Postgraduate Diploma
Laboratory Analysis in Large Animals

tech technological university

tech technological university

Postgraduate Diploma
Laboratory Analysis in Large Animals

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/in/veterinary-medicine/postgraduate-diploma/postgraduate-diploma-laboratory-analysis-large-animals

Index

01

Introduction

This program is unique because it allows for the development of in-depth and complete knowledge on Laboratory Analysis in Large Animals, in a distance learning format, adapting the content to the latest developments that are emerging in scientific publications.

Give your carer the boost it needs and specialize in a area with a high demand for professionals.

Large animals can have complex pathologies, so it is necessary to have specialized veterinarians who can treat them"

The Postgraduate Diploma in Laboratory Analysis in Large Animals incorporates innovative knowledge, based on the latest scientific evidence, that allows veterinary professionals to stay up-to-date on the newest treatments and emerging diseases that affect large animals across the world as a consequence of globalization.

Specialized and advanced knowledge of these diseases is necessary since outbreaks of some diseases considered eradicated or new ones may occur in all countries of the world.

Clinical practice is a very dynamic activity, new treatments are constantly appearing in scientific publications and veterinarians must be aware of them in order to be able to offer these options to their clients. Each of the modules in this program covers one of the organ systems, with emphasis on those systems that are most frequently affected in the Large Animals.

With respect to ruminants, although their handling and the diseases they suffer from are different from those of horses, they must also be understood with sufficient scientific expertise to be able to establish adequate treatments and accurate prognoses. Camelids of the new world or South America, which include mainly llamas and alpacas as domesticated animals, are animals bred for different purposes including fiber production, pack animals or meat production in South America. Horses are animals that are used both for leisure and as companion animals, as well as in different sports disciplines, which adds an important added economic value. It is essential to have a high level of knowledge in internal medicine to be able to work with these horses, since, due to their economic value, they are not readily accessible to clinicians with little training.

This program is designed by professors with the highest recognized degree of specialization, thus guaranteeing its quality in all aspects, both clinical and scientific, in large animals.

This **Postgraduate Diploma in Laboratory Analysis in Large Animals** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical cases presented by experts in Laboratory Analysis in Large Animals
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Latest innovations on Laboratory Analysis in Large Animals
- Practical exercises where self-assessment can be used to improve learning
- Special emphasis on innovative methodologies in Laboratory Analysis in Large Animals
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

Get trained with us and learn how to diagnose and treat diseases in large animals, in order to improve their quality of life"

This Postgraduate Diploma is the best investment you can make when choosing a refresher program to update your knowledge in Laboratory Analysis in Large Animals"

This program comes with the best educational material, providing you with a contextual approach that will facilitate your learning.

This 100% online program will allow you to combine your studies with your professional work while increasing your knowledge in this field.

The teaching staff includes professionals from the field of veterinary medicine, who bring to this training the experience of their work, in addition to recognized specialists from reference societies and prestigious universities.

