University of Pretoria Yearbook 2021

Faculty of Veterinary Science

Welcome to the Faculty of Veterinary Science

The Faculty of Veterinary Science of the University of Pretoria is situated on the Onderstepoort campus of the University some 20 km north west of the Hatfield main campus and some 15 km due north of the city centre of Pretoria (Tshwane). It aims to be an internationally accredited seat of veterinary excellence, strives to be globally competitive, regionally pre-eminent and locally relevant whilst providing an effective veterinary interface to Africa. The Faculty has a proud tradition in veterinary and para-veterinary education, research and service-rendering which dates back to the early 1920s.

Faculty regulations and information

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

The General Regulations (G. Regulations) and General Rules apply to all faculties of the University of Pretoria. It is expected of all students to familiarise themselves well with these regulations and rules as well as all faculty-specific and programme-specific regulations and information as stipulated in the online yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression.

Undergraduate programme information

BVSc – Bachelor in Veterinary Science degree programme

The BVSc degree programme is a professional training programme for veterinarians, and is accredited with the South African Veterinary Council (SAVC), the Namibian Veterinary Council (NVC), the Royal College of Veterinary Surgeons (RCVS) in the United Kingdom and the Australasian Veterinary Boards Council (AVBC) in Australia and New Zealand. The BVSc programme is the only programme of its kind in South Africa, and was established in 1920. It is a 6-year programme with a total of 833 credits and the first year is offered on the Hatfield campus, with years 2 – 6 being offered on the Onderstepoort campus. Admission into the programme is possible into the first as well as second year level.

The first year consists of a basic scientific foundation, the second year is dedicated to theoretical and practical skills training on the normal animal and its environment. Year three consists of theoretical and practical skills training in the causes and effects of disease whereas year 4 and the first half of year 5 are dedicated to theoretical and practical skills training in clinical veterinary medicine. The last 18 months consist of clinical work integrated learning in core and elective veterinary practice and a research report. A programme in veterinary professional life, which addresses various important aspects to prepare graduates for a career in veterinary science, runs throughout the programme from the first year to the first half of the fifth year.

BVetNurs – Bachelor in Veterinary Nursing degree programme

The BVetNurs degree programme is a professional training programme for veterinary nurses, and is accredited with the South African Veterinary Council (SAVC). The BVetNurs programme is the only programme of its kind in South Africa, and was established in 2019, at that stage replacing the 2-year Diploma in Veterinary Nursing (DVN) that has been offered since 1977. It is a 3-year programme with a total of 388 credits and is offered completely on the Onderstepoort campus. All students enter the programme at the first year level.

The uniquely designed vertically and horizontally integrated curriculum offers 2 years of theoretical and practical

skills training, and one year of clinical work integrated learning. A programme in veterinary nursing professional life, which addresses various important aspects to prepare graduates for a career in veterinary nursing, runs throughout the programme.

Admission into the Faculty's undergraduate programmes

Admission into the Faculty's undergraduate programmes is highly competitive, and takes place following a prescribed selection process as published annually in the Faculty's Undergraduate Faculty Brochure.

Academic Orientation Programme

This programme is presented annually for all first-year students on the Hatfield campus, as well as on the Onderstepoort campus in the case of BVetNurs first year students. Attendance is compulsory. A scaled-down version is also presented to second-year BVSc students on the Onderstepoort campus at the start of the academic year. Attendance is compulsory.

Details of of the orientation programmes will be provided in the documentation sent to all successful candidates at the end of the selection process.

It is required for all new first year students to be registered for and complete the module Academic Orientation (UPO 101).

Hospital Orientation Programme

The programme is presented annually for BVSc V and BVetNurs II students. It takes place during the week before the start of the respective clinical work integrated learning programmes. Attendance is compulsory.

Prescribed books and instruments

Students are requested not to purchase any books or instruments before they start with their chosen programme. Specific requirements will be provided during the academic orientation programme as well as in the relevant study guides.

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.

Academic literacy

It is required of all new undergraduate first year students to complete the prescribed academic literacy module(s) as contained in the academic curriculum of the relevant programme.

Language of tuition

English is the language of tuition, assessment and official communication at the University of Pretoria.

Statutory requirements for the professions

After the relevant degree has been conferred, graduates are required to register with the SAVC as veterinarians or as veterinary nurses before they may practise in South Africa in this capacity. Registration must be renewed annually.

In the case of veterinary surgeons, all BVSc graduates are required to complete 12 months of compulsory community service (CCS) before they will be allowed to accept any other professional employment, during which time they will be employed by the relevant state department in this capacity.

Faculty regulations

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

The General Regulations (G. Regulations) and General Rules apply to all faculties of the University of Pretoria. It is expected of all students to familiarise themselves well with these regulations and rules as well as all faculty specific and programme-specific regulations and information as stipulated in the online yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression.

1. Examinations and pass requirements

The following rules apply to the BVSc and BVetNurs programme, in addition to the University of Pretoria general regulations and general rules, with the exception of pass requirements of service modules presented by other faculties:

1. Attendance of all lectures, practicals and clinical duties is compulsory. Absence must be justified by submission of a medical certificate or valid documentation, within three working days after returning. Failure to comply may lead to examination refusal.
2. Students in the BVSc and BVetNurs programme must register for all modules in a particular year of study and may not deregister modules.
3. A student who fails one or more modules fails the particular year of study and must repeat the failed module(s) before being promoted to the next year of study.
4. In addition to clause iii., a fourth, fifth or final year student in the BVSc programme, and a second year student in the BVetNurs programme,who fails a module or modules has to repeat 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 during the repeat year.
5. For students repeating the fourth, fifth or sixth year, in the BVSc programme, or the second year in the BVetNurs rogramme exemption from the examination is granted for a module that was passed in the previous year if all lectures, practicals and/or clinical duties were attended and a year/semester mark of at least 50% was obtained in the repeat year.
6. The semester/year mark and examination mark contributes 50% each towards the final mark for all modules with examinations.
7. A head of department may require from a student to complete certain practical and/or clinical procedures or other similar requirements and to provide evidence of such before the student will be allowed access to the examination.
8. A student is required to obtain a minimum semester/year mark of 40%, a minimum 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 study guide.
9. The content, format and duration of the supplementary, extra-ordinary, and/or special examination will be similar to that of the examination, except for oral examinations, where the supplementary, extra-ordinary, and/or special examination may be in a different format.
10. Semester tests and examinations are scheduled as stipulated in the Faculty Academic Calendar, as approved by the dean.
11. A student applies for admission to an extra-ordinary assessment using the Faculty’s relevant standard operating procedure which is managed by student administration.
12. The percentage of weighting of subsections of an examination in the calculation of the examination mark will be indicated in the individual study guides.
13. A student qualifies for a supplementary examination under either the following circumstances:

- Where the final mark obtained is between 40% and 49%, or
- Where the final mark is above 50% and the examination mark is below 40%, or
- Where a subminimum mark for a specified section of the examination is not achieved, as explained in the relevant studyguide.

14. 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.
15. A head of department may require of a student to achieve a subminimum score of up to 50% in different

components or sections of a supplementary examination, in order to pass the supplementary examination.

2. Perusal and re-marking of examination papers scripts (also consult Reg G.14, and the Faculty's Standard Operating Procedure for perusal)

1. 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 head of department.
2. 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 5 working days after the announcement of the results of the primary examination and within 3 working days after the announcement of the results of the supplementary examination. The examiner will be appointed by the relevant head of the department. Re-evaluation of oral examinations is not allowed.

3. Exclusion

1. A student who is not permitted to re-register in terms of UP General Regulation G3.2 a) and b) is automatically excluded from the BVSc or BVetNurs programme at the end of the academic year.
2. A student who fails a particular year of study for the second time is automatically excluded.

4. Re-admission and dismissal

1. A student who has been excluded may apply in writing by the specified deadline to the Faculty Appeals Committee for consideration for re-admission, failing which the student is dismissed. The Faculty Appeals Committee has discretion to either readmit an excluded student, or to deny the appeal, in which case the student is dismissed.

5. Dress code

Special instructions regarding dress as stipulated in study guides must be adhered to. Details will be furnished when students are notified that they have been selected for the programme. Provision is made during the orientation programme for the acquisition of protective clothing.

6. Vaccinations

It is requireded of every student to complete the required vaccination protocol against rabies as arranged by Student Administration. The protocol is for the student's own account. Provision is made for the availability of documentation to facilitate claims with medical aid schemes.

7. Statutory requirements

It is required of all BVSc and BVetNurs students to register with the South African Veterinary Council (SAVC) as a veterinary student or veterinary nursing student respectively, at the time of first registration in the respective degree programme. Registration has to be renewed annually until completion of the degree programme.

Undergraduate Degree

BVetNurs (08130006)

Minimum duration of study	3 years

Programme information

This programme is accredited with the South African Veterinary Council (SAVC).
Each student must apply immediately after registration at UP 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.
After the degree has been conferred, graduates are required to register with the South African Veterinary Council as veterinary nurses before they may practise in South Africa in this capacity.

Also refer to the General Regulations and Rules.

Admission requirements

- The Faculty offers the following undergraduate programmes:
  - Bachelor of Veterinary Science (BVSc)
  - Bachelor of Veterinary Nursing (BVetNurs)
- Both undergraduate programmes in this Faculty include selection procedures, which are based on merit within different categories.
- The following persons may be considered for admission:
  - applicants who are currently in their final school-year and have applied with their final results of the preceding year of schooling (Grade 11 or equivalent);
  - applicants who have completed their final school-year, but have not yet commenced further studies;
  - applicants who are in possession of a certificate that is deemed by the University to be equivalent to the required National Senior Certificate (NSC) with university endorsement. This certificate must be certified by Universities South Africa (USAf);
  - applicants who are currently enrolled for tertiary education;
  - applicants who are graduates from another tertiary institution, or have been granted the status of a graduate of such an institution; and
  - applicants who are graduates of another faculty at the University of Pretoria.
- In order to retain conditional admission applicants need to comply with the minimum subject requirements based on their final school-year examination results.
- South African school-leaving applicants enrolled for the NSC or IEB who have forfeited their placement and who still comply with the minimum requirements will automatically be considered in the second round of selection in January.

Selection categories

School-leavers

- A valid NSC/IEB or equivalent qualification with admission for degree purposes.
- Subject requirements and the required Admission Point Score (APS) are indicated in the table below. The APS is calculated from the achievement levels obtained in the six 20-credit subjects of the NSC.
- Life Orientation is excluded when calculating the APS.
- Conditional admission is based on Grade 11 final examination results, or equivalent, being the final results of

the year preceding the last year of schooling, final admission on NSC/IEB or equivalent performance in Mathematics, English and Physical Sciences, as well as the Veterinary Nursing Value Added Form (VNVAF).
- Additional admission criteria may be used including an interview and additional selection tests.
- School-leaving applicants who are conditionally admitted based on their Grade 11 results will forfeit their placement if their NSC APS is more than 2 points lower than the Grade 11 APS used for conditional admission.

Applicants with previous higher education exposure

- There is an opportunity for students with previous higher education experience to also apply for the BVetNurs programme.

International students

- A small number of international students are admitted to the programme, including those from neighbouring Southern African Development Community (SADC) countries.
- Applicants who are accepted receive a letter of confirmation from the University, which will facilitate their application for a study permit.
- A valid study permit, obtained in the country of origin, is a prerequisite for registration.
- International applicants must comply with all UP's and the Department of Home Affairs' regulations related to international students.
- Please consult the International Cooperation Division's **Newcomer's Guide** for more information: click here

Conditional admission

- Conditionally admitted applicants will forfeit their placement if they do not comply with the relevant conditions.

Minimum requirements Achievement level English Home Language or English First Additional Language		**Mathematics**		**Physical Sciences**		**APS**
NSC/IEB	AS Level	NSC/IEB	AS Level	NSC/IEB	AS Level	
4	D	4	D	4	D	**28**

* *Cambridge A-level candidates who obtained at least a D in the required subjects, will be considered for admission. Students in the Cambridge system must offer both Physics AND Chemistry with performance at the level specified for NSC Physical Sciences in the table above.

* *International Baccalaureate (IB) HL candidates who obtained at least a 4 in the required subjects, will be considered for admission. Students in the IB system must offer both Physics AND Chemistry with performance at the level specified for NSC Physical Sciences in the table above.

Examinations and pass requirements

Refer to UP General Regulations and Rules

i. All modules of this programme are compulsory.
ii. Attendance of all lectures, practical, and clinic duties is compulsory. Any form of absence must be justified by submission of a medical certificate or valid documentation, within 3 working days after returning. Failure to comply may result in examination refusal.
iii. No minimum semester/year mark is required for admission to the examination.
iv. The semester/year marks and examination mark will count 50% each towards the final mark. Only

semester/year, examination and final marks are to be rounded. No condonement of marks will be allowed.

v. 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 relevant head of department, and as set out in the study guide.

vi. 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.

vii. A second- or final-year student who fails a module or modules in a year of study, has to repeat 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.

During the repeat year, exemption from the examination is granted for a module that was passed in the previous year if at least 80% of the practical periods were attended and a year/semester mark of at least 50% was obtained. This applies to modules where full exemption is not granted (because the final mark in the previous year was less than 65%).

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 be excluded from the programme and will not be permitted to continue.

viii. The content, format and duration of the supplementary, extraordinary, and/or special examination will be similar to that of the examination, except for oral examinations, where the supplementary, extraordinary, and/or special examination may be in a different format.

ix. Students who have obtained a semester/year mark of 65% or more in a particular module may be promoted according to UP's General Regulations. Departments will be allowed to use discretion in this regard. The rule will be stated in the study guide of the respected module.

x. Examinations are conducted as stipulated in the Faculty Calendar.

xi. A student will be allowed to repeat a particular year of study only once.

Practical/clinical/internship information

Proof of satisfactory completion of all prescribed clinical and practical components of the programme must be submitted to the Head: Student Administration of the Faculty.

Pass with distinction

The BVetNurs is conferred with distinction on a student who meets the following conditions:

- completes the degree in three years, and
- obtains a cumulative weighted average of at least 75% over the second and third years of study (the cumulative weighted average will not be rounded up to a whole number).

Curriculum: Year 1

Minimum credits: 120

Fundamental modules

Academic information management 111 (AIM 111) - Credits: 4.00
Academic information management 121 (AIM 121) - Credits: 4.00
Language and study skills 110 (LST 110) - Credits: 6.00

Academic orientation 108 (UPO 108) - Credits: 0.00

Core modules
Clinical veterinary nursing 121 (CVN 121) - Credits: 8.00
Clinical veterinary nursing 122 (CVN 122) - Credits: 8.00
Nursing professional life 100 (LPN 100) - Credits: 18.00
Primary animal health care 110 (PAH 110) - Credits: 18.00
Veterinary nursing practice 110 (PVN 110) - Credits: 12.00
Veterinary nursing practice 120 (PVN 120) - Credits: 12.00
Foundational veterinary sciences 110 (SVF 110) - Credits: 15.00
Foundational veterinary sciences 120 (SVF 120) - Credits: 15.00

Curriculum: Year 2
Minimum credits: 120

Core modules
Clinical veterinary nursing 211 (CVN 211) - Credits: 18.00
Clinical veterinary nursing 212 (CVN 212) - Credits: 12.00
Clinical veterinary nursing 213 (CVN 213) - Credits: 12.00
Clinical veterinary nursing 214 (CVN 214) - Credits: 12.00
Clinical veterinary nursing 221 (CVN 221) - Credits: 12.00
Clinical veterinary nursing 222 (CVN 222) - Credits: 18.00
Clinical veterinary nursing 223 (CVN 223) - Credits: 18.00
Nursing professional life 210 (LPN 210) - Credits: 12.00
Veterinary nursing practice 200 (PVN 200) - Credits: 6.00

Curriculum: Final year
Minimum credits: 148

Core modules
Nursing professional life 300 (LPN 300) - Credits: 8.00
Veterinary nursing practice 300 (PVN 300) - Credits: 140.00

BVSc (08130005)

Minimum duration of study	6 years

Programme information

This programme is accredited with the South African Veterinary Council (SAVC), Royal College of Veterinary Surgeons (RCVS) and the Australasian Veterinary Boards Council (AVBC).

Each student must apply immediately after registration at UP, 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.

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.

After completing the degree a Compulsory Community Service (CCS) year is required by the state. Graduates will be employed for one year of Compulsory Community Service by the national Department of Agriculture, Land

Reform and Rural Development (DALRRD). More information can be obtained from DALRRD.

Also refer to the General Regulations and Rules.

Admission requirements

- The Faculty offers the following undergraduate programmes:
  - Bachelor of Veterinary Science (BVSc)
  - Bachelor of Veterinary Nursing (BVetNurs)
- Both undergraduate programmes in this Faculty include selection procedures, which are based on merit within different categories.
- The following persons may be considered for admission:
  - applicants who are currently in their final school-year and have applied with their final results of the preceding year of schooling (Grade 11 or equivalent);
  - applicants who have completed their final school-year, but have not yet commenced further studies;
  - applicants who are in possession of a certificate that is deemed by the University to be equivalent to the required National Senior Certificate (NSC) with university endorsement. This certificate must be certified by Universities South Africa (USAf);
  - applicants who are currently enrolled for tertiary education;
  - applicants who are graduates from another tertiary institution, or have been granted the status of a graduate of such an institution; and
  - applicants who are graduates of another faculty at the University of Pretoria.
- In order to retain conditional admission applicants need to comply with the minimum subject requirements based on their final school-year examination results.
- South African school-leaving applicants enrolled for the NSC or IEB who have forfeited their placement and who still comply with the minimum requirements will automatically be considered in the second round of selection in January.

Selection categories

School-leavers

- A valid NSC/IEB or equivalent qualification with admission for degree purposes.
- Subject requirements and the required Admission Point Score (APS) are indicated in the table below. The APS is calculated from the achievement levels obtained in the six 20-credit subjects of the NSC.
- Life Orientation is excluded when calculating the APS.
- Conditional admission is based on Grade 11 final examination results, or equivalent, being the final results of the year preceding the last year of schooling, final admission on NSC/IEB or equivalent performance in Mathematics, English and Physical Sciences, as well as the Veterinary Science Value Added Form (VSVAF).
- Additional admission criteria may be used including an interview and additional selection tests.

Applicants with previous higher education exposure

- There is an opportunity for students with previous higher education experience to also apply for the BVSc programme. Placement in either the first or second year of the BVSc programme will depend on, among others, merit and subject choices.

International students

- A small number of international students are admitted to the programme, including those from neighbouring Southern African Development Community (SADC) countries.
- Applicants who are accepted receive a letter of confirmation from the University, which will facilitate their application for a study permit.

- A valid study permit, obtained in the country of origin, is a prerequisite for registration.
- International applicants must comply with all UP's and the Department of Home Affairs' regulations related to international students.
- Please consult the International Cooperation Division's **Newcomer's Guide** for more information: click here

Conditional admission

- Conditionally admitted applicants will forfeit their placement if they do not comply with the relevant conditions.

Minimum requirements Achievement level English Home Language or English First Additional Language		**Mathematics**		**Physical Sciences**		**APS**
NSC/IEB	AS Level	NSC/IEB	AS Level	NSC/IEB	AS Level	
5	C	5	C	5	C	**35**

* *Cambridge A-level candidates who obtained at least a D in the required subjects, will be considered for admission. Students in the Cambridge system must offer both Physics AND Chemistry with performance at the level specified for NSC Physical Sciences in the table above.

* *International Baccalaureate (IB) HL candidates who obtained at least a 4 in the required subjects, will be considered for admission. Students in the IB system must offer both Physics AND Chemistry with performance at the level specified for NSC Physical Sciences in the table above.

Additional requirements

Refer to the undergraduate admission regulation of the Faculty of Veterinary Science.

Examinations and pass requirements

The following rules apply to undergraduate programmes in the faculty, with the exception of pass requirements of service modules presented by other faculties:

Also refer to UP General Regulations and Rules

i. Attendance of all lectures, practicals and clinical duties is compulsory. Absence must be justified by submission of a medical certificate or valid documentation, within three working days after returning. Failure to comply may lead to examination refusal.
ii. Students in all undergraduate programmes in the faculty must register for all modules in a particular year of study and may not deregister modules.

iii. A student who fails one or more modules fails the particular year of study and must repeat the failed module(s) before being promoted to the next year of study.
iv. In addition to clause iii., a fourth, fifth or final year student in the BVSc programme or a second year student in the BVetNurs programme who fails a module or modules, has to repeat, all the modules for that particular year of study, except modules which were passed with a final mark of 65% or more, for which full exemption is granted during the repeat year.
v. For students repeating the fourth, fifth or sixth year of the BVSc programme, or the second year of the BVetNurs programme, exemption from the examination is granted for a module that was passed in the previous (failed) year if all lectures, practicals and/or clinical duties were attended and a year/semester mark of at least

50% was obtained in the repeat year.
vi. The semester/year mark and examination mark contributes 50% each towards the final mark for all modules with examinations.
vii. A student is required to obtain a minimum semester/year mark of 40%, a minimum 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 study guide.
viii. The content, format and duration of the supplementary, extra-ordinary, and/or special examination will be similar to that of the examination, except for oral examinations, where the supplementary, extra-ordinary, and/or special examination may be in a different format.
ix. Semester tests and examinations are conducted as stipulated in the Faculty Calendar.
x. A student applies for admission to an extra-ordinary assessment using the Faculty's relevant standard operating procedure which is managed by student administration.

Exclusion

xi. A student who is not permitted to re-register in terms of UP General Regulation G3.2 a) and b) is automatically excluded at the end of the academic year.
xii. A student who fails a particular year of study for the second time is automatically excluded.

Re-admission and dismissal

xiii. A student who has been excluded may apply online by the specified deadline to the Faculty Appeals Committee for consideration for re-admission, failing which the student is dismissed.
xiv. The Faculty Appeals Committee has discretion to either readmit an excluded student, or to deny the appeal, in which case the student is dismissed.

Practical/clinical/internship information

Clinical experience (including practical work)
Proof of satisfactory completion of prescribed clinical and practical components of the programme as prescribed in the relevant study guide(s) must be submitted to the relevant Head of Department : prior to the commencement of the examinations. Failure to do so may lead to examination refusal.

Pass with distinction

The BVSc degree is conferred with distinction on a student who has obtained a cumulative weighted average of at least 75% over the last three years of study. The cumulative weighted average is calculated as the average score of the weighted averages per year of the last 3 academic years as indicated on a student's academic record.

Curriculum: Year 1

Minimum credits: 126

Fundamental modules

Academic information management 111 (AIM 111) - Credits: 4.00
Academic information management 121 (AIM 121) - Credits: 4.00
Language and study skills 110 (LST 110) - Credits: 6.00
Academic orientation 108 (UPO 108) - Credits: 0.00

Core modules
Biometry 120 (BME 120) - Credits: 16.00
Chemistry 151 (CMY 151) - Credits: 16.00
Introductory genetics 161 (GTS 161) - Credits: 8.00
Molecular and cell biology 111 (MLB 111) - Credits: 16.00
Medical terminology 180 (MTL 180) - Credits: 12.00
Physics for biology students 131 (PHY 131) - Credits: 16.00
Veterinary professional life 101 (VPL 101) - Credits: 4.00
Mathematics 165 (WTW 165) - Credits: 16.00
Animal diversity 161 (ZEN 161) - Credits: 8.00

Curriculum: Year 2
Minimum credits: 132

** VPL 122 is not included when calculating credits: this is the online version of VPL 101 only applicable to students admitted to the BVSc programme in the second year.

