

At Louvain-la-Neuve - 180 credits - 3 years - Day schedule - In FrenchDissertation/Graduation Project : **NO** - Internship : **YES**Activities in English: **YES** - Activities in other languages : **NO**Activities on other sites : **NO**Main study domain : **Sciences vétérinaires**Organized by: **Faculty of Science (SC)**Programme acronym: **VETE1BA** - Francophone Certification Framework: 6**Table of contents**

Introduction	2
Teaching profile	3
Learning outcomes	3
Programme structure	4
Programme	5
Detailed programme by subject	5
Course prerequisites	9
The programme's courses and learning outcomes	11
Detailed programme per annual block	11
VETE1BA - 1st annual unit	11
VETE1BA - 2nd annual unit	13
VETE1BA - 3rd annual unit	15
Information	17
Access Requirements	17
Teaching method	19
Evaluation	19
Mobility and/or Internationalisation outlook	19
Possible trainings at the end of the programme	19
Contacts	19

VETE1BA - Introduction

Introduction

VETE1BA - Teaching profile

Learning outcomes

The first year of studies focuses on the acquisition of the core skills and knowledge in the basic sciences such as Chemistry, Biology, Mathematics and Physics.

The general objective of the second and third years is to give the students a solid grounding in the various aspects of the Biology of the most common healthy domestic animals (horses, bovines, ovines, pigs and birds). The courses are conceived in a complementary manner so that the student can integrate them into a coherent ensemble, by means of his individual work and self-study.

In addition to these studies, the bachelor's programme in Veterinary Medicine will enable the student to acquire expertise in documentary research, and in computer-aided preparation and presentations of written and oral reports in French and English.

On successful completion of this programme, each student is able to :

1) Maîtriser et utiliser les principaux concepts des sciences fondamentales et disciplinaires nécessaires à la compréhension de la complexité d'un être vivant.

1.1. Démontrer une compréhension approfondie des concepts de base des sciences fondamentales :

- organiser, par l'étude des concepts fondamentaux de la biologie, ses connaissances disciplinaires dans une perspective évolutionniste et centrées sur l'organisme animal.
- maîtriser, en chimie générale et en chimie organique, la dimension moléculaire de la matière vivante, prérequis indispensable à l'étude de son fonctionnement normal ou anormal.
- maîtriser, en physique et en mathématiques générales, les lois fondamentales de l'univers qui président à tout phénomène, y compris celui de la vie, mais également, plus encore que par l'étude des autres matières, se confronter à la rigueur du raisonnement logique de la démarche scientifique.
- développer, par les probabilités et les statistiques, un esprit d'analyse critique, la maîtrise du raisonnement par hypothèse ainsi que la compréhension et l'interprétation d'un résultat statistique.

1.2. Intégrer les principales notions des sciences disciplinaires relatives aux espèces d'animaux de compagnie et d'animaux de production

- En morphologie, faire preuve d'une connaissance approfondie de l'anatomie normale, y compris de son aspect radiologique ; de l'histologie normale des tissus et des organes.
- En embryologie, connaître et comprendre les aspects importants en clinique du développement de l'embryon depuis la fécondation jusqu'à la naissance.
- En physiologie, décrire précisément le fonctionnement et la régulation des différents systèmes d'organes qui composent un animal, y compris le système immunitaire.
- En biochimie, identifier les composants biochimiques de la matière vivante ainsi que spécifier leurs voies de synthèse et de dégradation.
- Intégrer les exigences en termes de gestion, de nutrition, d'environnement et de besoins éthologiques des espèces d'animaux de compagnie et d'animaux de production dont il connaîtra les différentes races.
- Maîtriser également les bases de la génétique moléculaire et factorielle.
- Connaître les caractéristiques générales des principales familles d'agents pathogènes (bactéries, virus, parasites) et les grands principes de leur virulence, prophylaxie et thérapeutique comme prérequis à l'étude des maladies infectieuses étudiées en master.
- Prendre conscience des enjeux que pose la santé animale dans le cadre de la protection de la santé publique et de celle de l'environnement, se former à la démarche clinique du diagnostic.

2) Mobiliser les aptitudes méthodologiques exigées par le niveau universitaire du programme d'étude et le niveau de l'exercice de la profession de médecin vétérinaire

- Comprendre et intégrer un savoir avec rigueur, précision et analyse critique.
- Mesurer son niveau de maîtrise d'un sujet ou d'une matière et approfondir par lui-même un domaine abordé au cours du programme.
- Rechercher avec méthode des informations scientifiques valides et pertinentes, se livrer à leur analyse critique et à leur synthèse.
- Utiliser ces informations pour proposer des solutions à des problématiques scientifiques, sociales ou éthiques.
- Organiser et gérer son temps de travail.
- Structurer et argumenter un raisonnement scientifique.
- Etablir les liens verticaux et transversaux unissant les différents enseignements et concepts afin d'aborder l'animal et son (dys-)fonctionnement dans son ensemble.

3) Travailler en équipe et développer ses habilités relationnelles

- Prendre des décisions éclairées et partagées, écouter, respecter chacun, développer une argumentation cohérente et établir un débat constructif dans le cadre de travaux en groupes.
- Collaborer, dialoguer voire diriger un petit groupe de travail.
- Accroître son sens des responsabilités et sa capacité à gérer et organiser un projet.

4) Maîtriser les techniques expérimentales générales des sciences fondamentales et des matières disciplinaires.

- Manipuler convenablement les instruments, la vaisselle et les réactifs lors des différents laboratoires de sciences fondamentales (chimie, biologie et physique).
- Utiliser correctement les microscopes, les différentes loupes, les principaux instruments de dissection, les instruments de mesure, de prélèvement, d'analyse, etc ... des enseignements disciplinaires.