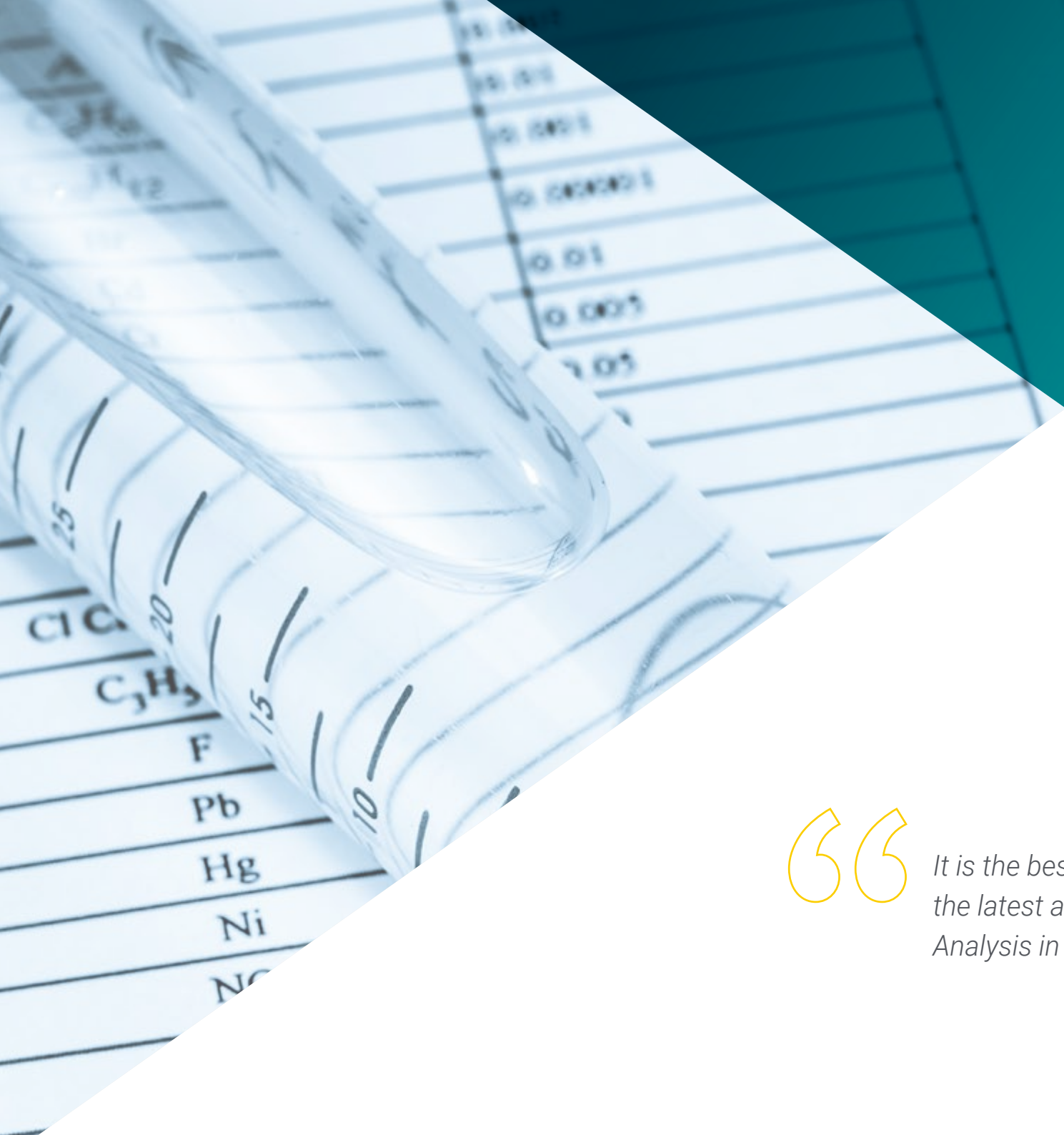
The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the specialist must try to solve the different professional practice situations that arise throughout the program. For this, the professional will have the help of an innovative interactive video system made by renowned and experienced experts in Internal Medicine in Large Animals.

02

Objectives

The Postgraduate Diploma in Laboratory Analysis in Large Animals is designed to facilitate the performance of veterinary professionals with the latest advances and the most innovative treatments in the sector.



It is the best option to learn about the latest advances in Laboratory Analysis in Large Animals"

General Objectives

- Examine the physiological functioning of the urinary system
- Establish an appropriate methodology for the examination of patients with urinary and renal problems
- Identify all clinical signs associated with kidney disease
- Establish the specific clinical approach to animals with a kidney disorder
- Generate specialized knowledge of the most common vascular problems
- Identify all clinical signs associated with each dermatological disease
- Establish the specific clinical approach for each pathology and determine the prognosis and the most appropriate treatment for each skin disease
- Determine the importance of the endocrine pathologies in horses and their relationship with laminitis
- Generate specialized knowledge of the main endocrine pathologies in cattle, small ruminants and camelids
- Establish how to carry out correct analytical interpretation both in adult as well as geriatric and newborn animals
- Develop the basics of hemostasis and coagulation, as well as the pathologies associated with their failure
- Establish the different types of immunological reactions, as well as the diseases they cause
- Generate advanced knowledge in acid-base interpretation
- Specify the basics of fluid therapy

Specific Objectives

Module 1. Alterations of the Urinary System in Large Animals

- Develop specialized knowledge of clinical examination in urinary and renal problems
- Perform renal controls to avoid renal toxicity
- Identify the alterations specific to the different renal diseases
- Establish an appropriate diagnostic plan for the main clinical manifestations of renal problems
- Correctly diagnose the different renal problems and establish a prognosis for these animals
- Determine a treatment plan, both short- and long-term, for the main urinary and renal problems

Module 2. Endocrinology and Dermatology in Large Animals

- Identify the main pathologies affecting the skin
- Analyze the origin of the problem and establish the prognosis of dermatitis
- Recognize the clinical and laboratory signs of the main dermatological diseases
- Determine the symptoms of skin diseases of fungal and parasitic origin and propose therapeutic options
- Establish the symptoms of allergic and immune-mediated skin diseases and propose therapeutic options
- Examine the different types of skin neoplasms, propose an appropriate treatment and determine the prognosis
- Identify the symptoms of other skin diseases as well as their prognosis and treatment options
- Gain sound knowledge of the diagnostic procedures used in endocrinology and their interpretation
- Determine the endocrine influence in certain disorders attributed, in principle, to other etiologies: laminitis, sepsis, decreased performance, bone pathologies in horses
- Establish the main endocrine pathologies that can be found in both adult horses and neonates, how to diagnose them and how to treat them
- Establish a working methodology for cattle, small ruminants and camelids with ocular neoplasia

Module 3. Laboratorial Diagnosis in Equidae. Alterations of the Hematopoietic System and Immunology in Large Animals

