

# University of Pretoria Yearbook 2019

## MSc Veterinary Industrial Pharmacology (Coursework) (08251018)

**Minimum duration of study** 2 years

**Total credits** 180

### Programme information

This programme is offered by the Department of Paraclinical Sciences.

The curriculum consists of compulsory core modules (90 credits) as well as a mini-dissertation (90 credits).

Also consult General Regulations.

Students are required to confirm whether a module will be presented in any particular year. This enquiry should be directed to the relevant head of department according to the syllabi information provided in the list of modules in this publication.

### Admission requirements

Subject to the stipulations of the applicable General Regulations, a BScHons, a four-year BScAgric, BVSc or equivalent degree or a relevant postgraduate diploma (on NQF level 8) is required.

Two years of professional experience might be required in certain cases.

#### Additional Requirements

In cases where web-based/online modules are offered, basic computer skills is required in order to successfully participate in the degree programme.

In certain cases, it remains the prerogative of the head of department to require, in addition to the entrance requirements, the successful completion of an admissions test before registration.

All international applicants whose first language is not English, may be required to pass a proficiency test in English (TOEFL). Application and more information: [www.ets.org/toefl/](http://www.ets.org/toefl/)

Postgraduate applicants who have completed any foreign qualifications must have all their previous post-school qualifications evaluated by the South African Qualifications Authority (SAQA) before applying for postgraduate studies at the University of Pretoria: [www.saqa.org.za](http://www.saqa.org.za)

#### International requirements

International students have to ensure they are aware of all aspects pertaining to them to study at the University of Pretoria which can be found at [www.up.ac.za/isd](http://www.up.ac.za/isd)

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## Examinations and pass requirements

A minimum examination mark of 50% is required in each of the modules where a semester or year mark is not required. However, where a semester or year mark is required, the latter will contribute 50% to the final mark. A subminimum of 40% is required in the examination and a final mark of at least 50 % to pass the module. Instructions regarding requirements for semester, year or examination marks are published in the study guides, for the specific attention of candidates.

The MSc coursework degree is conferred by virtue of the successful completion of examinations on the coursework modules and a mini-dissertation.

If a student fails a module, he/she will have to repeat the module the following year. A module cannot be repeated more than twice.

## Research information

Also consult the General Regulations.

Candidates must submit a mini-dissertation which deals with an applied field of study. The topic is determined in consultation with the supervisor and the relevant head of department, and must be approved according to Faculty guidelines. The mini-dissertation is based on an applied research project or related research projects (which need not be original), planned and reported by the candidate. (Assistance with statistical processing, applied specialised procedures, etc. is allowed, but must be acknowledged.)

An internal as well as external examiner will evaluate the mini-dissertation. The supervisor may not be an examiner.

The average mark of the separate marks awarded by all examiners constitutes the final mark for the mini-dissertation. The minimum pass mark is 50%. The Dean, on the recommendation of the relevant head of the department, may permit a candidate who has failed, to submit an amended mini-dissertation for final adjudication.

## Pass with distinction

The degree is conferred with distinction on a student who has obtained at least 75% for the mini-dissertation and a weighted average of at least 75% in the other modules needed to comply with degree requirements, provided that a minimum pass mark of 60% in all the other modules have been obtained.

# Curriculum: Year 1

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## Fundamental modules

### Research methodology 813 (VRM 813)

<b>Module credits</b>	0.00
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Veterinary Tropical Diseases
<b>Period of presentation</b>	Semester 1 and Semester 2

#### Module content

A web-based introductory module in research methodology that includes planning and undertaking a research project or clinical trial, collecting and analysing data, scientific writing, and enabling preparation and presenting of a research protocol.

## Core modules

### Advanced fundamentals of pharmacology 876 (FAK 876)

<b>Module credits</b>	40.00
<b>Prerequisites</b>	No prerequisites.
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Paraclinical Sciences
<b>Period of presentation</b>	Year

#### Module content

Scope and historical development of veterinary pharmacology.  
 Veterinary pharmaceuticals and formulation theory.  
 Pharmacokinetic theory, pharmacokinetic analysis and modelling.  
 Bioequivalence theory and evaluation.  
 Physicochemical and molecular basis of drug action.  
 Dose response and calculation of dose response parameters.  
 Pharmacological modulation of organ and body functions.  
 Molecular basis of action and pharmacological effects of chemotherapeutic agents.  
 Adverse drug reactions, interactions and pharmacovigilance.  
 Comparative species pharmacology, pharmacogenomics and pharmacogenetics.  
 Background on complementary medicines.  
 Fundamentals of pharmacological research.

### Veterinary industrial pharmacology 800 (VIP 800)

<b>Module credits</b>	50.00
<b>Prerequisites</b>	FAK 876

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**Language of tuition**      Module is presented in English

**Department**      Paraclinical Sciences

**Period of presentation**      Year

**Module content**

Veterinary pharmaceutical discovery and development.

Non-clinical safety and preclinical toxicology. Clinical safety and efficacy evaluation. Good laboratory and clinical practices. Drug statutory and application requirement. Drug application submission. Regulatory procedures, evaluation and veterinary drug control. Drug residue risk assessment. Product planning, production management and quality assurance. Drug marketing, pricing and promotion. Technical services, training, extension, product support and complaint investigation.

## Curriculum: Final year

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### Core modules

#### Minidissertation: Veterinary industrial pharmacology 890 (VIP 890)

<b>Module credits</b>	90.00
<b>Prerequisites</b>	VRM 813
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Paraclinical Sciences
<b>Period of presentation</b>	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.