Postgraduate Certificate Diagnosis and Treatment of Developmental Diseases in Large Animals





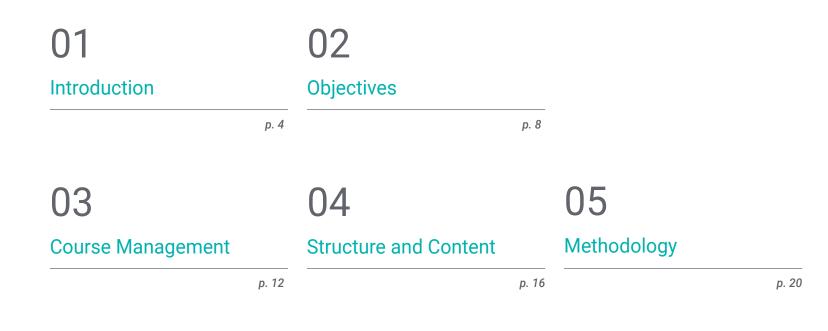
## Postgraduate Certificate

Diagnosis and Treatment of Developmental Diseases in Large Animals

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

Website: www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/diagnosis-treatment-developmental-diseases-large-animals

## Index



06 Certificate

# 01 Introduction

Breeding large animals: Ruminants (Cattle, Sheep), Camelids (Camels, Alpacas and Llamas), Swine (Pigs, Wild Boars) and Equidae (Horses, Donkeys and Mules) imply great economic and time investment to guarantee their maximum productive or athletic performance, depending on the species.

Breeders' expectations can be devalued if the quality of their results is not optimal. Similarly, the costs generated by the treatment of pathologies, such as angular or flexural deformities, are reduced or even avoided if they are diagnosed and treated early.

With this program, the specialist in traumatology and orthopedic surgery will be able to advise breeders of Large Animals and, consequently, reduce the incidence of these pathologies in their farms.

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Veterinarians must continue their training to adapt to new developments in this field"

## tech 06 | Introduction

Veterinarians face new challenges every day in treating their patients. The Postgraduate Certificate in Diagnosis and Treatment of Developmental Diseases 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 has programmed a careful selection of techniques used in the diagnosis and treatment of Lameness in Ruminants (Cattle, Sheep), Camelids (Camels, Alpacas, Llamas), Swine (Pigs, 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 Postgraduate Certificate 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 Developmental Diseases 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 Advanced Techniques for Cardiovascular Pathology in Large Animals: Equidae, Ruminants and Swine
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- Latest information on Diagnosis and Treatment of Developmental Diseases in Large Animals
- Practical exercises where self-assessment can be used to improve learning
- Special emphasis on innovative methodologies in Diagnosis and Treatment of Developmental Diseases 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"

### Introduction | 07 tech

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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 program has the best didactic material, which will enable a contextual study that will facilitate your learning.

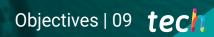
This 100% online Postgraduate Certificate will allow you to combine your studies with your professional work while increasing your knowledge in this field.

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 an immersive program designed 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 Diagnosis and Treatment of Developmental Diseases in Large Animals.

# 02 **Objectives**

The Postgraduate Certificate in Diagnosis and Treatment of Developmental Diseases 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 Developmental Diseases in Large Animals"