- Develop an advanced methodology to carry out a correct diagnosis of red series and white series alterations
- Identify and implement the necessary therapy in case of coagulation disorders
- Perform basic cytological interpretation of blood smears, peritoneal fluid and cerebrospinal fluid
- Perform a correct interpretation of analytical tests with biochemical alterations in adults and foals
- Identify and treat immune-mediated pathologies
- Carry out a complete analysis of the state of the acid-base in a critical patient
- Implement an appropriate fluid therapy plan based on the patient's imbalances

Join one of the largest online universities in the world”

03

Course Management

The program's teaching staff includes leading experts in Laboratory Analysis in Large Animals, who bring their work experience to this training program. Professionals of recognized prestige have joined forces to offer you this high-level training

Our team of teachers, experts in Laboratory Analysis in Large Animals, will help you reach success in your profession"

Management

Dr. Martín Cuervo, María

- Doctor of Veterinary Medicine from the University of Extremadura. Doctoral thesis on Inflammation Markers in Horses in a Critical Condition, 2017
- Degree in Veterinary Medicine from the University of Cordoba
- President of the Scientific Committee in the National Congress of the Spanish Association of Equine Veterinarians (AVEE), 2020.
- Member of the Scientific Committee in the International Committee of the International Purebred Spanish Horse Show (SICAB), 2020
- Veterinarian, member of the European Board of Veterinary Specialization (EBVS) and the European College of Equine Internal Medicine (ECVIM)
- Member of the Spanish Association of Equine Veterinarians (AVEE).
- Head of the Equinie Internal Medicine Services in the University of Extremadura (from 2015-present)

Dr. Barba Recreo, Marta

- PhD in Biomedical Sciences, Auburn University, Alabama, USA, in 2016.
- Diplomate of the American College of Internal Medicine, Large Animal in 2015.
- Degree in Veterinary Medicine from the University of Zaragoza in 2009
- Head of the Equine Internal Medicine Service, Clinical Veterinary Hospital, CEU Cardenal Herrera University, Valencia.

Professors

Dr. Diez de Castro, Elisa

- PhD Veterinary Medicine from the University of Cordoba Doctoral thesis in Equine Endocrinology in 2015
- Graduate of the European College of Equine Internal Medicine (ECEIM).
- Degree in Veterinary Medicine from the University of Cordoba
- Associate Professor of the Animal Medicine and Surgery Department at the University of Cordoba for the training and evaluation of the supervised internship (rotatory) of the fifth year students in the veterinary degree
- Equine Internal Medicine Service at Clinical Veterinary Hospital at the University of Cordoba

Dr. Viu Mella, Judit

- Cum Laude PhD in Animal Medicine and Health from the Autonomous University of Barcelona in 2013.
- Outstanding award for the thesis "Desequilibrios ácido-base en potros recién nacidos y caballos adultos evaluados por el enfoque cuantitativo" (Acid-base imbalances in newborn foals and adult horses evaluated by quantitative approach)
- Diplomate of the American College of Internal Equine Medicine in 2019.
- Degree in Veterinary Medicine from the Autonomous University of Barcelona 2003
- Member of the Spanish Association of Specialist Veterinarians (AVEDE)
- Equine Internal Medicine and Anesthesia Services in the Sierra de Madrid Veterinary Hospital
- Anesthetist in the equine unit of the UAB Veterinary Clinical Hospital (May 2007 to August 2018)

Dr. María Villalba Orero, María

- Doctor in Veterinary Medicine, Madrid Complutense University. Doctoral thesis in Equine Anesthesia in 2014
- Degree in Veterinary Medicine from the Complutense University Madrid
- Associate Professor in the Department of Animal Medicine and Surgery at the Complutense University Madrid, with teaching experience in equine internal medicine, specializing in cardiology, since 2017
- Professor of Pathophysiology at the Alfonso X el Sabio University (2014- 2017)
- Scientific advisor of cardiovascular and pulmonary ultrasound in the National Center of Cardiovascular Research Since 2017
- Private Equine Cardiology Service, working throughout Spain, since 2008.

04

Structure and Content

The structure of the content has been designed by the best professionals in the field of Laboratory Analysis in Large Animals, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to veterinary medicine.

We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too"

Module 1. Alterations of the Urinary System in Large Animals

1.1. Anatomy, Physiology and Diagnostic Tests
- 1.1.1. Anatomy
- 1.1.2. Physiology
  - 1.1.2.1. Elimination of Nitrogenous Components
  - 1.1.2.2. Electrolyte Removal and Recovery (Tubular Function)
  - 1.1.2.3. Water Balance

1.2. Hematology and Blood Biochemistry
- 1.2.1. Urianalysis
  - 1.2.1.1. Density
  - 1.2.1.2. Test Strip
  - 1.2.1.3. Microscopy
  - 1.2.1.4. Enzimuria
  - 1.2.1.5. Excretional Fractions
  - 1.2.1.6. Cultures
- 1.2.2. Imaging Techniques
  - 1.2.2.1. Ultrasound
  - 1.2.2.2. Radiology
  - 1.2.2.4. Endoscopy
  - 1.2.2.5. Gammagraphy
- 1.2.3. Renal Biopsy
- 1.2.4. Quantification of Renal Function (Clearance)