- Décrire et appliquer rigoureusement les normes de sécurité et d'hygiène relatives à ces instruments et aux techniques d'analyse et de dissection.
- 5) Approcher et procéder aux manipulations de base des espèces d'animaux de compagnie et d'animaux de production.
- Maîtriser sans crainte l'abord et le contact physique avec l'animal domestique.
 - Prodiquer les soins élémentaires (propreté et alimentation) et appliquer les normes d'hygiène adaptées à chaque espèce.
 - Formuler des conseils généraux sur l'entretien et la gestion de ces espèces.
 - Etre préparé à aborder efficacement en master la contention de l'animal malade et les soins à lui apporter.
- 6) Communiquer efficacement et convaincre
- 6.1 Communiquer en français, oralement ou par écrit :
- Exprimer poliment et précisément à différents types de personnes son opinion sur des sujets relevant de la vie courante, de la santé et de la gestion animales.
 - Adapter son discours au niveau de connaissance de son interlocuteur, y compris à propos de sujets complexes relevant de son domaine de compétence.
- 6.2 Communiquer en anglais :
- Exploiter par lui-même des documents d'ordre général relatifs aux sciences de base et plus complexes et spécialisés en relation avec les matières disciplinaires (niveau C1 de l'échelle européenne CECRL).
 - Comprendre l'essentiel de la langue anglaise écrite et orale dans un contexte essentiellement professionnel (niveau C1 CECRL).
 - S'exprimer oralement et interagir de manière simple sur les sujets généraux ou relevant de ses enseignements disciplinaires (niveau B2 CECRL).
 - Ecrire de façon simple et cohérente sur des sujets d'ordre général ou relevant de ses enseignements disciplinaires (niveau B2 CECRL).
- 7) Faire preuve d'un sens développé de la responsabilité envers la société, du devoir et de conscience professionnelle.
- Agir en accord avec les règlements, la déontologie et l'éthique.
 - Faire constamment preuve du désir d'apprendre.
 - Devenir progressivement, dès son entrée à l'Université, le principal acteur de sa propre formation en développant les acquis d'apprentissage précités de façon de plus en plus autonome.

Programme structure

This three year programme consists of an ensemble of courses related to the basic sciences (Biology, Chemistry, Mathematics, Physics), to Philosophy, Sciences common to the different branches of "living organisms" (Biochemistry, Genetics, Biostatistics, Microbiology, Immunology, General Histology, etc.) and the more specific veterinary sciences (Anatomy, Embryology, Physiology, Histology and Ethology of domestic animals and Ethnography and Vegetal Biology related to breeding, etc.).

The proportion of specific veterinary courses increases progressively from the first to the third year of the bachelor's programme.

It is important to note that the vast majority of the theoretical sessions are complemented by practical exercises (TP) or by task-based periods. These "TP" take place in very well-equipped, modern teaching laboratories, in the presence of the lecturers or their assistants.

In the context of the language training focus, each year of the bachelor's programme integrates a block of periods in English, with the last session, in the 3rd year, including a presentation in English on a biological topic.

Principal Subjects

Biology

- A) Cellular Biology and introduction to prokaryotes, protists and mycetes; B) Vegetal Biology; C) Animal Biology (11 credits)
- Vegetal Biology applied to breeding (2 credits)
- Complements in Animal Biology - Nervous System (2 credits)

Physics

- General Physics and elements of Mathematics (22 credits)
- Biophysics (6 credits)

Chemistry and Biochemistry

- General Chemistry (9 credits)
- Organic Chemistry (10 credits)
- Biochemistry (4 credits)
- Metabolic Biochemistry (3 credits)

Anatomy and Embryology of Domestic Animals (33 credits)

Animal Biochemistry, Physiology and Histology

- Animal Biochemistry, Physiology and Histology (6 credits)
- Animal Biochemistry (2 credits)
- Physiology of Domestic Animals (13 credits)
- Special Histology and Domestic Animals (9 credits)
- Animal Cellular Biology (2 credits)

Biostatistics (8 credits)

Immunology (3 credits)

Microbiology (4 credits)

Ethology (4 credits)

Genetics (5 credits)

Ethnography (5 credits)

Integrated Seminars (2 credits)

Philosophy (2 credits)

Computing Science (2 credits)

English (6 credits)

Integrated practical work (5 credits)

VETE1BA Programme

Detailed programme by subject

- Mandatory
- ⊗ Optional
- △ Not offered in 2021-2022
- ⊖ Not offered in 2021-2022 but offered the following year
- ⊕ Offered in 2021-2022 but not the following year
- △ ⊕ Not offered in 2021-2022 or the following year
- Activity with requisites
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

	Year		
	1	2	3

○ Content:

○ Biologie (17 credits)

○ LBIO1111	Cell and molecular biology	André Lejeune	FR [q1] [30h+20h] [5 Credits]	X		
○ LBIO1112	Organism biology : plants and animals	André Lejeune Jean-François Rees	FR [q2] [30h+20h] [5 Credits]	X		
○ LVET1111	Plant biology applied to breeding	André Moens Muriel Quinet	FR [q2] [22.5h+15h] [3 Credits]	X		
○ LVET1312	Ecologie appliquée aux animaux domestiques ■	Jean-François Cabaraux	FR [q2] [30h+12h] [4 Credits]			X

o Physique et mathématiques (14 credits)

○ LMAT1101	Mathematics 1	Pedro Dos Santos Santana Forte Vaz	FR [q1] [30h+20h] [4 Credits]	X		
○ LPHY1101	Physics 1	Thierry Fichetef	FR [q1] [30h+40h] [6 Credits]	X		
○ LPHY1103	Additional physics	Eduardo Cortina Gil Adrien Poncet	FR [q2] [40h+10h] [4 Credits]	X		

o Chimie et biochimie (19 credits)

