University of Pretoria Yearbook 2018

PhD Biotechnology (02261021)

Minimum duration of study	2 years
Total credits	360

Programme information

This is an interdepartmental programme.
The curriculum is to be determined by the heads of the participating departments. Please consult with Prof P Bloomer, Tel: 012 420 3259, for further details.

Duration of studies
The doctorate is conferred on a student only if one of the following periods has expired:

i. At least four years after complying with all the requirements for a three-year bachelor's degree.
ii. At least three years after complying with all the requirements for a four-year bachelor's degree.
iii. At least two years after complying with all the requirements for a bachelor's degree of five years or more.
iv. At least two years after complying with all the requirements for a master's degree.
v. With the exception of a shorter period that may be approved by the Dean, at least 12 months since registration for the doctorate at this University has expired.

The head of department may set specific residential requirements for students who are required to live on campus.

Renewal of registration
Subject to other faculty regulations, a student for a doctorate must complete his or her studies within three years after first registering for the degree. Under special circumstances, the Dean, on the recommendation of the head of department or the Postgraduate Committee, may give approval for a limited fixed extension of this period.

Curriculum
The curriculum for the PhD degree consists of the following:

i. Theoretical knowledge of the major subject/s and such additional modules as may be prescribed.
ii. A thesis.

Conversion of a master's to doctoral study
The stipulations of G.41 apply as follows:

1. Requirements

a. Under special circumstances, the dean of a faculty may convert the registration of a candidate for the master's degree to registration for a doctoral degree.
b. For such conversions, the head of department and the supervisor must be satisfied that the student's completed work is of the standard that would be expected of a doctoral student, that the student is capable of completing a doctoral degree, and that the project is of appropriate standard and scope to constitute a

doctoral study.

c. For such conversions, the head of department and the supervisor must be satisfied that the student has demonstrated that he or she has the potential to fulfil the requirements of a doctoral degree without having completed a master's degree.

2. Process

a. Application for conversion may be submitted at any time during the course of study for the master's degree.
b. The application for the conversion must include the following documentation:

i. A detailed progress report by the candidate of the work completed for the master's project. The report must provide proof that the results obtained thus far are of such a standard and scientific significance that they justify conversion to a doctoral project. The report should include details of presentations made at conferences and of material that has been submitted for publication and/or published.
ii. A detailed proposal for the intended doctoral project, written by the candidate, including the objectives of the project.
iii. A recommendation by the supervisor with specific comments on the ability of the applicant as a potential doctoral candidate as well as the feasibility of the conversion, especially with regard to the information provided by the candidate in his/her reports (items (i) and (ii)).
iv. A recommendation by the head of department, if he or she is not the supervisor, in which the ability of the candidate as a potential doctoral candidate is confirmed.
v. If the dean considers it advisable for the faculty, the candidate may be required to present a seminar to the department in support of the application. In this case, the head of department should include a report on this in his or her recommendation.

c. The application of the candidate, together with the reports and recommendations, is submitted for consideration to the dean, (who may delegate to the Chairperson of the Faculty Postgraduate Committee) for approval. The decision should be submitted to the Faculty Board for approval.

General
Candidates are required to familiarise themselves with the General Regulations regarding the maximum duration of study and the requirements to submit an article/s for publication.

Admission requirements

An appropriate MSc degree, with a final grade point average of at least 60%, or on recommendation by the Head of Department, and contingent upon the availability of supervisors and/or research projects within the participating department.

Examinations and pass requirements

i. Consult the General Regulations that apply to the calculation of marks.
ii. In order to obtain the PhD degree the candidate must:

- pass the examinations and the prescribed modules, as determined in the study programme;
- pass the thesis; and
- pass the final examination on the thesis and general subject knowledge.

Curriculum: Year 1

Minimum credits: 360

Core modules

Thesis: Agronomy 990 (AGR 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Department of Plant and Soil Sciences
Period of presentation	Year

Module content

This module involves the development, presentation and approval of a research proposal, the execution of the research project, and the writing up and presenting of the research results. In addition to the thesis, the student is also expected to publish at least one research paper in a peer-reviewed, UP accredited scientific journal. An oral examination covering Pasture Science and other fields related to the thesis will be conducted after the thesis has been accepted by examiners. A candidate needs to pass both the written thesis and oral examination to qualify for the degree.

Project and thesis 990 (BCM 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Biochemistry
Period of presentation	Year

Thesis: Plant science 990 (BOT 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Separate classes for Afrikaans and English
Department	Department of Plant and Soil Sciences
Period of presentation	Year

Thesis: Genetics 990 (GTK 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Genetics

Period of presentation Year

Curriculum: Final year

Minimum credits: 360

Core modules

Thesis: Agronomy 990 (AGR 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Department of Plant and Soil Sciences
Period of presentation	Year

Module content

This module involves the development, presentation and approval of a research proposal, the execution of the research project, and the writing up and presenting of the research results. In addition to the thesis, the student is also expected to publish at least one research paper in a peer-reviewed, UP accredited scientific journal. An oral examination covering Pasture Science and other fields related to the thesis will be conducted after the thesis has been accepted by examiners. A candidate needs to pass both the written thesis and oral examination to qualify for the degree.

Project and thesis 990 (BCM 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Biochemistry
Period of presentation	Year

Thesis: Plant science 990 (BOT 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Separate classes for Afrikaans and English
Department	Department of Plant and Soil Sciences
Period of presentation	Year

Thesis: Genetics 990 (GTK 990)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Genetics

Period of presentation Year

The information published here is subject to change and may be amended after the publication of this information. The General Regulations (G Regulations) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the General Rules section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.