Core modules
Animal production systems and principles of breeding 200 (VAP 200) - Credits: 8.00
Veterinary comparative anatomy 201 (VCA 201) - Credits: 28.00
Veterinary microbiology 210 (VEM 210) - Credits: 6.00
Veterinary ethology 202 (VET 202) - Credits: 18.00
Veterinary immunology 220 (VIM 220) - Credits: 6.00
Principles of animal nutrition 224 (VKU 224) - Credits: 12.00
Veterinary physiology and histology 200 (VPH 200) - Credits: 33.00
Veterinary professional life 122 (VPL 122) - Credits: 4.00
Veterinary professional life 201 (VPL 201) - Credits: 5.00
Pasture science 213 (WDE 213) - Credits: 12.00

Curriculum: Year 3
Minimum credits: 128

Core modules
General surgery 310 (GNS 310) - Credits: 7.00
General and organ pathology 300 (GOP 300) - Credits: 30.00
Introductory veterinary diagnostics 300 (IVD 300) - Credits: 20.00
Veterinary toxicology 300 (TOX 300) - Credits: 14.00
Veterinary infectious diseases 300 (VIP 300) - Credits: 14.00
Ethnoveterinary medicine 310 (VME 310) - Credits: 3.00
General veterinary pharmacology 300 (VPH 300) - Credits: 14.00
Veterinary professional life 301 (VPL 301) - Credits: 6.00
Veterinary parasitology 300 (VTP 300) - Credits: 20.00

Curriculum: Year 4
Minimum credits: 132

Core modules
Anaesthesiology 420 (ANV 420) - Credits: 8.00
Clinical pathology 410 (CLP 410) - Credits: 7.00

Diagnostic imaging 400 (DIM 400) - Credits: 16.00
Diagnostic pathology 401 (DPT 401) - Credits: 12.00
Veterinary epidemiology 420 (EPL 420) - Credits: 10.00
Equine medicine and surgery 410 (EQM 410) - Credits: 14.00
Small animal medicine and surgery 410 (SAS 410) - Credits: 21.00
Small animal medicine and surgery 420 (SAS 420) - Credits: 21.00
Veterinary professional life 401 (VPL 401) - Credits: 7.00
Veterinary reproduction 400 (VRP 400) - Credits: 16.00

Curriculum: Year 5

Minimum credits: 161

Core modules

Diagnostic pathology 511 (DPT 511) - Credits: 12.00
Porcine health and production 510 (PHP 510) - Credits: 5.00
Poultry health and production 510 (PLY 510) - Credits: 5.00
Ruminant medicine and surgery 510 (RUM 510) - Credits: 24.00
Ruminant production medicine and herd health 511 (RUM 511) - Credits: 16.00
Veterinary core practice 520 (VCP 520) - Credits: 52.00
Veterinary elective practice 520 (VEP 520) - Credits: 8.00
One health 510 (VOH 510) - Credits: 4.00
Veterinary public health 510 (VPH 510) - Credits: 14.00
Veterinary professional life 511 (VPL 511) - Credits: 8.00
Veterinary research report 520 (VRE 520) - Credits: 8.00
African wildlife management and conservation 510 (WMC 510) - Credits: 5.00

Curriculum: Final year

Minimum credits: 160

Core modules

Veterinary core practice 610 (VCP 610) - Credits: 52.00
Veterinary core practice 620 (VCP 620) - Credits: 52.00
Veterinary elective practice 610 (VEP 610) - Credits: 24.00
Veterinary elective practice 620 (VEP 620) - Credits: 16.00
Veterinary research report 600 (VRE 600) - Credits: 16.00

Postgrad Diploma/Certificate

PGDip in Animal Welfare (08220065)

Minimum duration of study	1 year

Programme information

- This programme is offered by the Faculty of Veterinary Science.
- The following persons may benefit from enrolling for the PGDip:
- The Department of Agriculture, Forestry and Fisheries (DAFF) identified a need for further theoretical training for their staff in veterinary public health, veterinary epidemiology and animal disease management. This one-year diploma provides for their training needs.
- BTech (or National Higher Diploma) graduates in Animal Health may apply for the diploma programme in order to prepare for masters' study.
- Veterinarians, who are undertaking or have completed their compulsory community service and require refreshment training in preparation for private practice, may benefit from enrolling for the diploma programme.
- Registered veterinarians who require further education towards their continued registration as professionals with the South African Veterinary Council (Continual Professional Development) will benefit by obtaining a PGDip as another means to obtaining their CPD requirements.
- Veterinarians who are in single person practices, who do not have the intention of being specialists due to the time commitments of specialist training, will gain advanced veterinary knowledge at a level above that of an undergraduate while they are still resident at their practices.
- Staff members of veterinary schools in Africa may enrol for the PGDip. As online modules are available to people who have the need for training, but do not necessarily have the funding for contact study in South Africa.
- The curriculum consists of four compulsory core and elective theoretical modules of 30 credits each to the value of 120 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

1. Relevant bachelor's degree **or** Bachelor of Technology degree **or** relevant diploma (NQF level 7)
2. An admissions examination may be required

Examinations and pass requirements

The PGDip is conferred by virtue of the successful completion of tests/assignments and an examination on four 30 credit coursework modules.
Every module will be evaluated by a written or oral test or assignment or practical work (a year mark will be determined) and an examination. The year mark and examination mark will each 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 year or examination marks are published in the study guides.
If a student fails a module, he/she will have to repeat the module the following year. A candidate has two

chances to pass a module.

Pass with distinction

The diploma is conferred with distinction on a student who has obtained an average of at least 75%, provided that a minimum final mark of 60% in each of the modules have been obtained.

Curriculum: Final year

Minimum credits: 120

Please note that clinical subjects are limited to veterinary graduates only

Core modules

Animal welfare principles 701 (ANW 701) - Credits: 30.00
Veterinary legislation and policy 702 (VLP 702) - Credits: 30.00

Elective modules

Clinical Anatomy 701 (ANG 701) - Credits: 30.00
Anaesthesiology 701 (ANV 701) - Credits: 30.00
Small animal behaviour and welfare 702 (ANW 702) - Credits: 30.00
African wildlife disease management 701 (AWD 701) - Credits: 30.00
Clinical reproduction 701 (CLR 701) - Credits: 30.00
Controlled and notifiable diseases 701 (CND 701) - Credits: 30.00
Non-radiological diagnostic imaging of dogs and cats 701 (DIM 701) - Credits: 30.00
Non-radiological diagnostic imaging of horses 702 (DIM 702) - Credits: 30.00
Non-radiological diagnostic imaging of ruminants 703 (DIM 703) - Credits: 30.00
Radiology: Dogs and cats 705 (DIM 705) - Credits: 30.00
Radiology: Horses 706 (DIM 706) - Credits: 30.00
Radiology: Ruminants 707 (DIM 707) - Credits: 30.00
Diagnostic pathology 701 (DPA 701) - Credits: 30.00
Veterinary epidemiology 701 (EPL 701) - Credits: 30.00
Clinical pharmacology 701 (FAK 701) - Credits: 30.00
Mechanisms of drug action 702 (FAK 702) - Credits: 30.00
Physiology 701 (FSL 701) - Credits: 30.00
Small animal clinical behaviour 710 (GEN 710) - Credits: 30.00
Herd and primary animal health 701 (HAH 701) - Credits: 30.00
Histology 701 (HTY 701) - Credits: 30.00
Clinical pathology 704 (KPA 704) - Credits: 30.00
Clinical pathology 705 (KPA 705) - Credits: 30.00
Laboratory animal science 702 (LAS 702) - Credits: 30.00
Laboratory diagnostics procedures 703 (LAS 703) - Credits: 30.00
Research ethics for laboratory animal science 704 (LAS 704) - Credits: 30.00
Necropsy technique and interpretation 701 (NTI 701) - Credits: 30.00
Ophthalmology 701 (OFM 701) - Credits: 30.00
Production animal management 701 (PAM 701) - Credits: 30.00
Mechanisms of disease 711 (PAT 711) - Credits: 30.00
Poultry health and nutrition 701 (PVT 701) - Credits: 30.00
Reproductive biology 701 (RPT 701) - Credits: 30.00

Reproductive physiology of animals 702 (RPT 702) - Credits: 30.00
Ruminant health and medicine 701 (RUM 701) - Credits: 30.00
Organic and inorganic toxicology 705 (TOK 705) - Credits: 30.00
Basic veterinary toxicology 706 (TOK 706) - Credits: 30.00
Porcine health, production and nutrition 701 (VKH 701) - Credits: 30.00
Veterinary principles of auditing 701 (VLP 701) - Credits: 30.00
Veterinary risk assessment 703 (VLP 703) - Credits: 30.00
Veterinary milk and meat hygiene 701 (VPH 701) - Credits: 30.00

PGDip in Laboratory Animal Science (08220062)

Minimum duration of study	1 year

Programme information

- The following persons may benefit from enrolling for the PGDip:
- The Department of Agriculture, Forestry and Fisheries (DAFF) identified a need for further theoretical training for their staff in veterinary public health, veterinary epidemiology and animal disease management. This one-year diploma provides for their training needs.
- BTech (or National Higher Diploma) graduates in Animal Health may apply for the diploma programme in order to prepare for masters' study.
- Veterinarians, who are undertaking or have completed their compulsory community service and require refreshment training in preparation for private practice, may benefit from enrolling for the diploma programme.
- Registered veterinarians who require further education towards their continued registration as professionals with the South African Veterinary Council (Continual Professional Development) will benefit by obtaining a PGDip as another means to obtaining their CPD requirements.
- Veterinarians who are in single person practices, who do not have the intention of being specialists due to the time commitments of specialist training, will gain advanced veterinary knowledge at a level above that of an undergraduate while they are still resident at their practices.
- Staff members of veterinary schools in Africa may enrol for the PGDip. As online modules are available to people who have the need for training, but do not necessarily have the funding for contact study in South Africa.
- The curriculum consists of four compulsory core and elective theoretical modules of 30 credits each to the value of 120 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

1. Relevant bachelor's degree **or** Bachelor of Technology degree **or** relevant diploma (NQF level 7)
2. An admissions examination may be required

Examinations and pass requirements

The PGDip is conferred by virtue of the successful completion of tests/assignments and an examination on four 30 credit coursework modules.
Every module will be evaluated by a written or oral test or assignment or practical work (a year mark will be determined) and an examination. The year mark and examination mark will each 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 year or examination marks are published in the study guides.
If a student fails a module, he/she will have to repeat the module the following year. A candidate has two chances to pass a module.

Pass with distinction

The diploma is conferred with distinction on a student who has obtained an average of at least 75%, provided that a minimum final mark of 60% in each of the modules have been obtained.

Curriculum: Final year

Minimum credits: 120

The two core modules are compulsary.

Choose 2 elective modules from the list of electives.

(Clinical subjects are limited to veterinary graduates only.)

Core modules

Laboratory animal science 702 (LAS 702) - Credits: 30.00
Research ethics for laboratory animal science 704 (LAS 704) - Credits: 30.00

Elective modules

African wildlife disease management 701 (AWD 701) - Credits: 30.00
Controlled and notifiable diseases 701 (CND 701) - Credits: 30.00
Clinical pharmacology 701 (FAK 701) - Credits: 30.00
Mechanisms of drug action 702 (FAK 702) - Credits: 30.00
Physiology 701 (FSL 701) - Credits: 30.00
Herd and primary animal health 701 (HAH 701) - Credits: 30.00
Histology 701 (HTY 701) - Credits: 30.00
Clinical pathology 704 (KPA 704) - Credits: 30.00
Clinical pathology 705 (KPA 705) - Credits: 30.00
Laboratory diagnostics procedures 703 (LAS 703) - Credits: 30.00
Necropsy technique and interpretation 701 (NTI 701) - Credits: 30.00
Production animal management 701 (PAM 701) - Credits: 30.00
Mechanisms of disease 711 (PAT 711) - Credits: 30.00
Poultry health and nutrition 701 (PVT 701) - Credits: 30.00
Reproductive biology 701 (RPT 701) - Credits: 30.00
Organic and inorganic toxicology 705 (TOK 705) - Credits: 30.00
Basic veterinary toxicology 706 (TOK 706) - Credits: 30.00
Porcine health, production and nutrition 701 (VKH 701) - Credits: 30.00
Veterinary milk and meat hygiene 701 (VPH 701) - Credits: 30.00

PGDip in Production Animals (08220063)

Minimum duration of study	1 year

Programme information

- This programme is offered by the Faculty of Veterinary Science.
- The following persons may benefit from enrolling for the PGDip:
- The Department of Agriculture, Forestry and Fisheries (DAFF) identified a need for further theoretical training for their staff in veterinary public health, veterinary epidemiology and animal disease management. This one-year diploma provides for their training needs.
- BTech (or National Higher Diploma) graduates in Animal Health may apply for the diploma programme in order to prepare for masters' study.
- Veterinarians, who are undertaking or have completed their compulsory community service and require refreshment training in preparation for private practice, may benefit from enrolling for the diploma programme.
- Registered veterinarians who require further education towards their continued registration as professionals with the South African Veterinary Council (Continual Professional Development) will benefit by obtaining a PGDip as another means to obtaining their CPD requirements.
- Veterinarians who are in single person practices, who do not have the intention of being specialists due to the time commitments of specialist training, will gain advanced veterinary knowledge at a level above that of an undergraduate while they are still resident at their practices.
- Staff members of veterinary schools in Africa may enrol for the PGDip. As online modules are available to people who have the need for training, but do not necessarily have the funding for contact study in South Africa.
- The curriculum consists of four compulsory core and elective theoretical modules of 30 credits each to the value of 120 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

1. Relevant bachelor's degree **or** Bachelor of Technology degree **or** relevant diploma (NQF level 7)
2. An admissions examination may be required

Examinations and pass requirements

The PGDip is conferred by virtue of the successful completion of tests/assignments and an examination on four 30 credit coursework modules.
Every module will be evaluated by a written or oral test or assignment or practical work (a year mark will be determined) and an examination. The year mark and examination mark will each 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 year or examination marks are published in the study guides.
If a student fails a module, he/she will have to repeat the module the following year. A candidate has two chances to pass a module.

Pass with distinction

The diploma is conferred with distinction on a student who has obtained an average of at least 75%, provided that a minimum final mark of 60% in each of the modules have been obtained.

Curriculum: Final year

Minimum credits: 120

Core modules

Herd and primary animal health 701 (HAH 701) - Credits: 30.00

Elective modules

African wildlife disease management 701 (AWD 701) - Credits: 30.00
Controlled and notifiable diseases 701 (CND 701) - Credits: 30.00
Mechanisms of drug action 702 (FAK 702) - Credits: 30.00
Physiology 701 (FSL 701) - Credits: 30.00
Histology 701 (HTY 701) - Credits: 30.00
Laboratory animal science 702 (LAS 702) - Credits: 30.00
Laboratory diagnostics procedures 703 (LAS 703) - Credits: 30.00
Research ethics for laboratory animal science 704 (LAS 704) - Credits: 30.00
Necropsy technique and interpretation 701 (NTI 701) - Credits: 30.00
Production animal management 701 (PAM 701) - Credits: 30.00
Mechanisms of disease 711 (PAT 711) - Credits: 30.00
Poultry health and nutrition 701 (PVT 701) - Credits: 30.00
Reproductive physiology of animals 702 (RPT 702) - Credits: 30.00
Organic and inorganic toxicology 705 (TOK 705) - Credits: 30.00
Basic veterinary toxicology 706 (TOK 706) - Credits: 30.00
Porcine health, production and nutrition 701 (VKH 701) - Credits: 30.00
Veterinary milk and meat hygiene 701 (VPH 701) - Credits: 30.00

PGDip in State Veterinary Medicine (08220064)

Minimum duration of study	1 year

Programme information

- This programme is offered by the Faculty of Veterinary Science.
- The following persons may benefit from enrolling for the PGDip:
- The Department of Agriculture, Forestry and Fisheries (DAFF) identified a need for further theoretical training for their staff in veterinary public health, veterinary epidemiology and animal disease management. This one-year diploma provides for their training needs.
- BTech (or National Higher Diploma) graduates in Animal Health may apply for the diploma programme in order to prepare for masters' study.
- Veterinarians, who are undertaking or have completed their compulsory community service and require refreshment training in preparation for private practice, may benefit from enrolling for the diploma programme.
- Registered veterinarians who require further education towards their continued registration as professionals with the South African Veterinary Council (Continual Professional Development) will benefit by obtaining a PGDip as another means to obtaining their CPD requirements.
- Veterinarians who are in single person practices, who do not have the intention of being specialists due to the

time commitments of specialist training, will gain advanced veterinary knowledge at a level above that of an undergraduate while they are still resident at their practices.
- Staff members of veterinary schools in Africa may enrol for the PGDip. As online modules are available to people who have the need for training, but do not necessarily have the funding for contact study in South Africa.
- The curriculum consists of four compulsory core and elective theoretical modules of 30 credits each to the value of 120 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

1. Relevant bachelor's degree **or** Bachelor of Technology degree **or** relevant diploma (NQF level 7)
2. An admissions examination may be required

Examinations and pass requirements

The PGDip is conferred by virtue of the successful completion of tests/assignments and an examination on four 30 credit coursework modules.
Every module will be evaluated by a written or oral test or assignment or practical work (a year mark will be determined) and an examination. The year mark and examination mark will each 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 year or examination marks are published in the study guides.
If a student fails a module, he/she will have to repeat the module the following year. A candidate has two chances to pass a module.

Pass with distinction

The diploma is conferred with distinction on a student who has obtained an average of at least 75%, provided that a minimum final mark of 60% in each of the modules have been obtained.

Curriculum: Final year

Minimum credits: 120

Core modules

Controlled and notifiable diseases 701 (CND 701) - Credits: 30.00
Veterinary legislation and policy 702 (VLP 702) - Credits: 30.00

Elective modules

Clinical Anatomy 701 (ANG 701) - Credits: 30.00
Anaesthesiology 701 (ANV 701) - Credits: 30.00
Small animal behaviour and welfare 702 (ANW 702) - Credits: 30.00
African wildlife disease management 701 (AWD 701) - Credits: 30.00
Clinical reproduction 701 (CLR 701) - Credits: 30.00
Controlled and notifiable diseases 701 (CND 701) - Credits: 30.00
Non-radiological diagnostic imaging of dogs and cats 701 (DIM 701) - Credits: 30.00

Non-radiological diagnostic imaging of horses 702 (DIM 702) - Credits: 30.00
Non-radiological diagnostic imaging of ruminants 703 (DIM 703) - Credits: 30.00
Radiology: Dogs and cats 705 (DIM 705) - Credits: 30.00
Radiology: Horses 706 (DIM 706) - Credits: 30.00
Radiology: Ruminants 707 (DIM 707) - Credits: 30.00
Diagnostic pathology 701 (DPA 701) - Credits: 30.00
Veterinary epidemiology 701 (EPL 701) - Credits: 30.00
Clinical pharmacology 701 (FAK 701) - Credits: 30.00
Mechanisms of drug action 702 (FAK 702) - Credits: 30.00
Physiology 701 (FSL 701) - Credits: 30.00
Small animal clinical behaviour 710 (GEN 710) - Credits: 30.00
Herd and primary animal health 701 (HAH 701) - Credits: 30.00
Histology 701 (HTY 701) - Credits: 30.00
Clinical pathology 704 (KPA 704) - Credits: 30.00
Clinical pathology 705 (KPA 705) - Credits: 30.00
Laboratory animal science 702 (LAS 702) - Credits: 30.00
Laboratory diagnostics procedures 703 (LAS 703) - Credits: 30.00
Research ethics for laboratory animal science 704 (LAS 704) - Credits: 30.00
Necropsy technique and interpretation 701 (NTI 701) - Credits: 30.00
Ophthalmology 701 (OFM 701) - Credits: 30.00
Production animal management 701 (PAM 701) - Credits: 30.00
Mechanisms of disease 711 (PAT 711) - Credits: 30.00
Poultry health and nutrition 701 (PVT 701) - Credits: 30.00
Reproductive biology 701 (RPT 701) - Credits: 30.00
Reproductive physiology of animals 702 (RPT 702) - Credits: 30.00
Ruminant health and medicine 701 (RUM 701) - Credits: 30.00
Organic and inorganic toxicology 705 (TOK 705) - Credits: 30.00
Basic veterinary toxicology 706 (TOK 706) - Credits: 30.00
Porcine health, production and nutrition 701 (VKH 701) - Credits: 30.00
Veterinary principles of auditing 701 (VLP 701) - Credits: 30.00
Veterinary risk assessment 703 (VLP 703) - Credits: 30.00
Veterinary milk and meat hygiene 701 (VPH 701) - Credits: 30.00

PGDip in Veterinary Clinical Sciences (08220061)

Minimum duration of study	1 year

Programme information

- This programme is offered by the Faculty of Veterinary Science.
- The following persons may benefit from enrolling for the PGDip:
- The Department of Agriculture, Forestry and Fisheries (DAFF) identified a need for further theoretical training for their staff in veterinary public health, veterinary epidemiology and animal disease management. This one-year diploma provides for their training needs.
- BTech (or National Higher Diploma) graduates in Animal Health may apply for the diploma programme in order to prepare for masters' study.
- Veterinarians, who are undertaking or have completed their compulsory community service and require

refreshment training in preparation for private practice, may benefit from enrolling for the diploma programme.
- Registered veterinarians who require further education towards their continued registration as professionals with the South African Veterinary Council (Continual Professional Development) will benefit by obtaining a PGDip as another means to obtaining their CPD requirements.
- Veterinarians who are in single person practices, who do not have the intention of being specialists due to the time commitments of specialist training, will gain advanced veterinary knowledge at a level above that of an undergraduate while they are still resident at their practices.
- Staff members of veterinary schools in Africa may enrol for the PGDip. As online modules are available to people who have the need for training, but do not necessarily have the funding for contact study in South Africa.
- The curriculum consists of four compulsory core and elective theoretical modules of 30 credits each to the value of 120 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

1. BVSc (or equivalent) degree
2. An admissions examination may be required

Examinations and pass requirements

The PGDip is conferred by virtue of the successful completion of tests/assignments and an examination on four 30 credit coursework modules.
Every module will be evaluated by a written or oral test or assignment or practical work (a year mark will be determined) and an examination. The year mark and examination mark will each 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 year or examination marks are published in the study guides.
If a student fails a module, he/she will have to repeat the module the following year. A candidate has two chances to pass a module.

Pass with distinction

The diploma is conferred with distinction on a student who has obtained an average of at least 75%, provided that a minimum final mark of 60% in each of the modules have been obtained.

Curriculum: Final year

Minimum credits: 120

Choose at least one of the Core modules list

You may choose more than one module from the list of core modules and the rest from the list of elective modules.