1.3. Acute Renal Insufficiency (ARF) in Horses
- 1.3.1. Causes
- 1.3.2. Pathophysiology
- 1.3.3. Acute Tubular Necrosis
- 1.3.4. Acute Interstitial Nephritis
- 1.3.5. Acute Glomerulonephritis
- 1.3.6. Diagnosis
- 1.3.7. Treatment
- 1.3.8. Prognosis

1.4. Chronic Renal Insufficiency in Horses
- 1.4.1. Predisposing Factors
- 1.4.2. Glomerulonephritis
- 1.4.3. Acute Interstitial Nephritis
- 1.4.4. Other Causes
- 1.4.5. Diagnosis
- 1.4.6. Treatment
- 1.4.7. Prognosis

1.5. Renal Tubular Acidosis in Horse
- 1.5.1. Pathophysiology
- 1.5.2. Type 1
- 1.5.3. Type 2
- 1.5.4. Type 3
- 1.5.5. Quantitative/ Traditional Approximation of Imbalances
- 1.5.6. Diagnosis
- 1.5.7. Treatment

1.6. Investigation and Differential Diagnosis of Polyuria/Polydipsia
- 1.6.1. Diagnostic Protocol
- 1.6.2. Causes
  - 1.6.2.1. Renal Insufficiency
  - 1.6.2.2. *Cushing*
  - 1.6.2.3. Primary Polydipsia
  - 1.6.2.4. Excessive Consumption of Salt
  - 1.6.2.5. Diabetes Insipidus
  - 1.6.2.6. Diabetes Mellitus
  - 1.6.2.7. Sepsis
  - 1.6.2.8. Iatrogenic

1.7. Investigation and Differential Diagnosis of Pigmenturia (Renal Hemorrhage, Urolithiasis, Urethritis)
- 1.7.1. Urethritis/Urethral Defects
- 1.7.2. Cystitis
- 1.7.3. Pyelonephritis

1.7.4. Urolithiasis
1.7.4.1. Urethral Calculi
1.7.4.2. Bladder Stones
1.7.5. Idiopathic Renal Hematuria
1.7.6. Hematuria Associated with Exercise
1.7.7. Pigmenturia Caused by Systemic Pathology
1.8. Genitourinary Diseases in Cattle
1.8.1. Congenital Genitourinary Pathologies
1.8.2. Kidney Damage and Failure
1.8.3. Other Diseases of the Kidneys
1.8.4. Diseases of the Urethers, Bladder and Urethra
1.9. Genitouriary Diseases in Small Ruminants
1.9.1. Congenital Genitourinary Pathologies
1.9.2. Kidney Damage and Failure
1.9.3. Other Diseases of the Kidneys
1.9.4. Urinary Obstruction.
1.9.5. Diseases of the Urethers, Bladder and Urethra
1.10. Genitourinary Diseases in Camelids
1.10.1. Congenital Genitourinary Pathologies
1.10.2. Kidney Damage and Failure
1.10.3. Other Diseases of the Kidneys
1.10.4. Urinary Obstruction.
1.10.5. Diseases of the Urethers, Bladder and Urethra
1.10.6. Neoplasty

Module 2. Endocrinology and Dermatology in Large Animals

2.1. Clinical Approach and Diagnostic Tests in Equine Dermatology
2.1.1. Medical History
2.1.2. Sampling and Main Diagnostic Methods
2.1.3. Other Specific Diagnostic Techniques
2.2. Infectious, Immune-Mediated and Allergic Diseases in Horses
2.2.1. Viral Diseases
2.2.2. Bacterial diseases
2.2.3. Fungal Diseases
2.2.4. Parasitic diseases
2.2.5. Hypersensitivity Reactions: Types
2.2.6. Insect Sting Allergy
2.2.7. Other Types of Allergies and Skin Reactions
2.3. Cutaneous Neoplasms in Equidae
2.3.1. Sarcoids
2.3.2. Melanoma
2.3.3. Squamous Cell Carcinoma
2.3.4. Other Skin Tumors
2.4. Alterations to the Thyroid and Adrenal Gland in Equidae
2.4.1. Functions of the Thyroids
2.4.2. Factors Affecting the Measurement of Thyroid Hormones
2.4.3. Diagnostic Test for Thyroid Function
2.4.4. Hypothyroidism
2.4.5. Hyperthyroidism
2.4.6. Neoplasms of the Thyroids
2.4.7. Adrenal Insufficiency in Adults
2.4.8. Adrenal Insufficiency in Foals
2.4.9. Hyperadrenocorticism
2.4.10. Adrenocortical Neoplasms

2.5. Dysfunction of the Pars Intermedia of the Pituitary in Equidae
- 2.5.1. Etiopathogenesis
- 2.5.2. Clinical Signs
- 2.5.3. Diagnosis
- 2.5.4. Treatment

