Course Guide for the PhD in Statistics

2015 - 2016
1. Introduction

These are unofficial guidance notes for PhD students in the Department of Statistics. You should retain this booklet as you may need to consult it from time to time throughout the period of your study.

The official statement of degree regulations is available at:

http://www2.warwick.ac.uk/services/gov/calendar

A further extremely valuable source of information is the University’s online information site for students (insite) available at:

http://www2.warwick.ac.uk/insite/student_info/

Further information is also available from the department’s webpage at:

http://www.warwick.ac.uk/go/stats

and specifically the postgraduate web pages at:

http://www2.warwick.ac.uk/fac/sci/statistics/postgrad

The University’s regulations regarding student registration, attendance and progress can be found at:

http://www2.warwick.ac.uk/services/gov/calendar/section2/regulations/reg36registrationattendanceprogress/revisedregulation36

**Supervision**

Your supervisor gives and directs training in research techniques, and provides guidance and instruction in the chosen research topic. See your supervisor whenever you need help or advice. From the outset you should agree with your supervisor a schedule of meetings and other contacts during term-time and vacations. There is no fixed pattern of working (this depends very much on your research topic) but on average a full-time student will meet with their supervisor for at least 6 hours per term and devote 1800 hours a year to their studies. In line with existing University policy postgraduate research (PGR) students are responsible for making regular reports of supervisory meetings in an electronic system (Tabula) which have to be endorsed by the supervisor. Please report your meeting on Tabula as soon as possible after the supervision has taken place and in any case not later than 2 days after the meeting. Please discuss the level of detail of the reports with your supervisor. The University’s monitoring rules of student attendance require that you record at least one supervisory meeting per calendar month on Tabula.
**Review Panel**
In addition to a main supervisor, you will have two staff designated as members of your review panel. If possible these reviewers will be in the same general area as your supervisor.

**Tutorial Support**
You also have a personal tutor who can provide pastoral care. If you have a problem which you cannot discuss with your supervisor, you should speak to your personal tutor. If you feel inhibited from talking to a tutor or other member of staff in the first instance, you may also consider talking to a member of your SSLC, the Students’ Union, the University Senior Tutor or a member of staff in Student Support for initial, informal advice.

**Director of Postgraduate Studies**
The Director of Postgraduate Studies oversees the training, monitoring and progression of PhD students, including making decisions related to training programmes, reviews and progression, withdrawal (including temporary withdrawal) and conference funding. In conjunction with the Research Committee and the Head of the Department, the DoPGS takes a strategic overview of the training of postgraduate studies and takes responsibility for all aspects of the PhD programme, including progression.

**The Postgraduate Support Officer**
The Postgraduate Support Officer is first point of contact for general postgraduate enquiries and provides advice and clerical support for all postgraduate students. Most course related forms and documents, including those for payroll and expenses, as well as timesheets, can be obtained from and returned to the Postgraduate Support Officer. The Postgraduate Support Officer can be found in C0.02, the Reception and Student Support Office.

**Changes of supervisor/review panel**
If you wish to request a change of supervisor, you must normally notify the Director of Postgraduate Studies in writing, providing your reasons for your request. You should always discuss this with your personal tutor first. The University recognises that if a student requests a change of research topic, it may not be possible to find an alternative supervisor. **Note that a change of topic and/or supervisor does not affect your registration time.**

If you wish to request a change in the review panel, you must notify your supervisor and Director of Postgraduate Studies in writing, providing reasons for your request. The Director of Postgraduate Studies will decide on such requests.
2. General Information

Books and Library
You should expect to buy a few of the core books in the area of your research.

The library is close to the department on the main campus. You should make use of the training provided by the library, particularly with respect to efficient use of both paper and electronic resources. Your student card is required for admission to the library.

The Mathematics Institute has its own library which includes many useful books and journals. Statistics students are generally welcome to use this library, please see the Maths Librarian for help.

Accommodation
The Department aims to provide shared office accommodation for all full-time research students for the period of their initial registration. You will be allocated a desk in a carrel, with a lockable cupboard.

