

**FACULTIES OF THE UNIVERSITY
OF PRETORIA**

HUMANITIES
NATURAL AND AGRICULTURAL SCIENCES
LAW
THEOLOGY
ECONOMIC AND MANAGEMENT SCIENCES
VETERINARY SCIENCE
EDUCATION
HEALTH SCIENCES
ENGINEERING, BUILT ENVIRONMENT AND INFORMATION TECHNOLOGY

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0002**

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**FACULTY OF VETERINARY SCIENCE
ACADEMIC PERSONNEL AS ON 30 SEPTEMBER 2009**

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Sonntag, Q., BVSc(Hons)(Pretoria)	Lecturer
Kitshoff, A.M., BVSc(Hons)(Pretoria)	Lecturer
Neville, B.G., BVSc(Pretoria)	Lecturer
Mosathupa, J.G., BTech(Diagn Rad)(Technikon Witwatersrand)	Junior Lecturer
HED(Unisa) PDMB(KwaZulu-Natal)	

Department of Paraclinical Sciences

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Eloff, J.N., BSc(Hons)(Botany) MSc(Chemistry)	Professor
DSc(Plant Biochemistry)(Potchefstroom)	
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Qekwana D.N., BVSc(Pretoria).....	Lecturer
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Department of Production Animal Studies

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MMedVet (Reproduction)(Pretoria) PhD(Utrecht)	
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DipACVPM	

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CIBiol FIBiol FZS FRS(SA) Sci Nat	
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Dr med.vet(Hannover)	
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Fehrsen, J., BSc(Hons)(Cape Town) MSc(Witwatersrand).....	Extraordinary Lecturer
PhD(Rhodes)	
Heath, J.A., MSc(Agric) PhD(Pretoria).....	Extraordinary Lecturer
Koekemoer, J.J.O., MSc PhD(Potchefstroom).....	Extraordinary Lecturer
Mans, B.J., BSc(Hons) MSc PhD(Pretoria).....	Extraordinary Lecturer
Maree, F.F., BMedSci BSc(Hons) PhD(Pretoria).....	Extraordinary Lecturer
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MPhil(UZ, Harare) PhD(Pretoria)	
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	Officer
Sibeko, K., BSc(Hons) MSc(Biotech)(Limpopo).....	Research Officer

Equine Research Centre

Director: Guthrie, A.J., BVSc(Hons) MMedVet(Phys)(Pretoria) Professor
PhD(Louisiana State)

Centre for Veterinary Wildlife Studies

Alexander Forbes Chair for Wildlife

Director: Centre for Veterinary Wildlife Studies:

Kriek, N.P.J., BVSc MMedVet(Path)(Pretoria) Professor

Student Administration

Vhengani, J., BA (Admin)(Hons)(Venda) Head

GENERAL INFORMATION

The rules for degrees and diplomas here published are subject to change and may be amended prior to the commencement of the academic year in 2010.

Admission

Any person who wishes to register at the University for the first time, or after an interruption of studies, should apply or reapply for admission. Application for admission to all undergraduate programmes in the Faculty closes on 30 June. Information on application for postgraduate programmes: consult the relevant head of department.

BVSc degree programme

The BVSc degree programme, as well as the prerequisite BSc (Veterinary Biology) programme, is under review. Students who enrolled for BSc (Veterinary Biology) I in 2009 will be required to complete the second year as prescribed, subject themselves to selection at the end of the second year and complete the BSc (Veterinary Biology) degree programme in the third year at the Onderstepoort Campus. Successful candidates will then be allowed to enter and complete the current four-year BVSc degree programme at the Onderstepoort Campus.

Students who are not selected for admission to the BSc (Veterinary Biology) third year, will have to select an alternative BSc degree programme in the Faculty of Natural and Agricultural Sciences.

DCH(Vet) and DHA(Vet)

Both programmes are under review – not offered in 2010.

University Diploma in Veterinary Nursing

Only a limited number of students will be admitted [consult V.10 (a)(i), (ii), (iii) and (iv)]. The programme is currently under review.

Statement of symbols

When registering at this University for the first time, a candidate has to submit a record of symbols obtained for each subject in the Grade 12 examination.

National Senior Certificate (NSC)

All undergraduate students who register at the University of Pretoria for the first time, must show their original National Senior Certificate at the Student Administration of their faculty before the end of the first semester.

Medium of instruction

In conducting its business, the University uses two official languages, namely Afrikaans and English. However, since 1997, English is the only medium of instruction in the Faculty of Veterinary Science, although undergraduate students may answer tests and examinations in Afrikaans. A proficiency test in English may be required as part of the selection procedure.

In respect of administrative and other services, a student has the right to choose whether the University should communicate with him or her in Afrikaans or English.

Bursaries and loans

Particulars of bursaries and loans are available on request.

Residence accommodation

Allocation of accommodation in the residence at Onderstepoort will only be confirmed after admission to the third year of the BSc (Veterinary Biology) degree programme, BVSc degree programme or DipVetNurs diploma programme. Details concerning accommodation fees are available on request.

Application for accommodation in the Onderstepoort residence should be submitted as part of the application form for admission as from 1 April of the preceding year.

Academic Orientation Programme

This programme is presented annually for all new diploma and third-year BSc (Veterinary Biology) students, and attendance is compulsory. Parents of diploma students, may attend the first day of the programme, details of which are obtainable from:

The Head: Student Administration, Faculty of Veterinary Science, University of Pretoria, Private Bag X04, 0110, Onderstepoort.

Leadership and Management Awareness Programme

The programme is presented annually for all new diploma and BVSc II students. It takes place before lectures start and forms part of the orientation programme for diploma students. Attendance is compulsory.

Hospital Orientation Programme

The programme is presented annually for all BVSc III students. It takes place during the week before the clinic rotation programme starts in September.

Attendance is compulsory.

Prescribed books

Students are requested not to purchase any books or instruments before they start with the programme. Specific requirements are stated in the relevant study guides.

Amendment of regulations and fees

The University retains the right to amend the regulations and to change fees without prior notification.

NB The fees advertised and thus levied in respect of a module or study programme presentation represents a combination of the costs associated with the formal services rendered (for example lectures, practicals, access to laboratories, consumables used in laboratories, etc) as well as associated indirect overheads such as the provision of library and recreation facilities, security and cleaning services, electricity and water supply, etc. Therefore the fees in respect of a module or study programme presentation cannot simply be reconciled with the visible services that are rendered in respect of such module or study programme.

Dress code

Special instructions regarding dress must be adhered to. Details will be furnished when students are notified that they have been selected for the programme.

Excursions

As it is essential to gain practical experience outside the Faculty, students are reminded to make provision for an adequate amount of money to cover expenses for excursions throughout their period of study. Details are provided in the relevant study guides.

Definition of terms

The following terms are generally used in all faculties.

academic year: the duration of the academic year as determined by the University Council

capita selecta: a specific component or combination of components of an existing module

certificate of satisfactory preparation: satisfactory preparation also implies satisfactory attendance at practical classes and clinical work

core module: a compulsory module for a specific study programme

module: an independent, defined learning unit, designed to result in a specific set of learning outcomes, and which is a component of a programme

credit (or credit value): a value unit linked to particular learning activities and the total number of learning hours needed to complete a module successfully.

curriculum: a series of modules grouped together over a specified period of time and in a certain sequence according to the regulations

elective module: a module that can be selected on an elective basis

examination mark: the mark awarded to a student in a module on the basis of an examination, including practical and clinical examinations where applicable. If necessary, the examination mark is finalised after ancillary examinations have been completed.

final mark: the mark calculated on the basis of the semester/year mark and the examination mark awarded to a student in a module, using a formula which is determined from time to time by means of regulations for each module with the proviso that should no semester/year mark be required in a module, the examination mark serves as the final mark

regulation for admission: a regulation approved by a faculty concerning the admission of students to the faculty and which includes a provision regarding the selection process.

SAQA: South African Qualifications Authority

semester module: a module that extends over one semester

semester/year mark: the mark awarded to a student on the basis of tests, class-work, practical work or any other work which was done in a particular module

specialist module: major module (speciality) in MMedVet programmes

syllabus: the division of the study material for a specific module, according to the regulations

year module: a module that extends over one year (two semesters)

REGULATIONS AND CURRICULA: DEGREE AND DIPLOMA PROGRAMMES

1. Admission to undergraduate studies

1.1 General

1.1.1 To register for a first bachelor's degree at the University, a candidate should, apart from the required National Senior Certificate, comply with the particular requirements prescribed in the admission procedures and the faculty regulations of the respective faculties and departments for admission to particular modules and programmes.

1.1.2 The following persons may also be considered for admission:

- (i) A candidate who is in possession of another certificate that is accepted by the

University as equivalent to the required National Senior Certificate with admission for degree purposes.

- (ii) A candidate who is a graduate from another tertiary institution or has been granted the status of a graduate of such an institution.

1.1.3 The Senate may limit the number of students allowed to register for a programme, in which case the Dean may, at his or her own discretion, select from the students who qualify for admission those who may be admitted.

2. **Admission to diploma studies**

Students will only be admitted to an undergraduate diploma programme if they comply with the specific requirements for admission to specific modules and programmes as stipulated in the admission procedures and faculty regulations of the various faculties and departments.

3. **Academic literacy**

It is expected of all new undergraduate students to provide proof of academic literacy. This can be achieved through successful completion of prescribed tests and/or successful completion of prescribed modules.

4. **Computer and information literacy**

It is expected of all new undergraduate students to provide proof of computer literacy. This can be achieved through successful completion of prescribed tests and/or successful completion of prescribed modules in computer and information literacy.

5. **Registration for a particular year of study**

At the beginning of an academic year, students register for all the modules they intend taking in that specific year (whether these be first-semester, second-semester or year modules).