2.6. Equine Metabolic Syndrome
- 2.6.1. Etiopathogenesis
- 2.6.2. Clinical Signs
- 2.6.3. Diagnosis
- 2.6.4. Treatment

2.7. Alterations in the Metabolism of Calcium, Phosphorus and Magnesium in Horses. Anhidrosis
- 2.7.1. Alterations That Occur With Hypocalcemia
- 2.7.2. Alterations That Occur With Hypercalcemia
- 2.7.3. Diseases That Occur With Hypophosphatemia
- 2.7.4. Pathologies Associated with Hyperphosphatemia
- 2.7.5. Hypomagnesemia
- 2.7.6. Hypermagnesemia
- 2.7.7. Anhidrosis

2.8. Dermatological, Metabolic and Endocrine Alterations in Cattle
- 2.8.1. Congenital Dermatological Pathologies
- 2.8.2. Skin and Fur Diseases
- 2.8.3. Diseases of the Subcutis
- 2.8.4. Diseases of Hooves and Horns
- 2.8.5. Cutaneous Neoplasms
- 2.8.6. Ketosis
- 2.8.7. Calcium, Magnesium and Phosphorous Disorders
- 2.8.8. Other Endocrinopathies

2.9. Dermatological and Endocrine Alterations in Small Ruminants
- 2.9.1. Congenital Dermatological Pathologies
- 2.9.2. Infectious Dermatitis
- 2.9.3. Vesicular and Mucocutaneous Junction Diseases
- 2.9.4. Parasitic Diseases of Hair and Wool
- 2.9.5. Caseous Lymphadenitis
- 2.9.6. Skin and Adnexal Diseases Associated with Toxicity and Nutritional Problems
- 2.9.7. Neoplasty
- 2.9.8. Pregnancy Toxemia
- 2.9.9. Stump, Rickets

2.10. Dermatological and Endocrine Alterations in Camelids
- 2.10.1. Infectious Dermatitis
- 2.10.2. Mucocutaneous Junction Diseases
- 2.10.3. Diseases Affecting Fiber Quality

Module 3. Laboratorial Diagnosis in Equidae. Alterations of the Hematopoietic System and Immunology in Large Animals

3.1. Hematology in Adult Horses: Alterations in the Red Series.
- 3.1.1. Physiology of Red Blood Cells and Platelets
- 3.1.2. Interpretation of Alterations in the Red Series
- 3.1.3. Iron Metabolism
- 3.1.4. Thrombocytopenia/Thrombocytosis
- 3.1.5. Polycythemia
- 3.1.6. Anemia
  - 3.1.6.1. Loss: Hemorrhage
  - 3.1.6.2. Destruction
    - 3.1.6.2.1. Infectious and Parasitic Diseases That Cause Anemia: Piroplasmosis, EIA and Other Diseases
    - 3.1.6.2.2. Immune-mediated Hemolysis
    - 3.1.6.2.3. Neonatal Isoerythrolisis
    - 3.1.6.2.4. Oxidative Damage

3.1.6.3. Lack of Production
3.1.6.3.1. Anemia Chronic Inflammation
3.1.6.3.2. Myeloptisis/Aplasia Medular
3.1.7. Physiology of the White Series
3.1.8. Neutrophils
3.1.9. Eosinophils
3.1.10. Basophils
3.1.11. Lymphocytes
3.1.12. Mast Cells
3.1.13. Leukaemias
3.2. Biochemistry in Adult Horses
3.2.1. Renal Profile
3.2.2. Liver Profile
3.2.3. Acute Phase Proteins
3.2.4. Muscular Profile
3.2.5. Other Determinants
3.3. Hematology and Biochemistry in Foals/ Geriatric Horses
3.3.1. Differences in Hematology
3.3.2. Differences in Biochemistry
3.3.2.1.Differences in Renal Function
3.3.2.2 Differences in Liver Function
3.3.2.3 Differences in Muscular Profile
3.4. Immune Response of Foals and Geriatric Horses
3.4.1. Peculiarities of the Immune System of Neonatal Foals
3.4.2. Evolution of the Immune Response During the First Year of Age
3.4.3. Senecundity: Peculiarities of the Geriatric Immune System
3.5. Hypersensitivity Reactions. Immune-Mediated Diseases
3.5.1. Hypersensitivity Type 1
3.5.2. Hypersensitivity Type 2
3.5.3. Hypersensitivity Type 3
3.5.4. Hypersensitivity Type 4
3.5.5. Immunocomplexes Manifestations of Immune-Mediated Diseases
3.6. Hemostasis Disorders
3.6.1. Primary Hemostasis
3.6.2. Secondary Hemostasis
3.6.3. Coagulation Based on Intrinsic and Extrinsic Pathways vs. Cell-Based Coagulation Model (Initiation, Propagation and Amplification)
3.6.4. Anticoagulation
3.6.5. Fibrinolysis/Antifibrinolysis
3.6.6. Disseminated Intravascular Coagulation
3.6.7. Hemorrhagic Purpura
3.6.8. Hereditary Problems
3.6.9. Procoagulant and Anticoagulant Treatments
3.7. Basic Principles of Acid-Base Equilibrium. Fluid Therapy
3.7.1. Introduction. Why is Acid-Base Equilibrium Important?
3.7.2. Basic Concepts
3.7.3. Protection Mechanisms: Short and Long-Term Slope Compensations
3.7.4. Interpreting Methods
3.7.5. Step by Step. How to Interpret the Acid-Base to Obtain Maximum Information
3.7.5.1. Lactate
3.7.5.2. Electrolytes
3.7.5.2.1. Hypernatremia (>145mmol/l)
3.7.5.2.2. Hyponatremia (Horse<134 mmol/l)
3.7.5.2.3. Hyperpotassemia or Hyperkalemia (>4,5mmol/l)
3.7.5.2.4. Hypotassemia or Hypokalemia (<3.5 mmol/l)
3.7.5.2.5. Hyperchloremia (>110 mmol/l)
3.7.5.2.6. Hypochloremia (<90 mmol/l)
3.7.5.3. SIDm
3.7.5.4. ATO
3.7.5.5. SIG
3.7.6. Classification of the Alterations
3.7.7. Basic Principles of Fluid Therapy
3.7.8. Body Composition of Fluids and Electrolytes