You are welcome to the use the Departmental Common Room and kitchen. Drinks facilities in the kitchen are free to postgraduates.

For security reasons, the Maths and Stats Building is locked in the evenings and at weekends. However, you can use your student card to gain entry to the building out of hours.

Information Technology
The department expects to be able to communicate with you via email - and you should check your account regularly.

Computing
Computing facilities are provided in the shared office accommodation. With the agreement of your supervisor you can have an account on the Department’s UNIX network and the departmental cluster for intensive computations. Software needs will depend on your research topic. LaTEX is essential for presenting your work.

Although some courses are available, the best way to learn to use a package is just to try it, making full use of on-line help facilities (and fellow students!). Some software manuals are provided in the dept. The University’s Department of Computing Services provides open access computer rooms across the campus, and also offer a wide variety of short courses.
**Monitoring Student Engagement**
In line with University guidelines the Department has procedures to monitor the attendance and progress of PhD students. The policy is included at the back of these notes.

*If students are going to be absent from the Department for longer than 4 weeks, for any reason, such as studying at another university, they must inform the Postgraduate Support Officer of this before leaving.*

**Student-Staff Liaison Committee**
The Student-Staff Liaison Committee (SSLC) for research students meets once a term, and discusses any items of concern to postgraduate students. Students on the PhD course should elect a student representative from each year of the programme. Items can be referred as appropriate to the departmental Chairman or to the Departmental Council.

**Lectures**
You are welcome to attend any of the courses on the Statistics MSc programme or MASDOC programme which may be helpful for your work. There are also many other courses with the University which may be relevant to your study. See your supervisor for advice about this.

**Writing up your Work**
Learning to present your work in a clear and concise way is a very important part of research training. Get into the habit of writing notes or reports on your work as it progresses - this will help focus discussions with your supervisor and will be invaluable when you come to write up your thesis. It may also be a good idea to write a brief summary of any discussions with your supervisor and to provide him/her with a copy of this. This should be done online via Tabula.

**Photocopying**
When you enrol you will be given access to photocopying and printing facilities in the Department.

**Posters**
Posters should be sent by email to the Programmes Assistant specifying the size, usually A0 or A1, and whether it should be printed in colour or black & white. Posters should be sent to the Programmes Assistant at least 4 days before you leave for your conference.

If you are funded by a Research Council you will need to include your grant number on your poster. Contact the Postgraduate Support Officer to find out your number.
**Forms**
Most of the forms you will need can be found on the Department’s webpages:  
[http://www2.warwick.ac.uk/fac/sci/statistics/postgrad/current_students/forms](http://www2.warwick.ac.uk/fac/sci/statistics/postgrad/current_students/forms)

**Noticeboards and Pigeonholes**
The postgraduate notice boards and pigeonholes are outside rooms C1.02, C1.03 or D0.06. Notices for PhD students will be posted on the postgraduate section. Please check your pigeonhole regularly. You can leave notes as needed in the staff pigeonholes (located in the Common Room).

**Tutorial Teaching**
The teaching on several of the Department’s undergraduate courses is supported by tutorial groups, many of which are led by research students. It is expected that all students will undertake teaching and marking of tutorial assignments during their studies. However, the Department recognizes that this is time consuming and will not ask you to teach when you enter your fourth year or when your progression is such that your supervisor advises that you should concentrate exclusively on PhD research. If your progression is normal then teaching and marking during your first 3 years of study is expected. When deciding what to teach please always consult your supervisor before submitting your choices. A tip: sometimes you can make efficient choices, for instance by helping with the same module twice you can save some preparation time.

The benefits of undertaking this teaching are many and varied, including:

- experience in communicating statistics and probability to others. With the very bright undergraduates in our department this is a unique opportunity;
- evidence of this competency will be invaluable when applying for vacancies with a teaching component, or which contain some element of communication with non-statisticians/probabilists, as well as many other occupations outside academia;
- teaching others requires a depth of understanding of the topic, more than can simply be obtained from reading or examinations, and will enhance your background in statistical and probabilistic skills;
- developing these new skills can be surprisingly helpful in obtaining a greater understanding of your own research topic;
- it is an opportunity for you to contribute positively to the wider activities of the Department and so develop a sense of belonging;
- such engagement within a team will also be highly regarded by many potential employers.
Before you can teach, you have to attend a training course. This is arranged jointly by the department and Learning and Development Centre.