6. **Module credits for unregistered students**

There are students who attend lectures, write tests and examinations and in this manner earn 'marks', but have either not registered for modules or have not registered as students at all. These marks will not be communicated to any student before s/he has provided proof of registration. Students cannot obtain any credits in a specific academic year for a module 'passed' in this manner during a previous academic year and for which they were not registered. This arrangement applies even where students are prepared to pay the tuition fees.

7. **Examination and pass requirements**

A final mark of at least 50% is required to pass a module. Students are also referred to the Faculty approved *Guidelines for Semester Assessments and Examinations in the Faculty of Veterinary Science* as well as individual study guides.

7.1 **Subminima in examinations**

Subminima required in modules or subdivisions of modules appear in the study guides issued annually for these modules.

7.2 Examinations (Reg G.12)

The examinations for modules offered in the first semester, take place in May/June, while all other examinations (for second-semester modules and year modules) take place in October/November.

7.3 Ancillary examinations (Reg G.12.3)

After completion of an examination and before the final examination results are announced, the examiners may offer an additional evaluation opportunity on certain aspects of the work of the module as provided for in the *Guidelines for Semester Assessments and Examinations in the Faculty of Veterinary Science*.

7.4 Re-marking of examination papers (also consult Reg G.14)

After an examination, departments provide feedback to students concerning the framework that was used by the examiners during the examination. The manner in which feedback is given is determined by the heads of department.

Students may apply for re-marking of an examination paper after perusal of the paper and payment of the prescribed fee. **This should take place within 14 calendar days after the announcement of the results.** The examiner will be appointed by the head of the department concerned. Re-evaluation of oral examinations is not allowed.

7.5 Supplementary examinations (Reg G. 12.4)

Supplementary examinations in first-semester modules take place as provided for in Reg V.1(d)(1)(ii)(bb), and V.10(i)(i)(bb), while those for year modules take place before the beginning of the first semester of the following year, or otherwise as stipulated in the study guide for that module.

7.6 Statutory requirements

Registration requirements contained in V.1 (a)(3) and (4) and V. 10(a)(v) and (vi).

8. Promotion requirements

Promotion to a subsequent year of study in all undergraduate programmes offered by the Faculty is subject to the successful completion of all modules of the relevant year of study. Students are specifically referred to V.1(c) (iv), (v), (ix) and (x) as well as V.10(e), (g) and (h).

<p>DEGREES AND DIPLOMAS CONFERRED/AWARDED IN THE FACULTY OF VETERINARY SCIENCE</p>

The following degrees and diplomas are conferred/awarded in the Faculty (minimum period of study in brackets):

- (a) Bachelor of Veterinary Science – [BVSc] (4 years)
- (b) Bachelor of Veterinary Science Honours – [BVScHons] (1 year)
- (c) Master of Veterinary Medicine – [MMedVet] (2 years)
- (d) Master of Science in Veterinary Science – [MSc (Veterinary Science)] (1 year)
- (e) Master of Science in Veterinary Industrial Pharmacology – [MSc (Veterinary Industrial Pharmacology)] (1 year)
- (f) Master of Science in Veterinary Tropical Diseases – [MSc (Veterinary Tropical Diseases)] (1 year)
- (g) Doctor of Philosophy – [PhD] (2 years)

- (h) Doctor of Veterinary Science – [DVSc]
- (i) Postgraduate Diploma in Public Health – [DCH(Vet)] (2 years)
(Under review – not offered in 2010)
- (j) Postgraduate Diploma in Health Administration – [DHA(Vet)] (2 years)
(Under review – not offered in 2010)
- (k) University Diploma in Veterinary Nursing – [DipVetNurs] (2 years)

Students who were given permission by the deans of both faculties to register for a module offered by another faculty, must familiarise themselves with the requirements for admission to the module in question as well as the regulations governing subminima in examinations and supplementary examinations, etc.

I. BACHELOR'S DEGREE

General Regulations G.1 to G.15 are applicable to bachelor's degrees and also apply *mutatis mutandis* to undergraduate diplomas.

V.1 Bachelor of Veterinary Science [BVSc] (Code 08130003)

(a) Admission requirements

NB

1. Subject to the stipulations of General Regulation G.1., prospective students who wish to be admitted to the programme must have:
a BSc (Veterinary Biology) degree;
OR
a related degree and successfully completed BSc (Veterinary Biology) II and III modules as required;
OR
a related degree and successfully completed related modules in an existing veterinary science degree programme at another university.
2. Admission to the programme will be subject to selection and the availability of places (see General Information).
3. Each student must apply immediately after first admission to the Registrar of the South African Veterinary Council for registration as a student in veterinary science. Registration is compulsory and must be renewed annually for the duration of the study.
4. After the degree has been conferred, graduates are required to register with the South African Veterinary Council as veterinarians before they may practise in South Africa in this capacity.

(b) Duration of study

Four years of full-time study

(c) General

- (i) General Regulation G.10.1 concerning satisfactory attendance, preparation and payment of module fees, applies to examination, promotion and attendance modules. Attendance at all lectures, practical classes, clinics (including clinical orientation and holiday clinics) and excursions is compulsory. Any form of absence must be justified by submission of a

- medical certificate or another acceptable form of evidence. Failure to comply may lead to examination refusal.
- (ii) Admission to the examinations in some modules is subject to specific requirements – consult study guides. The weighting of semester/year marks in the calculation of the final mark shall be 50%.
 - (iii) A student is required to obtain a subminimum of 40% in the examination as well as a final mark of at least 50% to pass a module. A subminimum of 40% in subdivisions of theoretical and/or practical examinations may be required as stipulated by the Dean in consultation with the head of department concerned, and as set out in the annual study guide. In terms of General Regulation G.10.4, a semester mark or year mark of at least 50% must be obtained in attendance modules. The stipulations of General Regulations G.12.1 to G.12.5 also apply.
 - (iv) A student must pass all the modules of the respective previous year of study in order to be promoted to the subsequent year of study, as well as to the clinical rotations. A single further examination will, however, be allowed for students who have **only one** of the following modules outstanding at the end of the academic year:
 - GNS 420 General surgery
 - WDE 320 Planted pastures and fodder crops
 - ANV 601 Anaesthesiology
 - PHP 601 Porcine health and production
 - PLY 601 Poultry health and production
 - VBE 601 Veterinary business management and ethics
 - CBF 610 Cage bird and fish diseases
 - WOC 610 Wildlife, ostrich and crocodile health
 - (v) A student who fails a module or modules in a year of study, has to repeat, subject to the stipulations of General Reg. G.11.2 (a) to (c) and Regulation V.1(c)(ix), all the modules for that particular year of study, except modules which were passed with a final mark of at least 65%, for which full exemption is granted. Provisional exemption is granted for an examination module passed with a final combined mark of less than 65%. This implies that at least 80% of the practical periods have to be attended and that a year/semester mark of at least 50% has to be obtained through the completion of all scheduled assessments, tests, tasks, etc, in order to obtain exemption from the examination in those modules at the end of the repeat semester/year. Examinations are compulsory in all the modules previously failed, as well as in those modules in which exemption from the examination has not been obtained. If a student fails any of these examinations (or supplementary examination), he or she will not be allowed to continue their studies in the Faculty [see V.1(c)(x)].
 - (vi) No limit is placed on the number of modules in which supplementary examinations may be done, except in the final year of study. The nature and date of supplementary examinations are determined by the Dean in consultation with the head of department.
 - (vii) A head of department may require from a student who has been admitted to a supplementary examination, to do additional prescribed work for a specified period of time before he or she may take the supplementary examination as approved by the Dean
 - (viii) Subject to General Regulation G.12.4.3, a minimum of 50% is required to pass a supplementary examination. The semester or year mark is not taken into account.

- (ix) In addition to the stipulations of General Regulation G.3.2(b), a student will not be allowed to repeat the same year of study twice.
- (x) A student who has to discontinue his or her studies in terms of stipulations (v) and (ix) above, may request the Dean in writing to consider his or her application for readmission to the Faculty in terms of prescribed procedures as stipulated in *Application of General Regulation G.3 and Faculty Regulation V.1.c(ix) in the Faculty of Veterinary Science, University of Pretoria* as approved by the Faculty Board.

(d) Curriculum

(i) First year of study

- | | | |
|------|---------|-------------------------------------------------------|
| (1) | APH 400 | Applied physiology |
| (2) | CPE 400 | Companion animal ethology, handling and welfare |
| (3) | GOP 400 | General and organ pathology |
| (4) | VPH 400 | General pharmacology |
| (5) | GNS 420 | General surgery |
| (6) | ICS 401 | Introductory clinical studies |
| (7) | TOX 400 | Toxicology |
| (8) | VCA 400 | Veterinary comparative anatomy |
| (9) | VTP 400 | Introductory veterinary microbiology and parasitology |
| (10) | WDE 320 | Planted pastures and fodder crops |

(ii) Second year of study

- | | | |
|-----|---------|-------------------------------|
| (1) | SAC 500 | Small animal clinical studies |
| (2) | BHP 500 | Bovine health and production |

(iii) Third year of study

- | | | |
|-----|------------------|---------------------------------------------------|
| (1) | ANV 601 | Anaesthesiology |
| (2) | ECS 601 | Equine clinical studies |
| (3) | PHP 601 | Porcine health and production |
| (4) | PLY 601 | Poultry health and production |
| (5) | VBE 601 | Veterinary business management and ethics |
| (6) | SSH 601 | Small stock health and production |
| (7) | PHE 601 | Veterinary public health and applied epidemiology |
| (8) | Electives | |
| | CBF 610 | Cage bird and fish diseases |
| | WOC 610 | Wildlife, ostrich and crocodile health |

Students who would like to pursue an elective in research methodology should lodge an enquiry at Student Administration.

(9) Attendance module

- | | |
|---------|----------------------|
| DPT 620 | Diagnostic pathology |
|---------|----------------------|

(aa) Students have to attend 5 working days of clinic orientation in the Veterinary Academic Hospital before commencement of the clinic rotation programme.

