops an idea for a project, discusses this idea with their supervisor, and books a place on a project week.
- The project week affords an opportunity for the student to start work in earnest, to attend teaching sessions and workshops, and to have one-to-one meetings with their supervisor.
- Six weeks later, the student submits their proposal for formal review. If this is approved, they may continue. If not, then they will need to revise the proposal, and submit it for assessment after the next project week.
- The student provides their supervisor with further reports on progress as they complete the project and start to work on the dissertation.
- The student prepares a final version of the dissertation, and submits it as soon as they are ready—which should be before the submission deadline pertaining to their current final term of study.

#### 6.3 Extent

The project report should represent the same amount of effort, and achievement, as two taught modules, complete with assignments: that is, two weeks full-time—the equivalent of two teaching weeks—plus 18 weeks part-time—the equivalent of two pre-study and two assignment periods. This work is usually undertaken over a period of one year.

Dissertations should be submitted in A4 format, with a normal font size no less than 10pt and no greater than 12pt, and margins no less than 2cm and no greater than 2.54cm. As stated in the regulations, they should not exceed 20,000 words in length, excluding diagrams and appendices. For further information please refer to the examination conventions.

Normally, candidates for the MSc will start work on their project after attending most, if not all, of their taught modules. The examiners will not consider a submitted dissertation from a candidate who has not completed the taught part of the degree.

#### 6.4 Subject

The Programme Office maintains a small library of past dissertations for students to browse through, in order to get an idea about subject matter and extent. An abstract of every past dissertation is stored on the Programme's administrative database.

Students may choose any topic that will allow them to demonstrate understanding of software engineering through the medium of a dissertation. The best way of doing this is usually to choose a topic related to one or more of the subjects taught on the Programme. Many students choose topics that are related to their current employment, allowing them to see how the ideas taught in the Programme may be applied alongside current practice.

#### 6.5 Proposal

The work starts with a project proposal containing:

- 1. a description of the subject matter: product, theory, application area, or problem domain;
- 2. a brief account of the original contribution that the project work might be expected to make;
- 3. a plan, or outline, of the dissertation, explaining how it will demonstrate the student's understanding;
- 4. a list of resources that will be required.
- 5. a suggested schedule of tasks and delivery dates; and
- 6. an outline of any social, legal, or ethical issues relating to the work.

This should be prepared in consultation with the student's supervisor, and submitted to the Programme Office together with a completed project start form. Depending on the project topic, a change of supervisor may be appropriate, if there is another member of staff available with particular expertise in the area of proposed study.

While working on their project and dissertation, the student should take care to keep their supervisor informed of progress. The primary mode of communication will be email. As the work progresses, there might be considerable variation from the original proposal: any drastic change will require approval If this does occur, contact your supervisor in the first instance.

#### 6.6 Report

The results of the project work are presented in a short report, of 15,000-20,000 words, or 45-60 pages. This forms the basis for formal assessment of the project, just as the written assignments form the basis for assessment of the taught modules. The report should be submitted once the taught part of the course is complete.

#### 6.7 Resources

If a student wishes to use software with an education license, the Programme Office Manager will be happy to provide confirmation of student status should this prove necessary. The wide variety of subject matter, and the fact that the project work may be closely related to the student's (or their employer's) business, makes it impractical for the Programme to provide resources to support the project work. However, Oxford University IT Services can provide licenses for some software products.

#### 6.8 Confidentiality

Many students choose a product-based project in which they will construct a model of a product or component that they have already encountered, or developed, as part of their employment. Alternatively, they may choose a process-based project in which they analyse existing practices within their organisation.

The results of these projects will usually be commercially sensitive: they may describe design features, or aspects of the development process, that the student's employer would wish to keep secret. To make such projects possible—their educational value is considerable—Programme staff undertake to respect the confidential nature of each student's work.

A written confidentiality, or non-disclosure, agreement can be established between the University and the student (or their employer). The Programme Manager has a template for this agreement, and is the first point of contact for any student requiring reassurance. However, the University cannot accept financial liability for breaches of confidentiality.

#### 6.9 Commercial exploitation

The University claims no rights to commercial exploitation of work submitted by students on the Programme. However, it does claim a licence to use whatever is submitted for assessment for non-commercial, academic purposes. This is to avoid any risk of an individual constraining future research and teaching in the University by arguing—with or without merit—that it is based upon their assignment submission.