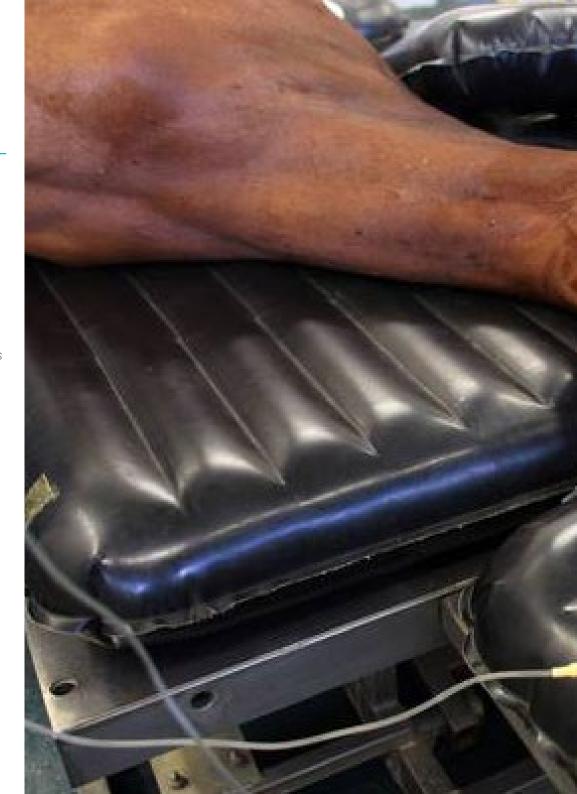
## tech 10 | Objectives



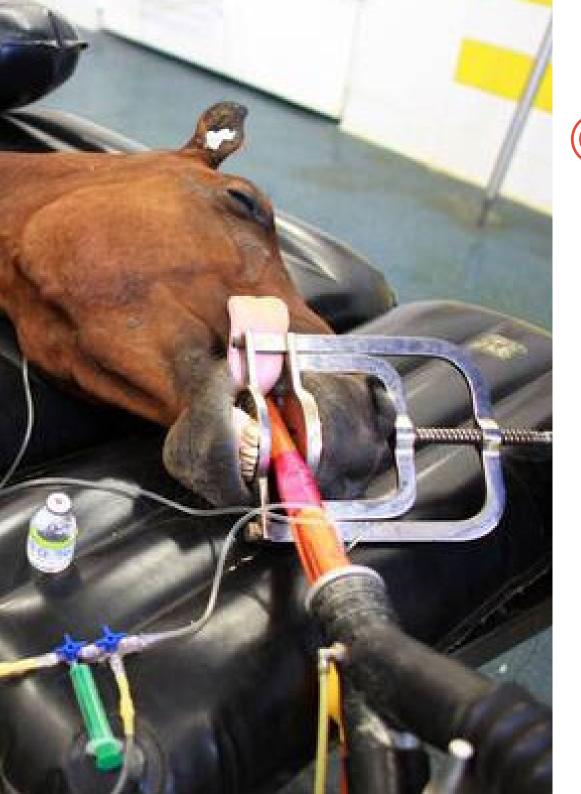
#### **General Objectives**

- Gain advanced knowledge of the angular deformities, flexural deformities, osteochondrosis, and subchondral cysts
- Determine the different treatments for angular and flexural deformities
- Establish an appropriate methodology for the identification, treatment and prognostication of osteochondral lesions
- Generate specialized knowledge on the etiopathogenesis, identification, treatment and prognosis of subchondral cysts
- Propose therapeutic strategies to limit the negative consequences of these pathologies





## Objectives | 11 tech





#### Specific Objectives

- Develop specialized knowledge on the etiopathogenesis of angular deformities, flexural deformities, osteochondrosis and subchondral cysts
- Carry out a correct diagnosis of the different alterations presented
- Specify the techniques for delaying and stimulating bone growth used in the surgical treatment of angular deformities
- Determine the medical treatments and application of resins, splints and orthopedic tools used in the treatment of angular and flexural deformities
- Specify the demotomy and tenotomy techniques used in the treatment of flexural deformities
- Establish the specificities in the treatment of deformities according to the age of the patient and the anatomical area affected
- Determine the prevalence, predisposing factors, diagnosis, localization, treatment and prognosis of osteochondral lesions and subchondral cysts

# 03 Course Management

The program's teaching staff includes leading experts in the diagnosis and treatment of developmental diseases in large animals, who contribute the experience of their work to this 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 Developmental Diseases in Large Animals, will help you to achieve success in your profession"

## tech 14 | Course Management

#### 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 service and professor at Alfonso X El Sabio University, Madrid.
- Surgeon at the Equine Hospital of Aznalcollar, Seville.