○ LCHM1111B	General chemistry	Michel Devillers	FR [q1] [45h+45h] [8 Credits]	X		
○ LCHM1141A	Organic chemistry	Benjamin Elias (coord.) Charles-André Fustin	FR [q2] [30h+20h] [5 Credits]	X		
○ LCHM1271V	Eléments de biochimie	Patrice Soumillion	FR [q1] [20h] [2 Credits]		X	
○ LCHM1371V	Metabolic biochemistry - courses and bibliographic work	Melissa Page	EN [q2] [30h+15h] [4 Credits]		X	

o Anatomie et Embryologie (28 credits)

○ LVET1141	Anatomy of domestic animals I	André Moens	FR [q2] [45h+37.5h] [8 Credits]	X		
○ LVET1241A	Domestic animals anatomy II (1st part)	André Moens	FR [q1] [40h+35h] [6 Credits]		X	
○ LVET1241B	Domestic animals anatomy II (2d part)	André Moens	FR [q2] [35h+40h] [7 Credits]		X	
○ LVETE1250	Embryology of Domestic Animals	André Moens	FR [q1] [26h+4h] [4 Credits]		X	
○ LVETE1342	Anatomy of Domestic Animals	André Moens	FR [q2] [22.5h+22.5h] [3 Credits]			X

o Biochimie, physiologie et histologie animales (38 credits)

○ LBIO1234	Animal histology	Anne-Catherine Gérard (compensates Bernard Knoops)	FR [q1] [20h+20h] [4 Credits]			X
○ LVETE1390	Histologie spéciale et des animaux domestiques	Françoise Gofflot	FR [q1] [45h+60h] [8 Credits]			X
○ LBRAL2102F	Physiological and nutritional biochemistry : parts 1, 2 and 3	Cathy Debier Yvan Larondelle	EN [q1] [24h] [2 Credits]			X
○ LVET1295	Animal cell biology : complements	Pierre Morsomme Valérie Van der Eecken (compensates Bernard Knoops)	FR [q2] [26h] [2 Credits]		X	
○ LVET1296	Physiologie générale	Isabelle Donnay	FR [q2] [22.5h+6h] [3 Credits]		X	
○ LBIO1338	Travaux pratiques intégrés de physiologie, histologie et biochimie animales	Bernard Knoops Melissa Page Jean-François Rees	FR [q2] [0h+22.5h] [2 Credits]			X
○ LVET1374	Physiologie digestive et nutrition des animaux domestiques	Cathy Debier Yvan Larondelle	FR [q2] [60h+4h] [6 Credits]			X
○ LVETE1373A	Physiologie des animaux domestiques : endocrinologie et reproduction	Isabelle Donnay	FR [q1] [45h+9h] [5 Credits]			X
○ LVETE1373B	Physiologie des animaux domestiques : physiologie cardiovasculaire, rénale et respiratoire	Isabelle Donnay	FR [q1] [45h+15h] [6 Credits]			X

o Biostatistique (7 credits)

○ LVETE1262	Biostatistics and information's critical analysis	Catherine Legrand	FR [q1] [45h+40h] [7 Credits]			X
-------------	---	-------------------	-------------------------------	--	--	---

o Immunologie (6 credits)

○ LBIO1237	Immunology : basis and applications in biology	Jean-Paul Dehoux	FR [q1] [25h+15h] [4 Credits]			X
○ LVET1243	Epidemiology	Jean-Paul Dehoux	FR [q2] [20h+4h] [2 Credits]			X

o Microbiologie (8 credits)

○ LBIO1311	Microbiology and virology	Benoît Desguin Thomas Michiels	FR [q1] [40h+15h] [5 Credits]			X
------------	---------------------------	--------------------------------	-------------------------------	--	--	---

				Year		
				1	2	3
○ LVET1311	Parasitologie et mycologie 🟡	Tanguy Marcotty	FR [q2] [25h+7h] [3 Credits]			x
o Ethologie (4 credits)						
○ LVETE1230	Domestic Animals Ethology 🟡	Marc Vandenneede	FR [q2] [30h+15h] [4 Credits]			x
o Génétique (5 credits)						
○ LBIR1352	General genetics 🟡	Philippe Baret (coord.) Jacques Mahillon (compensates Philippe Baret)	FR [q2] [45h+15h] [5 Credits]			x
o Ethnographie (6 credits)						
○ LVET1280	Ethnographie et appréciation des animaux domestiques 🟡	Christophe Boccart Marc Vandenneede	FR [q2] [45h+20h] [6 Credits]			x
o Philosophie, éthologie et éthique (4 credits)						
○ LSC1120	Philosophy, ethology and ethics	Alexandre Guay Charles Pence	FR [q1] [45h] [4 Credits]	x		
o Informatique (3 credits)						
○ LSC1181	Documentation research and computer tools	Frédéric Brodtkom	FR [q1] [20h+10h] [3 Credits]	x		
o Séminaires et exercices intégrés (7 credits)						
○ LVETE1300	Integrated Seminars 🟡	André Lejeune André Moens Melissa Page Muriel Quinet René Rezsöhazi Patrice Soumillion	FR [q2] [0h+25h] [2 Credits]			x
○ LVETE1381	Integrated exercises 🟡	Cathy Debier Jean-Paul Dehoux Isabelle Donnay Isabelle Donnay (compensates Bernard Knoops) Françoise Gofflot André Moens Jean-François Rees René Rezsöhazi	FR [q2] [0h+50h] [5 Credits]			x
o Anglais (7 credits)						
○ LANG1861	English: reading and listening comprehension of scientific texts	Fanny Desterbecq (coord.) Amandine Dumont (coord.) Marc Piwnik	EN [q2] [10h] [2 Credits]	x		
○ LANG1862	English: reading and listening comprehension of scientific texts 🟡	Ahmed Adriouèche (coord.) Catherine Avery Amandine Dumont Ariane Halleux (coord.) Adrien Kefer (compensates Laura Lievens)	EN [q1] [30h] [3 Credits]			x
○ LANG1863	English for Students in Sciences (Upper-Intermediate level) 🟡	Ahmed Adriouèche (coord.) Catherine Avery (coord.) Amandine Dumont (coord.) Sandrine Jacob (coord.) Hila Peer Nevin Serbest Colleen Starrs Françoise Stas (coord.)	EN [q1 or q2] [30h] [2 Credits]			x

