

FACULTY OF SCIENCE

POSTGRADUATE STUDENT INFORMATION BOOKLET

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Faculty Homepage:

UCT Homepage:

Admissions Office

<http://www.students.uct.ac.za/students/prospective/postgraduate-studies>

Tel. No. 021 650 2128

International Academics Programmes Office

<http://www.iapo.uct.ac.za/>

Tel. No. 021 650 2822

Student Fees Office

<http://www.students.uct.ac.za/students/fees-funding/fees/handbook>

Tel. No. 021 650 1704

Student Housing Admission & Advocacy

<http://www.students.uct.ac.za/students/student-life/housing>

Tel. No. 021 650 2977

Postgraduate Centre & Funding Office

<http://www.students.uct.ac.za/students/fees-funding/postgraduate-degree-funding>

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Doctoral Degrees Office

<http://www.students.uct.ac.za/students/applications/doctoral-candidates>

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INTRODUCTION

This booklet is an attempt to explain some of the administrative and academic issues related to the postgraduate experience. Your time and energy should be spent enjoying the excitement of your research, rather than wrestling with bureaucracy, and you are encouraged to take the time to read through these pages so that you are more aware of the processes that will affect your life as a postgraduate student.

Postgraduate education at UCT commonly results in one of two outputs: a Doctor of Philosophy degree (PhD) or a Master's degree (MSc/MPhil). Master's degrees in the Science Faculty may be obtained in one of two ways; (i) by a research dissertation; (ii) by coursework and a minor research dissertation/research project.

Note that this handbook is intended to serve as a guide to postgraduate students. Whilst it draws on other published University documents and Handbooks, it does not replace them. The rules for the various higher degrees are set out in the [Handbook of General Rules & Policies](#) (Handbook 3 in the UCT series) and the [Faculty of Science Student Handbook](#) (Handbook 11 in the UCT series).

WHAT IS THE DIFFERENCE BETWEEN A MASTER'S AND A DOCTORAL DEGREE?

The most basic difference between a Master's degree and a PhD (Doctor of Philosophy) is that the PhD is the higher degree: it requires more effort, time and original research. However, in practice the difference is more subtle than this. By convention a Master's degree is normally awarded following the successful examination of a dissertation, which means a discourse or discussion. A PhD is awarded based on a thesis (an assertion or tenet that has to be proved against critical argument). In practice, however, the two terms are commonly used interchangeably.

A Master's degree is frequently a student's first encounter with real research. Its primary function is training in research. It is a clearly circumscribed piece of work that the supervisor feels confident can be undertaken within, or close to, the minimum time. The skills imparted, and which the candidate hones through the process, include posing a research question, undertaking a relevant literature review, engaging rigorously with research methods, drawing valid conclusions and communicating findings in a clear, logical and scholarly way. Importantly, the work does not have to contain original findings - it must simply demonstrate a mastery of the methods of research.

The degree of Doctor of Philosophy, on the other hand, demands that the candidate is able to conduct independent research on their own initiative. Through the thesis the candidate must be able to demonstrate in their thesis that they are at the academic forefront in the topic selected, that the work is original and that it advances knowledge.

MASTER'S DEGREES IN SCIENCE

A candidate entering a Master's degree must generally have a BSc(Honours) degree or four-year undergraduate equivalent (i.e. a four-year degree post NSC equivalent, which includes a research project). Departments in the Science Faculty offer three types of Master's degrees; the differences are summarised below:

- Master of Science (by dissertation): This is a research-based degree in which a dissertation on a selected research topic is completed under the guidance of a supervisor. The majority of students in the Science Faculty complete their Master's degree in this manner.
- Master of Science (by coursework and minor dissertation): In this degree a candidate completes 50% of the requirement through coursework, and 50% by way of a minor dissertation on a piece of supervised research. The dissertation is smaller in scope than one completed where the dissertation counts for the full degree.
- Master of Philosophy (MPhil): This is either a research degree, or a degree obtained by coursework and minor dissertation, for candidates engaged in cross-faculty research dissertations or where a candidate comes from a non-science academic background.

A detailed listing of the fields in which higher degrees are offered in the Faculty is set out in the Faculty Handbook.

DOCTORAL DEGREES IN SCIENCE

There are two types of doctoral degrees offered in Science – a PhD (Doctor of Philosophy) and DSc (Doctor of Science). The former is obtained via research submitted as a thesis and is in practice the most common mechanism for obtaining a Doctoral degree. The DSc degree has very rarely been awarded at UCT, and is normally based on a career of high quality publications focused on a particular topic; in this regard it is more relevant to senior researchers late in their careers. The entrance requirement for the PhD is a Master's degree, but it is sometimes possible to change registration to a PhD after completing the first year of Master's research (see page 11 for details).

ACADEMIC LOCATION OF THE DEGREES

The PhD is a University degree (the award of the degree is the responsibility of the Doctoral Degrees Board (DDB)), but students are usually academically located in the department of the principal supervisor.

Master's degrees are awarded by the Science Faculty, and are discipline-specific and students are located within the appropriate department. If a coursework Master's student is registered in the Faculty of Science but pursues the dissertation component with a supervisor in another Faculty then they must register their dissertation in the Faculty of the main supervisor. The dissertation will be examined through the supervisor's Faculty and the outcome, including whether the dissertation is awarded a distinction, will be decided by the relevant Master's degree committee in that Faculty. The student will nevertheless still graduate within the Science Faculty and the rules for the awarding of the degree with distinction will be subject to those detailed within this booklet.