(bb) Supplementary examinations

Supplementary examinations in first-semester modules take place after conclusion of the June examinations.

- (iv) **Fourth year of study**
- (1) BHP 650 Applied bovine health and production
 - (2) SSH 650 Applied small stock health and production
 - (3) PHP 650 Applied porcine health and production
 - (4) PLY 650 Applied poultry health and production
 - (5) SAC 650 Applied small animal clinical studies
 - (6) ECS 650 Applied equine clinical studies
 - (7) PHE 650 Applied veterinary public health
- (aa) **Supplementary examinations**
 A head of department may require from a student who has been admitted to a supplementary examination, to do additional prescribed work for a specified period of time before he or she may take the supplementary examination as approved by the Dean.
 A student will only be allowed to do supplementary examinations in **two** modules.
- (bb) **Special examination**
 Students who have failed one or two modules and who have not been admitted to a supplementary examination, or who fail the supplementary examination(s), may be allowed to take a special examination after having worked full-time in the department/s concerned for a period determined by the head/s of department and with the Dean's approval. If they fail the latter, the Dean will determine when a further examination may be taken.
- (cc) **Repetition of the final year of study**
 Students who have failed more than two modules at the time of the Examination Commission meeting, must repeat the final year of the curriculum with due cognisance of rule V.1(c)(v), unless the Dean decides otherwise.
- (dd) **Clinical experience (including practical work)**
 Proof of satisfactory completion of prescribed clinical and practical components of the programme as prescribed below must be submitted to the Head: Student Administration of the Faculty, prior to the commencement of the final examinations. Failure to do so may lead to examination refusal.
- In state control of stock diseases and administration: experience at an approved institution as approved by the Dean.
 - Practical and clinical experience at the Faculty and at approved private practices as well as other institutions as approved by the Dean.
- (ee) **Degree with distinction**
 The BVSc degree is conferred with distinction on a student who has obtained at least 60% for each module during the last three years of study, and an average of at least 75% for all the modules in the final year of study.

II. HONOURS DEGREE

**V.2 Bachelor of Veterinary Science Honours
[BVScHons] (Code 08240001)**

Also consult General Regulations G.16 to G.29. 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 information provided in the Syllabi section of this publication.

The honours degree provides the student with a broad scientific background in the theoretical aspects of the modules that are required for eventual MMedVet degree studies. However, the conferment of the honours degree is not subject to future registration for master's degree studies.

(a) Requirements for admission

A candidate must have a BVSc or an equivalent degree. Entrance examinations for individual modules may be required.

In addition to the stipulations of the regulations, the head of department has the prerogative to require an entrance test prior to registration for honours degree studies. Candidates may also be required to pass an English proficiency test (TOEFL) at an acceptable level.

(b) Duration

The programme has to be completed within two years following first registration for the degree in the case of full-time study, and within three years in the case of part-time study.

(c) Curriculum

The curriculum consists of a number of modules, equivalent to a minimum of 24 and a maximum of 30 credits, chosen from the following list, or from relevant modules offered in other programmes of the Faculty and other faculties of the University as approved by the dean/s of the faculties concerned:

MODULE NAME	MODULE CODE
DISCIPLINE-BASED	
Anaesthesiology:	
Anaesthesiology	ANV 771, 772
Anatomy/Histology:	
Anatomy	ANG 774, 779
Histology	HIS 700
Clinical Pathology:	
Clinical pathology	KPA 701, 702
Ophthalmology:	
Ophthalmology	OFM 700
Pathology:	
Mechanisms of disease	PAT 771
Necropsy technique and interpretation	PAT 707
Ophthalmological pathology	PAT 708
Pathology	PAT 700
Reproductive pathology	PAT 709

Pharmacology:

Clinical ophthalmic pharmacology and therapeutics FAK 711

Physiology:

Physiology FSL 713, 787, 788

Reproductive physiology of animals GSK 708

Surgery:

Surgery CHV 705

Surgery: Reproduction CHV 706

Toxicology:

Toxicology: Basic and clinical veterinary toxicology TOK 701

Toxicology: Organic and inorganic poisons TOK 704

Toxicology: Phyto- and mycotoxins TOK 703

Veterinary Public Health:

Veterinary public health fundamentals VPH 700

SPECIES-BASED

LARGE STOCK/SMALL STOCK

Anatomy ANG 704

Beef herd health BKG 782

Bovine medicine: Gastrointestinal and production diseases BOM 701

Bovine medicine: Diseases of the liver, cardiovascular, respiratory and urinary system BOM 702

Bovine medicine: Neurology, musculoskeletal system, skin and appendages BOM 703

Reproductive biology: Cattle GSK 709

Clinical reproduction: Cattle GSK 710

Clinical pharmacology: Ruminants FAK 706

Dairy cattle herd health BKG 781

Pathology: Ruminants PAT 705

Production animal management PAM 700

Radiology: Ruminants DIM 785

Small stock herd health KKS 780

Reproductive biology: Small stock GSK 711

Clinical reproduction: Small stock GSK 712

Non-radiological diagnostic imaging of ruminants DIM 786

HORSES

Anatomy ANG 703

Clinical pharmacology: Horses FAK 707

Equine medicine GEN 703

Reproductive biology: Horses GSK 713

Clinical reproduction: Horses GSK 714

Ophthalmology: Large Animals OFM 702

Pathology: Horses PAT 704

Radiology: Horses DIM 783

Surgery: Horses CHV 704

Non-radiological diagnostic imaging of horses DIM 784

LABORATORY ANIMALS

Laboratory animal science LAS 700

Toxicology: Laboratory toxicity testing	TOK 702
Veterinary research methodology	VRM 782

PIGS

Pathology: Pigs	PAT 703
Porcine health and production: Housing	PHP 701
Porcine health and production: Nutrition	PHP 702

POULTRY

Poultry health and production	PHP 771
Poultry nutrition	PVV 700

SMALL ANIMALS

Anatomy	ANG 705
Clinical pharmacology: Dogs and cats	FAK 775
Ophthalmology: Small Animals	OFM 701
Pathology: Dogs and cats	PAT 702
Radiology: Dogs and cats	DIM 781
Small animal medicine	GEN 702, 707
Small animal behavioural medicine	GEN 709
Reproductive biology: Dogs and cats	GSK 715
Clinical reproduction: Dogs and cats	GSK 716
Surgery: Small animals	CHV 703
Non-radiological diagnostic imaging of dogs and cats	DIM 782

WILDLIFE

Drugs used in wildlife and exotic species	FAK 708
Pathology: Wildlife	PAT 706
Reproductive biology: Wildlife	GSK 717
Clinical reproduction: Wildlife	GSK 718

See SYLLABI on web for the number of credits awarded to these modules.

- (i) Where the honours degree precedes a master's degree, the modules chosen for the honours degree programme must support the particular field of study for the prospective master's degree programme. The selection of modules is approved by the Dean, on the recommendation of the head of department in which the study for the master's degree will be undertaken. Credits obtained will be recognised in the MMedVet degree programme [see V.3(d)].
 - (ii) If a candidate plans to register for an honours degree only, the selected modules are approved by the Dean, following consultation with the heads of department concerned.
- (d) Registration**
Students who intend to register for this programme, must consult with the Dean and the heads of department concerned, well in advance, as not all the postgraduate modules are necessarily offered every year.
- (e) Examinations**
(Consult General Regulations G.18 and G.26.1)

In order to obtain the degree a student has to successfully complete all relevant modules. A student may not sit for an examination more than twice in the same module.

- (i) 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 students.
- (ii) To obtain the **degree with distinction**, a minimum of 60% is required in each module, as well as a proportionately calculated average of at least 75% for the degree as a whole.

III. MASTER'S DEGREES

V.3 Master of Veterinary Medicine [MMedVet]

Also consult General Regulations G.30 to G.44. 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 after having consulted the Syllabi on the web at: <http://web.up.ac.za/modules>

The master's degree in Veterinary Medicine is a professional degree and equips the student with a broad scientific background in the theoretical and practical aspects of the chosen field of study.

(a) Fields of study

The MMedVet degree is offered in the following fields of study. The degree code, mini-dissertation code and total number of SAQA credits are indicated in respect of each field of specialisation.

	Field of study	Degree code	Mini-dissertation code	SAQA credits
1	Anaesthesiology (Anaes)	08250131	ANV 890	685
2	Cattle Herd Health (Bov)	08250231	BKG 890	640
3	Clinical Laboratory Diagnostics (Clin lab diag)	08250191	KDK 890	480
4	Diagnostic Imaging (DiagIm)	08250142	DIM 890	626
5	Laboratory Animal Science (LAS)	08250211	PFK 890	640
6	Medicine (Med)(Bov)	08250052	GEN 891	560
7	Medicine (Med)(Eq)	08250053	GEN 892	560
8	Medicine (Med)(Small Animals)	08250054	GEN 893	664
9	Ophthalmology (Ophth)	08250251	OFM 890	640

10	Pathology (Path)	08250101	PAT 890	462
11	Pharmacology (Pharm)	08251131	FAK 895	620
12	Pig Herd Health (Suill)	08250182	VKH 890	640
13	Poultry Diseases (Atil)	08250171	PVT 890	630
14	Reproduction (Gyn)	08250031	GSK 890	630
15	Small Stock Herd Health (CaprOv)	08250241	KKS 890	550
16	Surgery (Chir)(Eq)	08251121	CHV 894	797
17	Surgery (Chir)(Small Animals)	08250022	CHV 892	822
18	Toxicology (Tox)	08251141	TOK 890	480
19	Veterinary Ethology (VetEt)	08250082	VET 890	640
20	Veterinary Public Health (Hyg)	08250041	VVD 895	620
21	Wildlife Diseases (Fer)	08250221	WSK 890	650

(b) Admission

- (i) Subject to the stipulations of General Regulations G.30 and G.62, a candidate must be in possession of the BVSc or an equivalent degree. In certain cases, the head of department under which a specific field of study for the MMedVet falls, may require that a candidate first obtains a BVScHons degree [Reg.V.2(c)], with modules applicable to the particular MMedVet degree programme. A minimum of 60% in each module may be required before a student may commence studies for the MMedVet degree.
A student who wishes to commence studies for the MMedVet degree, and already has a BVScHons degree and complies with the requirements already mentioned, will retain credit for the modules concerned for a period of two years, unless the head of department decides otherwise.
- (ii) Furthermore, a head of department has the prerogative to require, in addition to the requirements of the said regulation, an evaluation of a student, which may include practical components, or the setting of special conditions. A student may also be required to pass a proficiency test in English (TOEFL) at an acceptable level.
- (iii) The number of students that can be admitted to the MMedVet degree programme annually, depends on the training capacity of a department and the number of available posts.

