RHODES UNIVERSITY

FACULTY OF SCIENCE

APPLICATION FOR CHANGE OF REGISTRATION FROM MSc TO PhD

(to be submitted through the Head of Department)

(updated May 2007)

Section A - Personal details and declaration

Name: _____ Student Number:_____

Department: _____

Supervisor(s): _____

Field of research: *(Please give this in a descriptive way, for example "Feeding biology of common and blue duiker" and not simply "Zoology".)*

_____

_____

Date of first registration for MSc: _____

We declare that the information we have provided is correct in every respect.

Signed (student): _____ Date: _____

Signed (supervisor): _____ Date: _____

Section B - Documentation to be provided by the student

Documentary evidence in support of your application must be attached to this application under the following headings

(a) Your academic record so far (degree certificates or transcripts).

(b) Papers published.

(c) Papers submitted or in preparation.

(d) Details of conferences attended, and presentations given.

(e) Professional reports submitted.

(f) Further evidence of national or international recognition.

(g) Comprehensive report on progress made to date on MSc (this can include chapter drafts and outlines, as well as preliminary analyses of data).

(h) Motivation for change of registration (indicate and explain future objectives and how these meet the requirements for a PhD).

Section C - Documentation to be provided by the supervisor

Documentary evidence in support of this application must be provided by the supervisor under the following headings

(a) Report by the supervisor, assessing the candidate's progress and ability, and providing a realistic estimate of when the project will be completed if the application is successful.

(b) Declaration in respect of student contribution *vis-a-vis* other authors in all published work in respect of which the supervisor and candidate have been co-authors.

(c) List of MSc and PhD students supervised in the last 5 years as sole supervisor, together with the starting and completion dates and result of examination. Indicate also which of these students upgraded from MSc to PhD studies.

(d) List of MSc and PhD students co-supervised in the last 5 years, together with the starting and completion dates and result of examination. Indicate also which of these students upgraded from MSc to PhD studies.

(e) Indications of the level of financial support that can be provided.

(f) Declaration in respect of ability to continue supervision (with respect to periods of leave, retirement or resignation).

Section D - Documentation to be provided by the Head of Department

(a) The Head of Department must provide a short comment on the application and whether it is felt it should be supported.

(b) Any further evidence bearing on the application.

Section E - FOR OFFICE USE ONLY

Application received: _____

Members of panel: _____

Recommendation of panel: _____

Dean's comment: _____

Dean's signature: _____ Date: _____

Rhodes University

Faculty of Science

Upgrading from a Master's to a PhD

This document aims to give students, supervisors and heads of departments guidance as to what is expected when a student wishes to upgrade MSc studies to PhD studies in the Faculty of Science.

Preamble

In the Higher Degrees guide, section 3.1.2 appears the statement:

> In practice, most PhD candidates have a Master's degree. However, Senate may, on the recommendation of the Faculty concerned, convert the registration of a candidate for the Master's degree to registration for a PhD degree. Such conversions require the Head of Department and supervisor to be satisfied that the student's completed work is of a standard normally expected of a doctoral student, that the student is capable of completing a doctoral degree and that the project is of a level and scope expected of a PhD study. Applications for conversion should normally be submitted for consideration to the Higher Degrees Committee of the appropriate Faculty between 12 to 18 months after first registration for the Master's degree.
>
> Please note: The relevant Higher Degrees Committee should be consulted for information on specific rules and criteria that may apply to upgrades in that Faculty.

all of which applies to the rule more formally quoted in the Calendar:

> G.54 Senate may, on the recommendation of the Board of the Faculty concerned, convert the registration of a candidate for the Master's degree by thesis to registration for the PhD degree if they consider that the work is of a standard normally expected of a doctoral student.

At the outset it should be appreciated that to qualify for a PhD is significantly different from an MSc. Rule G.66 puts this formally:

> G.66 Candidates shall submit a thesis on the results of their study which shows evidence of originality and independent research.

The criteria for the award of an MSc stipulate neither "originality" nor "independent research". In practice, of course, the best MSc theses do display aspects of both, which may be why Rule G.60 appears for Master's candidates with no equivalent for PhD candidates:

G.60 The degree may be awarded with distinction.

The differences between an MSc and a PhD are very large. While an MSc need not include original and independent research a PhD must do so. While there may be more emphasis on data collection and less on interpretation in an MSc, there will be far more emphasis on original and novel interpretation at the PhD level. It is likely that the examination process of the PhD (three external examiners) will be far more rigorous than that for the MSc. It goes without saying that far fewer students will be able to complete a PhD than an MSc. A PhD cannot be earned simply by being a laboratory assistant to some supervisor, nor by collecting more data or performing more experiments similar to those deemed adequate for obtaining an MSc.