STUDENT FUNDING

The Postgraduate Centre & Funding Office (located on the Upper Level, Otto Beit Building, University Avenue North), is an important source of information and advice about potential funding sources and the procedures necessary to access these. Contact the Postgraduate Funding Office with any queries regarding:

- Funding your postgraduate studies.
- Applying for conference and overseas travel grants.
- Information on the NRF and the NRF online application process.
- Delays in payment of your funding.
- Information on the Postgraduate Centre and Seminar Room bookings and for general help and information.

Students are encouraged to apply for financial support to a full range of potential sources early in their final year of undergraduate study, or in the year before they wish to initiate their postgraduate studies. For further information please visit the website: <http://www.students.uct.ac.za/students/fees-funding/postgraduate-degree-funding>

APPLYING FOR ADMISSION

Application procedure

The Faculty will consider an application to register for a Master's or PhD degree from anyone who meets the academic entrance requirements. For a Master's degree this is an Honours degree or equivalent. An Honours degree is a post-Bachelor degree qualification. A four-year Bachelor's degree that is considered equivalent to a South African Honours degree may be accepted provided they have completed a research project. Entrance requirement for registration as a PhD student is a Master's degree or equivalent.

International students may require certification of their degree equivalence by the South African Qualifications Authority (SAQA). Contact the Postgraduate Administrator in the Faculty Office for the address. The Faculty reserves the right to make a final judgement on the South African equivalence of a foreign degree and uses the NARIC system to determine degree equivalence globally.

Applications for coursework Master's degrees are usually limited and applicants are accepted on a competitive basis. Students interested in applying for admission should first consult the department concerned to determine closing dates for applications, and what documentation is required.

Prospective candidates wishing to register for a PhD or a Master's by dissertation should have a discussion with the prospective supervisor prior to applying formally to the University. A formal application will have to be submitted online at <https://applyonline.uct.ac.za>

You will generally have to provide the following information:

- A *curriculum vitae* which includes your personal details, your academic history and any work experience.
- An official transcript of your university results (**non-UCT students only**).
- The name(s) of UCT staff members who have agreed to serve as your supervisor/s.
- For students that have not already engaged but have been provisionally accepted by a prospective supervisor (subject to Departmental and Faculty approval) then their application should include a brief outline of the area of interest for research towards your Master's or PhD degree. This letter together with the rest of your application will be circulated within the potential host department and supervisors may choose to contact you or not.

- Proof that you meet the minimum English language requirement for admission

Advice on application procedures can be obtained from the Postgraduate Administrator in the Science Faculty Office.

Do not arrive at UCT until you have been formally notified by the Faculty of Science that you have been accepted for postgraduate study.

English Language Proficiency

International students from non-English speaking backgrounds are required to provide proof of English proficiency and may be required to take a test.

Supervision of the dissertation/thesis

The principal supervisor must be a full-time permanent member of the academic staff of the Faculty. Co-supervision by persons within or outside the University is possible, but a person employed outside of the University may not act as a principal supervisor. An adjunct staff member may act as principal supervisor on motivation by the Head of Department (HoD) and Faculty, subject to the approval of the Deputy Vice Chancellor for Research. The respective roles of the supervisors (e.g., project inception, funding, skills proffered) should be detailed within the Memorandum of Understanding (MoU).

The choice of supervisor must be approved by the HoD. It is important that the HoD is satisfied that the proposed supervisor has adequate knowledge, time and resources to supervise the proposed research. In the case of Doctoral candidates, the DDB is also responsible for the adequacy of the supervisor. Academic staff who do not have a PhD, will not normally supervise PhD degrees. In rare cases, people who are experts in their fields and have prior supervisory experience, but who do not have a PhD, are approved by the DDB to be the primary supervisor of a PhD thesis.

In the case of a student currently registered at UCT, the process of finding a supervisor which is outlined above will normally take place during the year prior to embarking on further postgraduate study.

Selecting a research topic

The selection of a topic for research for a Master's or PhD may occur in two ways. Either the topic of research is identified by the prospective student, or a supervisor might provide several possible projects from which the student can choose; either way, the supervisor and student need to agree on the selected research topic. The suitability of a research topic depends not only on its intrinsic academic merit, but also on funding realities. It is, however, the responsibility of the candidate to make the final selection, and it is wise to choose a topic of strong interest rather than one offering better funding.

REGISTRATION

First registration Research Master's and PhD students

There is no specific date for first registration of newly entering postgraduate students who are registering for a PhD or Master's degree (by dissertation only) - commencement is by mutual arrangement with the supervisor. However, Master's and PhD students who need to have the year of first registration counted as an academic year for their minimum period of registration (1 year for a Master's, 2 years for a PhD) must have been registered for the degree concerned by 30 April. Registration follows formal acceptance by the Faculty for admission. Registration instructions are available on the web at <http://www.science.uct.ac.za/sci/postgrad/current/registration>. First-time registration at any time in the second semester incurs 50% fees. For detailed information on fees see <http://www.students.uct.ac.za/students/fees-funding/fees/handbook>

Master's registration requires a short proposal (1-3 pages) subject to approval by the HoD and Deputy Dean outlining *inter alia*:

- the topic to be investigated;
- familiarity with the central literature within the broad field of study; and
- clarity on the research methods.