Payment for teaching and marking is paid by the hour and rates of pay are sent to students at the start of the academic year.

**Study Skills and Training**

*Research Student Skills Programme*
The University offers training, resources and support to enable you to succeed in your research degree, develop your skills and prepare for your next career steps. Check [http://www2.warwick.ac.uk/services/scs/pgr](http://www2.warwick.ac.uk/services/scs/pgr) for information on various useful workshops and programmes covering various themes such as, for example, dissertation writing, time management, how to be an effective researcher, working effectively with your supervisor etc…

*Training course on teaching*
All students are normally expected to attend the department’s training course on teaching.

*PG Certificate in Transferable Skills in Science*
The PGCTSS is an accredited qualification designed to enable you to improve your research effectiveness with the aim of becoming a successful doctoral researcher undertaking world leading research. There are two separate courses within the PGCTSS, for PhD students and post doctoral researchers. The course consists of 6 modules over 3 years. A Postgraduate Award of 3 modules is also available. Fees are met by the University for all Warwick students. The PGCTSS is specifically designed to complement a scientific PhD and has been completed successfully by some Statistics PhD students. Check [https://www2.warwick.ac.uk/fac/sci/pioneers/pgcts/](https://www2.warwick.ac.uk/fac/sci/pioneers/pgcts/)

*Courses in English*
If English is not your first language, it is important to practice at every opportunity. If you wish to improve your skills, you should visit the Centre for Applied Linguistics who offer both pre-sessional and in-sessional courses in English. Check [http://www2.warwick.ac.uk/fac/soc/al/learning_english/](http://www2.warwick.ac.uk/fac/soc/al/learning_english/)

The postgraduate section of the Department web site provides links to internal and external courses.
**Student careers**

Careers information for postgraduate researchers including one-to-one careers guidance is offered by the Student Skills Service and Careers at [http://www2.warwick.ac.uk/services/scs/pgr/career/](http://www2.warwick.ac.uk/services/scs/pgr/career/)

The Research Student Skills Programme covers academic writing, personal & professional development and research skills relevant for postgraduate researchers.

**Your webpage and Warwick ePortfolio**

As a researcher it is important that you have a presence within the online academic community. Warwick ePortfolio provides an opportunity to showcase your commitment to professional development, and the skills you are acquiring as a researcher and will also be seen and appreciated by potential employers.

The service is available at:

[http://www2.warwick.ac.uk/services/scs/pgr/eportfolio](http://www2.warwick.ac.uk/services/scs/pgr/eportfolio)

3. **WELFARE** [http://www2.warwick.ac.uk/insite/topic/healthsafety/welfare](http://www2.warwick.ac.uk/insite/topic/healthsafety/welfare)

**Absence & Illness**

If you are away or otherwise unable to work for an extended period (and certainly for all absences of more than one month), then you should inform your supervisor and the department via the Postgraduate Support Officer. See the extract from the University’s guidance at the end of this guide. The usual procedure in such cases is to apply for temporary withdrawal.

If your work is affected by illness get a sick note from your doctor; ensure your supervisor is informed and that a copy of the sick note is given to the Postgraduate Support Officer.

**Sexual and Racial Harassment**

Sexual and racial harassment is totally unacceptable. We will support those subjected to it and, when appropriate, will take disciplinary action against offenders. Within the Department help and support will be provided by all members of staff. Outside the Department you may seek help from the University Senior Tutor, the Student Counsellors, the Student Welfare Officer and the Student Union Welfare Staff.

The University and the Students’ Union have prepared Guidelines on Sexual, Racial and Personal Harassment (which can be seen on inSITE in the Campus Life [Health and Welfare] section). The guidelines include advice on identifying and addressing harassment, formal procedures which can be
followed and details of sources of support. The guidelines are also available from the office of the Director of Student and Ancillary Services.