3.7.9. Estimation of Dehydration
3.7.10. Types of Fluid
3.7.10.1. Crystaloid Solutions:
3.7.10.1.1 Ringer's Lactate
3.7.10.1.2 Isofundin®
3.7.10.1.3 Saline Solution (0.9% NaCl)
4.7.10.1.4 Sterovet®
3.7.10.1.5 Bicarbonate
3.7.10.1.6 Glucosaline 0,3/3,6%
3.7.10.1.7 Hypertonic Saline Solution (7.5% NaCl)
3.7.10.2 Colloidal Solutions
3.7.10.2.1 IsoHes®
3.7.10.2.2 Plasma

3.8. Interpretation of Laboratory Analysis and Immunological and Hematopoietic Alterations in Cattle
3.8.1. Blood Count
3.8.2. Blood Biochemistry
3.8.3. Allergies
3.8.4. Immune-Mediated Anemia
3.8.5. Thrombocytopenia

3.9. Interpretation of Laboratory Analysis and Immunological and Hematopoietic Alterations in Small Ruminants
3.9.1. Blood Count
3.9.2. Anemia and the FAMACHA System
3.9.3. Blood Biochemistry

3.10. Interpretation of Laboratory Analysis and Immunological and Hematopoietic Alterations in Camelids
3.10.1. Blood Count
3.10.2. Anemia
3.10.3. Blood Biochemistry

This training will allow you to advance in your career in a comfortable way"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

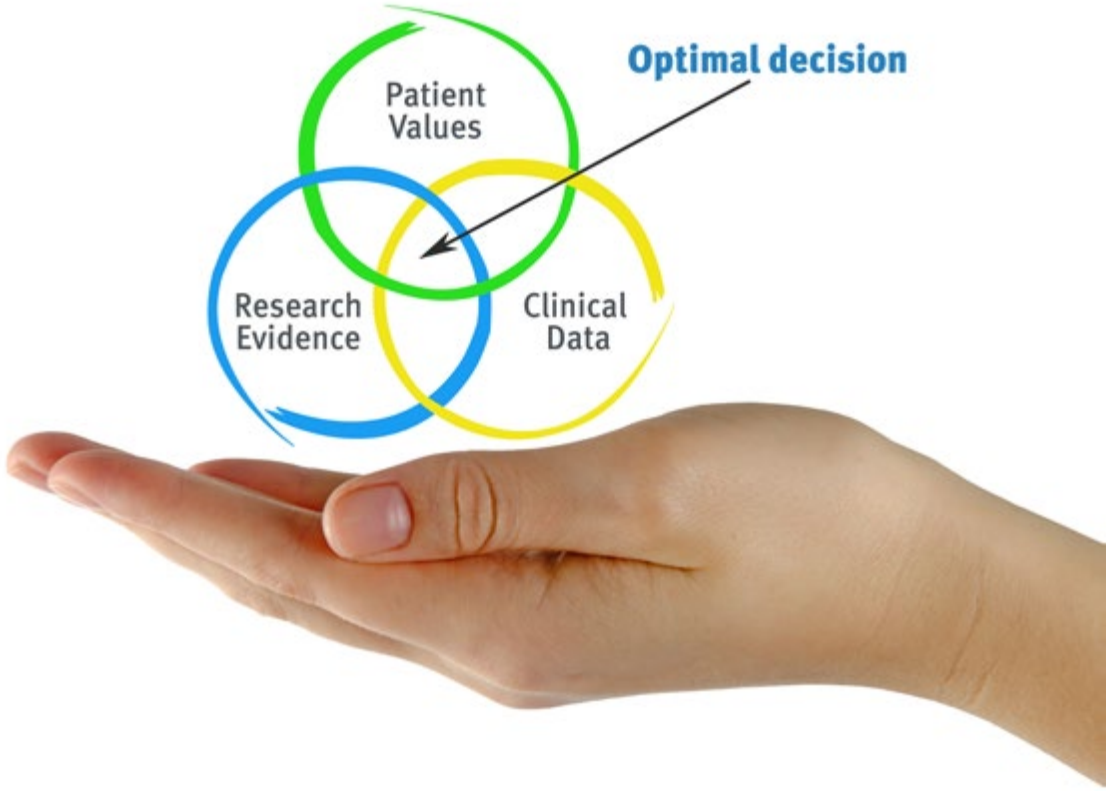
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