(c) Duration and attendance requirements

- (i) For candidates who are already in possession of the BVScHons degree with the applicable modules, the degree programme extends over at least two years, with a maximum duration of four years. If all the required modules have to be included in the MMedVet curriculum, the programme extends over a maximum of six years.
- (ii) Unless stipulated otherwise, the Dean must be satisfied that the candidates will have sufficient access to appropriate facilities and, where necessary, supervision by an appropriate person to complete the work required for the degree at a satisfactory level.
- (iii) Attendance requirements are determined in each individual case by the Dean (as recommended by the head of department concerned).

- (iv) Candidates have to complete an acceptable module in research methodology successfully.
- (v) Candidates will be required to keep a logbook or similar record of experiential training which is to be signed by the supervisor every 6 months. The logbook or other suitable record is to be made available for auditing when the specialist module is monitored by the South African Veterinary Council.

(d) Curricula

Elective modules will in all instances be determined in consultation with the head of department in which the proposed special field of study is offered. If deemed necessary, modules offered by other faculties of the University of Pretoria may form part of the prescribed programme.

1. MMedVet (Anaesthesiology)

Specialist module	Core modules	Elective modules
Anaesthesiology ANV 800	Anatomy ANG 774	None
	Physiology FSL 787	
	Physiology FSL 788	
	Research methodology VRM 811	

2. MMedVet (Cattle Herd Health)

Specialist module	Core modules	Elective modules
Cattle herd health BKG 800	Veterinary epidemiology EPL 851	<u>Two of:</u> Bovine medicine: Gastro-intestinal and production diseases BOM 701 Reproductive biology: Cattle GSK 709 Clinical reproduction: Cattle GSK 710 Pathology: Ruminants PAT 705 Production animal management PAM 700 Selected infectious diseases: Animal health management SID 811 Selected infectious diseases: Cattle SID 812
	Veterinary epidemiology EPL 852	
	Research methodology VRM 811	

3. MMedVet (Clinical Laboratory Diagnostics)

Specialist module	Core modules	Elective modules
Clinical laboratory diagnostics KDK 800	Clinical pathology KPA 701	<u>Two of:</u> Mechanisms of disease PAT 771 Physiology FSL 787
	Clinical pathology KPA 702	
	Physiology FSL 713	
	Research methodology VRM 811	

4. MMedVet (Diagnostic Imaging)

Specialist module	Core modules	Elective modules
Diagnostic imaging DIM 870	Anatomy ANG 774	One of: Equine medicine GEN 703 Small animal medicine GEN 707
	Radiology: Dogs and cats DIM 781	
	Non-radiological diagnostic imaging of dogs and cats DIM 782	
	Radiology: Horses DIM 783	
	Non-radiological diagnostic imaging of horses DIM 784	
	Medical physics MFK 800	
	Research methodology VRM 811	

5. MMedVet (Laboratory Animal Science)

Specialist module	Core modules	Elective modules
Laboratory animal science PFK 800	Laboratory animal science LAS 700	Any two appropriate postgraduate modules approved by the HOD
	Toxicology: Laboratory toxicity testing TOK 702	
	Veterinary research methodology VRM 782	
	Research methodology VRM 811	

6. MMedVet (Medicine)(Bovine)

Specialist module	Core modules	Elective modules
Bovine medicine GEN 801	Selected infectious diseases: Cattle SID 812	One of: Beef herd health BKG 782 Dairy cattle herd health BKG 781 Pathology: Ruminants PAT 705 Toxicology: Basic and clinical veterinary toxicology TOK 701 Physiology FSL 788 Veterinary epidemiology EPL 852
	Research methodology VRM 811	
	Veterinary epidemiology EPL 851	
	Clinical pharmacology: Ruminants FAK 706	

7. MMedVet (Medicine)(Equine)

Specialist module	Core modules	Elective modules
Equine medicine GEN 802	Clinical pharmacology: Horses FAK 707	One of: Clinical pathology KPA 701 Clinical pathology KPA 702
	Physiology FSL 787	

	Research methodology VRM 811	Clinical reproduction: Horses GSK 714 Ophthalmology: Large animals OFM 702 Pathology: Horses PAT 704 Radiology: Horses DIM 783 Surgery: Horses CHV 704 Non-radiological diagnostic imaging of horses DIM 784

8. MMedVet (Medicine)(Small Animals)

Specialist module	Core modules	Elective modules
Small animal medicine GEN 803	Small animal medicine GEN 702	<u>One of:</u> Clinical pathology KPA 701 Clinical pathology KPA 702 Radiology: Dogs and cats DIM 781 Non-radiological diagnostic imaging of dogs and cats DIM 782 <u>Two of:</u> Anaesthesiology ANV 771 Mechanisms of disease PAT 771 Clinical pharmacology: Dogs and cats FAK 775 Physiology FSL 787 Radiology: Dogs and cats DIM 781 Non-radiological diagnostic imaging of dogs and cats DIM 782
	Small animal medicine GEN 707	
	Research methodology VRM 811	

9. MMedVet (Ophthalmology)

Specialist module	Core modules	Elective modules
Ophthalmology OFM 800	Anatomy ANG 774	None
	Clinical ophthalmic pharmacology and therapeutics FAK 711	
	Ophthalmological pathology PAT 708	
	Physiology FSL 788	
	Research methodology VRM 811	

10. MMedVet (Pathology)

Specialist Module	Core modules	Elective modules
Pathology PAT 800	Histology HIS 700	Any appropriate postgraduate module approved by the HOD
	Pathology PAT 700	
	Research methodology VRM 811	

11. MMedVet (Pharmacology)

Specialist module	Core modules	Elective modules
Pharmacology FAK 800	Advanced fundamentals of pharmacology FAK 876	Any two appropriate postgraduate modules approved by the HOD
	Veterinary epidemiology EPL 852	
	Veterinary industrial pharmacology VIP 800	
	Research methodology VRM 811	

or

Specialist module	Core modules	Elective modules
Pharmacology FAK 800	Advanced fundamentals of pharmacology FAK 876	Any two appropriate postgraduate modules approved by the HOD
	Clinical pharmacology FAK 877	
	Physiology FSL 713	
	Research methodology VRM 811	

12. MMedVet (Pig Herd Health)

Specialist module	Core modules	Elective modules
Pig herd health VKH 800	Selected infectious diseases: Animal health management SID 811	Two of: Advanced fundamentals of pharmacology FAK 876 Pathology: Pigs PAT 703 Veterinary epidemiology EPL 851
	Selected infectious diseases: Pigs SID 815	
	Research methodology VRM 811	

13. MMedVet (Poultry Diseases)

Specialist module	Core modules	Elective modules
Poultry health and production PHP 800	Poultry health and production PHP 771	None
	Poultry nutrition PVV 700	
	Research methodology VRM 811	

14. MMedVet (Reproduction)

Specialist module	Core modules	Elective modules
Reproduction GSK 800	Clinical reproduction: Cattle GSK 710 Clinical reproduction: Small stock GSK 712 Clinical reproduction: Horses GSK 714 Clinical reproduction: Dogs and cats GSK 716	Two of: Reproductive physiology of animals GSK 708 Reproductive biology: Cattle GSK 709 Reproductive biology: Small stock GSK 711 Reproductive biology: Horses GSK 713 Reproductive biology: Dogs and cats GSK 715 Reproductive pathology PAT 709 Anatomy ANG 779
	Research methodology VRM 811	

15. MMedVet (Small Stock Herd Health)

Specialist module	Core modules	Elective modules
Small stock herd health KKS 800	Small stock herd health KKS 780	Two of: Clinical reproduction: Small stock GSK 712 Reproductive biology: Small stock GSK 711 Helminth infections: Ruminants HEI 813 Production animal management PAM 700 Selected infectious diseases: Animal health management SID 811 Selected infectious diseases: Small stock SID 816 Veterinary epidemiology EPL 851 or EPL 852
	Research methodology VRM 811	

16. MMedVet (Surgery)(Equine)

Specialist module	Core modules	Elective modules
Surgery CHV 804	Anatomy ANG 703	One of: Anaesthesiology ANV 771 Equine medicine GEN 703 Clinical reproduction: Horses GSK 714 Reproductive Biology: Horses GSK 713 Ophthalmology: Large animals OFM 702
	Radiology: Horses DIM 783	
	Non-radiological diagnostic imaging of horses DIM 784	
	Research methodology VRM 811	

17. MMedVet (Surgery)(Small Animals)

Specialist module	Core modules	Elective modules
Surgery CHV 803	Anaesthesiology ANV 771	None
	Anatomy ANG 705	
	Radiology: Dogs and cats DIM 781	
	Non-radiological diagnostic imaging of dogs and cats DIM 782	
	Research methodology VRM 811	

18. MMedVet (Toxicology)

Specialist module	Core modules	Elective modules
Toxicology TOK 800	Toxicology: Basic and clinical veterinary toxicology TOK 701	Any appropriate postgraduate module approved by the HOD
	Veterinary epidemiology EPL 852	
	Research methodology VRM 811	
	<u>Two of:</u> Toxicology: Laboratory toxicity testing TOK 702 Toxicology: Organic and inorganic poisons TOK 704 Toxicology: Phyto- and mycotoxins TOK 703	

19. MMedVet (Ethology)

Under review – will not be offered in 2010

20. MMedVet (Veterinary Public Health)

Specialist module	Core modules	Elective modules
Veterinary public health VVD 800	Veterinary epidemiology EPL 851	Any appropriate postgraduate module approved by the HOD
	Veterinary public health VPH 881, 882, 883, 884	
	Research methodology VRM 811	

21. MMedVet (Wildlife Diseases)

Specialist module	Core modules	Elective modules
Veterinary wildlife studies WLS 800	Drugs used in wildlife and exotic species FAK 708	<u>Two of:</u> Clinical reproduction: Wildlife GSK 718
	Pathology: Wildlife PAT 706	

	Veterinary epidemiology EPL 851	Reproductive biology: Wildlife GSK 717
	Research methodology VRM 811	Selected infectious diseases: Animal health management SID 811 Selected infectious diseases: Wildlife SID 817 Tick-borne diseases: Wildlife TBD 814 Veterinary epidemiology EPL 852

(e) Conferment of degree

The MMedVet degree is conferred by virtue of an examination and a mini-dissertation.