If you feel able to make it clear to the person causing you offence that their behaviour is unacceptable that may be enough to stop it. But if you do not feel able to tackle the person, you should feel free to seek assistance from those listed above or from fellow students to put an end to it.

4. PEOPLE AND DATES

Academic year 2015-2016
Term 1 (weeks 1-10): Monday 5 October 2015 to Saturday 12 December 2015
  • Lectures commence Tuesday 6 October 2015
Term 2 (weeks 11-20): Monday 11 January 2016 to Saturday 19 March 2016
Term 3 (weeks 21-30): Wednesday 25 April 2016 to Saturday 2 July 2016

Director of Postgraduate Studies: Dr Bärbel Finkenstadt

PhD Admissions: Professor Chenlei Leng and Dr Vicky Henderson

Head of Department: Professor Mark Steel

Centre for Research & Statistical Methodology (CRiSM):
Professor Gareth Roberts, Director

Academy for PhD Training in Statistics (APTS):
Dr Ben Graham/Dr Adam Johansen/Professor Wilfrid Kendall

Timetable Office and Programmes Manager: Mr David Kinmond

Postgraduate Support Officer for PhD & OxWaSP: Ms Eleanor Ingram
Telephone: 024 7615 0886 (external) or 50886 (internal)
Email: stats.pg.support@warwick.ac.uk

Programmes Assistant: Gustavo Diniz
Email: G.Diniz@warwick.ac.uk

5. SEMINARS AND READING GROUPS

The Department runs several seminar series, in statistics, probability and mathematical finance. All graduate students are urged to attend, as a way of both broadening experience of research topics of current interest, and meeting leading research workers from other universities and research institutions. The
**CRiSM Seminar** meets about five times per teaching term, when outside speakers present their latest research on some theoretical or applied statistical topic. CRiSM also hosts many larger workshops that you should feel free to attend if you are interested in the topic. The **Stochastic Finance @ Warwick Seminar**, the **Algorithms and Computationally Intensive Inference Seminar** and the **OxWaSP Seminar** meet regularly during term. The Department is the regular venue for the **Midlands Probability Theory Seminar**, which meets twice a term. At each meeting two speakers discuss topics of current interest in probability or stochastic modelling. It also regularly hosts the **RSS West Midlands Local group**.

A more informal **Young Researcher's Forum** is a meeting for postgraduate students and postdocs. It provides an informal forum where they discuss research, exchange ideas and learn from and with each other. You should use this to gain experience and confidence in oral presentation. The meeting usually starts with a seminar on topics from or related to statistics, followed by a discussion over coffee and biscuits. Everyone is welcome to attend.

Information about all the workshops, seminars and reading groups can be found on the departmental webpages, the common room screen and will be advertised to your email lists.

### 6. CONFERENCES

The Department has responsibility for training students in generic skills. Attendance at conferences and workshops is part of this training. You should discuss with your supervisor which conferences might be most appropriate. **Students must obtain the Department's permission to attend any conferences, irrespective of whether they require funding, and should always submit a conference/workshop request form prior to attending.**

Students are expected to offer a talk or poster at all conferences and should discuss their talk or poster with their supervisor prior to any presentation.

The department will normally be able to offer some funds to facilitate conference attendance. Students are expected to investigate and apply for other sources of support. There is a form for applying to the department for financial support. The form should be returned to the Postgraduate Support Officer well in advance of any expenditure being undertaken. Anyone who does not follow the correct procedure and obtain signed approval prior to travel may not have their claim honoured.

Students might normally expect to receive Departmental support to attend one national and one international conference during their period of registration. Economizing on travel costs and accommodation will help to make your travel budget go even further. Each student has a finite amount of support available,
so they should exercise judgement in applying for funding support, especially in their early years. Conference funding is in addition to money spent on training in the first year (e.g. on APTS).

All travel claims should be submitted within 3 months of the expenditure being incurred – should this fail to happen your claim may not be honoured. Forms for claiming expenses can be found in the Student Support Office. Currently the University will only reimburse flight costs above £500 if the flight has been booked via the Department through the University Travel Agent.