Year

1 2 3

o Stage (2 credits)

o LVET1244	Initiation à la ruralité et stage d'immersion en milieu animalier	Isabelle Donnay André Moens	FB [q1 or q2] [50h] [2 Credits]			X
------------	---	--------------------------------	---------------------------------	--	--	---

o Culture et esprit scientifique (3 credits)

o LVETE1101	Introduction to public health and economy	Jean-Paul Dehoux François-Xavier Philippe	FB [q2] [30h] [3 Credits]	X		
-------------	---	--	---------------------------	---	--	--

o Biosécurité (2 credits)

o LVETE1201	Biosecurity and good veterinary practices	Jean-Paul Dehoux Claude Saegerman	FB [q2] [2h+28h] [2 Credits]		X	
-------------	---	--------------------------------------	------------------------------	--	---	--

⊗ Optional courses

These credits are not counted within the 120 required credits.

⊗ LSST1001	IngénieursSud	Stéphanie Merle Jean-Pierre Raskin (coord.)	FB [q1+q2] [15h+45h] [5 Credits]			X
⊗ LSST1002M	Information and critical thinking - MOOC	Myriam De Kesel Jean-François Rees	FB [q2] [30h+15h] [3 Credits]			X

Course prerequisites

The **table** below lists the activities (course units, or CUs) for which there are one or more prerequisites within the programme, i.e. the programme CU for which the learning outcomes must be certified and the corresponding credits awarded by the jury before registering for that CU.

These activities are also identified in the **detailed programme**: their title is followed by a yellow square.

Prerequisites and student's annual programme

As the prerequisite is for CU registration purposes only, there are no prerequisites within a programme year. Prerequisites are defined between CUs of different years and therefore influence the order in which the student will be able to register for the programme's CUs.

In addition, when the jury validates a student's individual programme at the beginning of the year, it ensures its coherence, meaning that it may:

- transform a prerequisite into a corequisite within the same year (to enable the student to continue his or her studies with a sufficient annual course load)
- require the student to combine registration in two separate CUs which it considers necessary from a pedagogical point of view.

For more information, please consult the [Academic Regulations and Procedures](https://uclouvain.be/fr/decouvrir/rgee.html) (<https://uclouvain.be/fr/decouvrir/rgee.html>).

Prerequisites list

LANG1862	"English: reading and listening comprehension of scientific texts" has prerequisite(s) LANG1861 <ul style="list-style-type: none"> • LANG1861 - English: reading and listening comprehension of scientific texts
LANG1863	"Anglais interactif pour étudiants en sciences (niveau intermédiaire+)" has prerequisite(s) LANG1861 ET LANG1862 <ul style="list-style-type: none"> • LANG1861 - English: reading and listening comprehension of scientific texts • LANG1862 - English: reading and listening comprehension of scientific texts
LBIO1234	"Histologie animale" has prerequisite(s) LBIO1111 <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology
LBIO1237	"Immunologie : fondements et applications en biologie" has prerequisite(s) LBIO1111 <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology
LBIO1311	"Microbiologie et virologie" has prerequisite(s) LBIO1111 ET LVET1295 ET LBIO1237 <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology • LVET1295 - Animal cell biology : complements • LBIO1237 - Immunology : basis and applications in biology
LBIO1338	"Travaux pratiques intégrés de physiologie, histologie et biochimie animales" has prerequisite(s) LBIO1111 ET LCHM1271V ET LCHM1371V ET LVET1296 ET LBIO1234 <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology • LCHM1271V - Eléments de biochimie • LCHM1371V - Metabolic biochemistry - courses and bibliographic work • LVET1296 - Physiologie générale • LBIO1234 - Animal histology
LBIR1352	"Généétique générale" has prerequisite(s) LBIO1111 ET LVET1295 ET LVETE1262 <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology • LVET1295 - Animal cell biology : complements • LVETE1262 - Biostatistics and information's critical analysis
LBRAL2102F	"Physiological and nutritional biochemistry : parts 1, 2 and 3" has prerequisite(s) LCHM1271V ET LCHM1371V <ul style="list-style-type: none"> • LCHM1271V - Eléments de biochimie • LCHM1371V - Metabolic biochemistry - courses and bibliographic work
LCHM1271V	"Eléments de biochimie" has prerequisite(s) LBIO1111 ET LCHM1111B ET LCHM1141A <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology • LCHM1111B - General chemistry • LCHM1141A - Organic chemistry
LCHM1371V	"Metabolic biochemistry - cours et travail bibliographique" has prerequisite(s) LBIO1111 ET LCHM1141A <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology • LCHM1141A - Organic chemistry
LVET1241A	"Anatomie des animaux domestiques II (1e partie)" has prerequisite(s) LVET1141 <ul style="list-style-type: none"> • LVET1141 - Anatomy of domestic animals I
LVET1241B	"Anatomie des animaux domestiques II (2e partie)" has prerequisite(s) LVET1141 <ul style="list-style-type: none"> • LVET1141 - Anatomy of domestic animals I
LVET1243	"Epidémiologie" has prerequisite(s) LBIO1111 <ul style="list-style-type: none"> • LBIO1111 - Cell and molecular biology
LVET1244	"Initiation à la ruralité et stage d'immersion en milieu animalier" has prerequisite(s) LVET1111 ET LVETE1230 <ul style="list-style-type: none"> • LVET1111 - Plant biology applied to breeding • LVETE1230 - Domestic Animals Ethology
LVET1280	"Ethnographie et appréciation des animaux domestiques" has prerequisite(s) LPHY1101 ET LPHY1103

