

Postgraduate Certificate Diagnosis and Treatment of Lameness in Large Animals





Postgraduate Certificate Diagnosis and Treatment of Lameness in Large Animals

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/veterinary-medicine/postgraduate-certificate/diagnosis-treatment-lameness-large-animals

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

The protocol for musculoskeletal injuries in ruminants (cattle, sheep), camelids (camels, alpacas, llamas) and swine (pigs, wild boars) often lacks the necessary uniformity due to the connotations and difficulties involved in their management. Therefore, physical examination and knowledge of the main musculoskeletal pathologies affecting these species is essential in order to reach a definitive diagnosis.

Specialize in Diagnosis and Treatment of Lameness in Large Animals with this high level training taught by professionals with extensive experience in the field.





“

This training is the best option you can find to specialize in and make more accurate diagnoses”

Veterinarians face new challenges every day in treating their patients. The Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals comprises a complete and up to date educational program including the latest advances in traumatology and orthopedic surgery in ruminants (cattle, sheep), camelids (camels, alpacas and llamas), swine (pigs, wild boars) and equidae (horses, donkeys and mules).

The theoretical and practical content has been chosen taking into account its potential practical application in daily clinical practice. Furthermore, the audiovisual material collects scientific and practical information on the essential disciplines for professional practice.

In each topic, practical cases presented by experts in Traumatology and Orthopedic Surgery in Large Animals have been developed, with the objective of the practically applying the knowledge acquired. In addition, students will participate in a self evaluation process to improve their learning and knowledge during their practical activities.

The teaching team of the Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals has programmed a careful selection of techniques used in the diagnosis and treatment of ruminants (cattle, sheep), camelids (camels, alpacas, llamas), swine (pigs, wild boars) and equidae (horses, donkeys and mules), including the description of musculoskeletal surgery and rehabilitation in those species to which they are applied.

The teaching surgeons of this program are Graduates of the European or American College of Veterinary Surgeons and have extensive experience both in the university field and in private practice. In both areas, they are responsible for large animal surgery services in leading veterinary centers and most of them direct residency programs, master's degree programs and research projects.

As a result of the training that the teaching staff of this Postgraduate Certificate undertook in North America and Europe, the techniques have been extensively tested and are internationally recognized.

All of these elements mentioned above make this Postgraduate Certificate a unique specialization program, exclusive and different to all the courses offered in other universities.

This **Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals** contains the most complete and up to date educational program on the market. The most important features of the program include:

- ◆ Practical cases presented by experts in Diagnosis and Treatment of Lameness in Large Animals: Equidae, Ruminants and Swine
- ◆ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ The latest innovations in Diagnosis and Treatment of Lameness in Large Animals
- ◆ Practical exercises where self assessment can be used to improve learning
- ◆ Special emphasis on innovative methodologies in Diagnosis and Treatment of Lameness 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



Don't miss the opportunity to study this Postgraduate Certificate with us. It's the perfect opportunity to advance in your veterinary career"

“

This course is the best investment you can make when choosing a refresher programme to update your existing knowledge of Large Animal Veterinary Medicine"

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

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

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 professionals must try to solve the different professional practice situations that arise during the Postgraduate Certificate. For this, the professional will have the help of an innovative interactive video system made by renowned and experienced experts in Diagnosis and Treatment of Lameness in Large Animals.



02

Objectives

The Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals is designed to facilitate the performance of the veterinary professional with the latest advances and most innovative treatments in the sector.





