

University of Pretoria Yearbook 2022

MSc (Air Quality Management) (Coursework) (02250408)

Department Geography, Geoinformatics and Meteorology

Minimum duration of study 2 years

Total credits 180

NQF level 09

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.

Admission requirements

1. Relevant BScHons degree with mathematics and chemistry passed at first-year level **or** relevant four-year BSc degree with mathematics and chemistry passed at first-year level
2. A weighted average of at least 65% at honours or final-year level
3. An admission examination may be required
4. A CV with contactable references may be required

Note: Additional modules may be required in order to reach the desired standard

Additional requirements

Candidates must demonstrate proficiency in the English language up to the level required by either the TOEFL test (www.ets.org/toefl) or the IELTS language proficiency test (www.ielts.org).

Promotion to next study year

The progress of all master's 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.

Subject to exceptions approved by the Dean, on recommendation of the relevant head of department, and where applicable, a student may not enter for the master's examination in the same module more than twice.



Curriculum: Year 1

Core modules

Boundary layer meteorology 811 (AQM 811) - Credits: 15.00

Atmospheric chemistry 812 (AQM 812) - Credits: 15.00

Atmospheric thermodynamics 813 (AQM 813) - Credits: 15.00

Air pollution: society and environment 814 (AQM 814) - Credits: 15.00

Environmental paradigms 810 (ENV 810) - Credits: 15.00

Environmental law 816 (ENV 816) - Credits: 15.00

Mini-dissertation 891 (ENV 891) - Credits: 90.00

Curriculum: Final year

Core modules

[Boundary layer meteorology 811](#) (AQM 811) - Credits: 15.00
[Atmospheric chemistry 812](#) (AQM 812) - Credits: 15.00
[Atmospheric thermodynamics 813](#) (AQM 813) - Credits: 15.00
[Air pollution: society and environment 814](#) (AQM 814) - Credits: 15.00
[Environmental paradigms 810](#) (ENV 810) - Credits: 15.00
[Environmental law 816](#) (ENV 816) - Credits: 15.00
[Mini-dissertation 891](#) (ENV 891) - Credits: 90.00

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.