(f) Examinations

(Consult General Regulations G.32 and G.40)

(i) The examination(s) in the special field of study may only be taken from the end of the second year of study onwards.

(ii) The nature and duration of the examination(s), which will test fully the theoretical knowledge as well as the practical skills of the student, is determined by the head of department in which the chosen field of study is offered.

(iii) A minimum examination mark of 50% is required in each of the theoretical and practical sections of the module where a semester or year mark is not required. However, in cases where a semester or year mark is awarded, 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 in the theoretical and the practical sections. Instructions in the information guide regarding semester, year and examination marks, are brought specifically to the attention of students.

A student who fails in one or more modules, may be admitted by the Dean to a supplementary examination in such module(s), on the recommendation of the head of department concerned, and after a time-lapse determined by the Dean. The average mark awarded for theoretical and practical examinations in the specialist module accounts for 75% of the final mark, and the mini-dissertation for 25%.

Students who intend applying for membership of a specialist college abroad later on, should bear in mind that many of these colleges require a minimum examination mark, and a final mark of at least 60% for admission.

(g) Mini-dissertation

Also consult General Regulations G.57 to G.61.

(i) A student must submit a mini-dissertation, which deals with the particular field of study, prior to the examination in the theoretical section of the chosen field of study.

(ii) A mini-dissertation is based on a research project or related research projects (which need not be original), planned and written down by the student within the theme of the chosen field of study. (Assistance with statistical processing, applied specialised procedures, etc is allowed, but must be acknowledged.)

The student may use appropriate research done previously, to add to the writing of the mini-dissertation.

Earlier, related publications by the student may be bound with the mini-dissertation, but may not substitute the complete text of the mini-dissertation. Publications that are submitted, must be rounded off by means of an extensive introduction, materials, and information concerning methods and a discussion of the results. The mini-dissertation will be evaluated by an external examiner, who may not necessarily attend the final examination.

Before or together with the mini-dissertation, a draft article based on the mini-dissertation must be prepared for publication in an acknowledged journal and submitted to the Head: Student Administration, failing which the degree will not be conferred. The draft article must be acceptable to the supervisor and must comply with the requirements for subsidy (see applicable faculty rules). (Also consult General Regulation G.61.)

- (iii) The average of the separate marks awarded by all the examiners, constitutes the final mark for the mini-dissertation. The minimum pass mark is 50%. A student who has failed may be permitted by the Dean, on the recommendation of the head of department concerned, to submit an amended mini-dissertation for final adjudication. The mark awarded for the mini-dissertation will make up 25% of the final mark.

(h) Degree with distinction

In order to obtain the degree with distinction, a minimum pass mark of 75% is required in the examination in the chosen field of study and the mini-dissertation together.

V.4. Master of Science in Veterinary Science [MSc (Veterinary Science)]

Also consult General Regulations G.30 to G.44.

The MSc degree in Veterinary Science is a research degree.

(a) Requirements for admission

Subject to the stipulations of General Regulations G.30 and G.62, a BScHons, a four-year BScAgric, BVSc or equivalent degree is required.

A candidate with a completed BTech degree with a minimum of 60% in the broad area of specialisation that the candidate wishes to pursue a master's programme must first complete additional undergraduate coursework as well as coursework at honours level as determined by the head of department. The programme of study must be approved by the Postgraduate Committee, Faculty Board and Subcommittee of Senate. Confirmation of candidature will be based on the successful completion of the additional coursework requirements before admission to the master's programme.

Candidates who are accepted for the MSc degree programme have to complete an acceptable module in research methodology successfully. In certain cases, it remains the prerogative of the head of department to require, in addition to the entrance requirements already mentioned, an appropriate honours degree, or the successful completion of an admissions test before registration. A student may also be required to pass a proficiency test in English (TOEFL) at an acceptable level.

(b) Duration

The programme extends over a minimum period of one year, and a maximum of three years.

(c) Field of study

Total number of SAQA credits: 240

The MSc degree programme is offered by the following departments:

(i) Anatomy and Physiology	08251002	VWE 802
(ii) Companion Animal Clinical Studies	08251003	VWE 803
(iii) Paraclinical Sciences	08251004	VWE 804
(iv) Production Animal Studies	08251005	VWE 805
(v) Veterinary Tropical Diseases	08250901	VWE 801

(d) Conferment of degree

The MSc degree is conferred by virtue of the successful completion of a dissertation. Regulations V.3(g)(i) and (ii) apply *mutatis mutandis*. (Also consult General Regulations G.57 to G.61 as well as Reg.V.3 (g)(ii) and (iii) concerning the content, submission and editing of the dissertation.)

The research topic is determined in consultation with the head of department, and the research project(s) that follow, must be approved according to Faculty guidelines.

Before or together with the dissertation, a student must submit at least one draft article for publication in an acknowledged journal, failing which the degree will not be conferred. The draft article must be based on the research for the dissertation and must be acceptable to the supervisor and meet subsidy requirements. (Also consult General Regulation G.61.)

(e) Pass with distinction

The degree is conferred with distinction on a student who has obtained at least 75% for the dissertation.

<p>V.5. Master of Science in Veterinary Industrial Pharmacology [MSc (Veterinary Industrial Pharmacology)] (Code 08251006)</p>

Also consult General Regulations G.30 to G.44. 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 after having consulted the Syllabi on the web at: <http://web.up.ac.za/modules>

The MSc (Veterinary Industrial Pharmacology) is a coursework-based degree programme with a component of applied research (mini-dissertation).

(a) Requirements for admission

Subject to the stipulations of General Regulation G.62, an honours degree in natural sciences or agriculture such as a BScHons or BAgricHons, a four-year scientific-based degree such as BPharm and BScAgric, a BVSc or equivalent degree, is required.

A candidate with a completed BTech degree with a minimum of 60% in the broad area of specialisation that the candidate wishes to pursue a master's programme must first complete additional undergraduate coursework as well as coursework at honours level as determined by the head of department. The programme of study must be approved by the Postgraduate Committee, Faculty Board and Subcommittee of Senate. Confirmation of candidature will be based on the successful completion of the additional coursework requirements before admission to the master's 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. A student may be required to pass a proficiency test in English (TOEFL).

(b) Duration

The programme extends over a minimum period of one year full-time and two years part-time, and a maximum of three years.

(c) Curriculum

Total number of SAQA credits: 240

The curriculum consists of Veterinary industrial pharmacology as the special field of study; Fundamentals of pharmacology and Research methodology as additional core modules; and a number of elective modules equivalent to a prescribed number of credits, chosen from the following list, or from relevant general or species-based modules offered in other programmes in the Faculty and/or other faculties of the University approved by the Dean on the recommendation of the head of department.

Modules

Core modules (compulsory)

VIP 800	Veterinary industrial pharmacology
FAK 876	Advanced fundamentals of pharmacology
VRM 811	Research methodology

Elective modules

Discipline-based

CAH 811	Community-based animal health: Building communities
CAH 812	Community-based animal health: Veterinary communication and extension
HEI 811	Helminth infections: Companion animals
HEI 812	Helminth infections: Equids
HEI 813	Helminth infections: Ruminants
HEI 814	Helminth infections: Wildlife
EIP 811	Ectoparasitic infestations and protozoal infections: Companion animals
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants
EIP 814	Ectoparasitic infestations and protozoal Infections: Wildlife

SID 811	Selected infectious diseases: Animal health management
SID 812	Selected infectious diseases: Cattle
SID 813	Selected infectious diseases: Companion animals
SID 814	Selected infectious diseases: Equids
SID 815	Selected infectious diseases: Pigs
SID 816	Selected infectious diseases: Small stock
SID 817	Selected infectious diseases: Wildlife

(d) Conferment of degree

The MSc (Veterinary Industrial Pharmacology) degree is conferred by virtue of the successful completion of modules and a mini-dissertation.

(e) Examination

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.

Should a candidate fail a module, but score a mark of at least 40%, he or she may be admitted to a supplementary examination, which has to be taken either during the same examination period, or not later than the subsequent examination period. If a candidate fails to qualify for a supplementary examination, a special examination may be granted after one semester has lapsed.

The examination in the module Veterinary industrial pharmacology VIP 800 may only be taken after successfully completing the module Advanced fundamentals of pharmacology FAK 876.

(f) Mini-dissertation

Also consult General Regulations G.57 to G61

Candidates must submit a mini-dissertation (VIP 890) equivalent to a maximum of 100 credits, which deals with an applied field of study within the veterinary pharmaceutical industry. The topic is determined in consultation with the head of department, and the research project that follows, 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.) The candidate may use appropriate research done previously, to add to the writing of the dissertation.