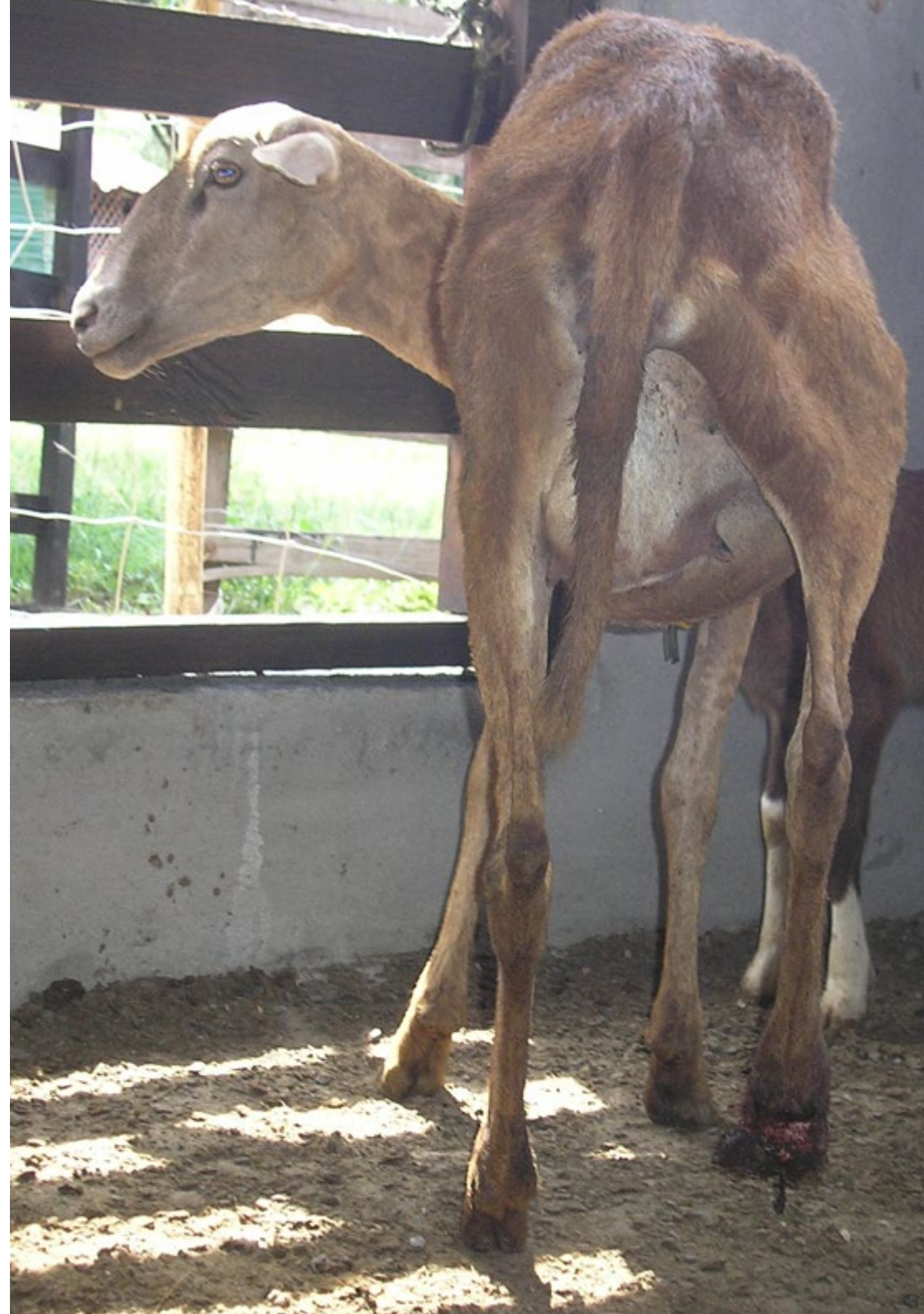
“

This is the best option to learn about the latest advances in Diagnosis and Treatment of Lameness in Large Animals”



General Objectives

- ♦ Establish the basic system and procedures in a lameness examination
- ♦ Identify the means available to locate an anatomical site as the cause of a claudication
- ♦ Establish the indications for the use of the different imaging techniques in the presence of an orthopedic problem
- ♦ Examine the main therapeutic options currently available on the market
- ♦ Examine the main pathological entities of the musculoskeletal system
- ♦ Analyze the main lesions of the axial skeleton
- ♦ Define the etiology of palmar hoof pain or podotrochlear pathology
- ♦ Compile the main findings in the diagnosis of bone, joint and soft tissue pathologies
- ♦ Present the different therapeutic options in the management of these pathologies