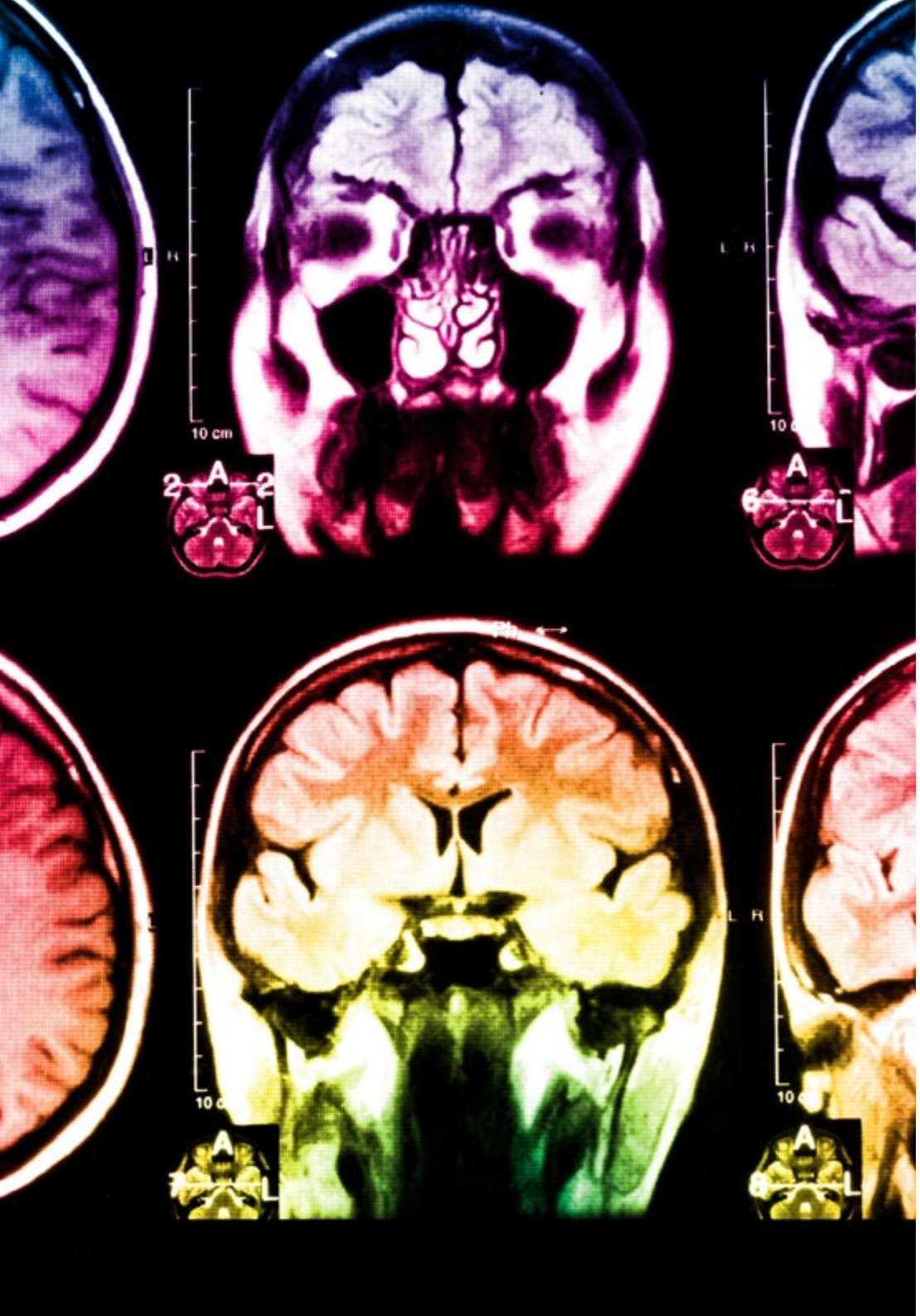
1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology more than 65,000 veterinarians have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. Our teaching method is developed in a highly demanding environment, where the students have a high socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