Previous, related publications by the candidate may be bound with the mini-dissertation, but may not substitute the complete text of the mini-dissertation. Publications, which are submitted, must be rounded off by means of an extensive introduction, materials, and information concerning methods and a discussion of the results. An external examiner, who may not necessarily attend the final examination in the special field of study, will evaluate the mini-dissertation.

Before or together with the mini-dissertation, a draft article based on the mini-dissertation must be prepared for publication in an acknowledged journal, failing which the degree will not be conferred. The draft article must be acceptable to the supervisor and must comply with the requirements for subsidy (see applicable Faculty rules). Also consult General Regulation G.61.

The average mark of the separate marks awarded by all examiners, constitutes the final mark for the dissertation. The minimum pass mark is 50%. The Dean, on the recommendation of the head of the department, may permit a candidate who has failed, to submit an amended mini-dissertation for final adjudication. The mark awarded for the mini-dissertation will make up 25% of the final mark.

(g) Pass with distinction

In order to obtain the degree with distinction, a minimum pass mark of 60% in all core modules and 75% in the examination in the special field of study and the mini-dissertation together are required.

V.6. Master of Science in Veterinary Tropical Diseases [MSc (Veterinary Tropical Diseases)] (Code 08251007)

Also consult General Regulations G.30 to G.44. 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 after having consulted the Syllabi on the web at: <http://web.up.ac.za/modules>

(a) Requirements for admission

Subject to the stipulations of General Regulation G.62, a BVSc, a four-year BSc in Agriculture (Animal Science), Microbiology, Zoology or Entomology or an equivalent degree is required.

A candidate with a completed BTech degree with a minimum of 60% in the broad area of specialisation that the candidate wishes to pursue a master's programme must first complete additional undergraduate coursework as well as coursework at honours level as determined by the head of department. The programme of study must be approved by the Postgraduate Committee, Faculty Board and Subcommittee of Senate. Confirmation of candidature will be based on the successful completion of the additional coursework requirements before admission to the master's programme.

In certain cases, it remains the prerogative of the head of department to require, in addition to the entrance requirements already mentioned, the successful completion of an admissions test before registration. A student may also be required to pass a proficiency test in English (TOEFL) at an acceptable level.

(b) Duration

The programme extends over a minimum period of one year full-time and two years part-time, and a maximum of three years.

(c) Curriculum

Total number of SAQA credits: minimum of 240

Modules: 140-155

Mini-dissertation: 100
 Total: 240-255

The curriculum consists of core and elective modules as well as a mini-dissertation. Core and elective modules are grouped into specific career paths. In special circumstances a module may be exchanged with another module in a career path with the approval of the head of department. Other modules may be selected from the list, or from relevant modules offered in other programmes in the Faculty and/or other faculties of the University approved by the Dean on the recommendation of the head of the department

This is primarily a web-based modular degree programme.

This degree programme caters for the needs of candidates who wish to acquire information on such aspects as the epidemiology, diagnosis and control/eradication of infectious and parasitic diseases of domestic animals and wildlife or would like to develop specific knowledge and technical skills that are required to make a diagnosis in microbiology (eg bacteriology, virology, immunology), parasitology (eg helminthology, ectoparasitology, protozoology) and molecular biology.

The degree programme is structured in such a way that a learner can achieve a qualification in a specific field of study. The following career paths are catered for:

1. Laboratory-orientated career in microbiology or parasitology;
2. Veterinary field services;
3. General practice in either wildlife, mixed cattle and wildlife, or mixed production animals

The following career paths are possible:

1. Laboratory-orientated career paths

1.1 Microbiology: Bacteriology

Successful completion of the degree programme will equip the candidate with the required competencies and laboratory skills to isolate and identify bacteria and fungi and to perform serological techniques applicable to bacteria, and molecular techniques used in diagnostic and research laboratories. The candidate will also be equipped to develop a protocol and to conduct a research project.

Modules to be completed:

	Modules	Credits
VRM 811	Research methodology (Core module)	20
LPK 811	Laboratory practice	20
AVB 811	Applied veterinary bacteriology and mycology: Introduction	7
AVB 812	Applied veterinary bacteriology and mycology: Identification of anaerobic bacteria	4
AVB 813	Applied veterinary bacteriology and mycology: Identification of aerobic and facultative anaerobes	9
AVB 814	Applied veterinary bacteriology and mycology: Identification of fungi	7

AVB 815	Applied veterinary bacteriology and mycology: Identification of <i>Mycoplasma</i> species	4
AVB 816	Applied veterinary bacteriology and mycology: Milk hygiene and udder health	4
ASR 811	Applied serology	30
VMB 816	Molecular biology	40
Total credits		145

1.2 **Microbiology: Virology**

Successful completion of the degree programme will equip the candidate with the required competencies and laboratory skills to isolate and identify viruses and to perform serological techniques applicable to viruses, and molecular techniques used in diagnostic and research laboratories. The candidate will also be equipped to develop a protocol and to conduct a research project.

Modules to be completed:

	Modules	Credits
VRM 811	Research methodology (Core module)	20
LPK 811	Laboratory practice	20
ASR811	Applied serology	30
AVV 811	Applied virology: General theory	10
AVV 815	Applied veterinary virology: Virus identification – cell cultures, embryonated eggs and laboratory animals	20
VMB 816	Molecular biology	40
Total credits		140

1.3 **Parasitology: Helminthology and ectoparasitology**

Successful completion of this degree programme will equip the candidate with the required laboratory skills to identify helminths, ectoparasites and protozoa of companion animals, equids, ruminants and wildlife, which specimens to collect and how these should be prepared for identification. The candidate will also be equipped to develop a research protocol and to conduct a research project.

Modules to be completed:

Option 1

	Modules	Credits
VRM 811	Research methodology (Core module)	20
EPL 851	Veterinary epidemiology (Core module)	16
AVE 811	Applied veterinary ectoparasitology and protozoology	25
AVH 811	Applied veterinary helminthology	25
EIP 811	Ectoparasitic infestations and protozoal infections: Companion animals	10
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants	10
EIP 814	Ectoparasitic infestations and protozoal infections: Wildlife	5
HEI 811	Helminth infections: Companion animals	5

HEI 812	Helminth infections: Equids	5
HEI 813	Helminth infections: Ruminants	10
HEI 814	Helminth infections: Wildlife	10
Total credits		141

Option 2

	Modules	Credits
VRM 811	Research methodology (Core module)	20
EPL 851	Veterinary epidemiology (Core module)	16
AVE 811	Applied veterinary ectoparasitology and protozoology	25
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants	10
TCK 811	Ticks	30
TSE 811	Tsetse and trypanosomosis	45
Total credits		146

1.4 Parasitology: Ectoparasitology

Successful completion of this degree programme will equip the candidate with the required laboratory skills to identify ectoparasites of companion animals, equids and ruminants. The candidate will also be skilled in field surveys, including collection and preparation of specimens for identification and will be able to develop a research protocol and to conduct a research project.

Modules to be completed:

	Modules	Credits
VRM 811	Research methodology (Core module)	20
EPL 851	Veterinary epidemiology (Core module)	16
AVE 811	Applied veterinary ectoparasitology and protozoology	25
EIP 811	Ectoparasitic infestations and protozoal infections: Companion animals	10
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants	10
TCK 811	Ticks	30
TSE 811	Tsetse and trypanosomosis	45
Total credits		156

1.5 Ticks and tick-borne diseases and tsetse and trypanosomosis

Successful completion of this degree programme will equip the candidate with the required laboratory skills to identify ticks, tsetse flies and trypanosomes of companion animals, equids, ruminants and wildlife. The candidate will also be skilled in field surveys, including collection and preparation of specimens for identification, will have a thorough understanding of the diseases caused by tick- and tsetse-transmitted pathogens, and will also be equipped to develop a research protocol and to conduct a research project.

Modules to be completed:

	Modules	Credits
VRM 811	Research methodology (Core module)	20
CAH 812	Community-based animal health: Veterinary communication and extension (Core module)	6
CAH 813	Community-based animal health: Veterinary service delivery (Core module)	7
EPL 851	Veterinary epidemiology (Core module)	16
TBD 811	Tick-borne diseases: Companion animals	5
TBD 813	Tick-borne diseases: Ruminants	15
TBD 814	Tick-borne diseases: Wildlife	5
TCK 811	Ticks	30
TSE 811	Tsetse and trypanosomosis	45
Total credits		149

1.6 Ectoparasitology: Tsetse and trypanosomosis

Successful completion of this degree programme will equip the candidate with the required laboratory skills to identify ectoparasites and protozoa of companion animals, equids, ruminants and wildlife, with special emphasis on tsetse flies and trypanosomes. The candidate will also be skilled in field surveys, including collection and preparation of specimens for identification, will have a thorough understanding of the clinical manifestation of ectoparasitic infestations and protozoal infections and will be equipped to develop a research protocol and to conduct a research project.

Modules to be completed:

	Modules	Credits
VRM 811	Research methodology (Core module)	20
CAH 812	Community-based animal health: Veterinary communication and extension (Core module)	6
CAH 813	Community-based animal health: Veterinary service delivery (Core module)	7
EPL 851	Veterinary epidemiology (Core module)	16
AVE 811	Applied veterinary ectoparasitology and protozoology	25
EIP 811	Ectoparasitic infestations and protozoal infections: Companion animals	10
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants	10
EIP 814	Ectoparasitic infestations and protozoal infections: Wildlife	5
TSE 811	Tsetse and trypanosomosis	45
Total credits		144

2. Veterinary field services career path

Successful completion of the degree programme will equip the candidate with the competencies, knowledge and skills to diagnose and control the important infectious diseases of cattle, with special reference to sub-Saharan Africa. The curriculum includes information on tick-borne diseases, ticks, tsetse and

trypanosomosis. The candidate will also be equipped to develop a protocol and to conduct a research project.