#### 6.10 Writing Skills

Overseas students whose first language is not English are encouraged to investigate attending one of the courses on English for Academic Study given in the University Language Centre. See <a href="http://www.lang.ox.ac.uk/">http://www.lang.ox.ac.uk/</a>

If you think this would be suitable for you, please discuss it with your supervisor or the Programme Office manager

#### 6.11 Proof Reading

As outlined in the Examination Regulations (www.admin.ox.ac.uk/examregs/2018-19/grgoveresedegr):

"Work submitted for examination must be solely the work of the candidate, except where otherwise clearly indicated. It is not permitted for a student to ask or allow someone else to make material changes to their work, for example, by rewriting passages of text or rewriting formulae or code. Failure to adhere to these regulations could constitute a breach of academic integrity and contravene the Proctors' Disciplinary Regulations for Candidates in Examination.

Candidates are responsible for the proof-reading of their work. Proof-reading by a third party is acceptable provided it constitutes no more than advice on the following: spelling and punctuation, formatting, grammar and syntax. A third party may not be used to change the text of the thesis so as to clarify, develop or change the ideas and arguments, reduce the length of the thesis, provide help with referencing, correct information within the thesis, or translate the thesis into English."

For further details on the policy, including what a third party proof-reader may and may not do, please visit <u>www.admin.ox.ac.uk/edc/policiesandguidance/policyonproofreaders</u>

#### 6.12 Submission of the project dissertation

Submission of the dissertation is through the online submissions portal. Upcoming submission deadlines are published on the website: after you log in, at the bottom right of the home screen is a link "dissertation deadlines and some example dissertations". The dissertation must be submitted no later than that detailed above. Work may be submitted in advance of the deadline if you choose. In doing this you will also avoid any issues that may arise due to IT problems and lead to late submission.

We recommend that you take time to ensure you are fully familiar with the procedures given on the submissions portal, well in advance of the submission deadline.

Please note the following:

- It is your responsibility to ensure that their work is submitted by the deadline.
- Failure to submit an assignment on time as a result of IT problems (eg computer malfunction, slow internet connection) will not be accepted as a valid reason for late submission. You should make regular back-up copies of all work and ensure that there is adequate time to submit your work. Do not leave submission until just before the deadline.
- Responsibility for the work rests with you at all times until issue of receipt, regardless of the method submission.
- All work will be dealt with under the standard submission procedure, whether submitted early, near the deadline, or late.
- Once submission has been made, the assignment cannot be withdrawn or altered.

#### 7. Final Examination

The Board of Examiners meets every term to consider marks for assignments and final awards for students who have completed the taught part of the degree and submitted a dissertation.

Its five members are appointed by the Divisional Board; each serves a three year term where possible. An External Examiner is appointed for each award programme who attends the final meeting and provides a separate report to the University. Please find detailed information on how assignments and dissertations are marked in the examination conventions.

The decision of the examiners may be contingent upon the results of a viva voce (oral) examination. In cases where there is any doubt as to a candidate's ability or the originality of their work, this part of the examination process is particularly important. You will be informed if you are required to attend a viva voce (oral) examination.

#### 7.1 Examination Conventions: Marking and Classification

Examination conventions are the formal record of the specific assessment standards for the course to which they apply. They set out how your examined work will be marked and how the resulting marks will be used to arrive at a final result and classification of your award. They include information on: marking scales, marking and classification criteria, scaling of marks, progression, resits, use of viva voce examinations, penalties for late submission, and penalties for over-length work. They also list internal and external examiners. Please note that you must not under any circumstances make contact with internal or external examiners.

The Examination Conventions can be found online at: <u>http://www.cs.ox.ac.uk/pro/handbook/examinations.html</u>

#### 7.2 Prizes

As set out in the Examination Conventions three prizes, each to the value of £200, may be awarded:

- One for best overall performance in the examination;
- One for best project; and
- The Richard Bird Prize for the dissertation that best presents a piece of software, an algorithm, or a mathematical theory pertaining to program construction.

If dissertations of sufficient merit are not submitted, the award may be withheld.

#### 7.3 Examiners' Reports

You can use examiners' reports of the previous years to prepare for your upcoming examinations. Previous years' Examiners' reports can be found online through the SSTL student portal.