PhD registration requires a short written research proposal (at least 3 pages), outlining the scope and intentions of the research. New PhD students will generally be required to develop a full research proposal during the first six months of their registration. Failure to produce a satisfactory proposal within the allotted time frame may lead to termination of registration at the end of the first year of registration. Acceptance of the full PhD proposal may involve the candidate presenting a seminar, based on a written research proposal, to departmental staff, other postgraduate students and others with specialist knowledge in the field of study, which demonstrates, *inter alia*, that:

- The candidate is familiar with the main literature in the field.
- There is enough scope in the topic for a PhD and there is a clear definition of the hypothesis proposed.
- The candidate has the ability to undertake the work.
- The potential contribution to knowledge has been identified and there is a clear definition of the key questions to be addressed in the context of the proposed hypothesis.
- The method of research is sound and achievable and there is a clear knowledge of the experimental procedures to be used, and both the methods and analyses to be pursued in producing the results.

Final responsibility for registration and acceptance of a PhD student lies with the DDB.

Master's by coursework and minor dissertation

Students registering for Master's by coursework and minor dissertation need to do so by the first day of lectures. Normally a specific day is set aside (consult with the department concerned in this regard) to complete registration procedures. Registration must be completed by the deadline or students will be subject to a fee penalty. When registering for the minor dissertation component (as a separate course code), an MoU will need to be completed.

The Memorandum of Understanding (MoU ACA47) and Progress and Planned Activities (PPA ACA48) form

The Memorandum of Understanding (MoU) is a formal agreement between a postgraduate student and their supervisor regarding their expectations of each other, and the requirements for the research for their degree. The intention is for students and supervisors to discuss and agree on several important issues at the point of registration. While this document may seem daunting, it is important to complete each section with care. In addition to helping plan the Master's or Doctoral Research programme, the MoU will be referred to in the case of any conflict or dispute arising during the course of study. Common disputes include issues over who funds research, authorship, intellectual property rights, insufficient contact time and feedback from supervisors. In addition to the actual outline of the research proposal, students and supervisors should agree on **the milestones** that need to be achieved so that students can graduate in the expected time for a Masters (2 years) or Doctoral (3 years) degree. This is important, as postgraduate funding is limited to the expected duration of the degree. Students and supervisors need to have a discussion on what **funding** the postgraduate student has to support themselves, prior to embarking on the degree. There should also be a clear understanding of what financial resources are available to cover the **cost of research** incurred by the student.

It is also important to agree on a number of important **intellectual property issues**, prior to commencement of the degree, including authorship, use of third party data, plans for management of research data, and compliance with UCT's intellectual policy guidelines. It is also essential to discuss whether the proposed research requires **ethical approval, permits to collect material, and biosafety approval** prior to commencement of any research.

The Progress and Planned Activities (PPA) form is an extension of the original MoU and captures the progress made by the student in the previous year of registration, as well as the planned activities for the year ahead, towards the completion of the requirements for the degree. The PPA is completed at the start of the second and subsequent years of registration. This process represents an annual review of progress and should be seen as an extension to the initial MoU. If in the opinion of the supervisor, adequate progress is not being made, the P&PA form should clearly lay down criteria (such as submission dates and milestones) against which further progress shall be measured. In November of each year, each student's progress will be assessed according to the criteria laid down in the MoU or P&PA form. If progress is deemed to be unsatisfactory, a candidate may be refused permission to reregister in the following year.

International students

All international students are required to go through a clearance/pre-registration process with the International Academic Programmes Office (IAPO) BEFORE Faculty registration. International students cannot register without clearance from IAPO. For pre-registration, you need to produce your passport with your valid UCT study permit, proof of medical insurance/aid and proof of payment of your fees. The registrations of international students cannot be approved without clearance. Any queries should be directed to IAPO at 021 650 2822 or iaapo@uct.ac.za.

In addition to standard tuition fees, all non-SADC international students are required to pay a non-refundable service administration fee. Students enrolling for Master's degrees by coursework and minor dissertation, are also charged an International Term Fee (ITF). The Faculty offers Faculty International Student Bursaries (FISB) to deserving international Master's students registering for the degree by coursework and minor dissertation. Further details and application forms are available from the supervisor or the Postgraduate Administrator in the Faculty Office.

Renewal of registration

Each candidate is responsible for maintaining continuous registration by reregistering each year. Registration instructions, are available on the web at <http://www.science.uct.ac.za/sci/postgrad/current/registration> See Fees Booklet for deadlines for registration for returning students, a penalty fee is charged for late registration.

In November, each student's progress will be considered against the objectives agreed to in the MoU or P&PA. Each supervisor is required to comment on the progress of their students and if the progress meets the work plan outlined in the MoU or P&PA then the student will be coded CONT (academically eligible to continue) and may proceed to register for the following year. The process for students whose progress is deemed to be unsatisfactory is explained in detail below (see page 14).

Change of registration

It is possible to change the status of registration during the process of study. Thus, it is possible for registration for a Master's degree to be changed to a PhD if the supervisor believes that the student has made good progress, has shown suitable potential and that there is scope within the project to lead to a higher qualification. This would normally occur at the start of the second year of Master's registration, and at the latest must occur by the end of the second year of Master's registration. It is not possible to backdate PhD registration to the first year. It is also not possible to use the work of the Master's degree towards a PhD after the examination process. Similarly, it is possible to change registration from a PhD to a Master's degree, but this must occur before examination. It is not possible for a Master's degree to result from a failed PhD.