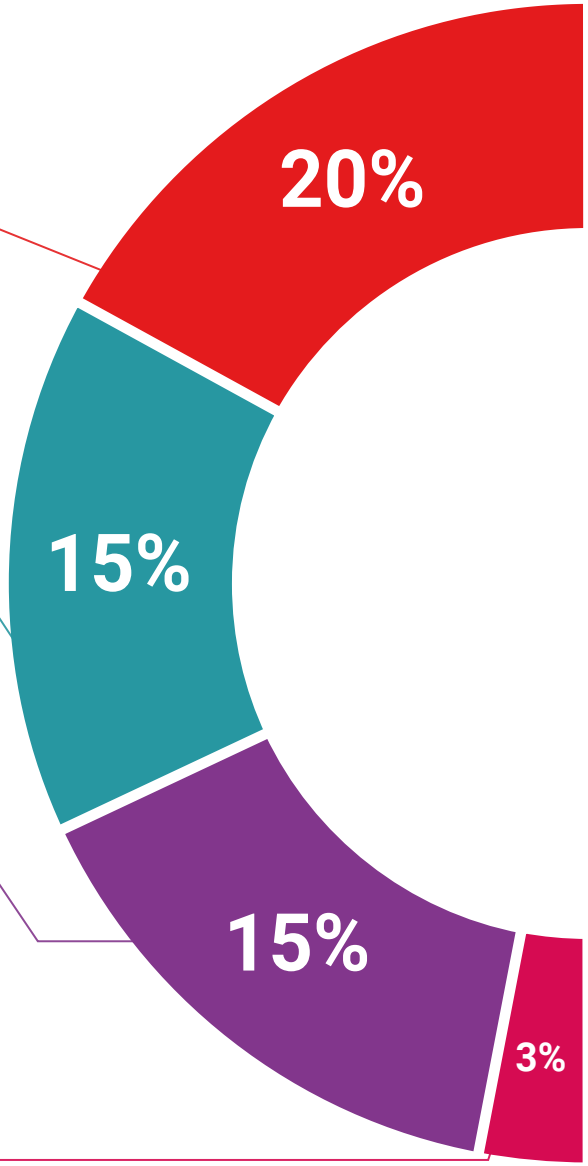
Interactive Summaries

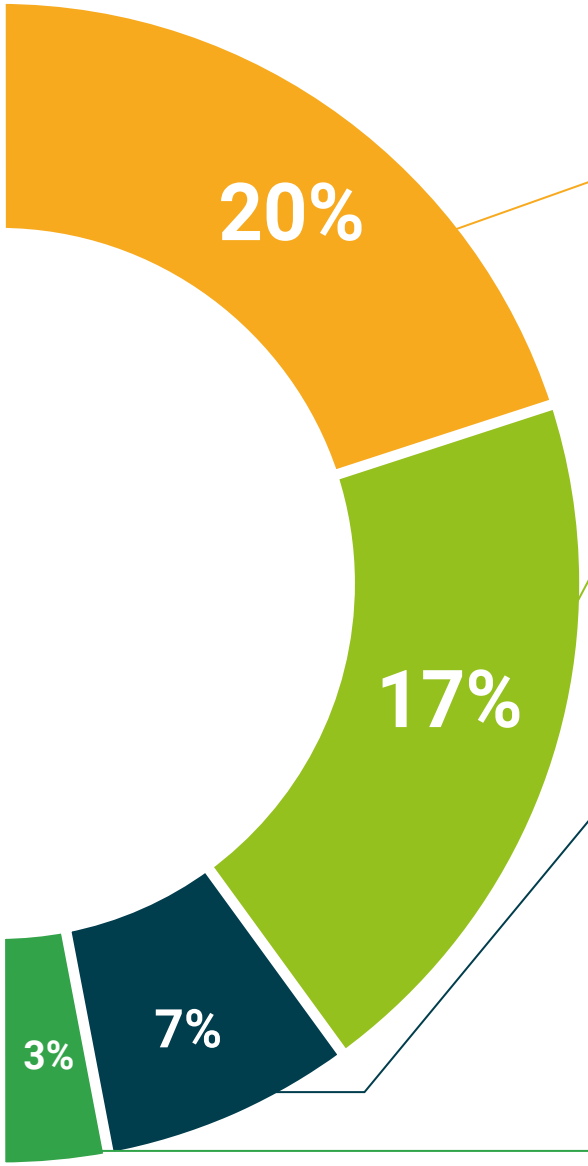
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

06

Certificate

This Postgraduate Diploma in Laboratory Analysis in Large Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This **Postgraduate Diploma in Laboratory Analysis in Large Animals** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma**, issued by **TECH Technological University** via tracked delivery*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Laboratory Analysis in Large Animals**

Official Nº of hours: **450 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Laboratory Analysis in Large Animals

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

tech technological university

Postgraduate Diploma
Laboratory Analysis in Large Animals

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Technological University**
- Dedication: **16h/week**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma
Laboratory Analysis in Large Animals

tech technological university