

# Postgraduate Certificate

## Pelvic Limb Fractures





## Postgraduate Certificate Pelvic Limb Fractures

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/pelvic-limb-fractures](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/pelvic-limb-fractures)

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# 01

# Introduction

20% of the fractures that occur in the daily clinical practice of dogs and cats occur in the femur. This bone is surrounded by a large amount of muscle mass, therefore, it is a bone that is difficult to fixate, but has a good response to bone repair after a fracture, as long as the fixation method fulfills its objective.





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*This training is the best option you can find to specialize in Pelvic Limb Fractures”*

The teaching team of this Postgraduate Certificate in Pelvic Limb Fractures has carefully selected the different state-of-the-art techniques for experienced professionals working in the veterinary field.

Fractures of the proximal femoral third are very particular fractures that have specific treatments. This program analyzes each of these fractures, as well as the different alternatives for their application.

Complex fractures of the femur are where the surgeon employs all the knowledge and principles of osteosynthesis to successfully repair this type of fracture. In the femur, given the large number of fractures of different types that can occur, we will talk about very precise osteosynthesis and precise rigid destabilizations, in which the basic principles of osteosynthesis and each of the systems must be followed consistently to achieve success with different fixation systems.

Tibial fractures can be divided into three types, knowing that the vast majority of tibial fractures are fractures of the distal third and long spiral fractures and that many of them can become exposed fractures. Therefore, it is essential to choose the most appropriate fixation method to achieve the desired objective, which is the total recovery of the patient and their evolution until they are able to walk without pain.

This Postgraduate Certificate focuses on the importance of a good pre-surgical planning, and on the treatment of femoral fractures according to the different planning methods.

The teachers in this training are university professors with between 10 and 50 years of classroom and hospital experience. They are professors from schools on different continents, with different ways of doing surgery and with world-renowned surgical techniques. This makes this Postgraduate Certificate a unique specialization program, different from any other that may be offered in other universities.

Being an online program, the student is not constrained by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life as they wish.

This **Postgraduate Certificate in Pelvic Limb Fractures** 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 Bone Plates and Screws
- ♦ 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.
- ♦ Latest innovations in Pelvic Limb Fractures
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Special emphasis on innovative methodologies in Pelvic Limb Fractures
- ♦ 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



*Do not miss the opportunity to study this Postgraduate Certificate in Pelvic Limb Fractures with us. It's the perfect opportunity to advance in your career"*

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*This course is the best investment you can make in selecting a refresher program to bring your knowledge of Pelvic Limb Fractures up to date.*”

Its teaching staff includes professionals from the veterinary field, who bring to this training their work experience, as well as recognized specialists from leading 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 during the academic year. For this, the professional will have the help of an innovative interactive video system made by leading experts in Pelvic Limb Fractures with extensive experience.