Gregynog Conference
The Department is a participating member of the annual Gregynog Statistics Conference, a joint venture with the University of Birmingham and the colleges of the University of Wales. All staff and graduate students are invited for a weekend away during each Easter vacation at Gregynog, a fine country house in mid-Wales. The costs of attending the Gregynog meeting are borne by the department. This is an excellent opportunity to hear leading statisticians from the UK and overseas present and discuss their work in a relaxed atmosphere. The dates for 2016 are 15-17 April.

Research Students Conference
This is an annual event organised by and for Statistics PhD students in the UK. The venue rotates each year. It was held at Warwick in 2010. Participants are invited to give a short talk on their research. Information about the location of the conference in 2016 will be sent to students when it becomes available. The practical details of arranging payment for travel, subsistence and fees must be discussed with the Postgraduate Support Officer well in advance.

P@W Young Researchers Workshop
This event, organised by the Department of Statistics, has the principal aim of bringing together young researchers working in probability (including postgraduate students and postdocs). Held at Warwick, it features two lectured courses by international experts on topics of current research interest in probability. Participants are also invited to give an informal introduction to an area of interest, or to present a more detailed account of their research. Over the last 8 years, the workshop has been run 5 times, and the Department plans to keep it a regular feature on the calendar of PhD students in years to come.
7. COURSE REQUIREMENTS

BACKGROUND

The Department monitors the progress of students via a system of regular vivas, reports and presentations, including reviews after 9 months, 15 months, 24 months, 30 months and, if appropriate, 36 months and 42 months.

The purposes of the reviews are to demonstrate that:

- the student has knowledge and skills appropriate to the stage of their research programme;
- they have completed work of a quality to justify continuation;
- the proposed research is likely to make a significant contribution to knowledge;
- a realistic plan is in place for completion of research within the expected time-frame.

You will be assigned a review panel consisting of two members of staff, not including your supervisor. At each stage the panel gives feedback, makes written recommendations to the Director of Postgraduate Studies, and identifies weaknesses. If weaknesses are identified you and your supervisor may be asked to draw up an action plan to remedy them.

The following rules and requirements are indicative and for full-time students, and the Director of Postgraduate Studies may choose to modify them as necessary. The rules for part-time students are similar, although the timings will be different.

MONITORING STUDENT ATTENDANCE

The University has procedures for monitoring student attendance. After each meeting with your supervisor you should complete the supervision webform which can be accessed via the PhD pages of the Department’s website.

Provided there is at least one record of a meeting in a calendar month the student will be deemed to have satisfied the monitoring point. Ideally each student should satisfy 12 monitoring points each year. The Department has procedures for identifying students who miss monitoring points, and the ultimate sanction is that the University may require students who are failing to engage with their studies to withdraw. Please see section ‘Points of Engagement’ at the end of this booklet.
**TRAINING**

The initial part of the PhD may be spent studying the literature on a topic, and developing the necessary research skills. You are encouraged to fill any gaps in your knowledge by attending appropriate courses. One of the aims of training is to ensure that students have an understanding of a broad range of statistical theories and methodologies which goes well beyond their individual research theme.

At the start of your study you and your supervisor are asked to devise a training plan to cover your first year. This plan should include approximately 100 hours of lectures or similar courses. You are asked to submit your training plan to the Postgraduate Director via the Postgraduate Support Officer within two weeks of starting the PhD.

Formal short courses are organised within the Academy for PhD training in Statistics (APTS, see http://www.warwick.ac.uk/go/apts). Alternatively you may choose to take courses from within the MSc programme, or from MASDOC. For students in probability or mathematical finance other courses may be more appropriate. You and your supervisor should carefully consider which are the most appropriate courses for study. You should expect to be examined on the courses that you choose, and you may be required to pass these courses. The results will form one of the inputs to the 15 month review.

Funding to cover the costs of your first year training is available from the Department. Normally this will be at least sufficient to cover four APTS weeks, or the equivalent.

**PROGRESSION**

**9 month review**

The first review takes place after 9 months and consists of a report and a 25-minute presentation, followed by a discussion. The report should be about 15-25 pages in length. The presentation takes place about 3 weeks after the submission of the report. The presentation is open to all staff and other postgraduate students. The review panel will read the report in advance and lead the discussion.