The documents to be submitted to the Faculty Office (in order to process a change in registration from Master's to PhD) include a letter of motivation signed by the supervisor(s) and HoD, a PhD research proposal, and a formal application submitted online at <https://applyonline.uct.ac.za>

The documents to be submitted to the Faculty Office (in order to process a change in registration from PhD to Master's) include a letter signed by the student requesting the change, together with a motivation from the supervisor(s) and HoD and a formal application submitted online at <http://www.uct.ac.za/apply/applications/postgraduates/>.

Leave of Absence or Cancellation/Discontinuation of studies

Leave of Absence (LoA)

If it is impossible for a candidate to continue with their studies/research in any given year (for example due to serious illness, maternity leave or on compassionate grounds) but they intend continuing in the following year then they must apply for a LoA, in writing, to the Dean. LoA can be awarded for a full year, the first six months or the second six months of the year. At PhD level a maximum of one year LoA is allowed by the DDB. The request for LoA must include the *Application for Leave of Absence* form and must state the period, the reasons and include supporting documentation (e.g. medical certificate), and have the signed support of the supervisor and HoD. The LoA application form is available at <http://www.forms.uct.ac.za/studentforms.htm>

Cancellation/Discontinuation of studies

If a candidate will be discontinuing studies then he/she must formally cancel registration in writing on the prescribed form. The cancellation form is obtainable from http://www.students.uct.ac.za/sites/default/files/image_tool/images/434/fees_funding/fees/forms/cancel_registration.pdf. Applications for retrospective cancellation of registration are not accepted: there are specified dates after which no fees will be refunded (see Fees Booklet).

SUPERVISION

Supervisor(s)

All students who register for the dissertation component will be formally allocated a supervisor, who is responsible for giving guidance. Co-supervision by people from within or outside of the University is possible, but the principal supervisor should be a full-time academic member of staff within the department in which the student is registered and must always be a UCT employee. Emeritus Professors may continue as principal supervisors of students who were registered under them before their retirement. However, both Emeritus Professors and Honorary Research Associates may only act as co-supervisors, (not as principal supervisor) with newly registering Master's and PhD students. An adjunct staff member may act as principal supervisor on motivation by the Head of Department and Faculty, subject to the approval of the Deputy Vice Chancellor for Research. The respective roles and contributions to a postgraduate research project can be detailed within the MoU acknowledging where appropriate the person(s) responsible for the inception of the project, funding, skills and duties to fulfil during the project. The approval of supervisors is the responsibility of the HoD, even though a student may have approached an individual staff member, or *vice versa*. The HoD must be satisfied that the supervisor has the necessary expertise, knowledge, skills and resources, time and funding to supervise the research. If the HoD is not satisfied that the experience/expertise of the supervisor is sufficient, or that they are overcommitted, he/she may insist on a co-supervisor being appointed. Typically a UCT supervisor will be permitted to supervise a maximum of six postgraduate students (Master's and PhD level combined) doing full time research dissertations.

Generally, members of staff should hold a PhD in order to supervise both PhD and Master's students, but this does not necessarily exclude a member of staff without a PhD from supervising a PhD or Master's. Without exception, any member of staff without a PhD seeking to be the primary supervisor of a PhD candidate will require formal approval by the DDB. The application to the DDB should be brought by the HoD, via the Dean, motivating the case. In the case of applicants with a track record of successful co-supervision, this accreditation will not usually be withheld.

Roles and responsibilities of student and supervisor(s)

Responsibility of the student:

- To acknowledge and accept primary responsibility for their education.
- To demonstrate a good work ethic.
- To strive to meet the expected throughput rate (18 months for a Master's by dissertation, 3 years for a PhD).
- To share ideas and to work collegially.
- To participate in and to contribute to the life of the department, including being available to demonstrate at undergraduate practicals/tutorials.
- To commit to co-publication with the supervisor(s).
- To be familiar with the University rules, particularly regarding plagiarism, and to commit to respecting those rules.

Responsibility of the supervisor(s) include

- Giving guidance about the nature of research and the standard expected, the planning of the research programme, literature and sources, attendance at taught classes, requisite techniques (including arranging for instruction where necessary), and about the problem of plagiarism.
- Maintaining contact through regular tutorial and seminar meetings, in accordance with the faculty/departmental policy and in the light of discussion of arrangements with the student.

- Being accessible to the student at appropriate times when the student may need advice.
- Giving detailed advice on the necessary completion dates of successive stages of the work so that the whole may be submitted within a scheduled time.
- Requesting written work, as appropriate, and returning such work with constructive criticism, in reasonable time.
- Arranging, as appropriate, for the student to talk about their work to staff or graduate seminars, and to have practice in oral presentations.
- Ensuring that the student is made aware of inadequate progress or of standards of work below that generally expected.
- Ensuring that the candidate is (or becomes) familiar with, and observes, one of the internationally recognised guides to scholarly conventions on presentation, documentation of sources and the like. The candidate must:
 - adopt and use a standard convention for citation and referencing;
 - attribute, cite and reference all significant contributions to, and quotations used in, the thesis;
 - be aware of the consequences of any attempt to pass on work of others as his or her own, or other forms of plagiarism, namely an end to any prospect of scholarly career, a failure, and disciplinary measure.