Core modules

Small animal surgery 701 (CHV 701) - Credits: 30.00
Small animal surgery 702 (CHV 702) - Credits: 30.00
Equine Surgery 707 (CHV 707) - Credits: 30.00

Equine medicine 701 (GEN 701) - Credits: 30.00
Small animal medicine 711 (GEN 711) - Credits: 30.00
Small animal medicine 712 (GEN 712) - Credits: 30.00

Elective modules
Clinical Anatomy 701 (ANG 701) - Credits: 30.00
Anaesthesiology 701 (ANV 701) - Credits: 30.00
Small animal anesthesiology 711 (ANV 711) - Credits: 30.00
Animal welfare principles 701 (ANW 701) - Credits: 30.00
African wildlife disease management 701 (AWD 701) - Credits: 30.00
Clinical reproduction 701 (CLR 701) - Credits: 30.00
Controlled and notifiable diseases 701 (CND 701) - Credits: 30.00
Non-radiological diagnostic imaging of dogs and cats 701 (DIM 701) - Credits: 30.00
Non-radiological diagnostic imaging of horses 702 (DIM 702) - Credits: 30.00
Non-radiological diagnostic imaging of ruminants 703 (DIM 703) - Credits: 30.00
Radiology: Dogs and cats 705 (DIM 705) - Credits: 30.00
Radiology: Horses 706 (DIM 706) - Credits: 30.00
Radiology: Ruminants 707 (DIM 707) - Credits: 30.00
Diagnostic pathology 701 (DPA 701) - Credits: 30.00
Veterinary epidemiology 701 (EPL 701) - Credits: 30.00
Clinical pharmacology 701 (FAK 701) - Credits: 30.00
Mechanisms of drug action 702 (FAK 702) - Credits: 30.00
Physiology 701 (FSL 701) - Credits: 30.00
Small animal clinical behaviour 710 (GEN 710) - Credits: 30.00
Herd and primary animal health 701 (HAH 701) - Credits: 30.00
Histology 701 (HTY 701) - Credits: 30.00
Clinical pathology 704 (KPA 704) - Credits: 30.00
Clinical pathology 705 (KPA 705) - Credits: 30.00
Laboratory animal science 702 (LAS 702) - Credits: 30.00
Laboratory diagnostics procedures 703 (LAS 703) - Credits: 30.00
Research ethics for laboratory animal science 704 (LAS 704) - Credits: 30.00
Necropsy technique and interpretation 701 (NTI 701) - Credits: 30.00
Ophthalmology 701 (OFM 701) - Credits: 30.00
Production animal management 701 (PAM 701) - Credits: 30.00
Mechanisms of disease 711 (PAT 711) - Credits: 30.00
Practice Management and veterinary drug legislation and control 701 (PPH 701) - Credits: 30.00
Poultry health and nutrition 701 (PVT 701) - Credits: 30.00
Reproductive biology 701 (RPT 701) - Credits: 30.00
Reproductive physiology of animals 702 (RPT 702) - Credits: 30.00
Ruminant health and medicine 701 (RUM 701) - Credits: 30.00
Small animal critical care 701 (SAC 701) - Credits: 30.00
Organic and inorganic toxicology 705 (TOK 705) - Credits: 30.00
Basic veterinary toxicology 706 (TOK 706) - Credits: 30.00
Porcine health, production and nutrition 701 (VKH 701) - Credits: 30.00
Veterinary principles of auditing 701 (VLP 701) - Credits: 30.00
Veterinary legislation and policy 702 (VLP 702) - Credits: 30.00
Veterinary risk assessment 703 (VLP 703) - Credits: 30.00

Veterinary milk and meat hygiene 701 (VPH 701) - Credits: 30.00

PGDip in Veterinary General (08220066)

Minimum duration of study	1 year

Programme information

- This programme is offered by the Faculty of Veterinary Science.
- The following persons may benefit from enrolling for the PGDip:
- The Department of Agriculture, Forestry and Fisheries (DAFF) identified a need for further theoretical training for their staff in veterinary public health, veterinary epidemiology and animal disease management. This one-year diploma provides for their training needs.
- BTech (or National Higher Diploma) graduates in Animal Health may apply for the diploma programme in order to prepare for masters' study.
- Veterinarians, who are undertaking or have completed their compulsory community service and require refreshment training in preparation for private practice, may benefit from enrolling for the diploma programme.
- Registered veterinarians who require further education towards their continued registration as professionals with the South African Veterinary Council (Continual Professional Development) will benefit by obtaining a PGDip as another means to obtaining their CPD requirements.
- Veterinarians who are in single person practices, who do not have the intention of being specialists due to the time commitments of specialist training, will gain advanced veterinary knowledge at a level above that of an undergraduate while they are still resident at their practices.
- Staff members of veterinary schools in Africa may enrol for the PGDip. As online modules are available to people who have the need for training, but do not necessarily have the funding for contact study in South Africa.
- The curriculum consists of four compulsory core and elective theoretical modules of 30 credits each to the value of 120 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

1. BVSc (or equivalent) degree
2. An admissions examination may be required

Examinations and pass requirements

The PGDip is conferred by virtue of the successful completion of tests/assignments and an examination on four 30 credit coursework modules.
Every module will be evaluated by a written or oral test or assignment or practical work (a year mark will be determined) and an examination. The year mark and examination mark will each 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 year or examination marks are published in the study guides.
If a student fails a module, he/she will have to repeat the module the following year. A candidate has two chances to pass a module.

Pass with distinction

The diploma is conferred with distinction on a student who has obtained an average of at least 75%, provided that a minimum final mark of 60% in each of the modules have been obtained.

Curriculum: Final year

Minimum credits: 120

Choose any 4 modules from the list of elective modules.

Elective modules

Clinical Anatomy 701 (ANG 701) - Credits: 30.00
Anaesthesiology 701 (ANV 701) - Credits: 30.00
Small animal anesthesiology 711 (ANV 711) - Credits: 30.00
Animal welfare principles 701 (ANW 701) - Credits: 30.00
African wildlife disease management 701 (AWD 701) - Credits: 30.00
Clinical reproduction 701 (CLR 701) - Credits: 30.00
Controlled and notifiable diseases 701 (CND 701) - Credits: 30.00
Non-radiological diagnostic imaging of dogs and cats 701 (DIM 701) - Credits: 30.00
Non-radiological diagnostic imaging of horses 702 (DIM 702) - Credits: 30.00
Non-radiological diagnostic imaging of ruminants 703 (DIM 703) - Credits: 30.00
Radiology: Dogs and cats 705 (DIM 705) - Credits: 30.00
Radiology: Horses 706 (DIM 706) - Credits: 30.00
Radiology: Ruminants 707 (DIM 707) - Credits: 30.00
Diagnostic pathology 701 (DPA 701) - Credits: 30.00
Veterinary epidemiology 701 (EPL 701) - Credits: 30.00
Clinical pharmacology 701 (FAK 701) - Credits: 30.00
Mechanisms of drug action 702 (FAK 702) - Credits: 30.00
Physiology 701 (FSL 701) - Credits: 30.00
Small animal clinical behaviour 710 (GEN 710) - Credits: 30.00
Herd and primary animal health 701 (HAH 701) - Credits: 30.00
Histology 701 (HTY 701) - Credits: 30.00
Clinical pathology 704 (KPA 704) - Credits: 30.00
Clinical pathology 705 (KPA 705) - Credits: 30.00
Laboratory animal science 702 (LAS 702) - Credits: 30.00
Laboratory diagnostics procedures 703 (LAS 703) - Credits: 30.00
Research ethics for laboratory animal science 704 (LAS 704) - Credits: 30.00
Necropsy technique and interpretation 701 (NTI 701) - Credits: 30.00
Ophthalmology 701 (OFM 701) - Credits: 30.00
Production animal management 701 (PAM 701) - Credits: 30.00
Mechanisms of disease 711 (PAT 711) - Credits: 30.00
Practice Management and veterinary drug legislation and control 701 (PPH 701) - Credits: 30.00
Poultry health and nutrition 701 (PVT 701) - Credits: 30.00
Reproductive biology 701 (RPT 701) - Credits: 30.00
Reproductive physiology of animals 702 (RPT 702) - Credits: 30.00
Ruminant health and medicine 701 (RUM 701) - Credits: 30.00
Small animal critical care 701 (SAC 701) - Credits: 30.00
Organic and inorganic toxicology 705 (TOK 705) - Credits: 30.00

Basic veterinary toxicology 706 (TOK 706) - Credits: 30.00
Porcine health, production and nutrition 701 (VKH 701) - Credits: 30.00
Veterinary principles of auditing 701 (VLP 701) - Credits: 30.00
Veterinary legislation and policy 702 (VLP 702) - Credits: 30.00
Veterinary risk assessment 703 (VLP 703) - Credits: 30.00
Veterinary milk and meat hygiene 701 (VPH 701) - Credits: 30.00

Master's

MMedVet Anaesthesiology (Coursework) (08250132)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Anaesthesiology 800 (ANV 800) - Credits: 270.00
Mini-dissertation: Anaesthesiology 890 (ANV 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Anaesthesiology 800 (ANV 800) - Credits: 270.00
Mini-dissertation: Anaesthesiology 890 (ANV 890) - Credits: 90.00

Curriculum: Final year

Core modules

Anaesthesiology 800 (ANV 800) - Credits: 270.00
Mini-dissertation: Anaesthesiology 890 (ANV 890) - Credits: 90.00

MMedVet Bovine Health and Production (Coursework) (08250055)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Production Animal Sciences.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Bovine health and production 800 (BHP 800) - Credits: 270.00
Mini-dissertation: Bovine health and production 890 (BHP 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Bovine health and production 800 (BHP 800) - Credits: 270.00
Mini-dissertation: Bovine health and production 890 (BHP 890) - Credits: 90.00

Curriculum: Final year

Core modules

Bovine health and production 800 (BHP 800) - Credits: 270.00
Mini-dissertation: Bovine health and production 890 (BHP 890) - Credits: 90.00

MMedVet Clinical Laboratory Diagnostics (Coursework) (08250192)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Clinical laboratory diagnostics 800 (KDK 800) - Credits: 270.00
Mini-dissertation: Clinical laboratory diagnostics 890 (KDK 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Clinical laboratory diagnostics 800 (KDK 800) - Credits: 270.00
Mini-dissertation: Clinical laboratory diagnostics 890 (KDK 890) - Credits: 90.00

Curriculum: Final year

Core modules

Clinical laboratory diagnostics 800 (KDK 800) - Credits: 270.00
Mini-dissertation: Clinical laboratory diagnostics 890 (KDK 890) - Credits: 90.00

MMedVet Diagnostic Imaging (Coursework) (08250143)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Diagnostic imaging 870 (DIM 870) - Credits: 270.00
Mini-dissertation: Diagnostic imaging 890 (DIM 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Diagnostic imaging 870 (DIM 870) - Credits: 270.00
Mini-dissertation: Diagnostic imaging 890 (DIM 890) - Credits: 90.00

Curriculum: Final year

Core modules

Diagnostic imaging 870 (DIM 870) - Credits: 270.00
Mini-dissertation: Diagnostic imaging 890 (DIM 890) - Credits: 90.00

MMedVet Equine Medicine (Coursework) (08250056)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Equine medicine 802 (GEN 802) - Credits: 270.00
Mini-dissertation: Equine medicine 892 (GEN 892) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Equine medicine 802 (GEN 802) - Credits: 270.00
Mini-dissertation: Equine medicine 892 (GEN 892) - Credits: 90.00

Curriculum: Final year

Core modules

Equine medicine 802 (GEN 802) - Credits: 270.00
Mini-dissertation: Equine medicine 892 (GEN 892) - Credits: 90.00

MMedVet Equine Surgery (Coursework) (08251122)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Surgery 804 (CHV 804) - Credits: 270.00
Mini-dissertation: Equine surgery 890 (CHV 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Surgery 804 (CHV 804) - Credits: 270.00
Mini-dissertation: Equine surgery 890 (CHV 890) - Credits: 90.00

Curriculum: Final year

Core modules

Surgery 804 (CHV 804) - Credits: 270.00
Mini-dissertation: Equine surgery 890 (CHV 890) - Credits: 90.00

MMedVet Laboratory Animal Science (Coursework) (08250212)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Paraclinical Sciences.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Fundamental modules

Laboratory animal science 800 (PFK 800) - Credits: 270.00
Mini-dissertation: Laboratory animal science 890 (PFK 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Laboratory animal science 800 (PFK 800) - Credits: 270.00
Mini-dissertation: Laboratory animal science 890 (PFK 890) - Credits: 90.00

Curriculum: Final year

Core modules

Laboratory animal science 800 (PFK 800) - Credits: 270.00
Mini-dissertation: Laboratory animal science 890 (PFK 890) - Credits: 90.00

MMedVet Ophthalmology (Coursework) (08250252)

Minimum duration of study 3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Ophthalmology 800 (OFM 800) - Credits: 270.00
Mini-dissertation: Ophthalmology 890 (OFM 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Ophthalmology 800 (OFM 800) - Credits: 270.00
Mini-dissertation: Ophthalmology 890 (OFM 890) - Credits: 90.00

Curriculum: Final year

Core modules

Ophthalmology 800 (OFM 800) - Credits: 270.00
Mini-dissertation: Ophthalmology 890 (OFM 890) - Credits: 90.00

MMedVet Pathology (Coursework) (08250102)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Paraclinical Sciences.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Pathology 800 (PAT 800) - Credits: 270.00
Mini-dissertation: Pathology 890 (PAT 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Pathology 800 (PAT 800) - Credits: 270.00
Mini-dissertation: Pathology 890 (PAT 890) - Credits: 90.00

Curriculum: Final year

Core modules

Pathology 800 (PAT 800) - Credits: 270.00
Mini-dissertation: Pathology 890 (PAT 890) - Credits: 90.00

MMedVet Pharmacology (Coursework) (08251132)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Paraclinical Sciences.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Pharmacology 800 (FAK 800) - Credits: 270.00
Mini-dissertation: Pharmacology 895 (FAK 895) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Pharmacology 800 (FAK 800) - Credits: 270.00
Mini-dissertation: Pharmacology 895 (FAK 895) - Credits: 90.00

Curriculum: Final year

Core modules

Pharmacology 800 (FAK 800) - Credits: 270.00
Mini-dissertation: Pharmacology 895 (FAK 895) - Credits: 90.00

MMedVet Pig Herd Health (Coursework) (08250183)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Production Animal Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Pig herd health 800 (VKH 800) - Credits: 270.00
Mini-dissertation: Pig herd health 890 (VKH 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Pig herd health 800 (VKH 800) - Credits: 270.00
Mini-dissertation: Pig herd health 890 (VKH 890) - Credits: 90.00

Curriculum: Final year

Core modules

Pig herd health 800 (VKH 800) - Credits: 270.00
Mini-dissertation: Pig herd health 890 (VKH 890) - Credits: 90.00

MMedVet Poultry Diseases (Coursework) (08250172)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Production Animal Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Poultry health and production 800 (PHP 800) - Credits: 270.00
Mini-dissertation: Poultry diseases 890 (PVT 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Poultry health and production 800 (PHP 800) - Credits: 270.00
Mini-dissertation: Poultry diseases 890 (PVT 890) - Credits: 90.00

Curriculum: Final year

Core modules

Poultry health and production 800 (PHP 800) - Credits: 270.00
Mini-dissertation: Poultry diseases 890 (PVT 890) - Credits: 90.00

MMedVet Reproduction (Coursework) (08250032)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Production Animal Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Reproduction 800 (GSK 800) - Credits: 270.00
Mini-dissertation 891 (GSK 891) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Reproduction 800 (GSK 800) - Credits: 270.00
Mini-dissertation 891 (GSK 891) - Credits: 90.00

Curriculum: Final year

Core modules

Reproduction 800 (GSK 800) - Credits: 270.00
Mini-dissertation 891 (GSK 891) - Credits: 90.00

MMedVet Small Animal Medicine (Coursework) (08250057)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Small animal medicine 803 (GEN 803) - Credits: 270.00
Mini-dissertation: Small animal medicine 893 (GEN 893) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Small animal medicine 803 (GEN 803) - Credits: 270.00
Mini-dissertation: Small animal medicine 893 (GEN 893) - Credits: 90.00

Curriculum: Final year

Core modules

Small animal medicine 803 (GEN 803) - Credits: 270.00
Mini-dissertation: Small animal medicine 893 (GEN 893) - Credits: 90.00

MMedVet Small Animal Surgery (Coursework) (08250024)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Surgery 803 (CHV 803) - Credits: 270.00
Mini-dissertation: Small animal surgery 892 (CHV 892) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Surgery 803 (CHV 803) - Credits: 270.00
Mini-dissertation: Small animal surgery 892 (CHV 892) - Credits: 90.00

Curriculum: Final year

Core modules

Surgery 803 (CHV 803) - Credits: 270.00
Mini-dissertation: Small animal surgery 892 (CHV 892) - Credits: 90.00

MMedVet Small Stock Herd Health (Coursework) (08250242)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Production Animal Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Small stock herd health 800 (KKS 800) - Credits: 270.00
Mini-dissertation: Small stock herd health 890 (KKS 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Small stock herd health 800 (KKS 800) - Credits: 270.00
Mini-dissertation: Small stock herd health 890 (KKS 890) - Credits: 90.00

Curriculum: Final year

Core modules

Small stock herd health 800 (KKS 800) - Credits: 270.00
Mini-dissertation: Small stock herd health 890 (KKS 890) - Credits: 90.00

MMedVet Toxicology (Coursework) (08251142)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Paraclinical Sciences.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.
The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Toxicology 800 (TOK 800) - Credits: 270.00
Mini-dissertation: Toxicology 890 (TOK 890) - Credits: 90.00
Research methodology 813 (VRM 813) - Credits: 0.00

Curriculum: Year 2

Core modules

Toxicology 800 (TOK 800) - Credits: 270.00
Mini-dissertation: Toxicology 890 (TOK 890) - Credits: 90.00

Curriculum: Final year

Core modules

Toxicology 800 (TOK 800) - Credits: 270.00
Mini-dissertation: Toxicology 890 (TOK 890) - Credits: 90.00

MMedVet Veterinary Public Health (Coursework) (08250042)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Paraclinical Sciences.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Research methodology 813 (VRM 813) - Credits: 0.00
Veterinary public health 800 (VVD 800) - Credits: 270.00
Mini-dissertation: Veterinary public health 890 (VVD 890) - Credits: 90.00

Curriculum: Year 2

Core modules

Veterinary public health 800 (VVD 800) - Credits: 270.00
Mini-dissertation: Veterinary public health 890 (VVD 890) - Credits: 90.00

Curriculum: Final year

Core modules

Veterinary public health 800 (VVD 800) - Credits: 270.00
Mini-dissertation: Veterinary public health 890 (VVD 890) - Credits: 90.00

MMedVet Wildlife Diseases (Coursework) (08250222)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Production Animal Studies.

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.

The MMedVet degree may entitle the holder to registration as a specialist with the South African Veterinary Council together with other requirements as determined by Council. Candidates are encouraged to review current Council guidelines on specialist registration.

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.

Also consult the UP General Regulations.

Admission requirements

Minimum admission requirements:

1. BVSc degree or an equivalent veterinary degree
2. Applicable experience of at least two years as a veterinarian, or training of at least one year in the specific field as an intern at a recognised training facility
3. An entrance examination may be required
4. Registration as a veterinarian with the South African Veterinary Council (SAVC) or authorisation by the SAVC to be enrolled for MMedVet studies

Additional requirements

The candidate will be required to work full-time at the faculty in the field of specialisation under supervision of an approved supervisor for the required duration.

Notification

While the MMedVet is an advanced professional programme equivalent to specialist certification, registration to practise as a specialist is controlled by the SAVC or international equivalent. These bodies may have additional requirements for registration that are not university requirements. Please check their requirements as well.

Examinations and pass requirements

Also consult the applicable General Regulations.

Conferment of the degree

The MMedVet is conferred by virtue of completion of a minimum of 90 weeks of clinical training, examination in the specialist module, and a mini-dissertation

Examinations

The examination(s) in the specialist field of study may only be taken on completion of the minimum clinical training.

The nature and duration of the specialist module's 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.
A minimum examination mark of 50% is required in each of the theoretical and practical and oral sections of the specialist module.
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.

Research information

Mini-dissertation
(Also consult the General Regulations)
A student must submit a mini-dissertation, which deals with the particular field of specialization.
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 specialization. (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 two examiners, who may not necessarily attend the final examination.
The average of the separate marks awarded by the two 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 relevant head of department, to submit an amended mini-dissertation for final adjudication.

Pass with distinction

In order to obtain the degree with distinction, a minimum final mark of 75% is required for the field of specialisation and the mini-dissertation.

Curriculum: Year 1

Core modules

Research methodology 813 (VRM 813) - Credits: 0.00
Veterinary wildlife studies 800 (WLS 800) - Credits: 270.00
Mini-dissertation: Wildlife diseases 890 (WSK 890) - Credits: 90.00

Curriculum: Year 2

Core modules

Veterinary wildlife studies 800 (WLS 800) - Credits: 270.00
Mini-dissertation: Wildlife diseases 890 (WSK 890) - Credits: 90.00

Curriculum: Final year

Core modules

Veterinary wildlife studies 800 (WLS 800) - Credits: 270.00
Mini-dissertation: Wildlife diseases 890 (WSK 890) - Credits: 90.00

MSc Ruminant Health (Coursework) (08251024)

Minimum duration of study	2 years

Programme information

This programme is offered by the Department of Paraclinical Sciences.

This degree programme underlines the major health and production considerations in domesticated ruminants. It caters for the needs of candidates who wish to extend their knowledge and skills that they have gained during their undergraduate training and aims to allow them to practise at a higher level.

The curriculum consists of compulsory core and elective theoretical 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

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

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

Choose one of the two elective modules as well as any appropriate module on 800 level to the value of at least 10 credits, approved by the HoD

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Ruminant health 801 (RUM 801) - Credits: 40.00

Elective modules

Bovine herd health 801 (BHH 801) - Credits: 40.00
Small stock health 801 (SSH 801) - Credits: 40.00

Curriculum: Final year

null

Core modules

Mini-dissertation: Ruminant health 890 (RUM 890) - Credits: 90.00

MSc Tropical Animal Health (Coursework) (08251020)

Minimum duration of study	2 years

Programme information

This programme is offered by the department of Veterinary Tropical Diseases.

This degree is offered as a combination of e-learning, face-to-face teaching and a compulsory collaborative induction/field-workshop. It has the following components:

- A two week compulsory induction/field-workshop
- Compulsory core modules
- Elective modules (Theory-based and Skills-based)
- Mini-dissertation
  For the MSc Tropical Animal Health the mini-dissertation will include an oral examination conducted face to face or via video conference. The oral examining panel will include an examiner from each institute (not the supervisor). A mark will be given which will constitute 10% of the final mini-dissertation mark. The dissertation will also be examined by one internal and one external examiner as stipulated by the UP regulations; a mark

will be given which will constitute 90% of the final mini-dissertation mark.

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

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of two years' professional experience in their selected field of study

Additional requirements

According to the Bologna Bachelor-Master structure, a Masters degree is required to register at ITM. (Note: A four-year BSc degree in the South African context is equivalent to a Masters degree in the Bologna system). Two years of professional experience might be required in certain cases. It remains the prerogative of the head of department (UP) or course director (ITM) 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. The web-based/online nature of the modules requires basic computer skills in order to successfully participate in the degree programme.

Also consult the General Regulations. Students are required to confirm whether a module will be presented in any particular year.

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

Elective modules: Choose modules to the value of 48 credits from the list of elective modules below ensuring that the following is adhered to:

- Choose two modules to the value of 18 credits from the following skills-based modules: ASR 811, AVB 817, AVH 811, AVV 811, EPL 804, TCK 811 and VMB 816.
- Choose three modules from the following list of theory-based modules: AHE 812, AHE 813, AHE 814, AHE 815, AHE 816, EPL 803, GVD 811 and TBD 814.

Fundamental modules

Research methodology 812 (VRM 812) - Credits: 9.00

Core modules

Laboratory diagnostics 811 (AHE 811) - Credits: 9.00
Basic epidemiology 802 (EPL 802) - Credits: 12.00
One health: basic concepts 801 (OHB 801) - Credits: 12.00

Elective modules

Advanced One Health 812 (AHE 812) - Credits: 12.00
Advanced one health: public health 813 (AHE 813) - Credits: 12.00
Animal health management: high impact and emerging diseases 814 (AHE 814) - Credits: 12.00
Advanced One Health: policy 815 (AHE 815) - Credits: 12.00
Surveillance and survey methodology 816 (AHE 816) - Credits: 12.00
Applied serology 811 (ASR 811) - Credits: 9.00
Applied veterinary bacteriology 817 (AVB 817) - Credits: 9.00
Applied veterinary helminthology 811 (AVH 811) - Credits: 9.00
Applied veterinary virology 811 (AVV 811) - Credits: 9.00
Advanced epidemiology 803 (EPL 803) - Credits: 12.00
Applied epidemiology 804 (EPL 804) - Credits: 12.00
General vector-borne diseases 811 (GVD 811) - Credits: 9.00
Ticks and tick-borne diseases 814 (TBD 814) - Credits: 9.00
Selected tick identification 811 (TCK 811) - Credits: 9.00
Applied molecular biology 816 (VMB 816) - Credits: 9.00

Curriculum: Final year

Core modules
Mini-dissertation 895 (AHE 895) - Credits: 90.00

MSc Veterinary Epidemiology (Coursework) (08251022)

Minimum duration of study	2 years

Programme information

This programme if offered by the Department of Production Animal Studies.

This degree programme provides training in the principles of and methods used in veterinary epidemiology, including training in selected more specialised tools used in the discipline. It caters for the needs of candidates who wish to be trained as epidemiologists, health officers or researchers involved in the investigation and control of diseases in animal populations and who would like to gain relevant knowledge and develop specific technical skills.

The curriculum consists of compulsory core and elective theoretical modules (90 credits) as well as a mini-dissertation (90 credits). It is primarily a web-based modular degree programme.

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

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

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

In addition to the core modules please select relevant elective module(s), in consultation with the HoD and supervisor, to the credit value of at least 15 credits.

