

University of Pretoria Yearbook 2017

PhD Air Quality Management (02261045)

Duration of study 2 years

Total credits 360

Programme information

Coordinated by the Department of Geography, Geoinformatics and Meteorology.

The Centre for Environmental Studies is a graduate school for multidisciplinary training and research focusing on the environment. Training aims to satisfy the need for environmental professionals for implementing current environmental legislation as well as industry-driven environmental management systems.

The extensions to the National Environmental Management Act (NEMA) promulgated after 2005 affect environmental management in South Africa in a profound way. In particular, the Air Quality Act brings South African legislation into line with international trends. The metro councils are charged with the responsibility of implementing the Act at the local level. In addition, companies need appropriate expertise to obtain licenses for their air quality management plans. This focus area serves to provide suitable expertise for the implementation of the above legislation by industry by training graduates specialised for careers in air quality management. On completion of the training, candidates should be conversant and be able to partake in, or render advice concerning the legislative requirements with respect to air quality management, modelling of and measurement of air pollution and the interpretation of pollution plumes, the measurement and interpretation of chemical air pollution as well as dust pollution, international agreements and requirements as well as the effects of air pollution on humans.

Duration of studies

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

- At least four years after complying with all the requirements for a three-year bachelor's degree.
- At least three years after complying with all the requirements for a four-year bachelor's degree.
- At least two years after complying with all the requirements for a bachelor's degree of five years or more.
- At least two years after complying with all the requirements for a master's degree.
- 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

- Candidates for PhD degrees need to have obtained a master's degree in an appropriate field of expertise. Preference will be given to PhD candidates with publication experience in professional journal(s).

- Admission is dependent on the candidate being in possession of an MSc [Option: Air Quality Management] or an equivalent degree with the status thereof as evaluated by the Director of the Centre and the head(s) of the particular department(s). In addition to further theoretical studies as prescribed by the Director and head(s) of the relevant department the study will involve a doctoral research thesis under guidance of a supervisor selected by the Director and head of department. The supervisor will be a suitable academic staff member of the University of Pretoria.
- Admission is additionally dependent on availability of supervisor/s and/or projects within the 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

Core modules

Thesis: Air quality management 998 (ENV 998)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Academic organisation	Geography, Geoinf + Meteor
Period of presentation	Year

Curriculum: Final year

Core modules

Thesis: Air quality management 998 (ENV 998)

Module credits	360.00
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Academic organisation	Geography, Geoinf + Meteor
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.