Conflict Resolution

Conflict Resolution Process for a Supervisor-Postgraduate student relationship

This process relates to conflict in the context of the Memorandum of Understanding (MOU) and Progress and Planned Activity (PPA) forms agreed between a student and a supervisor. Conflict is not necessarily to be avoided; it can result in creative new ideas, and the advance of knowledge. The very nature of the academic enterprise assumes that ideas may be challenged. Conflict should be handled early; it is easier to deal with small issues, as and when they arise. The longer an issue is left, the less likely the possibility of a resolution.

Conflict Resolution

If a conflict arises between a postgraduate student and a supervisor, the parties should, if possible, first try to resolve it amicably. If informal discussion is ineffective in resolving the conflict, then the parties should put their disagreement in writing, and submit this record to the Head of Department (who may refer the conflict to the appropriate Faculty structure) for resolution. If the supervisor is the Head, the record should be referred directly to the Deputy-Dean charged with Postgraduate Affairs. If this does not resolve the conflict within a month then the student or supervisor should refer the record to the Deputy-Dean. If the supervisor is the Deputy Dean, the record should be referred to the Dean. If this does not resolve the conflict, (or if the supervisor is the Dean), the student or the supervisor should refer the record to the Deputy Vice-Chancellor for Research and Internationalization. If at any stage the student or supervisor has any reservations about this conflict resolution process, they may consult the office of the Ombud.

Grievance Procedures

If the conflict between a postgraduate student and their supervisor is not resolved by the above process, the student should refer to Senate Procedures for Student Complaint in the General Rules and Policies Handbook 3.

Supervision and attendance at the University

During the period of registration, a higher degree candidate will be expected to be available on campus for discussion with their supervisor(s). For persons who are based outside Cape Town there is generally an expectation that the candidate will spend some period on campus interacting with the supervisor(s); the expected time spent on campus varies by department and must be clarified with the supervisor(s) and HoD. A candidate must be prepared to make him/herself available for discussion at the University if required.

UNSATISFACTORY PROGRESS

In November of each year supervisors are required to provide the Faculty Examinations Committee (FEC) with a statement as to the progress (satisfactory or unsatisfactory) of their Master's and PhD students. In this context progress is relative to the stated objectives within the MoU or PPA and takes into consideration factors that may have impeded progress that are not within the control of either the student or supervisor. In all cases where progress is unsatisfactory, despite mitigating factors, the student will be given a chance to respond to the supervisor's statement. The FEC will deliberate on the report submitted by the supervisor together with the response from the student, as well as the MoU or PPA.

If the appeal is upheld, the student will be allowed to re-register and will be assigned a progress of 'FEC concession to continue' (FECC). A new PPA form will be required to be completed with the supervisor, before registration, in which the objectives for the following year are clearly stipulated.

If the student's 'unsatisfactory' progress is upheld by the FEC, the student will be coded 'academically ineligible to continue' (RENN) and may not re-register. Appeals against this decision can be submitted to the DVC via the Deputy Registrar (karen.vanheerden@uct.ac.za) by research students, or to the Faculty Readmission Appeals Committee (RAC) by students registered for the coursework component of a Master's degree.

The student may decide not to continue with their studies in which case he/she must complete a 'Cancellation of Registration' form and submit it to the Faculty office for processing.

In select circumstances, the FEC may award a probation period to a student until re-registration commences. The student will be assigned a progress of 'status pending FEC decision' (FECp). The student will be informed of this decision in writing and will be required to immediately meet with their supervisor(s) and prepare a new PPA form within a specified period. Here the student and supervisor must devise a new work schedule for the stated period during which clear objectives must be agreed upon for a reassessment of progress. At the end of this probation period the supervisor will again be required to provide the FEC with a statement as to the progress (satisfactory or unsatisfactory) of the student. Should the progress during this "pending" period be satisfactory, the student will be assigned the progress of FECC and will be allowed to register for that year. If progress is again considered to be unsatisfactory and the FEC supports this decision, then the student will be coded RENN and will not be permitted to register. Students have the right to appeal this decision if there are relevant extenuating circumstances that might have impeded progress. Appeals against this decision can be submitted to the DVC via the Deputy Registrar (karen.vanheerden@uct.ac.za) by research students, or to the Faculty Readmission Appeals Committee (RAC) by students registered for the coursework component of a Master's degree.

ETHICS

The issues of ethics and intellectual honesty are vital to university life. The Faculty takes the issue of ethics in research very seriously and to this end has established a Research Ethics Committee which considers the following:

- All ethical matters related to research in the Faculty including, but not exclusively, conflicts of interest, authorship, the relationships between junior and senior research workers, and the role of the scientist in society.
- Any ethical issues brought to the attention of the Committee by researchers in the Faculty.
- To screen and approve, or otherwise, all research proposals in the Faculty that relate to human or animal subjects; this includes proposed research involving students or staff, by UCT researchers or by outside visiting researchers.
- To be aware that research questionnaires involving human subjects have ethical dimensions, and

that research involving staff or student perceptions of race, identity or ethnicity also have ethical dimensions.