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Basic veterinary epidemiology 851 (EPL 851) - Credits: 10.00
Biostatistics in veterinary science 852 (EPL 852) - Credits: 20.00
Analytical veterinary epidemiology 853 (EPL 853) - Credits: 20.00
Animal health information management 855 (EPL 855) - Credits: 5.00
Scientific reasoning in veterinary epidemiology 856 (EPL 856) - Credits: 5.00
Advanced topics in veterinary epidemiology 859 (EPL 859) - Credits: 15.00

Curriculum: Final year

Core modules

Mini-dissertation: Veterinary epidemiology 891 (EPL 891) - Credits: 90.00

MSc Veterinary Industrial Pharmacology (Coursework) (08251018)

Minimum duration of study	2 years

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

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

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

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Advanced fundamentals of pharmacology 876 (FAK 876) - Credits: 40.00
Veterinary industrial pharmacology 800 (VIP 800) - Credits: 50.00

Curriculum: Final year

Core modules

Minidissertation: Veterinary industrial pharmacology 890 (VIP 890) - Credits: 90.00

MSc Veterinary Public Health (Coursework) (08251025)

Minimum duration of study	2 years

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

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

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

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Basic veterinary epidemiology 851 (EPL 851) - Credits: 10.00
Veterinary public health: Meat hygiene 881 (VPH 881) - Credits: 40.00
Veterinary public health: Veterinary milk hygiene 883 (VPH 883) - Credits: 40.00

Curriculum: Final year

Core modules

Mini-dissertation: Veterinary public health 890 (VPH 890) - Credits: 90.00

MSc Veterinary Reproduction (Coursework) (08251023)

Minimum duration of study	2 years

Programme information

This programme is offered by the Department of Production Animal Studies.

The first objective of the degree programme is to provide each participant a strong theoretical grounding in those aspects of veterinary reproduction that are specifically of interest to him or her, whilst also having the opportunity to gain a wider perspective from interacting with other students doing the same programme but with different foci of interest. The second objective, which is as important as the first, is to let the student go through the scientific research process, from the formulation of a research question to reporting the research in a mini-dissertation and an article of sufficient merit to submit to an approved scientific journal.

The degree programme will be suitable for any veterinarian with an interest in reproduction and an interest in doing research in the field of reproduction, irrespective of the species in which his or her interest lies. The degree programme may also be suitable for non-veterinarians with similar interests but focused on those aspects of reproduction that are not of a strict veterinary nature, yet maintaining a focus on animal health.

The curriculum consists of compulsory core and elective theoretical 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

1. BVSc (or equivalent) degree
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

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

Elective Modules:

Choose 3 elective modules from the list of electives

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Reproductive physiology 801 (GSK 801) - Credits: 15.00

Elective modules

Bovine reproduction 806 (GSK 806) - Credits: 25.00
Small stock reproduction 807 (GSK 807) - Credits: 25.00
Equine reproduction 808 (GSK 808) - Credits: 25.00
Small animal reproduction 809 (GSK 809) - Credits: 25.00
Wildlife reproduction 810 (GSK 810) - Credits: 25.00

Curriculum: Final year

Core modules

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

MSc Veterinary Science Anatomy and Physiology (08251014)

Minimum duration of study	1 year

Programme information

This programme is offered by the Department of Anatomy and Physiology.

Also consult the UP General Regulations.

The MSc degree in Veterinary Science is a research degree. The degree is conferred by virtue of the successful completion of a dissertation.

Admission requirements

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

Research information

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

Before or on submission of the final copy of the dissertation, a student must submit a draft article for publication to the supervisor (General Regulation G.12(a) and (b)). The draft article should be based on the research that the student has conducted for the dissertation and be approved by the supervisor concerned. The supervisor should then have the opportunity to take the paper through all the processes of revision and resubmission as may be necessary and/or appropriate in order to achieve publication.

Pass with distinction

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

Curriculum: Final year

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Dissertation: Anatomy and physiology 802 (VWE 802) - Credits: 180.00

MSc Veterinary Science Companion Animal Clinical Studies (08251015)

Minimum duration of study	1 year

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

Also consult the UP General Regulations.

The MSc degree in Veterinary Science is a research degree. The degree is conferred by virtue of the successful completion of a dissertation.

Admission requirements

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

Research information

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

Before or on submission of the final copy of the dissertation, a student must submit a draft article for publication to the supervisor (General Regulation G.12(a) and (b)). The draft article should be based on the research that the student has conducted for the dissertation and be approved by the supervisor concerned. The supervisor should then have the opportunity to take the paper through all the processes of revision and resubmission as may be necessary and/or appropriate in order to achieve publication.

Pass with distinction

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

Curriculum: Final year

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Dissertation: Companion animal clinical studies 803 (VWE 803) - Credits: 180.00

MSc Veterinary Science Paraclinical Sciences (08251016)

Minimum duration of study	1 year

Programme information

This programme is offered by the Department of Paraclinical Sciences.

Also consult the UP General Regulations.

The MSc degree in Veterinary Science is a research degree. The degree is conferred by virtue of the successful completion of a dissertation.

Admission requirements

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

Research information

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

Before or on submission of the final copy of the dissertation, a student must submit a draft article for publication to the supervisor (General Regulation G.12(a) and (b)). The draft article should be based on the research that the student has conducted for the dissertation and be approved by the supervisor concerned. The supervisor should then have the opportunity to take the paper through all the processes of revision and resubmission as may be necessary and/or appropriate in order to achieve publication.

Pass with distinction

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

Curriculum: Final year

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Dissertation: Paraclinical sciences 804 (VWE 804) - Credits: 180.00

MSc Veterinary Science Production Animal Studies (08251017)

Minimum duration of study	1 year

Programme information

This programme is offered by the Department of Production Animal Studies.

Also consult the UP General Regulations.

The MSc degree in Veterinary Science is a research degree. The degree is conferred by virtue of the successful completion of a dissertation.

Admission requirements

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

Research information

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

Before or on submission of the final copy of the dissertation, a student must submit a draft article for publication to the supervisor (General Regulation G.12(a) and (b)). The draft article should be based on the research that the student has conducted for the dissertation and be approved by the supervisor concerned. The supervisor should then have the opportunity to take the paper through all the processes of revision and resubmission as may be necessary and/or appropriate in order to achieve publication.

Pass with distinction

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

Curriculum: Final year

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Dissertation: Production animal studies 805 (VWE 805) - Credits: 180.00

MSc Veterinary ScienceTropical Diseases (08250902)

Minimum duration of study	1 year

Programme information

This programme is offered by the Department of Veterinary Tropical Diseases.

Also consult the UP General Regulations.

The MSc degree in Veterinary Science is a research degree. The degree is conferred by virtue of the successful completion of a dissertation.

Admission requirements

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or** relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required

3. The candidate may be required to submit proof of experience in their selected field of study

Research information

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

Before or on submission of the final copy of the dissertation, a student must submit a draft article for publication to the supervisor (General Regulation G.12(a) and (b)). The draft article should be based on the research that the student has conducted for the dissertation and be approved by the supervisor concerned. The supervisor should then have the opportunity to take the paper through all the processes of revision and resubmission as may be necessary and/or appropriate in order to achieve publication.

Pass with distinction

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

Curriculum: Final year

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Dissertation: Veterinary tropical diseases 801 (VWE 801) - Credits: 180.00

MSc Wildlife Health, Ecology and Management (Coursework) (08251019)

Minimum duration of study	2 years

Programme information

This programme is offered by the Department of Production Animal Sciences.

This degree programme provides training in knowledge and skills to manage wildlife health, production and conservation. This includes technical knowledge of production systems such as housing, handling, husbandry, disease prevention, understanding the economic principles in this economy, understanding ecology and ecosystem management, understanding of policies and legislation relevant to wildlife areas and for veterinarians veterinary specific knowledge such as chemical manipulation, disease recognition and treatment. It will also include softer skills of community considerations in wildlife economies, leadership, communication and strategy skills.

The curriculum consists of compulsory core and elective theoretical 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

1. BVSc (or equivalent) degree **or** relevant four-year BScAgric degree **or** relevant BSc honours degree **or**

relevant postgraduate diploma (on NQF level 8)
2. An admissions examination may be required
3. The candidate may be required to submit proof of experience in their selected field of study

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

Electives:

Choose 1 elective to the value of 15 credits or any appropriate 800-level module, relevant to the field of study

Fundamental modules

Research methodology 813 (VRM 813) - Credits: 0.00

Core modules

Wildlife management and production 800 (NLB 800) - Credits: 20.00

Wildlife ecology 810 (NLB 810) - Credits: 20.00
Wildlife health advanced 810 (WLS 810) - Credits: 20.00
Transfrontier parks and conservation 811 (WLS 811) - Credits: 15.00

Elective modules

Wildlife health introduction 812 (WLS 812) - Credits: 15.00
Wildlife veterinary specific 813 (WLS 813) - Credits: 15.00

Curriculum: Final year

Core modules

Mini-dissertation: Wildlife health, ecology and management 890 (WLS 890) - Credits: 90.00

Doctorate

PhD Veterinary Science Anatomy and Physiology (08261006)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Anatomy and Physiology.

The PhD degree is conferred by virtue of the successful completion of a thesis and the submission of proof of acceptance of an article for publication issued by an accredited journal. Consult the General Regulations.

The research topic will be determined in consultation with the relevant head of department, following which the research projects will be approved in terms of Faculty guidelines and the General Regulations. Each candidate must satisfy the relevant 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.

Admission requirements

1. Relevant master's degree in science

Additional requirements

It remains the prerogative of the relevant 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.

Research information

Before or on submission of the final copy of the thesis, a student must submit proof of acceptance of an article for publication issued by an accredited journal, to the Head: Student Administration (UP General Regulation G.51). The accepted article should be based on the research that the student has conducted for the thesis and should have been approved by the supervisor concerned. The supervisor shall be responsible for ensuring that the article has been taken through all the processes of revision and resubmission, as may be necessary. In exceptional cases the Dean may allow a student to graduate subject to UP Regulations.

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

Curriculum: Year 1

Core modules

Thesis: Anatomy and physiology 902 (VWE 902) - Credits: 360.00

Curriculum: Year 2

Core modules

Thesis: Anatomy and physiology 902 (VWE 902) - Credits: 360.00

Curriculum: Final year

Core modules
Thesis: Anatomy and physiology 902 (VWE 902) - Credits: 360.00

PhD Veterinary Science Companion Animal Clinical Studies (08261007)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Companion Animal Clinical Studies.

The PhD degree is conferred by virtue of the successful completion of a thesis and the submission of proof of acceptance of an article for publication issued by an accredited journal. Consult the General Regulations.

The research topic will be determined in consultation with the relevant head of department, following which the research projects will be approved in terms of Faculty guidelines and the General Regulations. Each candidate must satisfy the relevant 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.

Admission requirements

1. Relevant master's degree in science

Additional requirements

It remains the prerogative of the relevant 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.

Research information

Before or on submission of the final copy of the thesis, a student must submit proof of acceptance of an article for publication issued by an accredited journal, to the Head: Student Administration (UP General Regulation G.51). The accepted article should be based on the research that the student has conducted for the thesis and should have been approved by the supervisor concerned. The supervisor shall be responsible for ensuring that the article has been taken through all the processes of revision and resubmission, as may be necessary. In exceptional cases the Dean may allow a student to graduate subject to UP Regulations.

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

Curriculum: Year 1

Core modules
Thesis: Companion animal clinical sciences 903 (VWE 903) - Credits: 360.00

Curriculum: Year 2

Core modules
Thesis: Companion animal clinical sciences 903 (VWE 903) - Credits: 360.00

Curriculum: Final year

Core modules
Thesis: Companion animal clinical sciences 903 (VWE 903) - Credits: 360.00

PhD Veterinary Science Paraclinical Sciences (08261008)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Paraclinical Sciences.

The PhD degree is conferred by virtue of the successful completion of a thesis and the submission of proof of acceptance of an article for publication issued by an accredited journal. Consult the General Regulations.

The research topic will be determined in consultation with the relevant head of department, following which the research projects will be approved in terms of Faculty guidelines and the General Regulations. Each candidate must satisfy the relevant 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.

Admission requirements

1. Relevant master's degree in science

Additional requirements

It remains the prerogative of the relevant 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.

Research information

Before or on submission of the final copy of the thesis, a student must submit proof of acceptance of an article for publication issued by an accredited journal, to the Head: Student Administration (UP General Regulation G.51). The accepted article should be based on the research that the student has conducted for the thesis and should have been approved by the supervisor concerned. The supervisor shall be responsible for ensuring that the article has been taken through all the processes of revision and resubmission, as may be necessary. In exceptional cases the Dean may allow a student to graduate subject to UP Regulations.

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

Curriculum: Year 1

Core modules
Thesis: Paraclinical sciences 904 (VWE 904) - Credits: 360.00

Curriculum: Year 2

Core modules
Thesis: Paraclinical sciences 904 (VWE 904) - Credits: 360.00

Curriculum: Final year

Core modules
Thesis: Paraclinical sciences 904 (VWE 904) - Credits: 360.00

PhD Veterinary Science Production Animal Studies (08261009)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Production Animal Studies.

The PhD degree is conferred by virtue of the successful completion of a thesis and the submission of proof of acceptance of an article for publication issued by an accredited journal. Consult the General Regulations.

The research topic will be determined in consultation with the relevant head of department, following which the research projects will be approved in terms of Faculty guidelines and the General Regulations. Each candidate must satisfy the relevant 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.

Admission requirements

1. Relevant master's degree in science

Additional requirements

It remains the prerogative of the relevant 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.

Research information

Before or on submission of the final copy of the thesis, a student must submit proof of acceptance of an article for publication issued by an accredited journal, to the Head: Student Administration (UP General Regulation G.51). The accepted article should be based on the research that the student has conducted for the thesis and should have been approved by the supervisor concerned. The supervisor shall be responsible for ensuring that the article has been taken through all the processes of revision and resubmission, as may be necessary. In exceptional cases the Dean may allow a student to graduate subject to UP Regulations.

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

Curriculum: Year 1

Core modules
Thesis: Production animal studies 905 (VWE 905) - Credits: 360.00

Curriculum: Year 2

Core modules
Thesis: Production animal studies 905 (VWE 905) - Credits: 360.00

Curriculum: Final year

Core modules
Thesis: Production animal studies 905 (VWE 905) - Credits: 360.00

PhD Veterinary Science Veterinary Tropical Diseases (08260272)

Minimum duration of study	3 years

Programme information

This programme is offered by the Department of Veterinary Tropical Diseases.

The PhD degree is conferred by virtue of the successful completion of a thesis and the submission of proof of acceptance of an article for publication issued by an accredited journal. Consult the General Regulations.

The research topic will be determined in consultation with the relevant head of department, following which the research projects will be approved in terms of Faculty guidelines and the General Regulations. Each candidate must satisfy the relevant 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.

Admission requirements

1. Relevant master's degree in science

Additional requirements

It remains the prerogative of the relevant 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.

Research information

Before or on submission of the final copy of the thesis, a student must submit proof of acceptance of an article for publication issued by an accredited journal, to the Head: Student Administration (UP General Regulation G.51). The accepted article should be based on the research that the student has conducted for the thesis and should have been approved by the supervisor concerned. The supervisor shall be responsible for ensuring that the article has been taken through all the processes of revision and resubmission, as may be necessary. In exceptional cases the Dean may allow a student to graduate subject to UP Regulations.

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

Curriculum: Year 1

Core modules
Thesis: Veterinary tropical diseases 901 (VWE 901) - Credits: 360.00

Curriculum: Year 2

Core modules
Thesis: Veterinary tropical diseases 901 (VWE 901) - Credits: 360.00

Curriculum: Final year

Core modules

Thesis: Veterinary tropical diseases 901 (VWE 901) - Credits: 360.00

Modules

Laboratory diagnostics 811 (AHE 811)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

This module deals with the concepts and principles of field and laboratory diagnosis of infectious and parasitic diseases of livestock and wildlife including aspects of specimen collection and shipment, interpretation of laboratory results and basic laboratory management.

Advanced One Health 812 (AHE 812)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

(elective)

This module will provide students with an understanding of health in particular social-ecological systems, with a focus on understanding the relationship between ecosystem health and infectious diseases of animals and humans, in order to improve disease control policies, ecosystem sustainability, food security and rural development.

Advanced one health: public health 813 (AHE 813)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)

Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

(elective)

This module will focus on the human dimension of One Health. It introduces an approach to formulate a zoonotic disease control programme. After the module students should be able to explain the disease burden of a particular zoonosis, to develop an epidemiological model, to analyse its broader determinants, to appraise and prioritise possible interventions based on effectiveness, cost, feasibility and acceptability and to identify implementation challenges in a specific public health system's context.

Animal health management: high impact and emerging diseases 814 (AHE 814)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

(elective)

This module deals with the concepts and principles of basic animal health management for livestock production and trade in livestock and livestock commodities. There will be a special focus on the management of infectious diseases that have a high impact in terms of international trade because of their detrimental effects on livestock production and health and/or human health. The module will also examine the drivers for emerging and re-emerging diseases with special reference to the livestock/wildlife/human interface.

Advanced One Health: policy 815 (AHE 815)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases

Period of presentation	Semester 1

Module content

(elective)

Policy is generally defined as a plan of action on the part of a government, business or other organisation intended to influence decisions and actions in a particular direction. This module introduces the key principles in policy making in regard to animal health and trade in livestock or livestock products. It will consider the essentials of “effective” policy creation, the role of science and uncertainty in policy, policy analysis and the role of government versus the private sector in animal health.

Surveillance and survey methodology 816 (AHE 816)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

(elective)

This module deals with the concepts and principles of terrestrial animal (livestock and wildlife) health surveillance; including the design; implementation and evaluation of surveillance system; the data sources; tools and methods available to perform effective surveillance; and the evaluation and analysis of surveillance data. This module will also provide an introduction to geographic information systems (GIS) and provide basic skills on how to use GIS in epidemiological studies.

Mini-dissertation 890 (AHE 890)

Qualification	Postgraduate
Module credits	80.00
NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

A mini-dissertation must be delivered 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.
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.

Mini-dissertation 895 (AHE 895)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

A mini-dissertation must be submitted 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. Before or together with the mini-dissertation, a student must submit at least one draft article for publication in an acknowledged journal to the Faculty Administration, 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.

Academic information management 111 (AIM 111)

Qualification	Undergraduate
Module credits	4.00
NQF Level	05
Programmes	BVSc BVetNurs
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology and Religion

Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Information Science
Period of presentation	Semester 1

Module content

Find, evaluate, process, manage and present information resources for academic purposes using appropriate technology.

Academic information management 121 (AIM 121)

Qualification	Undergraduate
Module credits	4.00
NQF Level	05

	BA
	BA Audiology
	BA Fine Arts
	BA Information Design
	BA Languages
	BA Law
	BA Speech-Language Pathology
	BA Visual Studies
	BA extended programme
	BAdmin Public Management and International Relations
	BCMP
	BChD
	BCom
	BCom Accounting Sciences
	BCom Agribusiness Management
	BCom Business Management
	BCom Econometrics
	BCom Economics
	BCom Financial Sciences
	BCom Human Resource Management
	BCom Informatics Information Systems
	BCom Investment Management
	BCom Law
	BCom Marketing Management
	BCom Statistics and Data Science
	BCom Supply Chain Management
	BCom extended programme
	BConSci Clothing Retail Management
	BConSci Food Retail Management
	BConSci Hospitality Management
	BDietetics
	BDiv
	BDram
	BEd Foundation Phase Teaching
	BEd Intermediate Phase Teaching
	BEd Senior Phase and Further Education and Training Teaching
	BIS Information Science
	BIS Multimedia
	BIS Publishing
	BIT Information Systems
	BMus
	BMus extended programme
	BNurs
	BOH
	BOT
	BPhysT
	BPolSci International Studies
	BPolSci Political Studies
	BRad in Diagnostics
	BSW
Programmes	BSc Actuarial and Financial Mathematics
	BSc Applied Mathematics
	BSc Architecture
	BSc Biochemistry
	BSc Biological Sciences
	BSc Biotechnology
	BSc Chemistry
	BSc Computer Science
	BSc Construction Management
	BSc Culinary Science
	BSc Ecology
	BSc Engineering and Environmental Geology
	BSc Entomology
	BSc Food Science
	BSc Genetics
	BSc Geography and Environmental Science
	BSc Geoinformatics
	BSc Geology
	BSc Human Genetics
	BSc Human Physiology
	BSc Human Physiology, Genetics and Psychology
	BSc Information and Knowledge Systems
	BSc Mathematical Statistics
	BSc Mathematics
	BSc Medical Sciences
	BSc Meteorology
	BSc Microbiology
	BSc Nutrition
	BSc Physics
	BSc Plant Science
	BSc Quantity Surveying
	BSc Real Estate
	BSc Zoology
	BSc extended programme - Biological and Agricultural Sciences
	BSc extended programme - Mathematical Sciences
	BSc extended programme - Physical Sciences
	BScAgric Agricultural Economics and Agribusiness Management
	BScAgric Animal Science
	BScAgric Applied Plant and Soil Sciences
	BScAgric Plant Pathology
	BSocSci Heritage and Cultural Tourism
	BSocSci Industrial Sociology and Labour Studies
	BSocSci Philosophy, Politics and Economics
	BSportSci
	BTRP
	BTh
	BVSc
	BVetNurs
	Diploma in Theology
	LLB
	MBChB

Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Humanities Faculty of Law Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Theology and Religion Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Informatics
Period of presentation	Semester 2

Module content

Apply effective search strategies in different technological environments. Demonstrate the ethical and fair use of information resources. Integrate 21st-century communications into the management of academic information.

Clinical Anatomy 701 (ANG 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

(BVSc graduates only)
An in-depth study of the osteology, arthrology, myology, angiology, neurology, splanchnology and topographical anatomy of a species of interest. Special attention to clinically important sections of the anatomy. The course will allow for further studies in anatomy for intercalation with subjects such as diagnostic imaging and surgery.

Anaesthesiology 420 (ANV 420)

Qualification	Undergraduate
Module credits	7.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	1 practical per semester, 3 lectures per week
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Prepare for safe general anaesthesia; premedication; trachea intubation; induction and maintenance of intravenous and inhalation anaesthesia; recovery from anaesthesia; local anaesthesia and pain management; anaesthetic complications.

Anaesthesiology 701 (ANV 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical training on canine and feline anaesthesia and analgesia.The module covers the latest techniques in anaesthetising compromised animals and the use of total intravenous anaesthetic techniques, positive pressure ventilation, peripheral muscle relaxants and monitor apparatus.

Small animal anesthesiology 711 (ANV 711)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Contact time	30 Hours
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Theoretical and practical training in specific areas of small animal anaesthesia and analgesia for the veterinary nurse. Formulation and implementation of appropriate strategies to comply with relevant standards.

Anaesthesiology 800 (ANV 800)

Qualification	Postgraduate

Module credits	270.00
NQF Level	09
Programmes	MMedVet Anaesthesiology (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced theoretical and practical and experiential training in the administration of local and general anaesthetics on a species-orientated basis. The module covers the structure and functioning of inhalation anaesthesia and monitor apparatus, the latest use of total intravenous anaesthetic techniques, positive pressure ventilation, peripheral muscle relaxants and the techniques and equipment employed for the immobilisation of game.
Theoretical training includes the attendance of postgraduate seminars in Anaesthesiology at the School of Medicine.

Mini-dissertation: Anaesthesiology 890 (ANV 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Anaesthesiology (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Animal welfare principles 701 (ANW 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced training in general principles and assessment of animal welfare with an emphasis on farm animals and animals destined for slaughter. Comparative evaluation of animal welfare in different contexts including wild and exotic species, companion animals, laboratory, teaching and working animals, and in disaster situations.

Small animal behaviour and welfare 702 (ANW 702)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine
Prerequisites	No prerequisites.
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Theoretical and practical training in assessment of welfare of dogs and cats in various contexts including shelters and dog population control. Formulation and implementation of appropriate strategies to comply with relevant standards.

Applied serology 811 (ASR 811)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Contact time	8 web-based periods per week
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

Skills training

The module will enable delegates to develop proficiency in procedures in veterinary immunology and serology, and to implement and standardize different serological techniques with special emphasis on ELISA and FA techniques.

Applied veterinary bacteriology 817 (AVB 817)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

Skills training

This module provides an introduction to the basic concepts of veterinary bacteriology, from sampling and handling of specimens to the methods and tools used for isolation and identification of bacteria of veterinary significance in the laboratory.

