

# Universiteit van Pretoria Jaarboek 2018

# PhD Wiskundige Wetenskappe (02260762)

Minimum duur van studie

2 jaar

**Totale krediete** 

360

## Programinligting

Hierdie inligting is slegs in Engels beskikbaar.

A candidate must complete a thesis in one of several fields in which research is actively being done in the Department. The research fields and the names of possible supervisors are available from the departmental postgraduate brochure at: www.up.ac.za/maths/postgrad

#### **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.

### **Toelatingsvereistes**

An appropriate master's degree is required for admission to doctoral study in Mathematics and Applied Mathematics. The programme composition of the master's degree must have included a heavy research component that led to a dissertation reflecting originality either in the content or in the presentation. In the selection procedure the candidate's complete honours and master's academic records will be considered. In particular it is required that the master's degree be obtained with distinction. If a candidate did not pass his/her master's degree with distinction he/she may submit an application together with a motivation by his/her potential supervisor to the postgraduate coordinator.

Admission is also subject to the availability of a suitable supervisor for the study.

### Ander programspesifieke inligting

Subject to other faculty regulations, a student for a doctoral degree must complete his or her studies within four



years after first registering for the degree. Under special circumstances, the Dean, on the recommendation of the head of department, may give approval for a limited fixed extension of this period. (Also see the General Regulations.)

## Eksamens en slaagvereistes

- 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.

### Bevordering tot volgende studiejaar

The progress of all doctoral candidates is monitored biannually by the supervisor and the postgraduate coordinator. A candidate's study may be terminated if the progress is unsatisfactory or if the candidate is unable to finish his/her studies during the prescribed period.



## Kurrikulum: Jaar 1

### **Kernmodules**

**Proefskrif: Toegepaste Wiskunde 990 (TWS 990)** 

Modulekrediete 360.00

**Voorvereistes** Geen voorvereistes.

**Onderrigtaal** Aparte klasse vir Engels en Afrikaans

**Departement** Wiskunde en Toegepaste Wiskunde

**Aanbiedingstydperk** Jaar

**Proefskrif: Wiskunde 990 (WIS 990)** 

Modulekrediete 360.00

**Voorvereistes** Geen voorvereistes.

**Onderrigtaal** Aparte klasse vir Engels en Afrikaans

**Departement** Wiskunde en Toegepaste Wiskunde

**Aanbiedingstydperk** Jaar



### Kurrikulum: Finale jaar

#### **Kernmodules**

**Proefskrif: Toegepaste Wiskunde 990 (TWS 990)** 

Modulekrediete 360.00

**Voorvereistes** Geen voorvereistes.

Onderrigtaal Aparte klasse vir Engels en Afrikaans

**Departement** Wiskunde en Toegepaste Wiskunde

**Aanbiedingstydperk** Jaar

**Proefskrif: Wiskunde 990 (WIS 990)** 

Modulekrediete 360.00

**Voorvereistes** Geen voorvereistes.

Onderrigtaal Aparte klasse vir Engels en Afrikaans

**Departement** Wiskunde en Toegepaste Wiskunde

**Aanbiedingstydperk** Jaar

Die inligting wat hier verskyn, is onderhewig aan verandering en kan na die publikasie van hierdie inligting gewysig word.

Die Algemene Regulasies (G Regulasies) is op alle fakulteite van die Universiteit van Pretoria van toepassing. Dit word vereis dat elke student volkome vertroud met hierdie regulasies sowel as met die inligting vervat in die Algemene Reëls sal wees.

Onkunde betrefffende hierdie regulasies en reels sal nie as 'n verskoning by oortreding daarvan aangebied kan word nie.