- To report to the Senate Ethics in Research Committee and, in addition, report all instances of unethical or improper research practice to the Dean for referral to the Chair of the University Research Committee.

At the time of first registration, the supervisor(s) will have to acknowledge a statement in the MoU relating to the need for any ethical clearance required for a student's research.

A particular (and unfortunately growing) ethical issue is that of plagiarism. Plagiarism is passing off someone else's work as your own: it results from inadequately acknowledging sources of data, analyses and ideas, and includes direct copying of passages of text. It is dishonest, and it has no place at a university. If students are in any doubt on issues relating to plagiarism, they must consult their supervisor(s) or the Ethics Committee. Instances of plagiarism will be taken to the University Court and may have very serious consequences, including rustication or even expulsion.

All Master's candidates, at the time of submission, are required to submit a declaration, which should be included in the dissertation, stating: 'I know the meaning of plagiarism and declare that all of the work in the dissertation, save for that which is properly acknowledged, is my own'.

The PhD declaration is discussed in the next section.

If in any doubt regarding ethical issues relating to research, seek advice from your supervisor(s) or HoD.

SUBMISSION OF A DISSERTATION/THESIS

Timing and process of submission

At the conclusion of research, the candidate must submit a dissertation or thesis for examination. This usually occurs after receiving an indication from the supervisor(s) that the product is in a form which is acceptable for submission. However, a candidate is not prevented from submitting without the supervisor's approval. If a candidate intends submitting a Master's dissertation for examination they must inform the HoD in writing, with a copy to the Dean, of such an intention two weeks in advance of the planned submission date. The supervisor(s) will then nominate suitable examiners for approval by the HoD and the Dean. If submitting a PhD thesis, the candidate must inform the Doctoral Degrees Board Officer (Masingene Building) in writing of such intention one month prior to the planned submission.

The dates for submission of dissertations and theses are:

- **Beginning of June** for persons hoping to graduate in December.
- **1 September** for persons hoping to graduate in April

Students who do not submit by the registration deadline will be required to re-register before submitting. Where a student who submitted prior to the start of term is required to revise and resubmit a dissertation/thesis, they must register and pay the academic fee for that year. If the examination result is not available prior to June graduation, the student will be registered by the Faculty for that academic year but does not have to pay fees. Please note that while the student must pay the full fees when re-registering for a revision of their dissertation/thesis, that they will be reimbursed a portion of their fees provided they complete their revisions timeously (e.g. within a quarter or semester).

Please refer to the *University Fees Booklet* for submission dates with respect to fee rebates.

Format

Students must submit for examination a digital copy in the format specified. Students may be required to submit copies of the dissertation in temporary binding if an examiner requests a hard copy of the dissertation. Where a hard copy is required, formatting is at the candidate's discretion, but using A4 paper is the expected norm. Reasonable width margins (2 - 2.5 cm) are desirable to ensure that binding does not impede reading of the text. However, candidates should consult their supervisor(s) early in the process. The contents must be printed in either double or one and a half spacing using a common font throughout. Printing on both sides of the page is encouraged, but a reasonable weight paper must then be used.

A candidate who contemplates including published papers in their dissertation/thesis must accept that approval to do so is not automatic. Refer to the *Guidelines for the inclusion of publications in the PhD thesis*, available from the DDB or Faculty Office, for further information. If a candidate contemplates doing this, they must note this in their MoU/PPA with their supervisor each year. In addition, the candidate and supervisor are advised to seek the advice of the Faculty's Higher Degrees Committee about their plan to do so at an early stage. While the faculty committee will not be able to give a binding answer in the case of PhD candidates, it will be able to indicate to the candidate and their supervisor whether:

- It is likely to support the proposal. Where published papers are included, the thesis must nonetheless show acceptable academic style, scholarly content and coherence as a connected account with a satisfactory introduction, statement of thesis and conclusion.
- It is unlikely to support submission according to the plan outlined. A binding decision can only be given by the DDB for PhD candidates. It is accepted that this may not be possible until sometime into the work.

A request to include publications in a thesis/dissertation should generally include the following:

1. Title of thesis
2. A brief overview of the thesis structure (it must include a general introduction and a discussion chapter that pulls the various chapters in the thesis together).
3. A list of publications that will be included as self-standing chapters, with the authors, title and journal information, together with a comment on the student's contribution to each article.
4. Declaration from each co-author and supervisor(s) that they agree that the article may be included in the thesis, and what their individual contributions were.
5. Declaration from any student co-author that the work won't be used for their higher degree purposes.

For a Master's degree a candidate must submit for examination a digital copy in the format specified, plus upon request, up to two copies of the dissertation in temporary binding for submission to examiners; to the Postgraduate Officer in the Science Faculty Office. Once the dissertation has been finally accepted, submit to the Faculty Office a digital copy of the final corrected version of the dissertation in the format specified for the Library.

For a PhD a candidate must submit for examination a digital copy in the format specified, plus upon request, up to three copies of the thesis in temporary binding for submission to examiners; to the Doctoral Degrees Board Officer. Once the thesis has been finally accepted, submit to the Doctoral Degrees Board Office a digital copy of the final corrected version of the thesis in the format specified for the Library.