Applied veterinary helminthology 811 (AVH 811)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

Skills training

This module provides an introduction to the control of helminth infections of economic or public health importance in the tropics. The focus is on transmission of helminths of livestock and on sustainable methods to break the lifecycles. Practical study includes common parasitological techniques and interpretation of parasitological parameters.

Applied veterinary virology 811 (AVV 811)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)

Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

Skills training

Theoretical and practical study of the use of cell cultures and embryonated chicken eggs for the isolation and identification of viruses.

African wildlife disease management 701 (AWD 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced training in infectious, parasitic and nutritional diseases of wildlife and their management in African wildlife species under ranching conditions. Also included are ostrich and crocodile farming.

Bovine herd health 801 (BHH 801)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Programmes	MSc Ruminant Health (Coursework)
Prerequisites	A BVSc, a four year BSc in Agriculture (Animal Science), Microbiology, Zoology or an equivalent degree
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content
The primary aim of this module is to provide the candidate with the skills and competence to promote the health and production efficiency of cattle operations (dairy, beef and feedlots). The module will enable students to integrate and apply knowledge so that health and production can be monitored and problems can be identified and solved on a herd basis.

The module content will be based on advanced theoretical training in bovine herd health with emphasis on principles of herd health and production programmes, animal health economics, monitoring dairy herd health and production (applied nutrition, fertility, udder health, foot health, general cow health, calves and replacement heifers), monitoring the health and performance of beef cow calf enterprises (resource base, forage and beef cow-calf stock flow, applied nutrition, fertility, young stock, integrated resource, health and management program), and beef feedlots

Bovine health and production 800 (BHP 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Bovine Health and Production (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content
Advanced and applied training to augment theoretical material presented in core and elective modules. Depending on the students' focus and field of interest he/she can chose per capita topics pertaining to either dairy herd health, beef herd health, feedlot beef production or clinical medicine. Dairy herd health can include in depth reviews on mastitis problems, dairy nutrition, dairy reproduction, lameness, young stock management and associated metabolic conditions. Beef herd health can include veld and pasture management, beef production and nutrition, reproduction and pertinent diseases and conditions. Feedlot beef production can include feedlot nutrition, respiratory anatomy and physiology, respiratory diseases, conditions, diagnosis and treatment, pharmacology, young stock management and production indices. Clinical medicine can include organ, metabolic and deficiency conditions along with the relevant pathophysiology, diagnosis and treatment methods. Advanced training in the chosen topics will be offered firstly in the form of seminar presentation and discussions. Clinical applications will be offered in the form of field visits to the relevant chosen areas and fields of interest as well as clinical supervision within the veterinary hospital clinical rotations. Supervised clinical training comprises a minimum 90 weeks. Integration and application of knowledge of health and production problems and evaluation of health status, production and economic effectiveness of dairy and or beef systems will be core.

Mini-dissertation: Bovine health and production 890 (BHP 890)

Qualification	Postgraduate

Module credits	90.00
NQF Level	09
Programmes	MMedVet Bovine Health and Production (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Mini-dissertation

Biometry 120 (BME 120)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05
Programmes	BIT Information Systems BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Culinary Science BSc Ecology BSc Entomology BSc Food Science BSc Genetics BSc Geography and Environmental Science BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Information and Knowledge Systems BSc Medical Sciences BSc Meteorology BSc Microbiology BSc Nutrition BSc Physics BSc Plant Science BSc Zoology BSc extended programme - Biological and Agricultural Sciences BSc extended programme - Physical Sciences BScAgric Agricultural Economics and Agribusiness Management BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology BVSc

Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Natural and Agricultural Sciences Faculty of Veterinary Science
Prerequisites	At least 4 (50-59%) in Mathematics in the Grade 12 examination, or at least 50% in both Statistics 113, 123
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 2

Module content

Simple statistical analysis: Data collection and analysis: Samples, tabulation, graphical representation, describing location, spread and skewness. Introductory probability and distribution theory. Sampling distributions and the central limit theorem. Statistical inference: Basic principles, estimation and testing in the one- and two-sample cases (parametric and non-parametric). Introduction to experimental design. One- and twoway designs, randomised blocks. Multiple statistical analysis: Bivariate data sets: Curve fitting (linear and non-linear), growth curves. Statistical inference in the simple regression case. Categorical analysis: Testing goodness of fit and contingency tables. Multiple regression and correlation: Fitting and testing of models. Residual analysis. Computer literacy: Use of computer packages in data analysis and report writing.

Economic evaluation of disease control intervention 872 (CDS 872)

Qualification	Postgraduate
Module credits	5.00
NQF Level	09
Programmes	MPH
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Module content

Students learn when and how to perform economic analyses.

Small animal surgery 701 (CHV 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences

Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical study of small animal orthopaedic surgery.

Small animal surgery 702 (CHV 702)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical study of small animal soft tissue surgery.

Equine Surgery 707 (CHV 707)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical study of equine surgery.

Surgery 800 (CHV 800)

Qualification	Postgraduate
Module credits	400.00

NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced theoretical, practical and experiential module in equine surgery.

Surgery 803 (CHV 803)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Small Animal Surgery (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced theoretical, practical and experiential module in small animal surgery.

Surgery 804 (CHV 804)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Equine Surgery (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced theoretical, practical and experiential module in equine surgery.

Mini-dissertation: Equine surgery 890 (CHV 890)

Qualification	Postgraduate
Module credits	90.00

NQF Level	09
Programmes	MMedVet Equine Surgery (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Mini-dissertation: Small animal surgery 892 (CHV 892)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Small Animal Surgery (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Mini-dissertation: Equine surgery 894 (CHV 894)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Clinical pathology 410 (CLP 410)

Qualification	Undergraduate
Module credits	7.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies

Period of presentation	Semester 1

Module content

Diagnosis and treatment of anaemia, polycythaemia, leukocyte kinetics, lymphohaemopoietic neoplasia; diagnosis and treatment of haemostatic abnormalities; diagnostic use of serum biochemistry, faecal and blood tests, urinalysis; cytology.

Clinical reproduction 701 (CLR 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Causes, pathogenesis, control, treatment and prevention of diseases and malfunctions of reproduction in cattle, as well as the evaluation of males and females for breeding soundness. Also included are certain aspects of assisted reproduction and reproductive biotechnology, such as control of the oestrous cycle and parturition. A veterinary perspective (indications, limitations, current and future possibilities, and methods) on reproductive biotechnologies.

General chemistry 117 (CMY 117)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05

Programmes	BDietetics BEd Senior Phase and Further Education and Training Teaching BSc Applied Mathematics BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Computer Science BSc Culinary Science BSc Ecology BSc Engineering and Environmental Geology BSc Entomology BSc Food Science BSc Genetics BSc Geography and Environmental Science BSc Geology BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Mathematics BSc Medical Sciences BSc Meteorology BSc Microbiology BSc Nutrition BSc Physics BSc Plant Science BSc Zoology BScAgric Agricultural Economics and Agribusiness Management BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	A candidate must have Mathematics for at least 60% and 60% for Physical Sciences.
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Chemistry
Period of presentation	Semester 1

Module content

General introduction to inorganic, analytical and physical chemistry. Atomic structure and periodicity. Molecular structure and chemical bonding using the VSEOR model. Nomenclature of inorganic ions and compounds. Classification of reactions: precipitation, acid-base, redox reactions and gas-forming reactions. Mole concept and stoichiometric calculations concerning chemical formulas and chemical reactions. Principles of reactivity: energy and chemical reactions. Physical behaviour gases, liquids, solids and solutions and the role of intermolecular forces. Rate of reactions: Introduction to chemical kinetics.

General chemistry 127 (CMY 127)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05
Programmes	BDietetics BEd Senior Phase and Further Education and Training Teaching BSc Applied Mathematics BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Computer Science BSc Culinary Science BSc Ecology BSc Engineering and Environmental Geology BSc Entomology BSc Food Science BSc Genetics BSc Geography and Environmental Science BSc Geology BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Mathematics BSc Medical Sciences BSc Meteorology BSc Microbiology BSc Nutrition BSc Physics BSc Plant Science BSc Zoology BSc extended programme - Biological and Agricultural Sciences BSc extended programme - Physical Sciences BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology

Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Natural and Agricultural Sciences students: CMY 117 GS or CMY 154 GS Health Sciences students: none
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Chemistry
Period of presentation	Semester 2

Module content

Theory: General physical-analytical chemistry: Chemical equilibrium, acids and bases, buffers, solubility equilibrium, entropy and free energy, electrochemistry. Organic chemistry: Structure (bonding), nomenclature, isomerism, introductory stereochemistry, introduction to chemical reactions and chemical properties of organic compounds and biological compounds, i.e. carbohydrates and aminoacids. Practical: Molecular structure (model building), synthesis and properties of simple organic compounds.

Chemistry 151 (CMY 151)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05
Programmes	BChD BPhysT BVSc MBChB
Service modules	Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	A candidate must have Mathematics for at least 60% and 60% for Physical Sciences.
Contact time	1 practical per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Chemistry
Period of presentation	Semester 1

Module content

Theory: Introduction to general chemistry: Measurement in chemistry, matter and energy, atomic theory and the periodic table, chemical compounds and chemical bonds; quantitative relationships in chemical reactions, states of matter and the kinetic theory; solutions and colloids, acids, bases and ionic compounds, chemical equilibria. Introduction to organic chemistry: Chemical bonding in organic compounds, nature, physical properties and nomenclature of simple organic molecules, isomerism, chemical properties of alkanes and cycloalkanes, alkenes, alcohols, aldehydes and ketones, carboxylic acids and esters, amines and amides, carbohydrates, proteins, and lipids.
Practicals.

Controlled and notifiable diseases 701 (CND 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

Advanced training in diseases with implications on trade and/or human health/wellbeing. The module will covey advanced knowledge in the specific disease, their management and basic monitoring epidemiological tools. Attention will also be given to emerging diseases as well as diseases associated with wildlife ranching.

Clinical veterinary nursing 121 (CVN 121)

Qualification	Undergraduate
Module credits	8.00
NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1 day excursion, 21 lectures per week for 2 weeks
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content
Relevant anatomy and physiology, husbandry and handling, hospitalisation, medical nursing, surgical nursing, emergency and critical care, nutrition, common conditions, neonatal care, and anaesthesia of birds; reptiles; small mammals including rabbits, rats and mice, guinea pigs and chinchillas; primates, small carnivores, sugar gliders, hedgehogs and small wildlife. The hand rearing of wild hoof stock.

Clinical veterinary nursing 122 (CVN 122)

Qualification	Undergraduate
Module credits	8.00
NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1.5 discussion classes per week for 2 weeks, 1.5 practicals per week for 2 weeks, 2 online lectures for 2 weeks, 23.5 lectures per week for 2 weeks
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 2

Module content
Nursing of the patients, of the relevant domestic animals, with diseases of the skin, hooves, teat and udder. Diagnostic procedures related to the skin.

Clinical veterinary nursing 211 (CVN 211)

Qualification	Undergraduate
Module credits	18.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	20 lectures per week for 4 weeks, 3 practicals per week over 4 weeks
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 1

Module content
Nursing and physical rehabilitation of musculo-skeletal patients of the relevant domestic animals. Diagnostic imaging of the skeleton. Principles of theatre practice.

Clinical veterinary nursing 212 (CVN 212)

Qualification	Undergraduate

Module credits	12.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	24 lectures per week for 2 weeks, 3 practicals per week over 2 weeks
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

Nursing of patients, of the relevant domestic animals, with dental and gastrointestinal diseases. Diagnostic Imaging of the abdomen. Other diagnostic procedures related to the gastro-intestinal tract.

Clinical veterinary nursing 213 (CVN 213)

Qualification	Undergraduate
Module credits	12.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	21 lectures per week for 2 weeks, 3 online lectures for 2 weeks, 6 practicals per week for 2 weeks
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

Nursing of patients, of the relevant domestic animals, with reproductive conditions. Care and nursing of neonates. Assisted reproduction technologies.

Clinical veterinary nursing 214 (CVN 214)

Qualification	Undergraduate
Module credits	12.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1 discussion class per week over 2 weeks, 1 online lecture for 2 weeks, 1.5 practicals per week for 2 weeks, 25 lectures per week for 2 weeks
Language of tuition	Module is presented in English

Department	Companion Animal Clinical Studies
Period of presentation	Semester 1

Module content

Nursing of the patient with endocrine disease, of the relevant domestic animals. Nursing of urinary and renal patients. Diagnostic procedures related to the endocrine system, bladder and kidneys.

Clinical veterinary nursing 221 (CVN 221)

Qualification	Undergraduate
Module credits	12.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1 practical per week for 2 weeks, 1.5 online lecture for 2 weeks, 26 lectures per week for 2 weeks
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Nursing of ophthalmological and neurological patients, of the relevant domestic animals. Diagnostic imaging of the skull and spine. Diagnostic procedures related to the eye and nervous system.

Clinical veterinary nursing 222 (CVN 222)

Qualification	Undergraduate
Module credits	18.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1.5 online lecture for 4 weeks, 19 lectures per week for 4 weeks, 2 practicals per week for 4 weeks
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Nursing of cardiac and respiratory patients, of the relevant domestic animals. Anaesthesiology of the veterinary patient. Diagnostic imaging of the thorax. Other diagnostic procedures related to the cardio-vascular and respiratory system. Physical animal rehabilitation related to the circulatory and respiratory systems.

Clinical veterinary nursing 223 (CVN 223)

Qualification	Undergraduate
Module credits	18.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1.25 online lecture, 4 weeks, 1.25 practicals per week for 4 weeks, 20 lectures per week for 4 weeks
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Critical care of patients, of the relevant domestic animals. Nursing of the oncology patient. Nursing of a patient with multi-systemic disease. Triage and emergencies.

Diagnostic imaging 400 (DIM 400)

Qualification	Undergraduate
Module credits	14.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	2 lectures per week over 14 weeks, 3 lectures per week over 14 weeks, 9 practicals per year
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Principles of diagnostic imaging; diagnostic imaging of the abdomen, thorax, head, appendicular system and the vertebral column in dogs and cats; diagnostic imaging of the appendicular system in horses and production animals.

Non-radiological diagnostic imaging of dogs and cats 701 (DIM 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08

Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study in non-radiological diagnostic imaging of dogs and cats. Approximately 76% is allocated to diagnostic ultrasound; 8% to MRI, CT and Scintigraphy each respectively. The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed, as well as ways in which this field of study is linked to other diagnostic methods in order to confirm a diagnosis.

Non-radiological diagnostic imaging of horses 702 (DIM 702)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced study in non-radiological diagnostic imaging of horses. Approximately 80% is allocated to diagnostic ultrasound; 5% to MRI, 5% to CT and 10% to Scintigraphy. The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed.

Non-radiological diagnostic imaging of ruminants 703 (DIM 703)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08

Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study in non-radiological diagnostic imaging of ruminants. Approximately 85% is allocated to diagnostic ultrasound; 5% to MRI, CT and Scintigraphy each respectively. The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed, as well as ways in which this field of study is linked to other diagnostic methods in order to confirm a diagnosis.

Radiology: Dogs and cats 705 (DIM 705)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study of radiology of dogs and cats, including discussion on the pathophysiology, diagnosis and prognosis of pathological conditions.

Radiology: Horses 706 (DIM 706)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08

Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study of radiology of horses, including discussion on the pathophysiology, diagnosis and prognosis of pathological conditions.

Radiology: Ruminants 707 (DIM 707)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study of radiology of ruminants.
The pathophysiology, diagnosis and prognosis of pathological conditions are also discussed as well as ways in which this field of study relates to other diagnostic methods in order to confirm a diagnosis.

Diagnostic imaging 870 (DIM 870)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Diagnostic Imaging (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English

Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced study of small and large animal radiography, radiology, ultrasonography, scintigraphy, magnetic resonance imaging and computed tomography: with a view to specialisation.
Literature study and a minimum of 90 weeks practical work are also required.

Mini-dissertation: Diagnostic imaging 890 (DIM 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Diagnostic Imaging (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Diagnostic pathology 701 (DPA 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

(BVSc graduates only)
Diagnostic pathology of the diseases in various animal species.

Diagnostic pathology 401 (DPT 401)

Qualification	Undergraduate
Module credits	12.00
NQF Level	08
Programmes	BVSc

Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	2 lectures per week over 25 weeks, 21 practicals
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Planning and conducting necropsies; diagnostic approach to fatal conditions and diseases of dogs, cats and horses.

Diagnostic pathology 511 (DPT 511)

Qualification	Undergraduate
Module credits	12.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	14 practicals, 28 lectures
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Semester 1

Module content

Planning and conducting necropsies; diagnostic approach to fatal conditions and diseases of pigs, poultry, small stock, cattle and selected wildlife species.

Basis in environmental health 870 (EHM 870)

Qualification	Postgraduate
Module credits	5.00
NQF Level	09
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 1 lecture per week, 1 other contact session per week, 1 practical per week, 1 seminar per week
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Health risk assessment 871 (EHM 871)

Qualification	Postgraduate
Module credits	10.00
NQF Level	09
Programmes	MPH
Service modules	Faculty of Veterinary Science
Prerequisites	EOH 871
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Veterinary epidemiology 420 (EPL 420)

Qualification	Undergraduate
Module credits	10.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	14 lectures, 7 practical sessions per semester, 7 sessions per semester
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 2

Module content

Topics presented within an evidence-based medicine and clinical decision-making framework: basic concepts of epidemiology and disease transmission, measures of disease in populations, precision and bias, causal inference, measures of association, epidemiological study design, sampling methods, disease outbreak investigation and principles of diagnostic tests.

Veterinary epidemiology 701 (EPL 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.

Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
An introductory module in veterinary epidemiology designed to provide a foundation in epidemiology to allow for a better understanding of epidemiological reports.

Basic epidemiology 802 (EPL 802)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

Compulsory module.

A web-based introductory module in epidemiology that includes general concepts, quantification of disease prevalence and incidence, interpretation of diagnostic test results, basic sampling designs and basic statistics.

Advanced epidemiology 803 (EPL 803)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	EPL 802 (with a minimum of 60% final mark)
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

This module builds on the subjects dealt with in the ‘Basic Epidemiology’ module. It includes advanced statistical models (generalised linear model, mixed models, survival analysis) and introduces quantitative risk assessment.

Applied epidemiology 804 (EPL 804)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	EPL 803
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

Skills training

This module is a hands-on theoretical and practical introduction to epidemiological modelling, including simulation modelling. It assumes successful completion of the basic and applied epidemiology modules.

Basic veterinary epidemiology 851 (EPL 851)

Qualification	Postgraduate
Module credits	10.00
NQF Level	09
Programmes	MSc Veterinary Epidemiology (Coursework) MSc Veterinary Public Health (Coursework)
Prerequisites	A BVSc or equivalent qualification. Non-veterinary graduates will be considered under exceptional circumstances. Recommended: Grade 12 Mathematics.
Contact time	1 other contact session per week, 1 web-based period per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

An introductory module in veterinary epidemiology designed to provide a sound foundation in epidemiology that can be applied in practice and upon which further studies can be built. The module covers aspects of population medicine, disease outbreak investigation, clinical epidemiology, experimental studies, observational studies, surveys, basic analytical tools and diagnostic tests

Biostatistics in veterinary science 852 (EPL 852)

Qualification	Postgraduate
Module credits	20.00
NQF Level	09
Programmes	MSc Veterinary Epidemiology (Coursework)

Prerequisites	BVSc or equivalent qualification and Grade 12 Mathematics.
Contact time	2 seminars per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

This module provides the student with a foundation in basic statistical methods commonly used by postgraduate students in veterinary science. It covers statistical building blocks, confidence intervals, hypothesis testing, chi-square procedures, regression and correlation, paired and pooled t-tests, analysis of variance and non-parametric tests.

Analytical veterinary epidemiology 853 (EPL 853)

Qualification	Postgraduate
Module credits	20.00
NQF Level	09
Programmes	MSc Veterinary Epidemiology (Coursework)
Prerequisites	EPL 851 and EPL 852
Contact time	2 seminars per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 2

Module content

This module provides the student with further knowledge and skills in veterinary epidemiology and an introduction to certain more advanced statistical methods commonly used in veterinary science, including adjustment for confounding, multiple linear regression, logistic regression and survival analysis, and will provide the basis for further studies and research involving these techniques.

Animal health information management 855 (EPL 855)

Qualification	Postgraduate
Module credits	5.00
NQF Level	09
Programmes	MSc Veterinary Epidemiology (Coursework)
Prerequisites	No prerequisites.
Contact time	1 web-based period per week
Language of tuition	Module is presented in English
Department	Production Animal Studies

Period of presentation	Semester 1 or Semester 2

Module content

This module covers the principles and practice of the collection, entry, storage, management and processing of animal health-related data. It provides the knowledge necessary to be able to effectively work with data in veterinary epidemiology and animal health research.

Scientific reasoning in veterinary epidemiology 856 (EPL 856)

Qualification	Postgraduate
Module credits	5.00
NQF Level	09
Programmes	MSc Veterinary Epidemiology (Coursework)
Prerequisites	No prerequisites.
Contact time	1 web-based period per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

This module covers, using practical examples, the processes of scientific reasoning and critical thinking applicable to veterinary epidemiology, and equips the student to use clear lines of reasoning in developing and testing hypotheses and making inferences, and to be able to critically evaluate information presented in the literature.

Advanced topics in veterinary epidemiology 859 (EPL 859)

Qualification	Postgraduate
Module credits	15.00
NQF Level	09
Programmes	MSc Veterinary Epidemiology (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

This module consists of assignments, seminars, discussions, required reading and/or attendance of short courses on various specialised or advanced topics in veterinary epidemiology of interest to the student and relevant to the chosen research project. Activities are decided upon by the student, in consultation with and subject to approval by the supervisor

Mini-dissertation: Veterinary epidemiology 890 (EPL 890)

Qualification	Postgraduate
Module credits	120.00
NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Mini-dissertation

Mini-dissertation: Veterinary epidemiology 891 (EPL 891)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MSc Veterinary Epidemiology (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Mini-dissertation

Equine medicine and surgery 410 (EQM 410)

Qualification	Undergraduate
Module credits	14.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fourth year academic level and admission to relevant programme.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 1

Module content

Lameness: disorders of the front and hind limb; disorders of the spine; fractures and emergencies; muscular disorders; insurance examinations; identification, diagnosis and treatment of important cardiovascular, gastrointestinal, nervous system, urinary, skin, multi-systemic and respiratory disorders/diseases; hydration status and correction of fluid imbalances; the equine neonate: clinical examination, diagnostic tests and selected disorders.

Clinical pharmacology 701 (FAK 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced studies in veterinary clinical pharmacology studies pharmacotherapeutic features related to veterinary medicine and species-specific therapeutic objectives.

Mechanisms of drug action 702 (FAK 702)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Fundamentals of the pharmacokinetics and pharmacodynamics of veterinary drugs.

Pharmacology 800 (FAK 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Pharmacology (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Advanced theoretical, practical and experiential training in clinical and industrial pharmacology.

Advanced fundamentals of pharmacology 876 (FAK 876)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Programmes	MSc Veterinary Industrial Pharmacology (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Scope and historical development of veterinary pharmacology.
Veterinary pharmaceutics 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.

Mini-dissertation: Pharmacology 895 (FAK 895)

Qualification	Postgraduate
Module credits	90.00

NQF Level	09
Programmes	MMedVet Pharmacology (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Physiology 701 (FSL 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

Advanced level, with the emphasis on applied and pathophysiology of disease.

Equine medicine 701 (GEN 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical training in the diagnosis, treatment and management of equine internal medical diseases with aim of acquiring in-depth knowledge of the principles and practice of equine internal medicine and its supporting disciplines.

Small animal clinical behaviour 710 (GEN 710)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	BVSc, DVN (combined with RPL approval) and BVetNurs graduates only.
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced study of low stress handling techniques the clinical approach to assessment, diagnosis and management of behaviour disorders in dogs and cats, including the role of behaviour in small animal welfare assessment in various contexts.Emphasis is placed on developing practical skills.

Small animal medicine 711 (GEN 711)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical study in canine and feline medicine (non-internal organs). The module covers establishment of a minimum database, identification of problems, establishment of differential diagnoses, the logical selection of appropriate special procedures and clinical pathological analyses, logical interpretation of results and the understanding of the risk-benefit and financial implications of such special procedures for each organ system. Study of the conditions of internal organs is not included in this module.