Specific Objectives

Module 1. Diagnosis of Lameness in Large Animals: Ruminants, Swine and Equidae

- ♦ Specialize the student in the collection of essential data to obtain a complete anamnesis
- ♦ Differentiate between the different conformations that are predisposed to developing injuries in the musculoskeletal system
- ♦ Recognize the symptoms presented by a patient with thoracic limb claudication
- ♦ Recognize the symptoms presented by a patient with pelvic limb claudication
- ♦ Interpret the results of local or regional anesthesia as diagnostic tools
- ♦ Generate criteria that allows for the appropriate selection of imaging diagnostic techniques in each case
- ♦ Assess in detail the indications and considerations of each pharmacological group in the therapeutic management of a musculoskeletal injury

Module 2. Main Musculoskeletal Pathologies in Large Animals: Ruminants, Swine and Equidae

- ♦ Gain specialized knowledge for diagnosing and treating an articular pathology
- ♦ Recognize the symptoms of tendon and ligament injuries
- ♦ Analyze the etiology and pathogenesis of lesions associated with biomechanical maladaptation processes
- ♦ Present the most frequent acute and subclinical myopathies
- ♦ Identify and recognize pathologies of the axial skeleton that are involved in a drop in sports performance
- ♦ Analyze the different differential diagnoses related to podotrochlear pathology and their therapeutic management
- ♦ Examine the different treatment strategies based on biological therapy

03

Course Management

The program's teaching staff includes leading experts in the diagnosis and treatment of lameness in large animals, who bring their work experience to this training program. They are world renowned doctors from different countries with proven theoretical and practical professional experience.





“

Our teaching team, experts in Diagnosis and Treatment of Lameness in Large Animals, will help you to achieve success in your profession”

Management



Dr. Muñoz Morán, Juan Alberto

- ♦ PhD in Veterinary Science
- ♦ Degree in Veterinary Medicine from the Complutense University of Madrid
- ♦ Graduate of the European College of Veterinary Surgeons
- ♦ Professor in Large Animal surgery at the Veterinary University of Pretoria, South Africa
- ♦ Head of the Equine Surgery Residency Program at the Veterinary University of Pretoria, South Africa
- ♦ Head of the Large Animal Surgery Department and professor at the Alfonso X el Sabio University, Madrid
- ♦ Surgeon at the Equine Hospital of Aznalcollar, Seville

Professors

Dr. Gómez Lucas, Raquel

- ♦ Doctor of Veterinary Medicine
- ♦ Degree in Veterinary from the Complutense University Madrid
- ♦ Graduate of the American College of Veterinary Sports Medicine and Rehabilitation (ACVSMR)
- ♦ Head of the Sports Medicine and Diagnostic Imaging Service of the Large Animal Area of the Clinical Veterinary Hospital of the Alfonso X el Sabio University since 2005



04

Structure and Content

The structure of the content has been designed by the best professionals in the field of Diagnosis and Treatment of 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.



“

This Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals contains the most complete and up to date scientific program on the market”

Module 1. Diagnosis of Lameness in Large Animals: Ruminants, Swine and Equidae

- 1.1. Medical History
 - 1.1.1. Basic Information
 - 1.1.2. Current Problem
 - 1.1.3. Importance of Conformation
 - 1.1.3.1. Thoracic Limbs
 - 1.1.3.2. Pelvic Limbs
 - 1.1.3.3. Back
 - 1.1.3.4. Digits
- 1.2. Static Physical Examination
 - 1.2.1. Observation
 - 1.2.2. Palpitation
- 1.3. Dynamic Physical Evaluation
 - 1.3.1. Basic Biomechanical Characteristics
 - 1.3.2. Exam Protocol
 - 1.3.3. Lameness of the Thoracic Limbs
 - 1.3.4. Lameness of the Pelvic Limb
 - 1.3.5. Types of Claudication
 - 1.3.6. Compensatory Lameness
 - 1.3.7. Classification
 - 1.3.8. Flexion Test
- 1.4. Diagnostic Anesthesia
 - 1.4.1. Types of Local Anesthetics
 - 1.4.2. General Considerations
 - 1.4.3. Perineural Anesthesia
 - 1.4.4. Intrasynovial Anesthesia
 - 1.4.5. Recommended Action Protocols
 - 1.4.6. Interpretation of Results
- 1.5. Analysis and Quantification of Movement
 - 1.5.1. Kinetic Study
 - 1.5.2. Kinematic Study