Length

In the case of a PhD, the thesis may not exceed 80,000 words. If it is felt that it is essential to exceed this length, special permission must be obtained from the Dean. It is the expectation that a Master's degree by dissertation only should be substantially shorter than this; on the order of 35,000 words (~80-100 pages) would be the expected norm. Minor dissertations completed as part of a Masters by coursework and minor dissertation should be shorter than full dissertations; on the order of 50 pages or 17, 000 – 25,000 words.

Title page

There must be a title page which includes the dissertation/thesis title, name of candidate, name of the supervisor and co-supervisor(s), name of department, University and the month and year of submission. The following is the recommended wording used after the thesis title and name of the candidate:

Dissertation (or Thesis) presented for the degree of Master of Science
(or Doctor of Philosophy) in the Department of ... University of Cape
Town Month and Year Supervisor(s)

For a Master's by coursework and minor dissertation the wording should read 'Minor Dissertation presented in partial fulfilment of the requirements for the degree of...'

Plagiarism declaration

Following the title page there should be a page containing the following signed statement by the candidate:

'I know the meaning of plagiarism and declare that all of the work in the dissertation (or thesis), save for that which is properly acknowledged, is my own'.

Publication

When presenting a thesis a candidate shall be deemed by so doing to grant free licence to the University to publish it in whole or in part in any format that the University deems fit. No publication may, without the prior permission of Senate, contain a statement that the published material was or is to be submitted in part or in full for the degree.

Declaration of free licence

In the case of PhD students, the candidate is required to sign a declaration stating: 'I hereby:

- a) grant the University free license to reproduce the above thesis in whole or in part, for the purpose of research;
- b) declare that:
 - I. the above thesis is my own unaided work, both in conception and execution, and that apart from the normal guidance from my supervisor(s), I have received no assistance except as stated below;
 - II. neither the substance nor any part of the thesis has been submitted in the past, or is being, or is to be submitted for a degree at this University or at any other University, except as stated below.

I am now presenting the thesis for examination for the Degree of PhD.'

Referencing

Forms of referencing must be standard for the discipline and must adhere to a recognised international convention, agreed with the supervisor(s).

EXAMINATION

Overview

The system of independent external examination lies at the heart of credible quality assurance. The examination of Master's dissertations involves two examiners (at least one of whom must be at an institution of high academic standing outside of South Africa). The examiners are selected based on their knowledge in the field within which the research is located. Appointments of examiners of Master's dissertations are subject to approval by the Dean.

At the Doctoral level, the thesis is examined by three external experts in the field, at least two of whom are based at an institution of high academic standing outside of South Africa. Appointments of examiners of PhD theses are subject to the approval by the DDB.

In all cases, the identity of the examiners is kept strictly confidential from the student. This confidentiality remains in force until the examiners give permission for their identities to be known after the examination process has run its full course (note that the examiners have the right not to give this permission). Supervisors are not permitted to contact examiners during the examination process. No dissertation or thesis will be examined under conditions of secrecy, though it is possible to apply for *temporary* confidentiality of a dissertation or thesis under examination where there is good reason for a short delay in making the research public (see secrecy conditions on page 20).

What is expected of a Master's dissertation?

In order for the degree to be awarded, a Master's dissertation must indicate that a candidate has successfully completed a programme of training in research in that they:

- understand the nature, objectives and scientific principles underlying the investigation;
- are adequately acquainted with the relevant literature;
- have mastered appropriate techniques and analytical methods;
- assess the significance of findings in a thorough and logically-coherent manner;
- show evidence of critical and independent thought; and
- report on the study in an acceptable scientific format (in accordance with Faculty rules and norms) that is satisfactory in both presentation and literary style.

A Master's degree is essentially a training course to equip a candidate with skills necessary either for employment in a given field, or for further independent research. Consequently, the dissertation need not involve original research, distinctly advance knowledge of the subject or be potentially publishable in a peer-reviewed scientific journal.

Awarding a Master's with distinction:

Master's degrees are awarded with distinction in exceptional cases only. Usually a unanimous decision from both examiners is required, but a distinction may be awarded by the Master's Degree Committee if one examiner recommends this and the other examiner does not object and their comments are both very positive and criticisms relatively minor.

To recommend that the degree be awarded with distinction, the examiner should be of the opinion that the work is outstanding at the Master's level, bearing in mind the time available to the candidate (usually between twelve months and two years), the methodological complexities involved, and the intellectual difficulty of the particular subject matter. As a guideline, examiners might consider a dissertation to be worthy of a distinction if it fulfils most of the following criteria:

- The standard is in the top 20%, approximately, of the Master's dissertations that they have examined.
- The structure and layout of the dissertation is excellent.
- The presentation is excellent. Some minor editorial errors (such as formatting, grammatical or spelling mistakes) may be tolerated and referred to the candidate for correction. Ubiquitous and careless errors in presentation that point to a lack of exactitude should militate against the award of a distinction.

Distinctions are not awarded to PhD theses.

Assessment of examiners' reports

In the case of Master's degrees, the examiners' reports are submitted to the HoD who writes a consolidated report, taking all examiners' comments into account. The HoD makes a recommendation to the Dean on the outcome of the examination and whether a distinction should be awarded or not. The Dean will then make the final decision on the outcome.

In the case of the Master's degree by coursework and minor dissertation, a candidate must obtain a distinction in each of the coursework and dissertation components, in order to be awarded the degree with distinction. Likewise, both components must be separately passed to achieve an overall pass.