The normal route

A strong case can be made that the norm should be to complete an MSc first, and then go on to a PhD after that. In particular, invaluable experience is to be gained in "writing up" - a task whose difficulty is notoriously underestimated by many if not most candidates, along with the underestimation of how time-consuming it actually is to produce an error free and attractively presented document. In addition, the examination process exposes the candidate and the research to invaluable external peer review.

The upgrade route should only be followed by the outstandingly able and productive student who has been able to produce really original papers very quickly or, perhaps, by a mature student who comes to do a research degree some years after Honours, and who has already spent time working and publishing in research related areas.

Thus, applications to upgrade come under intense scrutiny. One cannot depend merely on a brief note of support from a supervisor or Head of Department.

The Process

When an application is made for an upgrade, the appropriate form (available from the website) must be completed, and the evidence stipulated there must be gathered and supplied. This information is then sent to the Dean, whence it is circulated to a panel of three or four people in the Faculty who act as an upgrade committee. The panel is chosen from senior academics who themselves are known to have excellent records as supervisors and researchers. The choice is normally made from people in related areas, although not within the candidate's home department. For example, biochemists may review applications for chemists and vice-versa, physicists may review applications from mathematicians and computer scientists, and so on. The members of the panel make individual recommendations to the Dean.

In the case where there is unanimous support, the Dean then provisionally approves the upgrade, subject to confirmation by the Board and the Senate. In the case where some of the panel express reservations, further discussion and/or interviews may take

place. In the case where the panel unanimously agree that the application should not be supported, it is rejected (with no right of appeal), and the candidate is advised to complete the MSc as originally planned. Note that this does not represent "failure". On the contrary, the expectation is that the candidate will go on to obtain the MSc timeously and safely, and is in no way debarred from applying for PhD studies thereafter under the same or even a different supervisor.

The Criteria

Upgrading is a peer review process - of the candidate, and, it must be said, to some extent of the supervisor, the research group and the Department as well. Tempting as it might be to present a list of absolute criteria to be met for upgrading, and thus reduce this process to a simple one of "tick the boxes", there are many reasons why this route cannot be followed. However, the panel will be attempting to discern whether the following broad questions can be answered:

(a) Is the student competent to engage in PhD studies without first completing an MSc?

(b) Is the rate of progress towards an MSc truly exceptional?

Where possible, assessment will be based on external, peer reviewed work such as the performance in the last set of exams, a published or accepted paper, a prize at a conference or a major scholarship.

Students who have already had papers accepted for publication clearly have an edge, but it is very difficult to achieve that sort of (original and independent) productivity with 12-18 months of starting - all the more reason perhaps for insisting that a thesis be written and an MSc completed. In practice, of course, most students publish with or under their supervisor's name, a practice that obfuscates this issue to some extent.

The panel will be on the lookout for evidence that the student can already write scientifically sound documents, and has a good command of language. At the same time, they will not be immediately impressed by reams of paper or draft chapters which they probably have neither the time nor the detailed knowledge to review painstakingly - bear in mind that they are not charged with marking an MSc thesis, but of gauging the candidate's potential.

Cognizant of the fact that many postgraduate theses are sharply criticized by examiners for very shaky statistical analyses and dubious conclusions, they will be on the lookout for evidence that the student has essential analytic and statistical skills and the perception that these things are important.

(c) Is the project itself appropriate for PhD studies?

The panel will be very critical of applications where they sense the candidate has been doing routine lab experiments for a year, and seems to feel that a PhD can be obtained

simply by doing "more of the same". There must be ample evidence that the PhD research will be both original and independent.

(d) Does the Department have the appropriate facilities to support the research at the PhD level?

The panel must be convinced that there are sufficient resources, funding, laboratory space and equipment to support the project.

(e) Can the project be properly supervised at the PhD level?

The Committee would be failing in its duty if it did not take into account such simple considerations as whether the supervisor is about to leave the university or go on leave for a year. They also take into account the track record of the supervisor, and carefully consider any complications that might arise from co-supervision, or because students are working off campus where supervision may become problematic.

(f) What is the time scale for completion of the project?

There should be some strong evidence to suggest that the student will, in fact, complete within a further two years - that is to say will have completed a PhD within 3-4 years at most after Honours.

If the Committee sense that the student is going to take three years or longer, they are likely to argue that nothing is really being achieved - completing a PhD over five years is less rewarding (and riskier) than completing an MSc in two years and a PhD in a further three years.