- LPHY1101 - Physics 1
 - LPHY1103 - Additional physics
- LVET1295** "Compléments de biologie cellulaire animale" has prerequisite(s) L BIO1111
- L BIO1111 - Cell and molecular biology
- LVET1296** "Physiologie générale" has prerequisite(s) L BIO1111 ET L PHY1101 ET L PHY1103
- L BIO1111 - Cell and molecular biology
 - L PHY1101 - Physics 1
 - L PHY1103 - Additional physics
- LVET1311** "Parasitologie et mycologie" has prerequisite(s) L BIO1237 ET LVET1243 ET LVETE1230 ET L BIO1234
- L BIO1237 - Immunology : basis and applications in biology
 - LVET1243 - Epidemiology
 - LVETE1230 - Domestic Animals Ethology
 - L BIO1234 - Animal histology
- LVET1312** "Ecologie appliquée aux animaux domestiques" has prerequisite(s) LVETE1230 ET LVET1280 ET L PHY1101 ET L PHY1103
- LVETE1230 - Domestic Animals Ethology
 - LVET1280 - Ethnographie et appréciation des animaux domestiques
 - L PHY1101 - Physics 1
 - L PHY1103 - Additional physics
- LVET1374** "Physiologie digestive et nutrition des animaux domestiques" has prerequisite(s) L CHM1271V ET L CHM1371V ET LVET1241A ET LVET1295 ET LVET1296 ET L BIO1234
- L CHM1271V - Eléments de biochimie
 - L CHM1371V - Metabolic biochemistry - courses and bibliographic work
 - LVET1241A - Domestic animals anatomy II (1st part)
 - LVET1295 - Animal cell biology : complements
 - LVET1296 - Physiologie générale
 - L BIO1234 - Animal histology
- LVETE1230** "Ethologie des animaux domestiques" has prerequisite(s) L SC1181
- L SC1181 - Documentation research and computer tools
- LVETE1250** "Embryologie des animaux domestiques" has prerequisite(s) L BIO1111
- L BIO1111 - Cell and molecular biology
- LVETE1262** "Biostatistiques et analyse critique de l'information" has prerequisite(s) L MAT1101
- L MAT1101 - Mathematics 1
- LVETE1300** "Integrated Seminars" has prerequisite(s) L SC1181 ET L ANG1861 ET L ANG1862
- L SC1181 - Documentation research and computer tools
 - L ANG1861 - English: reading and listening comprehension of scientific texts
 - L ANG1862 - English: reading and listening comprehension of scientific texts
- LVETE1342** "Anatomie des animaux domestiques" has prerequisite(s) LVET1141 ET LVET1241A ET LVET1241B ET LVETE1250
- LVET1141 - Anatomy of domestic animals I
 - LVET1241A - Domestic animals anatomy II (1st part)
 - LVET1241B - Domestic animals anatomy II (2d part)
 - LVETE1250 - Embryology of Domestic Animals
- LVETE1373A** "Physiologie des animaux domestiques : endocrinologie et reproduction" has prerequisite(s) L CHM1371V ET LVET1241A ET LVET1241B ET LVET1296 ET L BIO1234
- L CHM1371V - Metabolic biochemistry - courses and bibliographic work
 - LVET1241A - Domestic animals anatomy II (1st part)
 - LVET1241B - Domestic animals anatomy II (2d part)
 - LVET1296 - Physiologie générale
 - L BIO1234 - Animal histology
- LVETE1373B** "Physiologie des animaux domestiques : physiologie cardio-vasculaire, rénale et respiratoire" has prerequisite(s) L CHM1371V ET LVET1241A ET LVET1241B ET LVET1296 ET L BIO1234
- L CHM1371V - Metabolic biochemistry - courses and bibliographic work
 - LVET1241A - Domestic animals anatomy II (1st part)
 - LVET1241B - Domestic animals anatomy II (2d part)
 - LVET1296 - Physiologie générale
 - L BIO1234 - Animal histology
- LVETE1381** "Exercices d'intégration" has prerequisite(s) L CHM1371V ET LVETE1250 ET LVET1296 ET L BIO1237 ET LVET1243
- L CHM1371V - Metabolic biochemistry - courses and bibliographic work
 - LVETE1250 - Embryology of Domestic Animals
 - LVET1296 - Physiologie générale
 - L BIO1237 - Immunology : basis and applications in biology
 - LVET1243 - Epidemiology
- LVETE1390** "Histologie spéciale et des animaux domestiques" has prerequisite(s) LVET1241A ET LVET1295 ET L BIO1237 ET L BIO1234
- LVET1241A - Domestic animals anatomy II (1st part)
 - LVET1295 - Animal cell biology : complements

- LBIO1237 - Immunology : basis and applications in biology
- LBIO1234 - Animal histology

The programme's courses and learning outcomes

For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

Detailed programme per annual block

VETE1BA - 1ST ANNUAL UNIT

- Mandatory
- ⊗ Optional
- △ Not offered in 2021-2022
- ⊙ Not offered in 2021-2022 but offered the following year
- ⊕ Offered in 2021-2022 but not the following year
- △ ⊕ Not offered in 2021-2022 or the following year
- Activity with requisites
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

o Content:

o Biologie

○ LBIO1111	Cell and molecular biology	André Lejeune	FB [q1] [30h+20h] [5 Credits]
○ LBIO1112	Organism biology : plants and animals	André Lejeune Jean-François Rees	FB [q2] [30h+20h] [5 Credits]
○ LVET1111	Plant biology applied to breeding	André Moens Muriel Quinet	FB [q2] [22.5h +15h] [3 Credits]