Modules to be completed:

Option 1

	Modules	Credits
VRM 811	Research methodology (Core module)	20
CAH 811	Community-based animal health: Building communities (Core module)	7
CAH 812	Community-based animal health: Veterinary communication and extension (Core module)	6
CAH 813	Community-based animal health: Veterinary service delivery (Core module)	7
EPL 851	Veterinary epidemiology (Core module)	16
SID 811	Selected infectious diseases: Animal health management	25
SID 812	Selected infectious diseases: Cattle	25
TBD 813	Tick-borne diseases: Ruminants	15
TCK 811	Ticks	30
Total credits		151

Option 2

	Modules	Credits
VRM 811	Research methodology (Core module)	20
CAH 811	Community-based animal health: Building communities (Core module)	7
CAH 812	Community-based animal health: Veterinary communication and extension (Core module)	6
CAH 813	Community-based animal health: Veterinary service delivery (Core module)	7
EPL 851	Veterinary epidemiology (Core module)	16
SID 811	Selected infectious diseases: Animal health management	25
SID 812	Selected infectious diseases: Cattle	25
TSE 811	Tsetse and trypanosomosis	45
Total credits		150

3. General practice career paths

3.1 Wildlife

Successful completion of the degree programme will equip the candidate with the competencies and knowledge required in private veterinary wildlife practice and related career paths in nature conservation or game farm management. The curriculum includes information on the parasitic and infectious diseases of wildlife (particularly at the wildlife-domestic animal interface) and their control, arthropod vectors of some of these diseases, and community-based animal health relating to communities adjacent to wildlife conservancies. The candidate will also be equipped to develop a protocol and to conduct a research project.

Modules to be completed:

	Modules	Credits
VRM 811	Research methodology (Core module)	20
EPL 851	Veterinary epidemiology (Core module)	16
EIP 814	Ectoparasitic infestations and protozoal infections: Wildlife	5
HEI 814	Helminth infections: Wildlife	10
SID 817	Selected infectious diseases: Wildlife	20
TBD 814	Tick-borne disease: Wildlife	5
TCK 811	Ticks	30
TSE 811	Tsetse and trypanosomosis	45
Total credits		151

3.2 Cattle/Wildlife

Successful completion of the degree programme will equip the candidate with the competencies and knowledge required in private veterinary practice where the wildlife-livestock interface represents an important component. The curriculum includes information on the parasitic and infectious diseases of wildlife (particularly at the wildlife-domestic animal interface) and their control, arthropod vectors of some of these diseases, and community-based animal health relating to communities adjacent to wildlife conservancies. The candidate will also be equipped to develop a protocol and to conduct a research project.

Modules to be completed:

Option 1

	Modules	Credits
VRM 811	Research methodology (Core module)	20
EPL 851	Veterinary epidemiology (Core module)	16
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants	10
EIP 814	Ectoparasitic infestations and protozoal infections: Wildlife	5
HEI 813	Helminth infections: Ruminants	10
SID 812	Selected infectious diseases: Cattle	25
SID 817	Selected infectious diseases: Wildlife	20
TBD 814	Tick-borne diseases: Wildlife	5
TSE 811	Tsetse and trypanosomosis	45
Total credits		156

Option 2

	Modules	Credits
VRM 811	Research methodology (Core module)	20
EPL 851	Veterinary epidemiology (Core module)	16
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants	10
EIP 814	Ectoparasitic infestations and protozoal infections: Wildlife	5
HEI 814	Helminth infections: Wildlife	10

SID 812	Selected infectious diseases: Cattle	25
SID 817	Selected infectious diseases: Wildlife	20
TBD 813	Tick-borne diseases: Ruminants	15
TBD 814	Tick-borne diseases: Wildlife	5
TCK 811	Ticks	30
Total credits		156

3.3 Production animals

Successful completion of the degree programme will equip the candidate with the competencies and knowledge required in private veterinary practice. The curriculum includes information on the parasitic and infectious diseases of cattle and small stock, especially their diagnosis and control. The candidate will also be equipped to develop a protocol and to conduct a research project.

Modules to be completed:

Option 1

	<u>Modules</u>	<u>Credits</u>
VRM 811	Research methodology (Core module)	20
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants	10
HEI 813	Helminth infections: Ruminants	10
SID 811	Selected infectious diseases: Animal health management	25
SID 812	Selected infectious diseases: Cattle	25
TBD 813	Tick-borne diseases: Ruminants	15
TSE 811	Tsetse and trypanosomosis	45
Total credits		150

Option 2

	<u>Modules</u>	<u>Credits</u>
VRM 811	Research methodology (Core module)	20
HEI 813	Helminth infections: Ruminants	10
SID 811	Selected infectious diseases: Animal health management	25
SID 812	Selected infectious diseases: Cattle	25
SID 816	Selected infectious diseases: Small stock	25
TBD 813	Tick-borne diseases: Ruminants	15
TCK 811	Ticks	30
Total credits		150

Modules

VRM 811	Research methodology
CAH 811	Community-based animal health: Building communities
CAH 812	Community-based animal health: Veterinary communication and extension
CAH 813	Community-based animal health: Veterinary service delivery
LPK 811	Laboratory practice
AVB 811	Applied veterinary bacteriology and mycology: Introduction

AVB 812	Applied veterinary bacteriology and mycology: Identification of anaerobic bacteria
AVB 813	Applied veterinary bacteriology and mycology: Identification of aerobic and facultative anaerobes
AVB 814	Applied veterinary bacteriology and mycology: Identification of fungi
AVB 815	Applied veterinary bacteriology and mycology: Identification of <i>Mycoplasma</i> species
AVB 816	Applied veterinary bacteriology and mycology: Milk hygiene and udder health
ASR 811	Applied serology
AVH 811	Applied veterinary helminthology
AVE 811	Applied veterinary ectoparasitology and protozoology
AVV 811	Applied virology: General theory
AVV 815	Applied veterinary virology: Virus identification – cell cultures, embryonated eggs and laboratory animals
VMB 816	Molecular biology
TCK 811	Ticks
TBD 811	Tick-borne diseases: Companion animals
TBD 813	Tick-borne diseases: Ruminants
TBD 814	Tick-borne diseases: Wildlife
TSE 811	Tsetse and trypanosomosis
HEI 811	Helminth infections: Companion animals
HEI 812	Helminth infections: Equids
HEI 813	Helminth infections: Ruminants
HEI 814	Helminth infections: Wildlife
EIP 811	Ectoparasitic infestations and protozoal infections: Companion animals
EIP 813	Ectoparasitic infestations and protozoal infections: Ruminants
EIP 814	Ectoparasitic infestations and protozoal infections: Wildlife
SID 811	Selected infectious diseases: Animal health management
SID 812	Selected infectious diseases: Cattle
SID 813	Selected infectious diseases: Companion animals
SID 814	Selected infectious diseases: Equids
SID 815	Selected infectious diseases: Pigs
SID 816	Selected infectious diseases: Small stock
SID 817	Selected infectious diseases: Wildlife

(d) Conferment of degree

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

The final mark will be calculated as follows:

Modules: 60%
Mini-dissertation: 40%

(e) Examination

The degree is conferred on a student who has obtained at least 50% for every module and at least 50% for the mini-dissertation.

If a student fails a module, he/she will have to repeat the module the following year.

(f) Mini-dissertation

Consult Regulations G.32 and G.40.

On an appropriate topic depending on the field of interest of the student. A research project of limited scope must be undertaken and written in the format of a mini-dissertation to fulfil the requirements of the MSc. The research topic is determined in consultation with the supervisor and head of department, and the research project must be approved according to Faculty guidelines.

Mini-dissertation: 100 credits (VTS 890)

Before or together with the mini-dissertation, a student must submit at least one draft article for publication in an acknowledged journal, failing which the degree will not be conferred. The draft article must be based on the research for the mini-dissertation and must be acceptable to the supervisor and meet subsidy requirements.

(Also consult General Regulations G.57 to G.61.)

(g) Pass with distinction

The degree is conferred with distinction on a student who has obtained at least 75% for the mini-dissertation and an average of at least 75% for the modules chosen.

IV. DOCTORATES

V.7. Doctor of Philosophy [PhD]

Also consult General Regulations G.45 to G.55.

(a) Admission requirements

Subject to the stipulations of General Regulation G.62, a candidate must hold an applicable master's degree to qualify for admission to the study for the PhD degree.

A candidate with an MTech degree who has obtained at least 60% for the MTech dissertation may be considered for admission if approved by Senate. Since the PhD is clearly more demanding of a wider (philosophical) scientific background, the selection of candidates for the PhD degree must be stringent, and could include outside evaluation of the dissertation work by nominees selected by the head of department and approved by the Faculty Postgraduate Committee, evidence of peer-reviewed publication, appropriate work-related experience (ie in a research

environment) and, where necessary, formal coursework to address shortcomings in the academic background.

It remains the prerogative of the head of department to require an admissions test prior to registration for the degree study, in addition to the regulatory requirements. A pass in a proficiency test in English (TOEFL) at an acceptable level may also be required, especially in the case of international candidates.

(b) Field of study

Total number of SAQA credits: 360

The PhD degree is offered by the following departments:

(i)	Anatomy and physiology	08261002	VVE 902
(ii)	Companion animal clinical studies	08261003	VVE 903
(iii)	Paraclinical sciences	08261004	VVE 904
(iv)	Production animal studies	08261005	VVE 905
(v)	Veterinary tropical diseases	08260271	VVE 901

The research topic will be determined in consultation with the head of department, following which the research projects will be approved in terms of Faculty guidelines and General Regulation G.57. Each candidate must satisfy the Dean on the recommendation of the head of department that he or she is working at an institution with the necessary facilities, to enable him or her to complete the work required for the degree satisfactorily.