Small animal medicine 712 (GEN 712)

Qualification	Postgraduate
Module credits	30.00

NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical study in canine and feline internal medicine specifically applicable to conditions of the internal organs. The module covers establishment of a minimum database, identification of problems, establishment of differential diagnoses, the logical selection of appropriate special procedures and clinical pathological analyses, logical interpretation of results and the understanding of the risk-benefit and financial implications of such special procedures for each organ system.

Equine medicine 802 (GEN 802)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Equine Medicine (Coursework)
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced training in organ, metabolic and deficiency diseases of equines. Pathophysiology, diagnostic and treatment methods are emphasised.

Small animal medicine 803 (GEN 803)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Small Animal Medicine (Coursework)
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Advanced theoretical and practical training in organ, metabolic and deficiency diseases of small animals. Pathophysiology, diagnostic and treatment methods are emphasised.

Mini-dissertation: Equine medicine 892 (GEN 892)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Equine Medicine (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Mini-dissertation: Small animal medicine 893 (GEN 893)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Small Animal Medicine (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

General surgery 310 (GNS 310)

Qualification	Undergraduate
Module credits	7.00
NQF Level	07
Programmes	BVSc
Prerequisites	No prerequisites.
Contact time	2 lectures per week for 13 weeks, 3 practicals per week over 4 weeks
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 1

Module content

General principles of surgery, applicable to all species. Principles of surgical asepsis, disinfection and sterilisation, suture materials and patterns, surgical haemostasis, traumatology, wound healing, wound infection, wound management, small animal bandages and surgical instrumentation.

General and organ pathology 300 (GOP 300)

Qualification	Undergraduate
Module credits	30.00
NQF Level	07
Programmes	BVSc
Prerequisites	Third year academic level and admission to relevant programme.
Contact time	2 discussion classes per week over 25 weeks, 6 demonstration sessions of 40 minutes, 6 lectures per week over 25 weeks
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Definitions and common causes of basic lesions in tissues and organs. Pathogenesis of basic lesions including, reversible cell injury, pigmentations, necrosis, apoptosis, circulatory disturbances, inflammation, immunopathology, growth disturbances and neoplasia. Organ pathology (with the emphasis on macroscopic changes and pathogenesis) of selected conditions of the various organ systems of the body.

Reproduction 800 (GSK 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Reproduction (Coursework)
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

This module offers broad-based, in-depth experiential training that may be theoretical and practical on animal reproduction and is a requirement for the MMedVet (Reproduction) degree. Reproduction, as taught during the undergraduate veterinary curriculum and modules GSK 801 to GSK 804 serves as basis for advanced training in obstetrics, gynaecology, andrology and assisted reproduction of animals.

Reproductive physiology 801 (GSK 801)

Qualification	Postgraduate
Module credits	15.00
NQF Level	09
Programmes	MSc Veterinary Reproduction (Coursework)
Prerequisites	No prerequisites.

Contact time	30 contact hours per semester
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

This module will provide advanced theoretical study in and critical appraisal of the principles, concepts, current application and potential developments in selected aspects of reproductive physiology of animals with a strong focus on the common domestic species as specified in modules GSK 806 to GSK 809.

Bovine reproduction 806 (GSK 806)

Qualification	Postgraduate
Module credits	25.00
NQF Level	09
Programmes	MSc Veterinary Reproduction (Coursework)
Prerequisites	GSK 801
Contact time	50 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

This module will provide advanced theoretical study in the reproduction of cattle, including the physiology and endocrinology of reproduction; monitoring, aspects of assisting and controlling their reproduction; managing diseases and malfunctions of reproduction and the evaluation of bulls and cows for breeding soundness.

Small stock reproduction 807 (GSK 807)

Qualification	Postgraduate
Module credits	25.00
NQF Level	09
Programmes	MSc Veterinary Reproduction (Coursework)
Prerequisites	GSK 801
Contact time	50 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

This module will provide advanced theoretical study in the reproduction of sheep and goats, including the physiology and endocrinology of reproduction; monitoring, aspects of assisting and controlling their reproduction; managing diseases and malfunctions of reproduction and the evaluation of males, bucks, ewes and nanny goats for breeding soundness.

Equine reproduction 808 (GSK 808)

Qualification	Postgraduate
Module credits	25.00
NQF Level	09
Programmes	MSc Veterinary Reproduction (Coursework)
Prerequisites	GSK 801
Contact time	50 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 2

Module content

This module will provide advanced theoretical study in the reproduction of mares and stallions, including the physiology and endocrinology of reproduction; monitoring, aspects of assisting and controlling their reproduction; managing diseases and malfunctions of reproduction and the evaluation of stallions and mares for breeding soundness.

Small animal reproduction 809 (GSK 809)

Qualification	Postgraduate
Module credits	25.00
NQF Level	09
Programmes	MSc Veterinary Reproduction (Coursework)
Prerequisites	GSK 801
Contact time	50 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1 or Semester 2

Module content

This module will provide advanced theoretical study in the reproduction of dogs and cats, including the physiology and endocrinology of reproduction; monitoring, aspects of assisting and controlling their reproduction; managing diseases and malfunctions of reproduction and the evaluation of dogs and bitches for breeding soundness.

Wildlife reproduction 810 (GSK 810)

Qualification	Postgraduate
Module credits	25.00
NQF Level	09
Programmes	MSc Veterinary Reproduction (Coursework)
Prerequisites	GSK 801
Contact time	50 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1 or Semester 2

Module content

This module will provide advanced theoretical study in the physiology and endocrinology of reproduction and reproductive patterns of wildlife, the monitoring of their reproduction, the development of breeding programmes for them and contraception, as well as diseases and malfunctions of reproduction and the evaluation of males and females for breeding soundness.

Mini-dissertation 891 (GSK 891)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Reproduction (Coursework) MSc Veterinary Reproduction (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

The aim of the module is to let the student experience and work through the scientific research process, starting with the formulation of a research question in the field of animal reproduction and ending with reporting the research in a mini-dissertation and an article of sufficient merit to submit to an approved scientific journal.

Introductory genetics 161 (GTS 161)

Qualification	Undergraduate
Module credits	8.00
NQF Level	05

Programmes	BEd Senior Phase and Further Education and Training Teaching BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Ecology BSc Entomology BSc Food Science BSc Genetics BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Information and Knowledge Systems BSc Medical Sciences BSc Microbiology BSc Nutrition BSc Physics BSc Plant Science BSc Zoology BSc extended programme - Biological and Agricultural Sciences BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology BVSc
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Veterinary Science
Prerequisites	MLB 111 GS
Contact time	2 lectures per week, fortnightly tutorials
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Semester 2

Module content

Chromosomes and cell division. Principles of Mendelian inheritance: locus and alleles, dominance interactions, extensions and modifications of basic principles.. Probability studies. Sex determination and sex linked traits. Pedigree analysis. Genetic linkage and chromosome mapping. Chromosome variation.

General vector-borne diseases 811 (GVD 811)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Language of tuition	Module is presented in English

Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

The module gives an overview of the most important vectors and vector borne diseases, their importance and insight on the importance of the biology of the vectors on the transmission of the micro-organisms they transmit.

Herd and primary animal health 701 (HAH 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

The module will enable students to integrate and apply knowledge so that health and production problems can be identified and solved on a herd basis, while health status and production effectiveness can be improved from a holistic and cost effective viewpoint. The module will also include aspects of primary animal health care that will be applicable to needs of the emerging farming sector.

Project management in health 870 (HCS 870)

Qualification	Postgraduate
Module credits	10.00
NQF Level	09
Service modules	Faculty of Veterinary Science
Prerequisites	HME 870
Contact time	1 discussion class per week, 1 lecture per week, 1 other contact session per week, 1 practical per week, 1 seminar per week
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Introduction to monitoring and evaluation for health managers 870 (HIN 870)

Qualification	Postgraduate
Module credits	10.00
NQF Level	09
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	1 practical per week, 16 lectures per week
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Module content

This is an introductory module on Monitoring and Evaluation (M&E) designed to provide students with knowledge, attitudes and skills regarding M&E frameworks, health information and data systems and indicators, evaluation designs, development of M&E plans, data collection, processing and use and feedback of M&E results, within the context of health systems strengthening. At the end of the module the student should be able to define M&E concepts in the context of health systems strengthening; describe M&E frameworks; design an M&E plan; understand health information systems and data collection, processing and understand how M&E results can be used for health systems strengthening.

Monitoring and evaluation 873 (HME 873)

Qualification	Postgraduate
Module credits	15.00
NQF Level	09
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	1 practical per week, 2 lectures per week, 4 discussion classes per week, 4 seminars per week
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Histology 701 (HTY 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08

Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

An in-depth comparative study of light and electron microscopic histology of domestic animals, birds and selected wildlife species.

Introductory veterinary diagnostics 300 (IVD 300)

Qualification	Undergraduate
Module credits	20.00
NQF Level	07
Programmes	BVSc
Prerequisites	Third year academic level and admission to relevant programme.
Contact time	3 lectures per week, 6 practicals per semester
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

The module introduces the student to clinical diagnostics in the normal animal patient, and evidence-based approaches of veterinary science. It consists of 3 integrated content components being the diagnostic focus, the clinical physiology focus and the research focus. The evidence-based approach acts as the integration of the clinical physiology and research focus areas, and is presented using group assignments where students have to critically appraise and interpret research papers using their knowledge of normal and abnormal physiological processes or clinical findings.

Clinical laboratory diagnostics 800 (KDK 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Clinical Laboratory Diagnostics (Coursework)
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies

Period of presentation	Year

Module content

Advanced training in veterinary clinical laboratory diagnostics including theoretical as well as practical knowledge of clinical biochemistry, clinical endocrinology, haematology, cytology, capita selecta aspects of: diagnostic bacteriology; diagnostic virology; diagnostic immunology; diagnostic protozoology; diagnostic toxicology and diagnostic parasitology; quality control; applied biometry; electronics/optics of laboratory equipment, and computer use.

Mini-dissertation: Clinical laboratory diagnostics 890 (KDK 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Clinical Laboratory Diagnostics (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Small stock herd health 800 (KKS 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Small Stock Herd Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Specialised training based on farm visits, discussions, seminars and case studies.
Specialised integration and application of knowledge so that health and production problems can be identified and solved on a herd basis, and health status and production effectiveness of small stock herds can be raised from a holistic and cost-effective viewpoint, within a broad spectrum of sheep and goat-farming systems and feedlots.

Mini-dissertation: Small stock herd health 890 (KKS 890)

Qualification	Postgraduate
Module credits	90.00

NQF Level	09
Programmes	MMedVet Small Stock Herd Health (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Clinical pathology 704 (KPA 704)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced study in clinical pathology including enzymology, cytology, haematology as well as clinical pathology of the kidney in domestic animals.

Clinical pathology 705 (KPA 705)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content
(BVSc graduates only)

Advanced study in clinical pathology including proteins, blood-gas and acid-base balance, gastro-enterology, haemostasis, and diagnostic test characteristics in domestic animals.

Laboratory animal science 702 (LAS 702)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Section 1: (10 credits)
Application of procedures within an accredited laboratory animal facility, with focus on laboratory animal management (rats and mice), including housing and care; enrichment; breeding; methods of dosing and methods of sample collection.

Section 2: (20 credits)
The biology of laboratory animals, their management and use as models in biomedical research.
The aim is to extend the activities concerning the care and use of laboratory animals for research, training and testing. Further to affirm the concept on which the modern practice of experimenting with animals is based, to take into consideration the controversy evoked in the climate of animal rights. The special professional role required of the veterinary and paraveterinary professions to enhance humane practice with regard to animal experiments as well as the promotion of a productive scientific effort in the biomedical sciences.

Laboratory diagnostics procedures 703 (LAS 703)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General

Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

The module will focus on basic tests available in laboratory diagnostics for infectious and parasitic diseases. Focus will be placed on the interpretation of tests, issuing of certificates, validation of test procedures, quality assurance and laboratory safety. The course will include basic within the laboratory of the department.

Research ethics for laboratory animal science 704 (LAS 704)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

An advanced module in research methodology for veterinarians involved in laboratory animals and/or laboratory work. The study will focus on animal ethics, animal ethics committee, evaluation of protocols and study design. Focus will also be placed on legislation for the use and protection of animals.

Nursing professional life 100 (LPN 100)

Qualification	Undergraduate
Module credits	18.00
NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1.5 online lecture for 4 weeks, 1.5 practicals per week for 4 weeks, 16 lectures per week for 4 weeks, 3.25 discussion classes per week for 4 weeks, 4.25 seminars per week for 4 weeks
Language of tuition	Module is presented in English

Department	Production Animal Studies
Period of presentation	Year

Module content

Veterinary terminology and the correct usage thereof. Career paths in the veterinary nursing profession. Collegiality and professional associations, veterinary-related laws and professional ethics. Introduction to wellness management.
An introduction to establishing, implementing, monitoring and evaluating sustainable quality co-operative partnerships with communities and providing consistent veterinary nursing input in order to improve animal health and welfare within a One Health Context. Opportunity to interact with professionals and community partners working in developing communities, important communication skills with people from a wide variety of backgrounds. An introduction to research methodology, including defining a research question, research design, sampling design, methods of data collection, data analysis and interpretation and report writing.
Aspects of animal welfare science and animal protection applied to companion animals (cats, dogs, horses) and production animals (cattle, sheep, pigs), and human-animal interactions.

Nursing professional life 210 (LPN 210)

Qualification	Undergraduate
Module credits	12.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1.5 other contact session per week, 23 lectures per week for 2 weeks, 3 discussion classes per week over 2 weeks
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

Communication for veterinary nurses. Self-awareness, self-management, social awareness, professionalism and relationship management. Cultural diversity. Information management. Practice management for veterinary nurses, including relevant marketing, promotion and sales, human resources management work place discipline, rewards for good work performance and application of the Labour Law in the work place, strategic client service and management, compassion fatigue and its components. Continuation of a portfolio as evidence of learning.

Nursing professional life 300 (LPN 300)

Qualification	Undergraduate
Module credits	8.00
NQF Level	07
Programmes	BVetNurs
Prerequisites	No prerequisites.

Contact time	2 weeks of guided self-study
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

A portfolio as evidence of learning is required to show that throughout the three-year degree programme, graduates developed the skills and competencies required to enable the veterinary nurse to be a consummate professional, capable of dealing with the diverse challenges of veterinary nursing professional and everyday life.

Language and study skills 110 (LST 110)

Qualification	Undergraduate
Module credits	6.00
NQF Level	05

Programmes	BConSci Clothing Retail Management BConSci Food Retail Management BConSci Hospitality Management BSc Actuarial and Financial Mathematics BSc Applied Mathematics BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Culinary Science BSc Ecology BSc Engineering and Environmental Geology BSc Entomology BSc Food Science BSc Genetics BSc Geography and Environmental Science BSc Geoinformatics BSc Geology BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Mathematical Statistics BSc Mathematics BSc Medical Sciences BSc Meteorology BSc Microbiology BSc Nutrition BSc Physics BSc Plant Science BSc Zoology BScAgric Agricultural Economics and Agribusiness Management BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology BVSc BVetNurs
Service modules	Faculty of Natural and Agricultural Sciences Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Unit for Academic Literacy
Period of presentation	Semester 1

Module content

The module aims to equip students with the ability to cope with the reading and writing demands of scientific disciplines.

Molecular and cell biology 111 (MLB 111)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05
Programmes	BChD BDietetics BEd Senior Phase and Further Education and Training Teaching BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Computer Science BSc Culinary Science BSc Ecology BSc Entomology BSc Food Science BSc Genetics BSc Geography and Environmental Science BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Information and Knowledge Systems BSc Medical Sciences BSc Microbiology BSc Nutrition BSc Physics BSc Plant Science BSc Zoology BScAgric Agricultural Economics and Agribusiness Management BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology BVSc MBChB
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	A candidate who has passed Mathematics with at least 60% in the Grade 12 examination
Contact time	1 practical/tutorial per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Biochemistry, Genetics and Microbiology
Period of presentation	Semester 1

Module content
Introduction to the molecular structure and function of the cell. Basic chemistry of the cell. Structure and composition of prokaryotic and eukaryotic cells. Ultrastructure and function of cellular organelles, membranes and the cytoskeleton. General principles of energy, enzymes and cell metabolism. Selected processes, e.g. glycolysis, respiration and/or photosynthesis. Introduction to molecular genetics: DNA structure and replication, transcription, translation. Cell growth and cell division.

Molecular and cell biology 133 (MLB 133)

Qualification	Undergraduate
Module credits	8.00
NQF Level	05
Programmes	BSc extended programme - Biological and Agricultural Sciences
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Admission to the relevant programme.
Contact time	2 lectures per week, Fortnightly discussions, Fortnightly practicals, Foundation Course
Language of tuition	Module is presented in English
Department	Department of Plant and Soil Sciences
Period of presentation	Semester 1

Module content

Introduction to life science and life on earth, including the importance and relevance of the Sustainable Development Goals; the scientific method, principles of microscopy, introduction to the molecular structure and function of the cell. Basic chemistry of the cell. Structure and composition of prokaryotic and eukaryotic cells.

Molecular and cell biology 143 (MLB 143)

Qualification	Undergraduate
Module credits	8.00
NQF Level	05
Programmes	BSc extended programme - Biological and Agricultural Sciences
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	Admission to the relevant programme.
Contact time	2 lectures per week, Fortnightly discussions, Fortnightly practicals, Foundation Course

Language of tuition	Module is presented in English
Department	Department of Plant and Soil Sciences
Period of presentation	Semester 2

Module content

Ultrastructure and function of cellular organelles, membranes and the cytoskeleton. General principles of energy, enzymes and cell metabolism including selected cellular processes, e.g. respiration and photosynthesis.

Medical terminology 180 (MTL 180)

Qualification	Undergraduate
Module credits	12.00
NQF Level	05
Programmes	BA Audiology BA Speech-Language Pathology BChD BNurs BOT BRad in Diagnostics BSportSci BVSc MBChB
Service modules	Faculty of Health Sciences Faculty of Natural and Agricultural Sciences Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Ancient and Modern Languages and Cultures
Period of presentation	Semester 1

Module content

The acquisition of a basic medical orientated vocabulary compiled from Latin and Greek stem forms combined with prefixes and suffixes derived from those languages. The manner in which the meanings of medical terms can be determined by analysing the terms into their recognisable meaningful constituent parts, is taught and exercised. The functional use of medical terms in context as practical outcome of terminological application is continually attended to.

Wildlife management and production 800 (NLB 800)

Qualification	Postgraduate
Module credits	20.00
NQF Level	09

Programmes	MSc Wildlife Health, Ecology and Management (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

This module covers wildlife management topics of husbandry (wildlife production systems, nutrition, housing and breeding) and wildlife management techniques (fire, fencing, captive management and animal welfare). The module will teach skills and tools of wildlife management.

Wildlife ecology 810 (NLB 810)

Qualification	Postgraduate
Module credits	20.00
NQF Level	09
Programmes	MSc Wildlife Health, Ecology and Management (Coursework)
Language of tuition	Module is presented in English
Department	Animal Science
Period of presentation	Semester 1

Module content

A module on plant ecology, veld management, animal ecology and plant and animal interactions. The students will gain a solid grounding and in-depth understanding of ecological theory and ecological management to maintain and improve ecosystem health. This module will provide a broad view, illustrating a wide variety of different ecosystem examples and will include in-field training in areas around HHWRS.

Necropsy technique and interpretation 701 (NTI 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

(BVSc graduates only)

An advanced module in necropsy techniques, interpretation and specimen collection.

Ophthalmology 701 (OFM 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

(BVSc graduates only)
The module covers the anatomy and physiology of the eye and its adnexa, examination techniques and aids, ocular therapeutics and treatment techniques, surgical and non-surgical conditions of the orbit, eyelids, third eyelid, conjunctiva, lachrymal system, cornea, sclera, anterior chamber, uvea lens, vitreous and retina, and hereditary diseases. Practical work includes the use of instrumentation and accessories during examination and surgical procedures. page

Ophthalmology 800 (OFM 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Ophthalmology (Coursework)
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

An advanced theoretical, practical and experiential module in ophthalmology of domestic animals (large and small animals).

Mini-dissertation: Ophthalmology 890 (OFM 890)

Qualification	Postgraduate

Module credits	90.00
NQF Level	09
Programmes	MMedVet Ophthalmology (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

One health: basic concepts 801 (OHB 801)

Qualification	Postgraduate
Module credits	12.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

This module will introduce students to the philosophy and practice of "One Health", an approach that recognises that the health and well-being of humans, domestic animals, wildlife and the ecosystems in which they live and function and intrinsically connected.

Primary animal health care 110 (PAH 110)

Qualification	Undergraduate
Module credits	18.00
NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	24 lectures per week for 5 weeks, 4 practicals per week for 5 weeks
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

Breeding, feeding, handling and husbandry or care of domestic animals (cats, dogs, horse, cattle, sheep, pigs). Important parasitic and infectious diseases of domestic animals, including relevant immunology, food safety and zoonotic diseases.

Production animal management 701 (PAM 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

The module content includes the study of animal genetics, nutrition, management, housing, keeping of records, hygiene, welfare and behaviour, with special emphasis on nutrition. The species concerned are dairy cattle, beef cattle, small stock and pigs.

Mechanisms of disease 711 (PAT 711)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

An advanced module covering the mechanisms behind disease processes.

Pathology 800 (PAT 800)

Qualification	Postgraduate
Module credits	270.00

NQF Level	09
Programmes	MMedVet Pathology (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Pathology 800 is structured to train specialist veterinary pathologists, competent in the fields of diagnostic pathology and basic research principles, and to focus mainly on diseases and conditions in sub-Saharan domestic animals and wildlife. The course content deals with general and organ pathology, diseases and conditions of the various species. Within this 3-year period, 90 weeks of consecutive practical training, as required by the South African Veterinary Council, must be undertaken.

Pathology: Wildlife 806 (PAT 806)

Qualification	Postgraduate
Module credits	28.00
NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

The emphasis of the module is on practical diagnostic pathology (including forensic pathology) and its outcomes will enable a veterinarian to investigate disease and the cause of death in wildlife. The approach will emphasise the following: After conducting a necropsy, a diagnosis is finalised by also considering the results of other diagnostic tests and ancillary data; when it is not possible to make a final diagnosis, the formulation of a list of differential diagnoses and a strategy to resolve the problem; compiling interim and final report(s) that are scientifically sound, presentable to a court of law and reflect a degree of professionalism that is commensurate with a professional person. The theoretical component includes selected information dealing with incidental findings and ‘non-lesions’, species-specific infectious diseases, and non-infectious diseases.

Necropsy technique and interpretation 807 (PAT 807)

Qualification	Postgraduate
Module credits	28.00
NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences

Period of presentation	Year

Module content

An advanced module in necropsy techniques, interpretation and specimen collection.

Mini-dissertation: Pathology 890 (PAT 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Pathology (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Laboratory animal science 800 (PFK 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Laboratory Animal Science (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

An advanced module in the role of the veterinarian in laboratory animal medicine and practical aspects relating to the promotion of a productive scientific effort in the biomedical sciences.

Mini-dissertation: Laboratory animal science 890 (PFK 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Laboratory Animal Science (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Paraclinical Sciences

Period of presentation	Year

Porcine health and production 510 (PHP 510)

Qualification	Undergraduate
Module credits	5.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	26 lectures
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

The pig industry; breeding and husbandry; nutrition and related disorders; important diseases; biosecurity; miscellaneous conditions.

Poultry health and production 800 (PHP 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Poultry Diseases (Coursework)
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced training in poultry health and production.

Physics for biology students 131 (PHY 131)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05

Programmes	BChD BEd Senior Phase and Further Education and Training Teaching BPhysT BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Computer Science BSc Ecology BSc Entomology BSc Food Science BSc Genetics BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Medical Sciences BSc Microbiology BSc Nutrition BSc Plant Science BSc Zoology BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology BSportSci BVSc MBChB
Service modules	Faculty of Education Faculty of Health Sciences Faculty of Veterinary Science
Prerequisites	A candidate must have passed Mathematics with at least 60% in the Grade 12 examination
Contact time	1 discussion class per week, 1 practical per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Physics
Period of presentation	Semester 1

Module content

Units, vectors, one dimensional kinematics, dynamics, work, equilibrium, sound, liquids, heat, thermodynamic processes, electric potential and capacitance, direct current and alternating current, optics, modern physics, radio activity.

