

## ADVANCED DIPLOMA IN ANIMAL SCIENCES

AdvDip (Animal Sciences) - NQF Level 7 (120 credits)

**Qualification code: ADAN20**

(Specialisation codes for admission and registration: ADAA20 / ADEQ20)

SAQA ID: 110460, CHE NUMBER: H/H16/E062CAN

Campus where offered: Pretoria Campus

### REMARKS

a. *Admission requirement(s):*

A National Diploma: Agriculture: Animal Production or Equine Science, **or** a Diploma in Animal Sciences or Equine Science, **or** a Bachelor's degree in Agriculture in the field of Animal Sciences or Equine Science, **or** an equivalent qualification at NQF Level 6 with a minimum of 360 credits.

Holders of any other equivalent South African or international qualification may also be considered, see Chapter 1 of Students' Rules and Regulations.

b. *Selection criteria:*

Admission is subject to selection. Prospective students will be evaluated based on the marks obtained in the previous qualification and/or work experience.

Acceptance is subject to available capacity according to the Student Enrolment Plan (SEP). Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, [www.tut.ac.za](http://www.tut.ac.za).

c. *Recognition of Prior Learning (RPL), equivalence and status:*

See Chapter 30 of Students' Rules and Regulations.

d. *Intake for the qualification:*

January only.

e. *Presentation:*

Block-mode classes.

f. *Minimum duration:*

One year.

g. *Exclusion and readmission:*

See Chapter 2 of Students' Rules and Regulations.

### CURRICULUM

Students register for one of two options, namely Animal Sciences or Equine Science.

#### YEAR MODULES

CODE	MODULE	NQF-L	CREDIT
<b>Option 1: Animal Sciences: ADAA20</b>			
AAB107V	Advanced Animal Breeding and Genetics	(7)	(24)
AAH107V	Advanced Animal Health	(7)	(24)
AAR107V	Advanced Animal Reproductive Physiology	(7)	(24)



AAU107V	Advanced Animal Nutrition	(7)	(24)
RBI107V	Research Methodology: Biometry	(7)	(24)

TOTAL CREDITS FOR OPTION 1: **120**

**Option 2: Equine Science: ADEQ20**

AAB107V	Advanced Animal Breeding and Genetics	(7)	(24)
AAU107V	Advanced Animal Nutrition	(7)	(24)
AEH107V	Advanced Equine Health Care	(7)	(24)
AER107V	Advanced Equine Reproductive and Exercise Physiology	(7)	(24)
RBI107V	Research Methodology: Biometry	(7)	(24)

TOTAL CREDITS FOR OPTION 2: **120**

## MODULE INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular module. At time of publication, the syllabus content was defined as follows:

### A

**ADVANCED ANIMAL BREEDING AND GENETICS (AAB107V) 1 X 3-HOUR PAPER**  
*(Module custodian: Department of Animal Sciences)*

Integrated knowledge of Mendelian Genetics, Population Genetics, Quantitative Genetics, and Molecular Genetics as well as an ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories thereof as applied to the related fields of study. (Total notional time: 240 hours)

**ADVANCED ANIMAL HEALTH (AAH107V) 1 X 3-HOUR PAPER**  
*(Module custodian: Department of Animal Sciences)*

Integrated knowledge animal health and legal framework, effects of climate change on heat stress and animal health, causes, symptoms, treatment and prevention of animal diseases for different species as well as an ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories as applied to the related fields of study. (Total notional time: 240 hours)

**ADVANCED ANIMAL NUTRITION (AAU107V) 1 X 3-HOUR PAPER**  
*(Module custodian: Department of Animal Sciences)*

Integrated knowledge of animal feeding and nutrition, ruminal and hindgut fermentation, nutrients and their metabolism, feedstuffs, nutritional requirements and ration formulation for different species as well as ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories thereof as applied to the related fields of study. (Total notional time: 240 hours)

**ADVANCED ANIMAL REPRODUCTIVE PHYSIOLOGY (AAR107V) 1 X 3-HOUR PAPER**  
*(Module custodian: Department of Animal Sciences)*

Integrated knowledge of male and female reproductive organs, advanced anatomy, function and regulation of male and female hormones, semen collection techniques, assisted reproductive technologies, oestrus synchronisation and embryo transfer technologies as well as an ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories thereof as applied to the related fields of study. (Total notional time: 240 hours)



**ADVANCED EQUINE HEALTH CARE (AEH107V)****1 X 3-HOUR PAPER****(Module custodian: Department of Animal Sciences)**

Integrated knowledge of inflammation (pathophysiology and recent developments in therapy), infectious diseases and drug resistances, gastrointestinal problems, respiratory conditions, dehydration and shock in sport horses, fertility problems, developmental and degenerative joint diseases in sports horses, discipline-related sports injuries, programs in preventative medicine, drugs and medication as well as an ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories of as applied to the related fields of study. (Total notional time: 240 hours)

**ADVANCED EQUINE REPRODUCTIVE AND EXERCISE PHYSIOLOGY (AER107V)****1 X 3-HOUR PAPER****(Module custodian: Department of Animal Sciences)**

Integrated knowledge of mare and stallion reproductive organs, assisted reproductive technologies, gait analysis and equine locomotion patterns, functional and applied equine biomechanics, perceptual motor learning and motor control, equestrian training principles and concepts as well as an ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories thereof as applied to the related fields of study. (Total notional time: 240 hours)

**R****RESEARCH METHODOLOGY: BIOMETRY (RBI107V)****1 X 3-HOUR PAPER****(Module custodian: Department of Animal Sciences)**

Integrated knowledge of experimental designs and analysis, hypothesis testing, analysis of variance (ANOVA), mean separation procedures, linear regression and correlation, data analysis and reporting as well as an ability to apply and evaluate the key terms, concepts, facts, principles, rules and theories thereof as applied to the related fields of study. (Total notional time: 240 hours)