o Physique et mathématiques

○ LMAT1101	Mathematics 1	Pedro Dos Santos Santana Forte Vaz	FB [q1] [30h+20h] [4 Credits]
○ LPHY1101	Physics 1	Thierry Fichet	FB [q1] [30h+40h] [6 Credits]
○ LPHY1103	Additional physics	Eduardo Cortina Gil Adrien Poncelet	FB [q2] [40h+10h] [4 Credits]

o Chimie et biochimie

○ LCHM1111B	General chemistry	Michel Devillers	FB [q1] [45h+45h] [8 Credits]
○ LCHM1141A	Organic chemistry	Benjamin Elias (coord.) Charles-André Fustin	FB [q2] [30h+20h] [5 Credits]

o Anatomie et Embryologie

○ LVET1141	Anatomy of domestic animals I	André Moens	FB [q2] [45h +37.5h] [8 Credits]
------------	-------------------------------	-------------	---

o Philosophie, éthologie et éthique

○ LSC1120	Philosophy, ethology and ethics	Alexandre Guay Charles Pence	FR [q1] [45h] [4 Credits]
-----------	---------------------------------	---------------------------------	---------------------------------

o Informatique

○ LSC1181	Documentation research and computer tools	Frédéric Brodtkom	FR [q1] [20h+10h] [3 Credits]
-----------	---	-------------------	-------------------------------------

o Anglais

○ LANG1861	English: reading and listening comprehension of scientific texts	Fanny Desterbecq (coord.) Amandine Dumont (coord.) Marc Piwnik	FR [q2] [10h] [2 Credits]
------------	--	--	---------------------------------

o Culture et esprit scientifique

○ LVETE1101	Introduction to public health and economy	Jean-Paul Dehoux François-Xavier Philippe	FR [q2] [30h] [3 Credits]
-------------	---	--	---------------------------------

VETE1BA - 2ND ANNUAL UNIT

- Mandatory
- ⊗ Optional
- △ Not offered in 2021-2022
- ⊖ Not offered in 2021-2022 but offered the following year
- ⊕ Offered in 2021-2022 but not the following year
- △ ⊕ Not offered in 2021-2022 or the following year
- Activity with requisites
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

o Content:**o Chimie et biochimie**

○ LCHM1271V	Eléments de biochimie ■	Patrice Soumillion	[FR] [q1] [20h] [2 Credits]
○ LCHM1371V	Metabolic biochemistry - courses and bibliographic work ■	Melissa Page	[FR] [q2] [30h+15h] [4 Credits]

o Anatomie et Embryologie

○ LVET1241A	Domestic animals anatomy II (1st part) ■	André Moens	[FR] [q1] [40h+35h] [6 Credits]
○ LVET1241B	Domestic animals anatomy II (2d part) ■	André Moens	[FR] [q2] [35h+40h] [7 Credits]
○ LVETE1250	Embryology of Domestic Animals ■	André Moens	[FR] [q1] [26h+4h] [4 Credits]

o Biochimie, physiologie et histologie animales

○ LBIO1234	Animal histology ■	Anne-Catherine Gérard (compensates Bernard Knoops)	[FR] [q1] [20h+20h] [4 Credits]
○ LVET1295	Animal cell biology : complements ■	Pierre Morsomme Valérie Van der Eecken (compensates Bernard Knoops)	[FR] [q2] [26h] [2 Credits]
○ LVET1296	Physiologie générale ■	Isabelle Donnay	[FR] [q2] [22.5h+6h] [3 Credits]

o Biostatistique

○ LVETE1262	Biostatistics and information's critical analysis ■	Catherine Legrand	[FR] [q1] [45h+40h] [7 Credits]
-------------	---	-------------------	---------------------------------------

o Immunologie

○ LBIO1237	Immunology : basis and applications in biology ■	Jean-Paul Dehoux	[FR] [q1] [25h+15h] [4 Credits]
○ LVET1243	Epidemiology ■	Jean-Paul Dehoux	[FR] [q2] [20h+4h] [2 Credits]

o Ethologie

○ LVETE1230	Domestics Animals Ethology ■	Marc Vandenneede	[FR] [q2] [30h+15h] [4 Credits]
-------------	------------------------------	------------------	---------------------------------------

o Ethnographie

o LVET1280	Ethnographie et appréciation des animaux domestiques 🟡	Christophe Boccart Marc Vandenneede	EN [q2] [45h+20h] [6 Credits]
------------	--	--	-------------------------------------

o Anglais

o LANG1862	English: reading and listening comprehension of scientific texts 🟡	Ahmed Adriouche (coord.) Catherine Avery Amandine Dumont Ariane Halleux (coord.) Adrien Kefer (compensates Laura Lievens)	EN [q1] [30h] [3 Credits]
------------	--	--	---------------------------------

o Biosécurité

o LVETE1201	Biosecurity and good veterinary practices	Jean-Paul Dehoux Claude Saegerman	EN [q2] [2h+28h] [2 Credits]
-------------	---	--------------------------------------	------------------------------------

VETE1BA - 3RD ANNUAL UNIT

- Mandatory
- ⊗ Optional
- △ Not offered in 2021-2022
- ⊖ Not offered in 2021-2022 but offered the following year
- ⊕ Offered in 2021-2022 but not the following year
- △ ⊕ Not offered in 2021-2022 or the following year
- Activity with requisites
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

o Content:**o Biologie**

○ LVET1312	Ecologie appliquée aux animaux domestiques ■	Jean-François Cabaraux	[FR] [q2] [30h+12h] [4 Credits]
------------	--	------------------------	---------------------------------------

o Anatomie et Embryologie

○ LVETE1342	Anatomy of Domestic Animals ■	André Moens	[FR] [q2] [22.5h +22.5h] [3 Credits]
-------------	-------------------------------	-------------	---