Poultry health and production 510 (PLY 510)

Qualification	Undergraduate
Module credits	5.00
NQF Level	08
Programmes	BVSc

Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	26 lectures
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

The poultry industry; breeding and husbandry; nutrition and related disorders; important diseases; biosecurity; miscellaneous conditions; zoonosis.

Practice Management and veterinary drug legislation and control 701 (PPH 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Theoretical and practical training in specific areas of business management and drug legislation. The course deals with the basic principles of veterinary practice management with emphasis on the role of the veterinary nurse and includes practice management as a career enhancement for veterinary nurses.

Veterinary nursing practice 110 (PVN 110)

Qualification	Undergraduate
Module credits	12.00
NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	20 lectures per week for 3 weeks, 4 practicals per week for 3 weeks
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Semester 1

Module content
Essential nursing practices including disinfection and hospital hygiene, hospitalisation, basic nursing practices, observation and clinical examination of patients and occupational safety aspects. Fundamental pharmacology including medicine administration, storage and handling, drug regulations, dispensing, calculations, pharmacotherapeutics, pharmacokinetics and pharmacodynamics. The pharmacology of organ systems.

Veterinary nursing practice 120 (PVN 120)

Qualification	Undergraduate
Module credits	12.00
NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1 discussion class per week over 2 weeks, 15 lectures per week for 3 weeks, 2,5 practicals per week for 3 weeks
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Diagnostic procedures involving veterinary nurses, including diagnostic imaging, clinical pathology and other laboratory test, sample taking and sample management. Introduction to the general principles of animal physical rehabilitation procedures.

Veterinary nursing practice 200 (PVN 200)

Qualification	Undergraduate
Module credits	6.00
NQF Level	06
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	7.5 clinical practicals per week for 12 weeks, Yes
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Experiential learning: a practical application of the theoretical aspects of veterinary nursing practice. Experiential learning and experience will be gained by means of the Onderstepoort Skills Laboratory and limited exposure to clinic rotations in the Onderstepoort Veterinary Academic Hospital.

Veterinary nursing practice 300 (PVN 300)

Qualification	Undergraduate
Module credits	140.00
NQF Level	07
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	60 clinical practicals per week for 35 weeks, Yes
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Module content

Experiential learning: a practical application of the theoretical aspects of veterinary nursing practice covered in the curriculum of the BVetNurs programme. Topics include medical nursing, surgical nursing, intensive care nursing, reproduction, animal physical rehabilitation, diagnostic imaging, ophthalmology, dentistry, theatre practice, anaesthesiology and veterinary nursing professional life skills. Domestic animals exposed to include cats, dogs, cattle, small stock, horses and exotic animals/wildlife. The emphasis of practical exposure will be on attaining of the Day One Competencies for graduating veterinary nursing professionals.

Poultry health and nutrition 701 (PVT 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced training in poultry health, production systems and nutrition.

Mini-dissertation: Poultry diseases 890 (PVT 890)

Qualification	Postgraduate
Module credits	90.00

NQF Level	09
Programmes	MMedVet Poultry Diseases (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Qualitative research methods 870 (QHR 870)

Qualification	Postgraduate
Module credits	10.00
NQF Level	09
Programmes	MPH
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Reproductive biology 701 (RPT 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Includes the physiology and endocrinology of puberty, the oestrous cycle, pregnancy, parturition, the puerperium, as well as that of the foetus and the neonate. Also included are the physiology and endocrinology of the bull, more specifically that of puberty, spermatogenesis, the scrotum, the accessory sex glands, libido, erection, coitus, sperm and semen. Also included are certain aspects of reproductive biotechnology, namely the biotechnical aspects of collection, examination and freezing of semen and embryos, embryo transfer and in vitro fertilisation.

Reproductive physiology of animals 702 (RPT 702)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Students will gain advanced theoretical knowledge of general reproductive endocrinology and physiology of animals. It includes detailed knowledge and application of the structures of different hormone groups, forms of storage, transportation, methods of action and secretion control mechanisms: hormonal control of female reproductive cycles; fertilisation, sexing, gestation, pathogenesis of teratogenic deviations and partus, the puerperal period and re-implantation; male reproductive endocrinology and physiology; examining of fresh and frozen semen, including advanced methods; the use of hormone profiles to monitor gestation and cycles, and artificial breeding.

Ruminant medicine and surgery 510 (RUM 510)

Qualification	Undergraduate
Module credits	24.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	3 practicals per semester, 7 lectures per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

An integrated course that covers clinical and other aspects of diseases, conditions and syndromes of ruminants (cattle and small stock) organised in an organ system approach. The module includes an action learning project that requires attendance after hours, during weekends, public holidays and university recess.

Ruminant production medicine and herd health 511 (RUM 511)

Qualification	Undergraduate

Module credits	16.00
NQF Level	08
Programmes	BVSc
Prerequisites	No prerequisites.
Contact time	5 lectures per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

Theoretical training in the herd or flock approach to health and production management of small scale ruminant systems, commercial dairy, beef, wool, mutton and mohair production systems, emphasising monitoring, prevention, outbreak management, technology and economics.

Ruminant health and medicine 701 (RUM 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
Advanced theoretical study in ruminant medicine specifically applicable to conditions of the gastrointestinal tract, liver and production diseases, liver, cardiovascular, respiratory and urinary system, skin, nervous system and musculo-skeletal system, skin and appendages.

Ruminant health 801 (RUM 801)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Programmes	MSc Ruminant Health (Coursework)

Prerequisites	A BVSc, a four year BSc in Agriculture (Animal Science), Microbiology, Zoology or an equivalent degree
Contact time	1 discussion class per week, 1 seminar per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced theoretical training in ruminant health with emphasis on the pathophysiology, diagnosis, treatment and control of non-infectious diseases, specifically applicable to conditions of the gastro-intestinal tract, liver, production diseases, cardiovascular system, respiratory system, nervous system, musculo-skeletal system, skin and appendages.

Mini-dissertation: Ruminant health 890 (RUM 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MSc Ruminant Health (Coursework)
Prerequisites	A BVSc, a four year BSc in Agriculture (Animal Science), Microbiology, Zoology or an equivalent degree; VRM 813
Contact time	20 Contact sessions
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Mini-dissertation

Small animal critical care 701 (SAC 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Contact time	30 Hours
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies

Period of presentation	Year

Module content

Theoretical and practical training in specific areas of small animal critical care for the veterinary nurse. Formulation and implementation of appropriate strategies to comply with relevant standards.

Small animal medicine and surgery 410 (SAS 410)

Qualification	Undergraduate
Module credits	21.00
NQF Level	08
Programmes	BVSc
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	2 practicals per year, 9 lectures per week
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 1

Module content

Patient assessment; therapeutic and monitoring plans for selected key critical situations; identification, diagnosis and treatment of important cardiovascular, respiratory, kidney, skin, endocrine and eye conditions/diseases; multi-systemic conditions; dentistry; oncology; behaviour-related disorders and treatment, critical care and traumatology in dogs and cats.

Small animal medicine and surgery 420 (SAS 420)

Qualification	Undergraduate
Module credits	21.00
NQF Level	08
Programmes	BVSc
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	2 practicals per year, 9 lectures per week
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Patient assessment; therapeutic and monitoring plans for selected key critical situations; identification, diagnosis and treatment of important gastrointestinal, liver, pancreas, peritoneal, urogenital, skin, musculoskeletal, nervous system; dentistry in dogs and cats.

Communication in health 871 (SCC 871)

Qualification	Postgraduate
Module credits	10.00
NQF Level	09
Service modules	Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	1 practical per week, 16 lectures per week, 4 discussion classes per week, 4 seminars per week
Language of tuition	Module is presented in English
Department	School of Health System and Public Health
Period of presentation	Year

Small stock health 801 (SSH 801)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Programmes	MSc Ruminant Health (Coursework)
Prerequisites	No prerequisites.
Contact time	1 discussion class per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

The module content will be based on advanced theoretical training in small stock health with emphasis on principles of population health and production programmes, animal health economics, monitoring health and production. The module will enable students to integrate and apply knowledge so that health and production problems can be identified and solved on a flock basis and health status and production effectiveness of small stock flock can be raised from a holistic and cost effective viewpoint.

Foundational veterinary sciences 110 (SVF 110)

Qualification	Undergraduate
Module credits	15.00

NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	1 discussion class per week for 3 weeks
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Semester 1

Module content

Introductory anatomy, histology and physiology of the dog, cat, horse and ruminant. Applied ethology and communication of domestic animals (cats, dogs, horses, cattle, sheep, and pigs).

Foundational veterinary sciences 120 (SVF 120)

Qualification	Undergraduate
Module credits	15.00
NQF Level	05
Programmes	BVetNurs
Prerequisites	No prerequisites.
Contact time	25.5 lectures per week for 4 weeks
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Semester 2

Module content

Anatomy and physiology of the organ systems of the dog, cat, horse and ruminant.

Ticks and tick-borne diseases 814 (TBD 814)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

(elective)
This module gives an overview of the economically important ticks and tick-borne parasites of domestic and wild animals, their importance and insight the biology of the vectors on the transmission of the micro-organisms they transmit.

Selected tick identification 811 (TCK 811)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

Skills training (elective)

The objective of this module is to provide the basic knowledge of the biology, ecology, life-cycles, and importance of ticks. There will be a practical session to acquire the necessary laboratory skills to identify ticks of companion animals, equids, ruminants and wildlife.

Organic and inorganic toxicology 705 (TOK 705)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Advanced training on the most important and well-known plant, mycotoxins, zootoxicoses and organic and inorganic poisons.

Basic veterinary toxicology 706 (TOK 706)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Introduction to the underlying principles of toxicology. Includes training in laboratory based toxicity testing and methodology

Toxicology 800 (TOK 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Toxicology (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Advanced theoretical study and specialised practical training in aspects of veterinary toxicology.

Mini-dissertation: Toxicology 890 (TOK 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Toxicology (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English

Department	Paraclinical Sciences
Period of presentation	Year

Veterinary toxicology 300 (TOX 300)

Qualification	Undergraduate
Module credits	14.00
NQF Level	07
Programmes	BVSc
Prerequisites	No prerequisites.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

General principles of veterinary toxicology, with emphasis on the relevant factors and circumstances contributing to poisoning; advanced toxicology with regard to inorganic and organic compounds, fungi, cyanobacteria, plants, rodenticides, zootoxins, etc. Plant poisonings, mycotoxicoses and inorganic and organic poisonings are discussed under the following headings: epidemiology and species affected, description, identification, distribution and poisonous principle (if applicable), mechanism of action, toxicity, clinical signs, pathology (limited to the most important lesions); diagnosis, differential diagnosis, treatment and control of prevention. A pressed plant collection or a poisonous plant collection in digital format has to be submitted.

Veterinary toxicology: Organ/systems toxicology 801 (TOX 801)

Qualification	Postgraduate
Module credits	30.00
NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

The objective of this module is to provide advanced training in veterinary toxicology, including plant poisoning syndromes, mycotoxicoses, organic and inorganic intoxications as well as zootoxicoses of veterinary importance. This will enable the candidate to develop proficiency in routine toxicological field investigations, treatment of intoxications, diagnostic procedures and to provide sound advice on preventative measures.

Academic orientation 108 (UPO 108)

Qualification	Undergraduate

Module credits	0.00
NQF Level	00
Programmes	BVSc BVetNurs
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Science Deans Office
Period of presentation	Year

Animal production systems and principles of breeding 200 (VAP 200)

Qualification	Undergraduate
Module credits	8.00
NQF Level	06
Programmes	BVSc
Prerequisites	Second year academic level and admission to relevant programme.
Contact time	3 lectures per week over 22 weeks, 4 practicals per year
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Introduction to the role and concepts of animal production systems in the South African food production economy. Evolution, domestication and breed development. Animal recording, trait classification and the concept of functional efficiency. Qualitative and quantitative breeding principles with specific reference to selection of farm animal species. Principles of communal farming systems in Southern Africa. Principles requirements and production indices for extensive, semi-intensive and intensive animal production systems with reference to dairy, beef, mutton, wool, mohair, poultry meat, egg, pork and venison production. Game management systems with reference to conservation and game farming. The role of the human in livestock production systems and sustainable production. The module contains practical sessions in farm animal management on a rotational basis including after-hours, weekends, public holidays and university recess.

Veterinary comparative anatomy 201 (VCA 201)

Qualification	Undergraduate
Module credits	28.00
NQF Level	06
Programmes	BVSc
Prerequisites	Second year academic level and admission to relevant programme.

Contact time	21 dissection practicals per week over 3 weeks S1, 21 dissection practicals per week over 3 weeks S2, 6 lectures per week over 3 weeks S1, 6 lectures per week over 3 weeks S2
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

Anatomical terminology, early embryonic development, central and autonomic nervous systems, cutaneous appendages and musculature, head, thoracic limb, trunk, pelvis and pelvic limb anatomy of the canine with clinically relevant comparisons to the feline, equine, bovine, ovine and porcine, as well as some wildlife species. Basic avian anatomy.

Veterinary core practice 520 (VCP 520)

Qualification	Undergraduate
Module credits	52.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	40 hours per week over 13 weeks, Yes
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Practical application of the theoretical aspects of small animal, production animal, equine and state veterinary practice covered in the core curriculum of the BVSc programme. Topics include medicine, surgery, reproduction, diagnostic imaging, pathology and clinical pathology, ophthalmology, dentistry and anaesthesiology of cats, dogs, cattle, small stock and horses, herd/flock health, epidemiology, economics, drug regulations, certification, animal health- and import/export regulations, veterinary public health, veterinary business management and veterinary professional life skills. The emphasis of practical exposure will be on attaining of the Day One Competencies for graduating veterinary professionals.

Veterinary core practice 610 (VCP 610)

Qualification	Undergraduate
Module credits	52.00
NQF Level	08
Programmes	BVSc
Prerequisites	VCP 520. Final year academic level and admission to relevant programme.
Contact time	40 hours per week over 13 weeks, Yes

Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 1

Module content

Practical application of the theoretical aspects of small animal, production animal, equine and state veterinary practice covered in the core curriculum of the BVSc programme. Topics include medicine, surgery, reproduction, diagnostic imaging, pathology and clinical pathology, ophthalmology, dentistry and anaesthesiology of cats, dogs, cattle, small stock and horses, herd/flock health, epidemiology, economics, drug regulations, certification, animal health- and import/export regulations, veterinary public health, veterinary business management and veterinary professional life skills. The emphasis of practical exposure will be on attaining of the Day One Competencies for graduating veterinary professionals.

Veterinary core practice 620 (VCP 620)

Qualification	Undergraduate
Module credits	52.00
NQF Level	08
Programmes	BVSc
Prerequisites	VCP 610. Final year academic level and admission to relevant programme.
Contact time	40 hours per week over 13 weeks, Yes
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Semester 2

Module content

Practical application of the theoretical aspects of small animal, production animal, equine and state veterinary practice covered in the core curriculum of the BVSc programme. Topics include medicine, surgery, reproduction, diagnostic imaging, pathology and clinical pathology, ophthalmology, dentistry and anaesthesiology of cats, dogs, cattle, small stock and horses, herd/flock health, epidemiology, economics, drug regulations, certification, animal health- and import/export regulations, veterinary public health, veterinary business management and veterinary professional life skills. The emphasis of practical exposure will be on attaining of the Day One Competencies for graduating veterinary professionals.

Veterinary microbiology 210 (VEM 210)

Qualification	Undergraduate
Module credits	6.00
NQF Level	06
Programmes	BVSc
Prerequisites	Second year academic level and admission to relevant programme.
Contact time	3 lectures per week

Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

General introduction to microbiology. Introduction to bacteria, fungi and viruses. Pathogenesis of infection by bacteria, fungi and viruses. Normal flora of selected organ systems in domestic animals. Principles of laboratory diagnosis of infectious diseases.

Veterinary elective practice 520 (VEP 520)

Qualification	Undergraduate
Module credits	8.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	40 hours per week over 4 weeks, Yes
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 2

Module content

The purpose of this module is to give students additional exposure in a practice area of interest. The aim is to provide the graduate with theoretical and practical exposure to strengthen Day 1 competencies in those components of veterinary science needed for him/her to enter the particular career path with confidence. The scope of the module is expansion, integration and practical application of knowledge established through the core component of the BVSc programme. Students will complete one of the following six practice areas: Small Animal and Exotic Practice, Rural and Wildlife Practice, Veterinary Public Health and State Veterinary Practice, Equine Practice, Intensive Animal Production Practice, and Veterinary Research Career.

Veterinary elective practice 610 (VEP 610)

Qualification	Undergraduate
Module credits	24.00
NQF Level	08
Programmes	BVSc
Prerequisites	VEP 520. Final year academic level and admission to relevant programme.
Contact time	40 hours per week over 5 weeks, Yes
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

The purpose of this module is to give students additional exposure in a practice area of interest. The aim is to provide the graduate with theoretical and practical exposure to strengthen Day 1 competencies in those components of veterinary science needed for him/her to enter the particular career path with confidence. The scope of the module is expansion, integration and practical application of knowledge established through the core component of the BVSc programme. Students will complete one of the following six practice areas: Small Animal and Exotic Practice, Rural and Wildlife Practice, Veterinary Public Health and State Veterinary Practice, Equine Practice, Intensive Animal Production Practice, and Veterinary Research Career.

Veterinary elective practice 620 (VEP 620)

Qualification	Undergraduate
Module credits	16.00
NQF Level	08
Programmes	BVSc
Prerequisites	VEP 610. Final year academic level and admission to relevant programme.
Contact time	40 hours per week over 4 weeks, Yes
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 2

Module content

The purpose of this module is to give students additional exposure in a practice area of interest. The aim is to provide the graduate with theoretical and practical exposure to strengthen Day 1 competencies in those components of veterinary science needed for him/her to enter the particular career path with confidence. The scope of the module is expansion, integration and practical application of knowledge established through the core component of the BVSc programme. Students will complete one of the following six practice areas: Small Animal and Exotic Practice, Rural and Wildlife Practice, Veterinary Public Health and State Veterinary Practice, Equine Practice, Intensive Animal Production Practice, and Veterinary Research Career.

Veterinary ethology 202 (VET 202)

Qualification	Undergraduate
Module credits	18.00
NQF Level	06
Programmes	BVSc
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	Second year academic level and admission to relevant programme.
Contact time	20 practicals, 81 lectures over a two week period
Language of tuition	Module is presented in English
Department	Production Animal Studies

Period of presentation	Year

Module content

The husbandry of and common procedures performed on key domestic species, behavioral principles of key domestic species, handling skills for key domestic animals, aspects of animal welfare.

Veterinary immunology 220 (VIM 220)

Qualification	Undergraduate
Module credits	6.00
NQF Level	06
Programmes	BVSc
Prerequisites	Second year academic level and admission to relevant programme.
Contact time	1 seminar, 6 lectures per day over 7 days
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

Overview of the immune system, structure of antibodies, biosynthesis of immunoglobulins, antigen-receptor interaction, complement, humoral immune response, cellular immune response, selected immunodiagnostic techniques, vaccinology, basic principles of immunity to infectious and parasitic diseases.

Veterinary infectious diseases 300 (VIP 300)

Qualification	Undergraduate
Module credits	14.00
NQF Level	07
Programmes	BVSc
Prerequisites	Third year academic level and admission to relevant programme.
Contact time	3 discussion classes per week over 5 weeks, 3 lectures per week over 23 weeks
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

Veterinary infectious diseases is a module aimed at providing the student with in-depth knowledge of all aspects of diseases of food-producing and companion animals caused by viruses, bacteria, fungi and prions. The module is structured to enable students to discern which infectious diseases of animals are high impact diseases and which are of lesser significance in order of importance. The module covers the morphological and physico-chemical characteristics of the causative organisms and the epidemiology and pathogenesis of the diseases caused by them. Course candidates will also learn how to diagnose these diseases in both the living and dead animal, and the control strategies applicable, including control at the livestock/wildlife/human interface. Finally, course candidates will learn about the socio-economic importance of infectious diseases of animals with special reference to transboundary spread.

Veterinary industrial pharmacology 800 (VIP 800)

Qualification	Postgraduate
Module credits	50.00
NQF Level	09
Programmes	MSc Veterinary Industrial Pharmacology (Coursework)
Prerequisites	FAK 876
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.

Minidissertation: Veterinary industrial pharmacology 890 (VIP 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MSc Veterinary Industrial Pharmacology (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Porcine health, production and nutrition 701 (VKH 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Advanced theoretical study in pig housing, nutrition and disease for animal housed both outdoor and intensive, specifically applicable to conditions of Southern Africa.

Pig herd health 800 (VKH 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Pig Herd Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Specialised training based on farm visits, discussions, seminars and case studies. Integration and application of knowledge so that health and production problems can be identified and solved on a herd basis, and health status and production effectiveness of pig herds can be raised within a wide spectrum of pig-farming systems.

Mini-dissertation: Pig herd health 890 (VKH 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Pig Herd Health (Coursework)

Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Principles of animal nutrition 224 (VKU 224)

Qualification	Undergraduate
Module credits	12.00
NQF Level	06
Programmes	BVSc
Prerequisites	Second year academic level and admission to relevant programme.
Contact time	6 lectures per week over 10 weeks
Language of tuition	Module is presented in English
Department	Animal Science
Period of presentation	Semester 2

Module content

Introduction to animal nutrition with the focus on feed intake, digestibility and metabolism of feeds in both monogastric and ruminant animals. Classification of feedstuffs and the nutritive value in the diet for the different farm animal species. An introduction to applied nutrition and feeding of monogastric and ruminant animals, equine and companion animals.

Veterinary principles of auditing 701 (VLP 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
The following module will focus on auditing and compliance at the farm, abattoir and processing plant level.

Veterinary legislation and policy 702 (VLP 702)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Contact time	70 contact hours
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Broad-based training in understanding, interrogating and critically applying veterinary policy (including applicable South African legislation), and international phytosanitary and sanitary policy and trade.

Veterinary risk assessment 703 (VLP 703)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

(BVSc graduates only)
The module will introduce concepts in risk assessment, risk management and risk communication.

Applied molecular biology 816 (VMB 816)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)

Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

Skills training

Theoretical and practical study in the principles and applications of PCR, cloning and DNA sequencing techniques.

Ethnoveterinary medicine 310 (VME 310)

Qualification	Undergraduate
Module credits	3.00
NQF Level	07
Programmes	BVSc
Prerequisites	Third year academic level and admission to relevant programme.
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Semester 1

Module content

Principles of ethnoveterinary knowledge comprising indigenous, plant-based approaches to animal health and wellbeing; association of plant secondary metabolites with biological activity and toxicity; interaction of ethnoveterinary medicine with orthodox veterinary care; community benefits of ethnoveterinary medicine.

One health 510 (VOH 510)

Qualification	Undergraduate
Module credits	4.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

Introduction to the One Health concept; emerging and endemic infectious diseases at human/animal interfaces; veterinary issues at human/wildlife interfaces in southern Africa; One Health approaches at human/animal/ecosystem interfaces; animal health, conservation and rural development at interfaces in southern Africa; communication and collaboration between multiple disciplines.

Veterinary physiology and histology 200 (VPH 200)

Qualification	Undergraduate
Module credits	33.00
NQF Level	06
Programmes	BVSc
Prerequisites	1st year Physics and Chemistry. Second year academic level and admission to relevant programme.
Contact time	Semester 1: 8 lectures per week over 14 weeks, Semester 2: 9 lectures per week over 14 weeks
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Module content

The light microscope, structure and function of cells and tissues, the endocrine system, the nervous system, the integument, muscle structure and function, haematology, the cardiovascular system, the respiratory system, metabolic pathways and the digestive system, the urinary system, the reproductive system, basic avian physiology and thermoregulation.

General veterinary pharmacology 300 (VPH 300)

Qualification	Undergraduate
Module credits	14.00
NQF Level	07
Programmes	BVSc
Prerequisites	Third year academic level and admission to relevant programme.
Contact time	3 lectures per week
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

General principles of pharmaceuticals, pharmacokinetics, pharmacodynamics and pharmacotherapeutics. Regulatory control of veterinary medicines and dispensing requirements. A study of groups of functional, systemic and chemotherapeutic drugs utilised in general veterinary practice with emphasis on their pharmacological effects, general indication, safety and side effects.