- 1.6. Radiological Examination
 - 1.6.1. General Considerations
 - 1.6.2. Main Findings and Interpretation
- 1.7. Ultrasound Examination
 - 1.7.1. General Considerations
 - 1.7.2. Main Findings and Interpretation
- 1.8. Advanced Diagnostic Imaging Techniques
 - 1.8.1. Magnetic Resonance
 - 1.8.2. Computerized Tomography
 - 1.8.3. Gammagraphy
- 1.9. Introduction to Treatment
 - 1.9.1. Conservative Medicine Therapies
 - 1.9.2. Surgical Management
- 1.10. Clinical Examination in Ruminants, Swine and Camelids
 - 1.10.1. Ruminants (Cattle, Sheep) and Camelids (Camels, Alpacas and Llamas)
 - 1.10.2. Swine (Pigs, Wild Boar)

Module 2. Main Musculoskeletal Pathologies in Large Animals: Ruminants, Swine and Equidae

- 2.1. Articular Pathology
 - 2.1.1. Classification
 - 2.1.2. Etiology
 - 2.1.3. Main Joints Affected in Sport Horses
 - 2.1.4. Diagnosis
 - 2.1.5. Treatment Management
- 2.2. Maladaptive Bone Pathology
 - 2.2.1. Etiology
 - 2.2.2. Diagnosis
 - 2.2.3. Treatment Management

- 2.3. Tendon Pathology
 - 2.3.1. Etiology
 - 2.3.2. Main Areas Affected in Sport Horses
 - 2.3.3. Diagnosis
 - 2.3.4. Treatment Management
- 2.4. Ligament Pathology
 - 2.4.1. Etiology
 - 2.4.2. Main Areas Affected in Sport Horses
 - 2.4.3. Diagnosis
 - 2.4.4. Treatment Management
- 2.5. Muscular Pathology
 - 2.5.1. Etiology and Classification
 - 2.5.2. Diagnosis
 - 2.5.3. Treatment Management
- 2.6. Head, Dorsum and Pelvis Pathologies
 - 2.6.1. Cervical Pathology
 - 2.6.2. Thoracolumbar Pathologies
 - 2.6.3. Lumbosacral Pathologies
 - 2.6.4. Sacroiliac Pathology
- 2.7. Podotrochlear Pathologies. Palmar Hoof Pain
 - 2.7.1. Etiology
 - 2.7.2. Clinical Signs
 - 2.7.3. Diagnosis
 - 2.7.4. Treatment Management
- 2.8. Conservative Therapy and Therapeutic Farriery
 - 2.8.1. Nonsteroidal Anti-Inflammatories
 - 2.8.2. Corticosteroids
 - 2.8.3. Hyaluronic Acid
 - 2.8.4. Glycosaminoglycans and Oral Supplements
 - 2.8.5. Bisphosphonates
 - 2.8.6. Polyacrylamide Gel
 - 2.8.7. Other treatments
 - 2.8.8. Therapeutic Farriery
- 2.9. Regenerative Biological Therapy
 - 2.9.1. Use of Mesenchymal Cells
 - 2.9.2. Autologous Conditioned Serum
 - 2.9.3. Autologous Protein Solution
 - 2.9.4. Growth Factors
 - 2.9.5. Platelet-rich Plasma
- 2.10. Main Musculoskeletal Pathologies in Ruminants, Camelids and Swine
 - 2.10.1. Ruminants (Cattle, Sheep) and Camelids (Camels, Alpacas and Llamas)
 - 2.10.2. Swine (Pigs, Wild Boar)



This training will allow you to advance in your career comfortably"

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. Gervas, 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

The Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals guarantees, in addition to the most rigorous and up to date training, access to a Postgraduate Certificate issued by TECH Global University.





“

Successfully complete this training and receive your university qualification without travel or laborious paperwork”

This program will allow you to obtain your **Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Diagnosis and Treatment of Lameness in Large Animals**

Modality: **online**

Duration: **12 weeks**

Accreditation: **12 ECTS**



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



Postgraduate Certificate Diagnosis and Treatment of Lameness in Large Animals

- » Modality: **online**
- » Duration: **12 weeks**
- » Certificate: **TECH Global University**
- » Credits: **12 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

Postgraduate Certificate Diagnosis and Treatment of Lameness in Large Animals