o Biochimie, physiologie et histologie animales

○ LVETE1390	Histologie spéciale et des animaux domestiques ■	Françoise Gofflot	[FR] [q1] [45h+60h] [8 Credits]
○ LBRAL2102F	Physiological and nutritional biochemistry : parts 1, 2 and 3 ■	Cathy Debier Yvan Larondelle	[FR] [q1] [24h] [2 Credits]
○ LBIO1338	Travaux pratiques intégrés de physiologie, histologie et biochimie animales ■	Bernard Knoops Melissa Page Jean-François Rees	[FR] [q2] [0h+22.5h] [2 Credits]
○ LVET1374	Physiologie digestive et nutrition des animaux domestiques ■	Cathy Debier Yvan Larondelle	[FR] [q2] [60h+4h] [6 Credits]
○ LVETE1373A	Physiologie des animaux domestiques : endocrinologie et reproduction ■	Isabelle Donnay	[FR] [q1] [45h+9h] [5 Credits]
○ LVETE1373B	Physiologie des animaux domestiques : physiologie cardio-vasculaire, rénale et respiratoire ■	Isabelle Donnay	[FR] [q1] [45h+15h] [6 Credits]

o Microbiologie

○ LBIO1311	Microbiology and virology ■	Benoît Desguin Thomas Michiels	[FR] [q1] [40h+15h] [5 Credits]
○ LVET1311	Parasitologie et mycologie ■	Tanguy Marcotty	[FR] [q2] [25h+7h] [3 Credits]

o Génétique

○ LBIR1352	General genetics ■	Philippe Baret (coord.) Jacques Mahillon (compensates Philippe Baret)	[FR] [q2] [45h+15h] [5 Credits]
------------	--------------------	--	---------------------------------------

o Séminaires et exercices intégrés

○ LVETE1300	Integrated Seminars ■	André Lejeune André Moens Melissa Page Muriel Quinet René Rezsóhazy Patrice Soumillion	[FR] [q2] [0h+25h] [2 Credits]
-------------	-----------------------	---	--------------------------------------

○ LVETE1381	Integrated exercises 🟡	Cathy Debier Jean-Paul Dehoux Isabelle Donnay Isabelle Donnay (compensates Bernard Knoops) Françoise Gofflot André Moens Jean-François Rees René Rezsöházy	FB [q2] [0h+50h] [5 Credits]
-------------	------------------------	---	------------------------------------

○ Anglais

○ LANG1863	English for Students in Sciences (Upper-Intermediate level) 🟡	Ahmed Adriouche (coord.) Catherine Avery (coord.) Amandine Dumont (coord.) Sandrine Jacob (coord.) Hila Peer Nevin Serbest Colleen Starrs Françoise Stas (coord.)	FB [q1 or q2] [30h] [2 Credits]
------------	---	--	------------------------------------

○ Stage

○ LVET1244	Initiation à la ruralité et stage d'immersion en milieu animalier 🟡	Isabelle Donnay André Moens	FB [q1 or q2] [50h] [2 Credits]
------------	---	--------------------------------	------------------------------------

⊗ Optional courses

These credits are not counted within the 120 required credits.

⊗ LSST1001	IngénieuxSud	Stéphanie Merle Jean-Pierre Raskin (coord.)	FB [q1+q2] [15h+45h] [5 Credits]
⊗ LSST1002M	Information and critical thinking - MOOC	Myriam De Kesel Jean-François Rees	FB [q2] [30h+15h] [3 Credits]

VETE1BA - Information

Access Requirements

Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.

The admission requirements must be met prior to enrolment in the University.

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

SUMMARY

- [General access requirements](#)
- [Specific access requirements](#)
- [Access based on validation of professional experience](#)
- [Special requirements to access some programmes](#)

General access requirements

Except as otherwise provided by other specific legal provisions, admission to undergraduate courses leading to the award of a Bachelor's degree will be granted to students with one of the following qualifications :

1. A Certificate of Upper Secondary Education issued during or after the 1993-1994 academic year by an establishment offering full-time secondary education or an adult education centre in the French Community of Belgium and, as the case may be, approved if it was issued by an educational institution before 1 January 2008 or affixed with the seal of the French Community if it was issued after this date, or an equivalent certificate awarded by the Examination Board of the French Community during or after 1994;
2. A Certificate of Upper Secondary Education issued no later than the end of the 1992-1993 academic year, along with official documentation attesting to the student's ability to pursue higher education for students applying for a full-length undergraduate degree programme;
3. A diploma awarded by a higher education institution within the French Community that confers an academic degree issued under the above-mentioned Decree, or a diploma awarded by a university or institution dispensing full-time higher education in accordance with earlier legislation;
4. A higher education certificate or diploma awarded by an adult education centre;
5. A pass certificate for one of the [entrance examinations](https://uclouvain.be/fr/etudier/inscriptions/examens-admission.html) (https://uclouvain.be/fr/etudier/inscriptions/examens-admission.html) organized by higher education institutions or by an examination board of the French Community; this document gives admission to studies in the sectors, fields or programmes indicated therein;
6. A diploma, certificate of studies or other qualification similar to those mentioned above, issued by the Flemish Community of Belgium, the German Community of Belgium or the Royal Military Academy;
7. A diploma, certificate of studies or other qualification obtained abroad and deemed equivalent to the first four mentioned above by virtue of a law, decree, European directive or international convention;

Note:

Requests for equivalence must be submitted to the Equivalence department ([Service des équivalences](#)) of the Ministry of Higher Education and Scientific Research of the French Community of Belgium in compliance with the official deadline.

The following two qualifications are automatically deemed equivalent to the Certificate of Upper Secondary Education (Certificat d'enseignement secondaire supérieur – CESS):

- European Baccalaureate issued by the Board of Governors of a European School,
- International Baccalaureate issued by the International Baccalaureate Office in Geneva.

8. Official documentation attesting to a student's ability to pursue higher education (diplôme d'aptitude à accéder à l'enseignement supérieur - DAES), issued by the Examination Board of the French Community.