The primary purpose of the review is to give you feedback on your progress, and to prepare you for the 15 month review. At this stage it is not necessary for you to have completed original research but you should be able to demonstrate
an awareness and understanding of the relevant literature, and of the direction of your research.

**15 month review**
The second review takes place after 15 months and consists of a report, and about 3 weeks later, a meeting between the panel and the student. The report should be about 20-30 pages in length. The meeting is open to other members of staff, but not other postgraduate students. The meeting may be expected to take between one and two hours.

The primary purpose of this meeting is to enable the panel to make a recommendation to the Director of Postgraduate Studies as to whether you should be allowed to continue on a PhD programme. Students starting in 2015 or after will initially be registered on the MPhil degree and the decision outcome of the 15 months review will be to either upgrade to PhD or remain on the MPhil degree registration. In making their recommendation the panel will take into account your performance at the 9 month review. Your performance in APTS and other first-year training as well as your supervisor’s opinion will also be considered as part of your 15 month upgrading review.

The 15 month review is key to considering if you are capable of successfully completing a PhD thesis, and whether it is in your best interests to be allowed to proceed.

**18 month review (OxWaSP students only)**
For students on the OxWaSP programme registered at Warwick the upgrading review takes place at 18 months. After 18 months the review stages of OxWaSP students are identical to the ones of the Warwick PhD described here.

**24 month review**
The third review takes place after 24 months. On this occasion you are asked to produce a research report, to give a thesis outline, and, in consultation with your supervisor, to give an estimated completion date. The report may be in the form of a research article (possibly jointly with the supervisor) or a thesis chapter, and should form a prototype for a paper in a good journal. The panel will provide written feedback to you, and a written recommendation to the Director of Postgraduate Studies.

**30 month review**
After 30 months, you should provide a signed overview of the thesis plan to the Director of Postgraduate Studies, together with a provisional submission date. Your supervisor must indicate their support by signing the document.
The Department expects that students will complete their study in a period of three to three and a half years. For those students who require more than three years the procedure is as follows.

36 month review (if necessary)
This stage must be completed by 36 months, and if requests for an extension or funding are required, then it is in your interests for this stage to be completed promptly. There are two possible processes depending on whether you plan to submit between 36 and 39 months, or later than 39 months.

Submission planned between 36 and 39 months
You should submit a revised thesis plan to the Director of Postgraduate Studies, with an intended submission date. Your supervisor must indicate their agreement.

Submission planned later than 39 months
In addition, a review takes place after 36 months. You should produce a thesis plan and a research report, and, in consultation with your supervisor, give an estimated submission date. Your supervisor should indicate their agreement to the proposed timetable. The research report may be in the form of a research article or a thesis chapter, and should be substantially different from the material given after 24 months. About three weeks after the submission of the report the panel meets with you to discuss the research report and your progress. This meeting takes the form of a viva.

42 month review (if necessary)
If after 42 months you have not submitted then you should provide the Director of Postgraduate Studies with an overview of your thesis and a predicted submission date. Your supervisor must indicate their agreement, as before.

It is not possible to extend registration beyond 48 months. In exceptional circumstances (see University guidance) students are required to apply for temporary withdrawal and may do so within 48 months of registration.

Some further Remarks on the review
The results of all reviews will be communicated to you by your supervisor, or a deputy appointed by the supervisor, as soon as possible after the review, and normally within one week of presentations and one month of the submission of written reports. It is your responsibility to submit all reports in time. Please find below a table of times valid for the usual case where you started a full time MPhil/PhD registration at the beginning of October.
Time frame for reports and presentations over the course of 4 year PhD