#### Professors

#### Dr. Drici Khalfı, Amel

- Degree in Veterinary Medicine from the University of Argel, Algeria
- Head of Hospitalization, Department of Large Animals, Veterinary University of Pretoria, South Africa



## 04 Structure and Content

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

This Postgraduate Certificate in Diagnosis and Treatment of Developmental Diseases in Large Animals contains the most complete and up-todate educational program on the market"

## tech 17 | Structure and Content

**Module 1.** Development Diseases: Angular and Flexural Deformities; Osteochondrosis and Subchondral Cyst in Large Animals: Ruminants, Swine and Equidae

- 1.1. Angular Deformities Etiopathogenesis
  - 1.1.1. Anatomy
  - 1.1.2. Hormonal Factors
  - 1.1.3. Perinatal and Developmental Factors
- 1.2. Diagnosis and Preserved Treatment of Angular Deformities
  - 1.2.1. Clinical and Radiography Diagnosis
  - 1.2.2. Use of Splints, Resins and Fittings
  - 1.2.3. Use of Shockwaves
- 1.3. Surgical Treatment of Angular Deformities
  - 1.3.1. Bone Growth Stimulation Techniques
  - 1.3.2. Bone Growth Delay Techniques
  - 1.3.3. Corrective Ostectomy
  - 1.3.4. Prognosis
- 1.4. Etiopathogenesis and Diagnosis of Flexural Deformities
  - 1.4.1. Congenital
  - 1.4.2. Acquired
- 1.5 Conservation Treatment of Flexural Deformities
  - 1.5.1. Physiotherapy and Exercise Control
  - 1.5.2. Medical Treatment
  - 1.5.3. Use of Splints and Resins
- 1.6. Surgical Treatment of Flexural Deformities
  - 1.6.1. Distal Interphalangeal Joint
  - 1.6.2. Metacarpal/Metatarsal-Phalangeal Joint
  - 1.6.3. Carpal Joint
  - 1.6.4. Tarsal Joint





#### Structure and Content | 18 tech

- 1.7. Osteochondrosis I
  - 1.7.1. Etiopathogenesis
  - 1.7.2. Diagnosis
  - 1.7.3. Location of Lesions
- 1.8. Osteochondrosis II
  - 1.8.1. Treatment
  - 1.8.2. Prognosis
- 1.9. Subchondral Bone Cyst I
  - 1.9.1. Etiopathogenesis
  - 1.9.2. Diagnosis
  - 1.9.3. Location of Lesions
- 1.10. Subchondral Bone Cyst II
  - 1.10.1. Treatment
  - 1.10.2. Prognosis

This program 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.

## Methodology | 21 tech

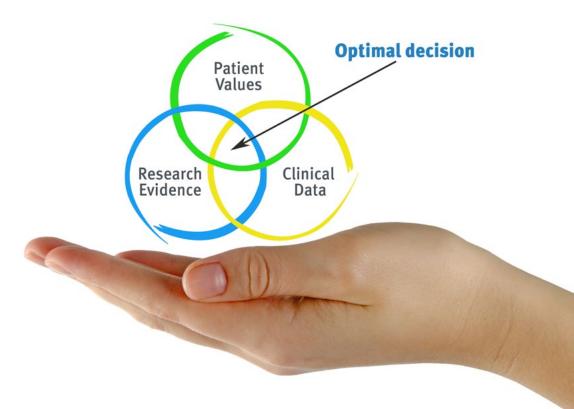
Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## tech 22 | Methodology

#### 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.



## tech 24 | Methodology

#### **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.





## Methodology | 25 tech

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.

## tech 26 | Methodology

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.

20%

15%

3%

15%

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.

## Methodology | 27 tech



#### **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.

20%

7%

3%

17%



#### **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.



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 Developmental Diseases in Large Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

## tech 29 | Certificate

This **Postgraduate Certificate in Diagnosis and Treatment of Developmental Diseases in Large Animals** contains the most complete and up-to-date educational program on the market.

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

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

Title: Postgraduate Certificate in Diagnosis and Treatment of Developmental Diseases in Large Animals

Official N° of Hours: 150 h.



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

technological university Postgraduate Certificate **Diagnosis and Treatment** of Developmental Diseases in Large Animals » Modality: online » Duration: 6 weeks » Certificate: TECH Technological University » Dedication: 16h/week » Schedule: at your own pace » Exams: online

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