#### 8. If things go wrong

The most common cause for a lack of progress on the course is the demands of professional employment. The Programme is designed for students who are in full-time employment and the staff involved in delivering the course understand the demands that this brings. We recommend that you discuss with your employer the commitment that the Programme requires from you and them ahead of starting the Programme. We strongly believe that you and your employer will benefit hugely from you being part of this Programme, it is an investment of time as well as a financial one.

The second most common cause for failure is personal problems. If these begin to affect your health or your work, do not delay in consulting your medical advisor or one of the supervisors or advisors allocated to you by the Department and your College. Nearly all problems, whether emotional, medical or psychological, can be solved or alleviated by those who have the experience and expertise to advise, *provided that they know early enough*.

Each college has its own systems of support for students: please refer to your College Handbook or website for more information on whom to contact and what support is available through your college.

There is a wide range of sources of support available more widely in the University, including in relation to mental and physical health and disability: details are available from <u>www.ox.ac.uk/students/welfare</u>.

A third possible reason for disappointment is a mismatch between the culture and content of the course and the experience and aspirations of the student. Every effort is made in course design, provision of options, and the selection of students; but there is no way to avoid the occasional mismatch. This must be regarded as failure of the system rather than the student, and it is sensible to treat the problem without allocating blame. The best solution is to recognise the situation as early as possible, and avoid further waste of effort and disappointment.

If you have difficulty in understanding a lecture, please discuss it with your supervisor, or the lecturer for the course; at least one of them should be able to make an explanation that meets your needs. If you find the lectures unsatisfactory in any other way, please tell the lecturer or your supervisor; they are keen to make improvements where possible. If you find any aspect of your supervision unsatisfactory and you feel unable to discuss it with your supervisor, you should contact one or more of the following members of staff: your Advisor; the MSc Course Director; Programme office staff; the Director of the Programme; the Head of Student Administration or (in exceptional circumstances) the Head of Department.

#### 8.1 Progression

#### 8.1.1 Matriculation

Each student will be required to attend a matriculation ceremony within two terms of starting on the Programme. Failure to attend will result in the offer of college membership being withdrawn, and the student's status as a student lapsing

#### 8.1.2 Suspension of Status

Students who are unable to pursue their studies for a prolonged period of time may request a suspension of status. Up to three terms may be requested at a time, although no more than six terms' suspension will be granted during a single period of study. Such requests are considered by the Director of Graduate Studies. A supporting case will be required from the student's supervisor and from the student's college.

Students should not undertake any substantial study—for example, a course attendance and the corresponding assignment—during a suspension. Any course or assignment fees will apply as usual; any remaining instalments of award fees will be postponed for the duration of the suspension awarded.

Note: If you are taking a suspension of status for maternity, extended paternity and adoption leave, please use the form GSO.17b

Please use Suspension of Status Request Form - GSO.17 forms available here: <u>www.ox.ac.uk/students/academic/guidance/graduate/progression</u>

#### 8.1.3 Extensions of Time

Students who are unable to complete their studies by the end of their current final term may request an extension to their period of study. Up to three terms may be requested; such requests are considered by the Director of Graduate Studies, and formally approved by the Supervisory Committee. A supporting case will be required from the student's supervisor and from the student's college.

A request for a further extension, again of up to three terms, will be accepted, but will require approval from the University's Education Committee. A strong supporting case will be required, including a plan for the completion of the remaining work before the end of the proposed final term.

Please use Extension of Time Request Form - GSO.15 available here: <u>www.ox.ac.uk/students/academic/guidance/graduate/progression</u>

#### 8.2 Failure and Resits

The requirements that must be met to obtain the MSc in Software Engineering and MSc in Software and Systems Security are set out in the examination conventions, together with the consequences of failing to meet them.

A candidate who fails part of the examination, either the dissertation or taught courses, will be permitted to retake that element (or equivalent) on one further occasion only, in the year following the initial attempt.

#### 8.3 Supplicating for a Postgraduate Diploma or Postgraduate Certificate

If for some reason you decide not to complete the MSc award then you may be eligible to supplicate for one of the awards above subject to the conditions in the Examination Conventions. Where a student has reached their maximum number of terms but has not met the requirements for the MSc, the examiners may offer one of the above awards. If a student decides not to accept this then they would leave the programme without completing an award.

## 9. The Department and You

#### 9.1 Feedback

You will be asked to complete a questionnaire for each lecture course you attend. Please take the time to complete this and return it, as feedback is extremely valuable in helping us to continue to improve the course and your learning experience.