<table>
<thead>
<tr>
<th>Progress Review</th>
<th>Report Submitted</th>
<th>Presentation Date</th>
<th>Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 month</td>
<td>2 weeks prior to presentation date</td>
<td>End of June – organised by PGSO</td>
<td>Within 3 weeks</td>
</tr>
<tr>
<td>15 month</td>
<td>End of November</td>
<td>Mid- December – organised by student</td>
<td>Within 1 month</td>
</tr>
<tr>
<td>24 month</td>
<td>End of September</td>
<td>n/a</td>
<td>Within 1 month</td>
</tr>
<tr>
<td>30 month</td>
<td>End of March</td>
<td>n/a</td>
<td>Within 2 weeks</td>
</tr>
<tr>
<td>36 month</td>
<td>Beginning of October</td>
<td>Meeting with panellists arranged by student</td>
<td>Within 2 weeks</td>
</tr>
<tr>
<td>42 month</td>
<td>End of March</td>
<td>n/a</td>
<td>Within 2 weeks</td>
</tr>
</tbody>
</table>

Thesis examination
A research thesis is normally examined by two examiners, a member of the Department and an external examiner who is an expert in the particular topic. The external examiner is usually a senior member of staff from another university.

Your supervisor will submit an Examiner Nomination Form, via the Student Support Office, to the Graduate School who will then send you further instructions on submitting your thesis. The Internal Examiner will then communicate with the External and you supervisor to arrange a suitable date for the viva. All correspondence with your examiners prior to the viva may only be done via your supervisor.

After reading the thesis the examiners will hold an oral examination where you will be asked questions about your work and about your wider knowledge of the subject. Award of the PhD follows a satisfactory report from the examiners.

Minor revisions to a PhD thesis may be required. Alternatively, the degree of MPhil may be awarded instead of the PhD, or you may be required to resubmit the thesis with or without a further oral examination. Exceptionally, the examiners can decide not to award a degree.

Progress on the PhD programme
If at any stage in the review process the panel feels that you are failing to make adequate progress then they may recommend that you withdraw or write up for an MSc by Research or an MPhil. In such cases the Director of Postgraduate Studies, possibly in conjunction with Research Committee, will decide whether to allow you to progress. If the decision is not to allow you to progress then you are entitled to ask for a second review within 3 months. This is usually invoked automatically by the Department by devising a 3 month action plan. If the panel and the Director of Postgraduate Studies remain of the opinion that you are not making adequate progress then you will be required to withdraw or
write up for an MSc by Research or MPhil. At this stage you may appeal to the University, subject to the rules and regulations for such appeals.

8. ADVICE ON THE PREPARATION OF PhD THESES

The Department believes that full-time students should expect to submit their thesis after three to three and a half years. Except in exceptional circumstances, the University places an upper limit of four years for full-time students and seven years for part-time students.

The following notes are intended to help students to submit in a timely fashion.

**Timetable**
The time required to write a PhD thesis is longer than is often supposed. A respectable timetable, allowing for the possibility arising of the need for further checking of the literature and for further analysis or calculations might be:

<table>
<thead>
<tr>
<th>Task</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory chapter(s) and co-ordination of review material</td>
<td>four weeks</td>
</tr>
<tr>
<td>Initial final versions of the chapters of new material</td>
<td>ten weeks</td>
</tr>
<tr>
<td>Consultations and revisions of these chapters</td>
<td>three weeks</td>
</tr>
<tr>
<td>Preparations of tables and diagrams</td>
<td>two weeks</td>
</tr>
<tr>
<td>Proof reading, copying</td>
<td>two weeks</td>
</tr>
<tr>
<td>Binding</td>
<td>one week</td>
</tr>
<tr>
<td>Allowance for hiccups, false starts etc.</td>
<td>four weeks</td>
</tr>
</tbody>
</table>

**Timetable**

This means that writing should normally begin between 2 years and 6 months and 3 years after beginning the course. Note that this timetable assumes that draft versions of the material in the chapters have been prepared, and all major analyses and results have been produced.

**Thesis length**
The thesis should be no longer than necessary to provide a sufficient introduction to the field of study for the non-specialist, to present all the new results and to discuss their implications in the context of current knowledge of the field by providing adequate references to the literature. Omit unessential information – it has been said that the art of writing consists largely of knowing what to leave in the inkwell. Examiners are just as critical of theses that are too long as ones that are too short. Rewriting is a very painful business.