(c) Duration

Consult General Regulation G.51.

The study extends over a minimum period of two years, with a maximum of six years.

(d) Conferment of degree

The PhD degree is conferred by virtue of the successful completion of a thesis and an oral examination. Consult General Regulation G. 60.4(e).

Before or together with the thesis a student must submit at least one article for publication in an acknowledged journal, failing which the degree will not be conferred. The article must be based on the research for the thesis and must be acceptable to the supervisor and meet subsidy requirements. The student is required to submit proof of the receipt of the article by an accredited journal to the Head: Student Administration. Consult General Regulation G.61.

Also consult General Regulations G.57 to G.61 with regard to the submission and technical editing of the thesis.

V. 8 Doctor of Veterinary Science [DVSc]

The DVSc degree is conferred by virtue of publications (consult General Regulation G.56).

(i)	Anatomy and physiology	08260002
(ii)	Companion animal clinical studies	08260003
(iii)	Paraclinical sciences	08260005
(iv)	Production animal studies	08260004
(v)	Veterinary tropical diseases	08260006

V. POSTGRADUATE DIPLOMAS

Please note: The programmes are under review and will not be offered in 2010.

(a) Requirements for admission

Subject to the stipulations of General Regulation G.62, a BVSc, BVMCh or equivalent degree is required. A student may be required to pass a proficiency test in English (TOEFL) at an acceptable level.

(b) Duration

The programme extends over at least two academic years full-time and three years part-time.

(c) Examinations

Students must comply with all the academic and practical requirements of the various modules to the satisfaction of the head of department before they will be admitted to the examinations, and must pass the prescribed written, oral and/or practical examinations in all the modules.

A minimum examination mark of 50% is required in each of the theoretical and practical sections of a module for which a year or semester mark is not required. However, in cases where a semester or a year mark is required, a minimum semester or year mark of 40% must be obtained in each section for admission to the examination. A subminimum of 40% in the examination, and at least 50% as a final mark are required to pass in the theoretical and practical sections. Instructions regarding semester, year or examination marks contained in the departmental manuals, are brought to the specific attention of students.

(d) Supplementary examinations

Supplementary examinations are granted in accordance with general rules.

(e) Diploma with distinction

A diploma is awarded with distinction to a student who obtains an average of at least 75% in all the modules.

**V.9.1 Postgraduate Diploma in Veterinary Community Health [DCH(Vet)]
(Code 08220042) (Not offered in 2010)**

**V.9.2 Postgraduate Diploma in Health Administration [DHA(Vet)]
(Code 08220051) (Not offered in 2010)**

VI. UNIVERSITY DIPLOMA

**V.10 University Diploma in Veterinary Nursing [DipVetNurs]
(Code 08120002)**

(a) Requirements for admission

- (i) A candidate must be in possession of a National Senior Certificate (NSC) and must have passed the following Grade 12 subjects at the level indicated:

English at home language/first additional

language level	4 (50-59%)
Life Sciences	4 (50-59%)
Mathematics	4 (50-59%)
Physical Sciences	4 (50-59%)
Alternative subject 1	3 (40-49%)
Alternative subject 2	3 (40-49%)

A minimum Admission Point Score (APS) of 22 will be required [calculated from the achievement level obtained in English, Life Sciences, Mathematics and Physical Sciences and the two best alternative subjects $[(4 \times 4 + 2 \times 3) = (16 + 6) = 22]$

(Although Life Orientation is excluded from the calculation of the required APS, a minimum score of 4 (50-59%) must be achieved.)

- (ii) Students are admitted annually after selection according to the approved procedure.
- (iii) Each student must apply, immediately after first admission, to the Registrar of the South African Veterinary Council for registration as a student in veterinary nursing. Registration is compulsory and must be renewed annually for the duration of the study.
- (iv) After the diploma has been awarded, diplomates are required to register with the South African Veterinary Council as veterinary nurses before they may be employed in South Africa in this capacity.

(b) Duration of study

Two academic years of full-time study.

(c) Admission to examinations

The stipulations of General Regulation G.10.1 regarding satisfactory attendance, preparation, as well as the payment of class fees, apply to examination, promotion and attendance modules. In addition, attendance at all the prescribed lectures, practicals, clinics (including holiday clinics) and excursions is compulsory. Absence with good reason from any of these must be substantiated by a medical certificate or other acceptable proof, failing which admission to the examination could be refused. Failure to comply with General Regulation G.10.1 will also result in examination refusal.

(d) Pass requirements in modules and supplementary examinations

- (i) In order to pass an examination module, a student must obtain a subminimum of 40% in the examination and a final mark of at least 50%. In promotion modules, a semester or year mark of at least 50% is required to pass.

- (ii) The theoretical part (ie written and/or oral) and the practical part (where applicable) of the examinations contribute an equal amount (ie 50:50) in the calculation of the final mark.
- (iii) If the examination includes a practical as well as a theoretical part, a sub-minimum of 40% is required in each section.
- (iv) An examination mark of 50% is required to pass a supplementary examination. The semester or year mark is not taken into calculation.
- (v) Supplementary examinations may be granted to a student in an unlimited number of modules in the first year of study, but not in the second year of study.
- (vi) A student must pass all the modules of the first year of study in order to be promoted to the second year of study. A single further examination will, however, be allowed for students who have **only one** of the following modules outstanding at the end of the academic year:
 - FAK 120 Pharmacology
 - LTG 120 Laboratory technique
 - MBI 111 Microbiology
 - AVP 111 General nursing
 - PAR 120 Parasitology
 - MVP 120 Medical nursing
 - TPR 120 Theatre practice
 - GSV 120 Reproductive nursing

(e) Promotion to the second year of study

A student who fails one or more modules in the first year of study, is subject to selection once again. A limited number of five students will be re-admitted to the first year of study. If re-admitted, the student has to repeat the first year of study. Students may apply for exemption from the examination in modules already passed, provided that a year or semester mark of at least 50% is obtained in the relevant modules in the year during which first-year studies are repeated and the requirements of V.10(c) have been met. For modules passed with a final mark of 65% or more, full exemption of lectures and examinations is granted.

(f) Pass with distinction

The diploma is awarded with distinction to a student who has obtained at least 60% in each module throughout the programme, and an average of at least 75% in the final year.

(g) General

In addition to the stipulations of General Regulation G.3.2(b), a student will not be allowed to repeat the same year of study twice.

- (h)** A student who has to discontinue his or her studies in terms of stipulations (e) and (g) above, may request the Dean in writing to consider his or her application for re-admission to the Faculty in terms of prescribed procedures as stipulated in *Application of General Regulation G.3 and Faculty Regulation V.1.c(ix) in the Faculty of Veterinary Science, University of Pretoria* as approved by the Faculty Board.

(i) Curriculum

Total number of SAQA credits: 355

(i) **First year of study**

ANG 104	Anatomy 104
FAK 120	Pharmacology 120
FSL 104	Physiology 104
VET 110	Veterinary ethology 110
LTG 120	Laboratory technique 120
MBI 111	Microbiology 111
AVP 111	General nursing 111
PAR 120	Parasitology 120

Promotion modules

MVP 120	Medical nursing 120
TPR 120	Theatre practice 120
GSV 120	Reproductive nursing 120

- (aa) **Clinical skills training** must be completed at various clinics of the Veterinary Academic Hospital throughout the year and during the December holidays, and also on a rotation basis at Outpatients, Isolation Ward and Intensive Care Unit after-hours and over weekends.
- (bb) **Supplementary examinations:** Subject to the provisions of Regulation V.10(d)(iii), students who obtain a final mark of between 40% and 49% in General nursing 111, Microbiology 111 or Veterinary ethology 110, may be admitted to a supplementary examination immediately after the June examinations. The provisions of Regulation V.10(d)(v) also apply.

(ii) **Second year of study**

MVP 200	Medical nursing 200
CVP 200	Surgical nursing 200
TPR 200	Theatre practice 200
NAR 200	Anaesthesiology 200
RAV 200	Radiography 200
GSV 200	Reproductive nursing 200

- (aa) **Clinical skills training** must be completed in various clinics of the Veterinary Academic Hospital. Students also have to work on a rotation basis at Outpatients, in the Isolation Ward and the Intensive Care Unit after hours and over weekends and holidays. After-hour duties are also required in the Equine Clinic, Ambulatory Services and the Reproduction Clinic. Students are also required to gain experience at the following institutions for two weeks each: an approved veterinary institute, private practice or clinic of their own choice at the Veterinary Academic Hospital. Additional rotations must be done at the Veterinary Academic Hospital during the April holidays.
- (bb) **Supplementary examinations**
A student in the final year of study may be granted a maximum of two supplementary examinations
A head of department may require from a student who has been admitted to a supplementary examination, to do additional prescribed work for a specified period of time before he or she may take the supplementary examination as approved by the Dean.

- (cc) **Special examination**
A student who has failed one or two modules and who has not been admitted to a supplementary examination, or who fails the supplementary examination(s), may be allowed to take a special examination after having worked full-time in the department/s concerned for a period determined by the head/s of department and with the Dean's approval. If he or she fails the latter, the Dean will determine when a further examination may be taken.
- (dd) **Repetition of the final year of study**
A student who has failed more than two modules at the time of the Examination Commission meeting, must repeat the last two semesters of the curriculum with due cognisance of rule V.10(e), unless the Dean decides otherwise.
- (ee) **Clinical experience (including practical work)**
Proof of satisfactory completion of prescribed clinical and practical components of the programme as prescribed below, must be submitted to the Head: Student Administration of the Faculty, prior to the commencement of the final examinations. Failure to do so may lead to examination refusal.
In state control of stock diseases and administration: experience at an approved institution as approved by the Dean.
Practical and clinical experience at the Faculty and at approved private practices as well as other institutions as approved by the Dean.

SYLLABI

Note:

The list of modules and the module descriptions are available at:
<http://web.up.ac.za/modules>