Students on full-time and part-time matriculated courses are surveyed once per year on all aspects of their course (learning, living, pastoral support, college) through the Student Barometer. Previous results can be viewed by students, staff and the general public at:

www.ox.ac.uk/students/life/student-engagement

#### 9.2 Student Representative

You will be asked to nominate a student representative(s) to sit on the Professional Programmes Supervisory Committee which meets once a term in week 2. Once confirmed, the names and email addresses of the student representative(s) will be circulated to the Cohort, and an additional reminder will be sent out prior to the Supervisory Committee each term. Please make sure that the representative is aware of any concerns or comments you have regarding the course.

#### 9.3 Communications

Information about the Department of Computer Science, its staff and courses is available from the Department's home page (<u>www.cs.ox.ac.uk</u>).

#### 9.4 Societies

The <u>Computer Science Graduate Society</u> (CoGS) provides a platform for the academic and social life of post-graduates in the Department. Covering both student representation on academic committees as well as organization of a variety of social events to give postgraduate and postdoctoral students the opportunity to mingle. from weekly 'coffee and cake' gatherings, to pizza and games nights.

The Oxford Women in Computer Science Society (OxWoCS) aims to support and promote women in computer science. The society exists for all women in computer science, be they students, faculty, or staff. OxWoCS runs a number of academic, social, and career events throughout the year, including weekly coffee meetings, talks by distinguished female speakers, and industry sponsored events. The society provides networking opportunities and a support network comprising role models, mentors, and peers.

The Oxford Computer Society (CompSoc) is a student-run society which organises social events, talks, and practical courses.

## **10.Appendices**

## [A] Regulations Relating to the Use of Information Technology Facilities

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

## [B] University Policy on Data Protection and Computer Misuse

https://www.admin.ox.ac.uk/councilsec/compliance/gdpr/universitypolicyondataprotection/

Computer Use and Misuse The University regards computer misuse as a serious matter which may warrant disciplinary action.

A policy statement, rules and guidelines on the use of the University's IT facilities are published by the ICT Committee with the approval of Council. They appear in the Proctors' and Assessor's Memorandum, and may also be found at <u>http://www.it.ox.ac.uk/policies-and-guidelines</u>

### [C] Use of Department of Computer Science Equipment and Premises

The formal conditions under which use may be made of Computer Science equipment in the Department of Computer Science can be seen here:

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

Users must abide by the rules

## [D] University of Oxford Equality Policy

#### http://www.admin.ox.ac.uk/eop/

The University of Oxford is committed to fostering an inclusive culture which promotes equality, values diversity and maintains a working, learning and social environment in which the rights and dignity of all its staff and students are respected.

The University embraces diversity amongst its members and seeks to achieve equity in the experience, progression and achievement of all students and staff through the implementation of transparent policies, practices and procedures and the provision of effective support. The University recognises that equality should be embedded in all its activities and will seek to promote awareness of equality and foster good practice. The University is committed to a programme of action to support its equality policy, to monitoring its effectiveness, and to publishing information on progress towards its equality aims.

In exercising its policies, practices, procedures and other functions, the University will have due regard to its duties under the Equality Act 2010 and to the protected characteristics[1] specified within it, as well as other relevant circumstances including parental or caring responsibilities, contract type, and working hours.

In particular, the University will:

Encourage applications for study and employment from the widest pool of potential candidates, especially where representation is disproportionately low; take steps to meet the particular needs of individuals from protected groups where these are different from the needs of others.

**In respect of students,** seek to attract applicants of the highest quality and potential, regardless of background. Decisions on the admission of students will be based solely on the individual merits of each candidate and the application of selection criteria appropriate to the course of study.

**In respect of staff,** ensure that entry into employment and progression within employment are determined solely by criteria which are related to the duties of a particular post and the relevant salary scale; and support career development and progression to ensure diverse representation and participation at all levels.

The University expects all members of the university community to treat each other with respect, courtesy and consideration and does not tolerate any form of bullying or harassment. It has a Policy on Harassment and Bullying, supported by a Harassment Advisory Service.

#### https://edu.admin.ox.ac.uk/university-policy-on-harassment

The Department's Equality and Diversity Committee meet once a term to ensure the university's policies are implemented at departmental level.

## [E] Policy on the Ethical Conduct of Research involving human participants and personal data

#### The University's aims

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

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

Full details of the policy can be read here:

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