In the case of Doctoral degrees, the reports are received by a Committee of Assessors, chaired by the Dean, who evaluate the reports and make a recommendation to the Doctoral Degrees Board who makes the final decision.

After a decision is reached, the Faculty Office (Master's) or DDB (PhD) sends a letter to the candidate, the HoD and the supervisor(s) informing them of the outcome.

Where improvements and corrections are required, the student must consult with the supervisor(s) for advice on what needs to be done. It is the responsibility of the supervisor(s) to oversee the corrections which will be subject to approval by the HoD and, in the case of Master's dissertations, the Dean or Dean's nominee. The Chair of the DDB is responsible for approving corrections in the case of PhD candidates. Such corrections should be completed within six months (Master's) or one year (PhD) of notification. *It is important to note that if the outcome of the examination is revise and resubmit for re-examination, the candidate has only one chance of resubmission, i.e. the option to revise and resubmit is not available in the re-examination.*

Once a decision is taken to award the degree, a copy of the dissertation/thesis is lodged with the library's digital repository.

ISSUES RELATING TO INTELLECTUAL OWNERSHIP

Secrecy conditions

The principle that all research results should be freely available governs all research conducted at the University of Cape Town. Therefore, no-one will be allowed to undertake research, if the results of which may not be

published. However, on rare occasions there may be a good reason for a short delay in making a thesis or dissertation available to anyone other than the supervisors and examiners. The University of Cape Town will consider giving such a dispensation on application to the Doctoral Degrees Board in the case of the PhD or Faculty in the case of a Master's. Good cause must be shown for the suppression of a thesis. The suppression period, which starts at graduation (confer date), may range from a minimum of six months to a period not exceeding three years.

The Doctoral Degrees Board (DDB) or Faculty will consider each application (either at a meeting or by Chair's Circular) and will decide after consultation with the Research Contracts and Intellectual Property Services Office (RCIPS).

If such permission is given, the thesis will not be added to UCT Library's *OpenUCT* digital repository. Only at the end of the specified period, the thesis will be added to UCT Library's *OpenUCT* digital repository.

Application **must be made before** the time of uploading the thesis for examination so as to enable the DDB/Faculty (by means of an amended Examiner Declaration Form) to place the examiners under an obligation of confidentiality and to make clear to examiners that, should they wish to discuss the thesis for purposes of examination, the DDB/Faculty must be informed beforehand so that the DDB/Faculty can place such persons under an obligation of confidentiality as well.

Copyright

The University recognises the rights of those who have ownership of copyright. Members of the University are explicitly prohibited from infringing copyright, either in terms of publications or software.

A candidate may, subject to prior approval of their supervisor(s), publish part or the whole of the work done under supervision for the degree before presenting it for the examination. Copyright rests with the author. However, no publication may, without the consent of Senate, contain a statement that the published material was, or is to be, submitted in part or in full requirement for the degree.

Further, when presenting a dissertation or thesis, the candidate is deemed, by doing so, to be granting the University free licence to publish it in whole or in part, in any format that the University deems fit.

Patents

This is a complex issue and is governed by University rules and guidelines. Students wishing to pursue it should consult with their supervisor(s) and the Research Office.

JOINT PUBLICATION

It is common practice for joint publications between the candidate and the supervisor(s) to be generated through the research process. There are differing conventions across the Faculty about the ordering of authors. This should be clarified and jointly agreed between the student and the supervisor(s) early in the MoU.

INCORPORATION OF STUDENTS INTO THE LIFE OF THE FACULTY

Postgraduate students are formally incorporated into the life of the Faculty through the following structures:

The Science Postgraduate Students' Council (SPSC)

Postgraduate students have a representative forum in the form of the Science Postgraduate Students' Council. This body comprises one representative from each of the 12 Science Faculty Departments, elected by their fellow postgraduates. The Deputy Dean charged with postgraduate affairs is an *ex officio* member. The Chair of the Science Postgraduate Students' Council represents Science Faculty postgraduate students on several University-wide committees.

The Dean's Advisory Committee and Science Faculty Board

Postgraduate students are represented, via the SPSC, on the two main decision making bodies of the Faculty, viz. the Dean's Advisory Committee (a committee of the Dean, Deputy Deans and Heads of Departments) and the Science Faculty Board.

Orientation

An orientation event is held annually, at which postgraduate students are addressed on issues such as rights and responsibilities, administrative issues, institutional relationships, financing and so on. It is typically held in February and is open to all postgraduate students in the Faculty.

INCORPORATION OF STUDENTS INTO THE LIFE OF THE UNIVERSITY

The University has a Board for Graduate Studies, chaired by the Deputy Vice-Chancellor with the portfolio for research. All Faculties are represented on this body by both a staff and a student representative. This Board is charged with improving the postgraduate educational experience within the University at large. In addition, a University Postgraduate Student Council looks after the interests of postgraduate students in general. The Postgraduate Student Centre on the Upper Campus is intended to be a place for formal and informal contact between postgraduate students across all Faculties.

POST-DOCTORAL FELLOWS

For administrative purposes, to facilitate access to the various services on the campus, post-doctoral fellows are registered on the University's student system. This is done through the Postgraduate Centre & Funding Office in the Otto Beit Building. However, it is the Science Faculty's belief that post-doctoral students should be considered equivalent to members of staff and be incorporated into the intellectual and social life of departments.