Veterinary public health 510 (VPH 510)

Qualification	Undergraduate
Module credits	14.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme
Contact time	6 lectures per week
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Semester 1

Module content

The role of the veterinary surgeon in veterinary public health. Veterinary food hygiene and nutrition-related diseases of importance regarding food of animal origin. Meat and milk hygiene; all necessary measures, including legislation, to ensure that food of animal origin is safe, sound and wholesome at all stages of production and manufacture, up to the consumer. Veterinary aspects of environmental health. Zoonosis in veterinary science. Introduction of the use of laboratory animals in biomedical research and relevant aspects relating to animal welfare. Introduction to the social aspects of the human-animal interaction by protecting and promoting human health in communities, veterinary extension and risk communication.

Veterinary milk and meat hygiene 701 (VPH 701)

Qualification	Postgraduate
Module credits	30.00
NQF Level	08
Programmes	PGDip in Animal Welfare PGDip in Laboratory Animal Science PGDip in Production Animals PGDip in State Veterinary Medicine PGDip in Veterinary Clinical Sciences PGDip in Veterinary General
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Advanced knowledge and application of veterinary meat (Red meat, Poultry, Ostrich, Wild Game, Crocodiles and fish) and milk (Raw milk and milk products) hygiene and food safety (including Zoonotic / food borne diseases). Also includes auditing, certification for export and the applicable interpretation of laboratory results. Emerging and re-emerging diseases.

Veterinary public health: Meat hygiene 881 (VPH 881)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Programmes	MSc Veterinary Public Health (Coursework)
Prerequisites	No prerequisites.
Contact time	10 practicals per week, 5 web-based periods per week
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of red meat hygiene relating to prevention and control of zoonoses and other diseases transmitted by meat, welfare of livestock, pre-harvesting, harvesting and post-harvesting aspects of red meat production, practical application of HACCP relating to the specific activities, prevention and control of chemical residues in meat, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Veterinary public health: Poultry food hygiene 882 (VPH 882)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Prerequisites	No prerequisites.
Contact time	10 practicals per week, 5 web-based periods per week
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of poultry hygiene relating to prevention and control of zoonoses and other diseases transmitted by meat, eggs or other poultry products, welfare of poultry, pre-harvesting, harvesting and post-harvesting aspects of poultry meat or egg production, practical application of HACCP relating to the specific activities, prevention and control of chemical residues, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Veterinary public health: Veterinary milk hygiene 883 (VPH 883)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Programmes	MSc Veterinary Public Health (Coursework)
Prerequisites	No prerequisites.
Contact time	10 practicals per week, 5 web-based periods per week
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to all aspects of milk hygiene relating to prevention and control of zoonoses and other diseases transmitted by milk, or other dairy products, welfare of livestock, pre-harvesting, harvesting and post-harvesting aspects of milk production or dairy products, practical application of HACCP relating to the specific activities, prevention and control of chemical residues, including veterinary drug residues and appropriate national and international legislation. An understanding of how these relate to applied research relevant to industry or public health (including the ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Veterinary public health: Environmental health and biosecurity 884 (VPH 884)

Qualification	Postgraduate
Module credits	40.00
NQF Level	09
Prerequisites	No prerequisites.
Contact time	10 practicals per week, 5 web-based periods per week

Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

A coherent and critical understanding and application of the theory and research methodologies and techniques relevant to control of zoonoses of environmental origin, biosecurity relating to food of animal origin and management of disasters and emergencies involving animals and animal products, safe collection and disposal of animal carcases, condemned meat or other animal products and animal wastes. The prevention, control and impact assessment of pollution by livestock production or industries, population control of animals in rural and urban environments to prevent zoonoses, occupational health of veterinary staff, management of the veterinary public health aspects of disasters and emergencies, evaluation of human-animal interactions and their impact on human health including animal facilitated therapy. An understanding of appropriate national and international legislation and how these relate to industry or public health (including ability to select and apply research methods effectively). Ability must be shown to rigorously critique and evaluate current research and participate in scholarly debates in this area of specialisation. Ability must be demonstrated to relate theory to practice and vice versa and to think epistemologically.

Mini-dissertation: Veterinary public health 890 (VPH 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MSc Veterinary Public Health (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content

Mini-dissertation

Veterinary professional life 101 (VPL 101)

Qualification	Undergraduate
Module credits	4.00
NQF Level	05
Programmes	BVSc
Prerequisites	No prerequisites.
Contact time	2 lectures every fortnight
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases

Period of presentation	Year

Module content

The five-year programme on veterinary professional life contributes to the development of life skills to enable veterinarians to be consummate professionals capable of dealing with the diverse challenges of professional and everyday life. The VPL 101 module provides an introduction to human-animal relationships in general and animal ethics and welfare in particular. Students are exposed to diversity in the veterinary profession and the concepts of difference, bias and stereotyping. Professional communication and mental wellness skills are introduced. Community-based learning involves excursions where students are exposed to some of the practical and clinical aspects of veterinary science.

Veterinary professional life 120 (VPL 120)

Qualification	Undergraduate
Module credits	3.00
NQF Level	05
Prerequisites	No prerequisites.
Contact time	2 lectures per week
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 2

Module content

The focus of the five-year programme on veterinary professional life is on professional and competency development. It also aims to contribute to the development of competencies to enable veterinarians to be consummate professionals capable of dealing with the diverse challenges of professional and everyday life. The VPL 120 module specifically aims to expose students to the diversity of opportunities and career paths in the veterinary profession

Veterinary professional life 122 (VPL 122)

Qualification	Undergraduate
Module credits	4.00
NQF Level	05
Programmes	BVSc
Prerequisites	Second year academic level and admission to relevant programme
Contact time	Web-based learning
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content
The VPL 122 module provides students that enter the BVSc programme from the second year an opportunity to cover the content presented in VPL101 online.
The five-year programme on veterinary professional life contributes to the development of life skills to enable veterinarians to be consummate professionals capable of dealing with the diverse challenges of professional and everyday life. The VPL 122 module provides an introduction to human-animal relationships in general and animal ethics and welfare in particular. Students are exposed to diversity in the veterinary profession and the concepts of difference, bias and stereotyping. Professional communication and mental wellness skills are introduced. Community-based learning involves excursions where students are exposed to some of the practical and clinical aspects of veterinary science

Veterinary professional life 201 (VPL 201)

Qualification	Undergraduate
Module credits	5.00
NQF Level	06
Programmes	BVSc
Prerequisites	VPL 101, or simultaneous registration for VPL 122. Second year academic level and admission to relevant programme
Contact time	1 day excursion, 16 hours per semester
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

This module focuses on developing a range of life skills, including personal wellness, self-awareness, group and veterinary communication skills. The topics of cultural diversity and transformation are utilised to gain a deeper understanding of the wide range of people with whom veterinarians interact professionally. Personal financial fitness skills are developed as an introduction to later studies in practice management skills. Community-based learning involves an excursion that provides experiential life skills learning.

Veterinary professional life 301 (VPL 301)

Qualification	Undergraduate
Module credits	6.00
NQF Level	07
Programmes	BVSc
Prerequisites	VPL 201. Third year academic level and admission to relevant programme
Contact time	1 discussion class per week, 1 lecture per week, 1 other contact session per week over 14 weeks
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases

Period of presentation	Year

Module content

This module focuses on community engagement, gender-based issues and teamwork. The One Health, One Welfare concept is applied in the community engagement context. The principles of dog population management are introduced. Veterinary communication skills and marketing are further developed within the context of the veterinary practice and the community setting, in particular engaging with learners and teachers in schools. The skills learnt in this and previous modules are applied practically in a group assignment involving a community-based activity.

Veterinary professional life 401 (VPL 401)

Qualification	Undergraduate
Module credits	7.00
NQF Level	08
Programmes	BVSc
Prerequisites	VPL 301. Fourth year academic level and admission to relevant programme.
Contact time	1 discussion class per week over 9 weeks, 1 lecture per week over 7 weeks, 9 other contact sessions for 1 week
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

Case studies are utilised to introduce students to veterinary law and ethics, regulatory veterinary medicine, veterinary policy, professional associations, the veterinary team and collegiality. Personal and professional wellness is addressed within these contexts by exploring common mental health challenges. Veterinary communication skills are further developed, including conflict management and negotiation skills. The integration of clinical and communication skills is introduced.

Veterinary professional life 511 (VPL 511)

Qualification	Undergraduate
Module credits	8.00
NQF Level	08
Programmes	BVSc
Prerequisites	VPL 401.
Contact time	3 lectures per week over 14 weeks, 9 other contact sessions for 1 week
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Semester 1

Module content

This module deals with business management, including the development of a business plan, basic financial, stock, human resources and client management, as well as marketing, promotion, sales and legislation relevant to business management. Workplace ethics and social entrepreneurship are introduced. Wellness, communication and leadership skills are explored within the context of the workplace and the global environment.

Veterinary research report 520 (VRE 520)

Qualification	Undergraduate
Module credits	8.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme.
Contact time	2 lectures per week, 2 weeks of research
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

The module provides students with the opportunity to integrate and apply research skills relevant to veterinary science such as literature evaluation, experimental design, data handling, evidence-based veterinary medicine and scientific communication in the form of a structured research report. Supervision is shared amongst all academic staff members of the Faculty of Veterinary Science.

Veterinary research report 600 (VRE 600)

Qualification	Undergraduate
Module credits	16.00
NQF Level	08
Programmes	BVSc
Prerequisites	Final year academic level and admission to relevant programme.
Contact time	1 hour contact session (x3), 6 weeks of guided self-study
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

The module provides students with the opportunity to integrate and apply research skills relevant to veterinary science such as literature evaluation, experimental design, data handling, evidence-based veterinary medicine and scientific communication in the form of a structured research report. Supervision is shared amongst all academic staff members of the Faculty of Veterinary Science.

Research methodology 812 (VRM 812)

Qualification	Postgraduate
Module credits	9.00
NQF Level	09
Programmes	MSc Tropical Animal Health (Coursework)
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	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.

Research methodology 813 (VRM 813)

Qualification	Postgraduate
Module credits	0.00
NQF Level	09

Programmes	MMedVet Anaesthesiology (Coursework) MMedVet Bovine Health and Production (Coursework) MMedVet Clinical Laboratory Diagnostics (Coursework) MMedVet Diagnostic Imaging (Coursework) MMedVet Equine Medicine (Coursework) MMedVet Equine Surgery (Coursework) MMedVet Laboratory Animal Science (Coursework) MMedVet Ophthalmology (Coursework) MMedVet Pathology (Coursework) MMedVet Pharmacology (Coursework) MMedVet Pig Herd Health (Coursework) MMedVet Poultry Diseases (Coursework) MMedVet Reproduction (Coursework) MMedVet Small Animal Medicine (Coursework) MMedVet Small Animal Surgery (Coursework) MMedVet Small Stock Herd Health (Coursework) MMedVet Toxicology (Coursework) MMedVet Veterinary Public Health (Coursework) MMedVet Wildlife Diseases (Coursework) MSc Ruminant Health (Coursework) MSc Veterinary Epidemiology (Coursework) MSc Veterinary Industrial Pharmacology (Coursework) MSc Veterinary Public Health (Coursework) MSc Veterinary Reproduction (Coursework) MSc Veterinary Science Anatomy and Physiology MSc Veterinary Science Companion Animal Clinical Studies MSc Veterinary Science Paraclinical Sciences MSc Veterinary Science Production Animal Studies MSc Veterinary ScienceTropical Diseases MSc Wildlife Health, Ecology and Management (Coursework)
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	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.

Veterinary reproduction 400 (VRP 400)

Qualification	Undergraduate
Module credits	14.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fourth year academic level and admission to relevant programme.
Contact time	10 practicals per week (26 week period), 3 lectures per week over 26 weeks

Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

The female reproductive cycle; parturition and puerperium; control of reproduction; identification, diagnosis and treatment of important diseases or malfunctions of the female reproductive system; identification, diagnosis and treatment of conditions of the neonate; male reproductive processes; identification, diagnosis and treatment of important diseases or malfunctions of the male reproductive system; venereal diseases in domestic animals; optimisation of breeding; investigation of infertility.

Veterinary parasitology 300 (VTP 300)

Qualification	Undergraduate
Module credits	20.00
NQF Level	07
Programmes	BVSc
Prerequisites	Third year academic level and admission to relevant programme.
Contact time	10 practicals per week over 25 weeks, 4 lectures per week over 25 weeks
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Module content

The objective of the module is to provide fundamentals of applied veterinary helminthology, ectoparasitology and protozoology as required by veterinarians. The module covers the life cycles, relevant morphological features, epidemiology and pathogenesis of important parasites of domestic animals. Candidates will also learn how to diagnose infections/infestations and diseases in life and dead animals as well as how to treat and control them. Where applicable, emphasis is also given on zoonotic implications.

Veterinary public health 800 (VVD 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Veterinary Public Health (Coursework)
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Module content
Specialised integration and application of knowledge within a single specific activity (core module) in Veterinary public health, including an approved research project.

Mini-dissertation: Veterinary public health 890 (VVD 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Veterinary Public Health (Coursework)
Prerequisites	VRM 813
Contact time	20 contact hours
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Mini-dissertation: Veterinary public health 895 (VVD 895)

Qualification	Postgraduate
Module credits	100.00
NQF Level	09
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Dissertation: Veterinary tropical diseases 801 (VWE 801)

Qualification	Postgraduate
Module credits	180.00
NQF Level	09
Programmes	MSc Veterinary ScienceTropical Diseases
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Dissertation: Anatomy and physiology 802 (VWE 802)

Qualification	Postgraduate

Module credits	180.00
NQF Level	09
Programmes	MSc Veterinary Science Anatomy and Physiology
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Dissertation: Companion animal clinical studies 803 (VWE 803)

Qualification	Postgraduate
Module credits	180.00
NQF Level	09
Programmes	MSc Veterinary Science Companion Animal Clinical Studies
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Dissertation: Paraclinical sciences 804 (VWE 804)

Qualification	Postgraduate
Module credits	180.00
NQF Level	09
Programmes	MSc Veterinary Science Paraclinical Sciences
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Dissertation: Production animal studies 805 (VWE 805)

Qualification	Postgraduate
Module credits	180.00
NQF Level	09
Programmes	MSc Veterinary Science Production Animal Studies
Prerequisites	VRM 813
Language of tuition	Module is presented in English

Department	Production Animal Studies
Period of presentation	Year

Thesis: Veterinary tropical diseases 901 (VWE 901)

Qualification	Postgraduate
Module credits	360.00
NQF Level	10
Programmes	PhD Veterinary Science Veterinary Tropical Diseases
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Veterinary Tropical Diseases
Period of presentation	Year

Thesis: Anatomy and physiology 902 (VWE 902)

Qualification	Postgraduate
Module credits	360.00
NQF Level	10
Programmes	PhD Veterinary Science Anatomy and Physiology
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Anatomy and Physiology
Period of presentation	Year

Thesis: Companion animal clinical sciences 903 (VWE 903)

Qualification	Postgraduate
Module credits	360.00
NQF Level	10
Programmes	PhD Veterinary Science Companion Animal Clinical Studies
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Companion Animal Clinical Studies
Period of presentation	Year

Thesis: Paraclinical sciences 904 (VWE 904)

Qualification	Postgraduate
Module credits	360.00

NQF Level	10
Programmes	PhD Veterinary Science Paraclinical Sciences
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Paraclinical Sciences
Period of presentation	Year

Thesis: Production animal studies 905 (VWE 905)

Qualification	Postgraduate
Module credits	360.00
NQF Level	10
Programmes	PhD Veterinary Science Production Animal Studies
Prerequisites	No prerequisites.
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Pasture science 213 (WDE 213)

Qualification	Undergraduate
Module credits	12.00
NQF Level	06
Programmes	BVSc
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	Second year academic level and admission to relevant programme
Contact time	2 blocks with a total of 60 lectures
Language of tuition	Module is presented in English
Department	Department of Plant and Soil Sciences
Period of presentation	Semester 1

Module content

Basic principles of pasture science: the influence of biotic and abiotic factors on the productivity of different strata and components of natural and planted pastures. This will enable the student to understand the management, production, appropriate and optimal utilisation as well as the conservation of these pastures. These principles can be used to ensure sustainable animal production and health.

One large assignment to be completed during recess in addition to lecture time.

Veterinary wildlife studies 800 (WLS 800)

Qualification	Postgraduate
Module credits	270.00
NQF Level	09
Programmes	MMedVet Wildlife Diseases (Coursework)
Prerequisites	No prerequisites.
Contact time	1 discussion class per week, 1 seminar per week, 5 practicals per week
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Module content

Broad-based, in-depth theoretical and practical training with emphasis on the skills required to capture, transport and manage free-ranging and captive animals with due consideration of conservation ecology, the interaction of wildlife and domestic animals and the control of diseases of wildlife.

Wildlife health advanced 810 (WLS 810)

Qualification	Postgraduate
Module credits	20.00
NQF Level	09
Programmes	MSc Wildlife Health, Ecology and Management (Coursework)
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1 or Semester 2

Module content

This in depth module covers wildlife diseases within the fields of identification, pathology, diagnostics and prevention. It also will cover epidemiology including geographical information systems, and an introduction to certain statistical methods commonly used in veterinary science, and will provide the basis for further studies and research involving these techniques. “One Health” philosophy and practices with a focus on community impacts of wildlife management practices will also be covered. It provides the student with good insight into the important infectious, non-infectious and parasitic diseases.

Transfrontier parks and conservation 811 (WLS 811)

Qualification	Postgraduate
Module credits	15.00
NQF Level	09
Programmes	MSc Wildlife Health, Ecology and Management (Coursework)
Language of tuition	Module is presented in English

Department	Production Animal Studies
Period of presentation	Semester 1

Module content

Community engagement issues will be covered including community based natural resource management, community research and feedback and human wildlife conflict. Conservation (principles, animal protection methods, forensics and illegal wildlife trade), economics (basic economics, trade, wildlife income systems, marketing and funding), human resources, strategy, leadership and entrepreneurship will also be covered. The students will be exposed to a broad overview and detailed case-studies relevant to areas transfrontier conservation areas in sub-Saharan Africa.

Wildlife health introduction 812 (WLS 812)

Qualification	Postgraduate
Module credits	15.00
NQF Level	09
Programmes	MSc Wildlife Health, Ecology and Management (Coursework)
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1 or Semester 2

Module content

This elective module is an introduction to wildlife diseases for students that have not done a veterinary degree. It provides students with an understanding of different disease groups, their life cycles, their pathogenesis, how they are identified and legislation relevant to disease control. It also covers Primary animal health care and veterinary public health relevant to wildlife management.

Wildlife veterinary specific 813 (WLS 813)

Qualification	Postgraduate
Module credits	15.00
NQF Level	09
Programmes	MSc Wildlife Health, Ecology and Management (Coursework)
Prerequisites	BVSc or equivalent
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1 or Semester 2

Module content

This module will cover veterinary relevant topics to wildlife management and conservation areas such as disease diagnoses, treatment, prevention, immobilisation, tranquilisation and reproductive management as well as veterinary specific legislation. This module is for veterinary practitioners who want to focus their skills and careers in wildlife and conservation practice.

Mini-dissertation: Wildlife health, ecology and management 890 (WLS 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MSc Wildlife Health, Ecology and Management (Coursework)
Service modules	Faculty of Natural and Agricultural Sciences
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

African wildlife management and conservation 510 (WMC 510)

Qualification	Undergraduate
Module credits	5.00
NQF Level	08
Programmes	BVSc
Prerequisites	Fifth year academic level and admission to relevant programme.
Contact time	10 discussion classes, 20 lectures
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Semester 1

Module content

Wildlife management; principles of capture; selected viral, bacterial, protozoal, ecto- and endoparasitic and nutritional diseases of wildlife; legislation pertaining to wildlife; conservation of iconic species of wildlife.

Mini-dissertation: Wildlife diseases 890 (WSK 890)

Qualification	Postgraduate
Module credits	90.00
NQF Level	09
Programmes	MMedVet Wildlife Diseases (Coursework)
Prerequisites	VRM 813
Language of tuition	Module is presented in English
Department	Production Animal Studies
Period of presentation	Year

Mathematics 134 (WTW 134)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05
Programmes	BCom BCom Economics BEd Senior Phase and Further Education and Training Teaching BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Computer Science BSc Construction Management BSc Culinary Science BSc Ecology BSc Entomology BSc Food Science BSc Genetics BSc Geography and Environmental Science BSc Geoinformatics BSc Human Genetics BSc Human Physiology BSc Human Physiology, Genetics and Psychology BSc Information and Knowledge Systems BSc Medical Sciences BSc Microbiology BSc Nutrition BSc Plant Science BSc Quantity Surveying BSc Real Estate BSc Zoology BScAgric Agricultural Economics and Agribusiness Management BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Veterinary Science
Prerequisites	50% for Mathematics in Grade 12
Contact time	1 tutorial per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Mathematics and Applied Mathematics
Period of presentation	Semester 1

Module content

**Students will not be credited for more than one of the following modules for their degree: WTW 134, WTW 165, WTW 114, WTW 158. WTW 134 does not lead to admission to Mathematics at 200 level and is intended for students who require Mathematics at 100 level only. WTW 134 is offered as WTW 165 in the second semester only to students who have applied in the first semester of the current year for the approximately 65 MBChB, or the 5-6 BChD places becoming available in the second semester and who were therefore enrolled for MGW 112 in the first semester of the current year.*
Functions, derivatives, interpretation of the derivative, rules of differentiation, applications of differentiation, integration, interpretation of the definite integral, applications of integration. Matrices, solutions of systems of equations. All topics are studied in the context of applications.

Mathematics 165 (WTW 165)

Qualification	Undergraduate
Module credits	16.00
NQF Level	05
Programmes	BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Genetics BSc Human Genetics BSc Human Physiology BSc Medical Sciences BSc Microbiology BVSc
Service modules	Faculty of Engineering, Built Environment and Information Technology Faculty of Education Faculty of Economic and Management Sciences Faculty of Veterinary Science
Prerequisites	50% for Mathematics in Grade 12 and MGW 112# or registered for BVSc
Contact time	1 tutorial per week, 4 lectures per week
Language of tuition	Module is presented in English
Department	Mathematics and Applied Mathematics
Period of presentation	Semester 2

Module content

*Students will not be credited for more than one of the following modules for their degree: WTW 134, WTW 165, WTW 114, WTW 158. WTW 165 does not lead to Mathematics at 200 level and is intended for students who require Mathematics at 100 level only. WTW 165 is offered in English in the second semester only to students who have applied in the first semester of the current year for the approximately 65 MBChB, or the 5-6 BChD places becoming available in the second semester and who were therefore enrolled for MGW 112 in the first semester of the current year.

Functions, derivatives, interpretation of the derivative, rules of differentiation, applications of differentiation, integration, interpretation of the definite integral, applications of integration, matrices, solutions of systems of equations. All topics are studied in the context of applications.

Animal diversity 161 (ZEN 161)

Qualification	Undergraduate
Module credits	8.00
NQF Level	05
Programmes	BEd Senior Phase and Further Education and Training Teaching BSc Biochemistry BSc Biological Sciences BSc Biotechnology BSc Chemistry BSc Ecology BSc Entomology BSc Food Science BSc Genetics BSc Human Genetics BSc Human Physiology BSc Microbiology BSc Plant Science BSc Zoology BSc extended programme - Biological and Agricultural Sciences BScAgric Animal Science BScAgric Applied Plant and Soil Sciences BScAgric Plant Pathology BVSc
Service modules	Faculty of Education Faculty of Veterinary Science
Prerequisites	No prerequisites.
Contact time	2 lectures per week, fortnightly practicals
Language of tuition	Module is presented in English
Department	Zoology and Entomology
Period of presentation	Semester 2

Module content

Animal classification, phylogeny organisation and terminology. Evolution of the various animal phyla, morphological characteristics and life cycles of parasitic and non-parasitic animals. Structure and function of reproductive,
respiratory, excretory, circulatory and digestive systems in various animal phyla. In-class discussion will address the sustainable development goals #3, 12, 13, 14 and 15 (Good Health and Well-being. Responsible Consumption and Production, Climate Action, Life Below Water, Life on Land).