The Statistics Departmental guidelines for the presentation of theses for the degrees of PhD, MPhil and MSc by Research are as follows:
All theses must conform in style content and presentation to the “Higher Degree Regulations” published in the University Calendar, and the “Requirements for the presentation of research theses” provided to research students by Registry. Candidates’ attention is drawn to Section E “Presentation and typing of theses”.

Formally, the absolute limits (without appendices, tables and bibliography) are:
70,000 words for a PhD thesis,
60,000 words for an MPhil thesis
40,000 words for an MSc by Research thesis

The guidelines for the appropriate lengths for Statistics theses are as follows:
- PhD – 90 to 150 pages of text plus essential diagrams, tables etc.
- MPhil – 70 to 100 pages of text plus essential diagrams, tables etc.
- MSc by Research – 50 to 90 pages of text plus essential diagrams, tables etc.

Students are advised not to include unessential data or computer analyses, even as appendices, in the bound thesis.

**Copying (Plagiarism)**
Students are reminded that plagiarism – reproducing another person’s work as your own – is considered a very serious offence. Your attention is drawn to the following paragraph in the University booklet “Guidance to Candidates, Supervisors and Examiners concerning Higher Degrees by Research”.
“The thesis must be entirely the candidate’s own work, and all sources used should be fully referenced and acknowledged in the thesis. There is no distinction to be made between plagiarism of reviews or summaries of existing knowledge on a subject and original research work. The University’s regulations on plagiarism appear in the University Calendar (Regulation 12).”

The University currently uses “Turnitin” software to check the extent to which the contents of a thesis coincide with articles available on the internet. The Department can assess theses with the Turnitin software prior to submission. Contact the Postgraduate Support Officer for further details.

**Regulations**
The University provides three relevant documents which should be read earlier rather than later:

- Requirements for the presentation of research theses (sent out by Registry two and a half years after starting research)
- Higher Degree Regulations (to be found in the University Calendar)
• Guidance to students, supervisors and examiners concerning higher degrees by research (sent out by Registry on first registration)

Spare copies of these documents can be obtained from the Registry. You should note that, amongst other requirements, the University insists that the thesis has an abstract and a declaration regarding any joint work. Students should complete an intention to submit form about one month prior to submission of the thesis.

**Nomination of Examiners**
The supervisor (not the student) should submit a Nomination of Examiner form one month before the viva. In particular, it is the supervisor who first makes contact with the external. The department arranges the viva. Our convention is that the internal examiner (or the adviser) makes contact with the external and arranges a date and books a room. All information about the time and date of viva should be passed to the Postgraduate Support Office and the supervisor, who should inform the student.

All communication with examiners before viva is via the supervisor (the student may not contact any examiner!); after the viva it may be via the examination adviser.

**After Submission**

*Workroom Desks*
After you have submitted your thesis it may be possible, depending on available space, for you to continue to use a workroom desk. If you do want a desk you should inform the Postgraduate Support Officer as soon as possible and a suitable desk will be allocated. Please note that at the start of the academic year each incoming first year student is guaranteed access to their own desk which means there will be fewer empty desks available to those entering their fourth year.

*Buster*
Students will be allowed to continue using Buster for up to 3 months after submission. If more than 3 months is required then students should apply to the IT Chair for further access.

*Webpages*
Students’ webpages will remain on the Department’s website for 3 months after submission.
9. PHD COMPLETION AWARD AND PRIZE

The John Copas Prize in Statistics (sponsored by the Faculty of Science)
The John Copas Prize in Statistics is a prize for the best thesis each year. The value of the award is £500. From 2015 the Department joins the Faculty of Science procedure. The research committee will shortlist from candidates who have submitted their thesis within the previous calendar year and make a nomination to the Faculty of Science who will award the prize to the candidate with the most outstanding thesis. The committee will in particular consider theses that have given rise to publications in highly regarded peer reviewed journals. If there are no theses of sufficient calibre, no prize may be awarded. If there are several outstanding theses the prize may be shared.

The continuation of the award scheme is conditional on the sponsorship of the Faculty of Science or the financial situation of the Department continuing to be sufficiently healthy.