Specific access requirements

- To be eligible to apply to a bachelor's programme, holder of a non-belgian degree who do not have Belgian student status must also:
 - have earned a secondary school degree within the last three years;
 - not already hold a bachelor's degree; and,
- Candidates, whatever their nationality, with a secondary school diploma from a country outside the European Union, must have obtained an average of 13/20 minimum or, failing that, have obtained this average, have passed one year of study in Belgium (for example special Maths / sciences).
- For any secondary school diploma **from a European Union country**, the admission request must contain the equivalence of your diploma or, at the very least, proof of the filing of the equivalence request with the Wallonia-Brussels Federation (French Community of Belgium). For any information relating to obtaining an equivalence, please refer to [the following site](#).

- Not to have obtained a secondary education diploma for more than 3 years maximum. Example: for an admission application for the academic year 2021-2022, you must have obtained your diploma during the academic years 2018-2019, 2019-2020 or 2020-2021. In the French Community of Belgium, the academic year runs from September 14 to September 13.[l_information/2021/common-bachelor/](#)

Access based on validation of professional experience

Admission to undergraduate studies on the basis of accreditation of knowledge and skills obtained through professional or personal experience (Accreditation of Prior Experience)

Subject to the general requirements laid down by the authorities of the higher education institution, with the aim of admission to the undergraduate programme, the examination boards accredit the knowledge and skills that students have obtained through their professional or personal experience.

This experience must correspond to at least five years of documented activity, with years spent in higher education being partially taken into account: 60 credits are deemed equivalent to one year of experience, with a maximum of two years being counted. At the end of an assessment procedure organized by the authorities of the higher education institution, the Examination Board will decide whether a student has sufficient skills and knowledge to successfully pursue undergraduate studies.

After this assessment, the Examination Board will determine the additional courses and possible exemptions constituting the supplementary requirements for the student's admission.

Special requirements to access some programmes

- Admission to **undergraduate studies in engineering: civil engineering and architect**

Pass certificate for the special entrance examination for undergraduate studies in engineering: civil engineering and architect (<https://uclouvain.be/fr/facultes/epl/examenadmission.html>).

Admission to these courses is always subject to students passing the special entrance examination. Contact the faculty office for the programme content and the examination arrangements.

- Admission to **undergraduate studies in veterinary medicine**

Admission to undergraduate studies in veterinary medicine is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents) (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>).

- Admission to **undergraduate studies in physiotherapy and rehabilitation**

Admission to undergraduate studies in physiotherapy and rehabilitation is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents). (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>)

- Admission to **undergraduate studies in psychology and education: speech and language therapy**

Admission to undergraduate studies in psychology and education: speech and language therapy is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents) (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>).

- Admission to **undergraduate studies in medicine and dental science**

Admission to undergraduate studies in medicine and dental science is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents). (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>)

Note: students wishing to enrol for a **Bachelor's degree in Medicine** or a **Bachelor's degree in dental science** must first sit an aptitude test (fr) (<https://uclouvain.be/en/study/inscriptions/etudes-contingentes.html>).

Teaching method

Des séances sont organisées au cours de la première année autour des questions de méthode de travail, par exemple la gestion du temps ou la manière d'aborder les différentes matières.

Outre des rapports à remettre ou des contrôles de connaissances au début de certaines séances de laboratoires, des interrogations obligatoires intervenant dans la note finale de chaque matière sont organisées après un mois de cours au premier quadrimestre.

Les exercices et laboratoires sont organisés en petits groupes et sont encadrés par des assistants. Les monitorats permettent à ceux qui le souhaitent de faire le point sur les matières vues au cours : les enseignants de chaque discipline répondent aux questions des étudiants et expliquent les points moins bien compris.

La plupart des enseignements disposent également d'un site internet ou est déposée une série d'informations utiles pour l'étude.

Evaluation

The evaluation methods comply with the regulations concerning studies and exams (<https://uclouvain.be/fr/decouvrir/rgee.html>). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

Différentes modalités sont mises en oeuvre pour l'évaluation des connaissances et des compétences acquises au cours de la formation; elles sont adaptées aux types de prestations : évaluation continue notamment pour les exercices pratiques, évaluation des travaux personnels et de groupe, évaluation globale (écrite et/ou orale) durant les sessions d'examens.

Mobility and/or Internationalisation outlook

International mobility is recommended rather within the framework of master programmes.

Moreover, participation in a short mobility can be envisaged at the end of the bachelor's degree in the framework of the Athens network <https://www.paristech.fr/fr/international/europe/athens>

Possible trainings at the end of the programme

Positioning of the programme within the University cursus

Successful completion of this programme entitles direct access to the master's in Veterinary Medicine, organised by the University of Liege.

Other studies accessible upon completion of the programme

Contacts

Curriculum Management

Entity

Structure entity

Denomination

Faculty

Sector

Acronym

Postal address

SST/SC/VETE

(VETE)

Faculty of Science (SC)

Sciences and Technology (SST)

VETE

Croix du sud 4-5 - bte L7.07.10

1348 Louvain-la-Neuve

Website

<https://uclouvain.be/fr/facultes/sc/vete>

Academic supervisor: [André Moens](https://uclouvain.be/repertoires/andre.moens) (<https://uclouvain.be/repertoires/andre.moens>)

Jury

- President and study advisor: [André Moens](https://uclouvain.be/repertoires/andre.moens) (<https://uclouvain.be/repertoires/andre.moens>)
- Secretary: [Françoise Gofflot](https://uclouvain.be/repertoires/francoise.gofflot) (<https://uclouvain.be/repertoires/francoise.gofflot>)

Useful Contact(s)

- Administrative manager for the student's annual program: [Nathalie Micha](https://uclouvain.be/repertoires/nathalie.micha) (<https://uclouvain.be/repertoires/nathalie.micha>)

- Secretary of the School of veterinary medicine: Catherine De Roy (<https://uclouvain.be/repertoires/catherine.deroy>)