*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.*

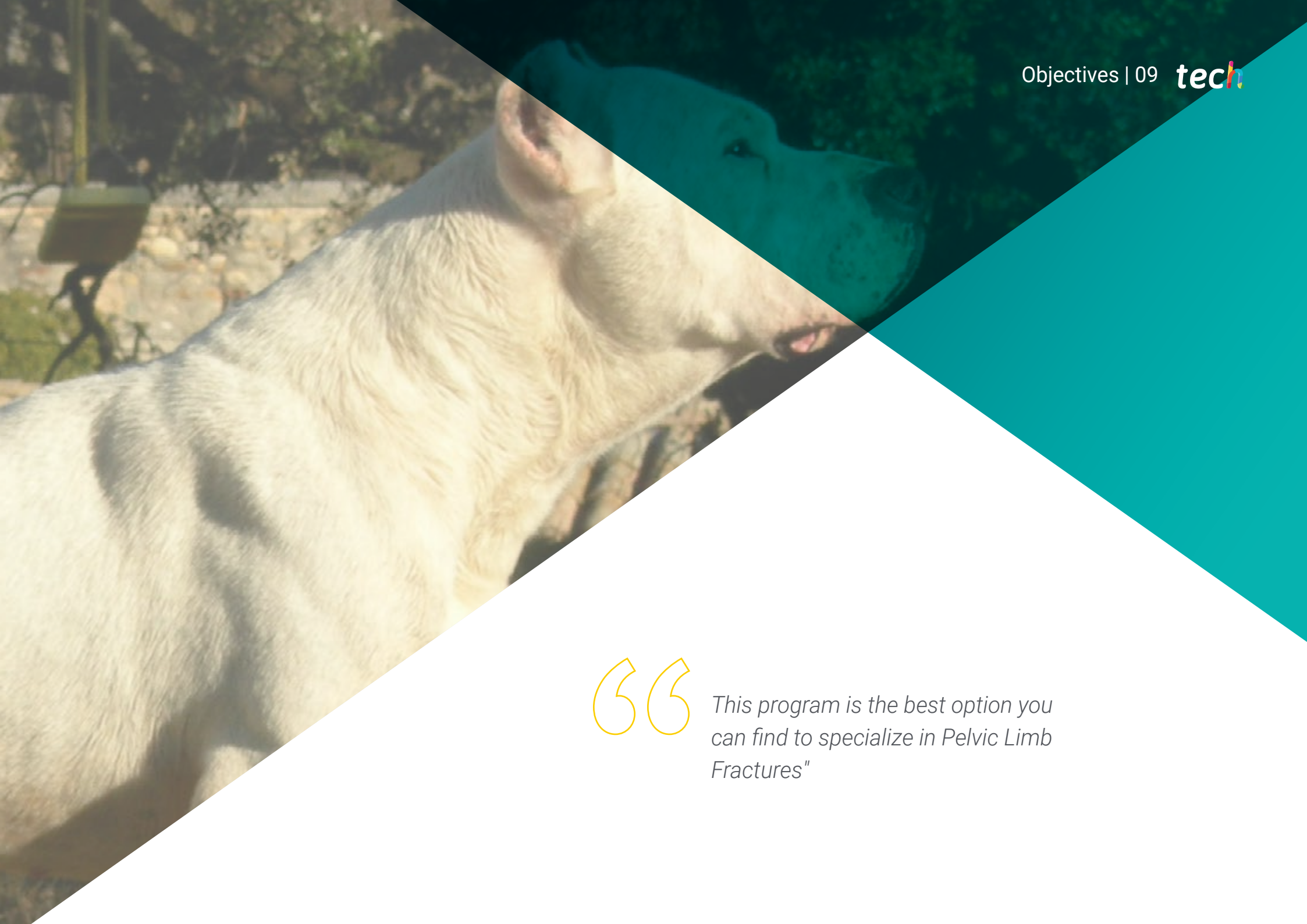


# 02 Objectives

The Postgraduate Certificate in Pelvic Limb Fractures is aimed at aiding the professional's performance with the latest advances and most innovative treatments in the sector.







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*This program is the best option you can find to specialize in Pelvic Limb Fractures"*



## General Objectives

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- Develop theoretical and practical knowledge of osteosynthesis in specific fractures of the femur, tibia and patella
- Encourage specialist judgement for decision making in specific fractures with specific repairs in each of the clinical situations in femur, patella and tibia

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*A path to achieve training and professional growth that will propel you towards a greater level of competitiveness in the employment market”.*





## Specific Objectives

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- ♦ Establish the classification of proximal femoral fractures and develop expertise on the most recommended fixation methods for successful fracture repair
- ♦ Compile the different systems and combinations of osteosynthesis systems in the repair of mid-femoral weight-bearing fractures
- ♦ Analyse the different methods of fixation and specialise in those that offer the highest success rate of fixation of knee fractures
- ♦ Determine the different fractures involving the tibia and specialize in the most recommended fixation methods for the solution of their fractures
- ♦ Examine the most common fractures encountered in daily practice, their diagnosis and surgical resolution

03

# Course Management

The teaching staff of the program includes leading experts in Veterinary Traumatology and Orthopedic Surgery, who bring their years of experience to this program. They are world-renowned doctors from different countries with proven theoretical and practical professional experience.



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*Our teaching team, will help  
you achieve success in your  
profession"*

## Management



### Dr. Soutullo Esperón, Ángel

- Head of the surgery service at the University Hospital of the Alfonso X el Sabio University
- Owner of the veterinary clinic ITECA
- Degree in Veterinary Medicine from the Complutense University of Madrid
- Master's Degree in Surgery and Traumatology the Complutense University of Madrid
- Diploma of Advanced Studies in Veterinary Medicine from the Complutense University of Madrid
- Member of the Scientific Committee of GEVO and AVEPA
- Lecturer at the Alfonso X el Sabio University in the subjects of Radiology, Surgical Pathology and Surgery
- Head of the surgery section on the AEVA Master's Degree in Small Animal Emergencies.
- Study of the clinical repercussions of corrective osteotomies TPLO (TFG Meskal Ugatz)
- Study of the clinical repercussions of corrective osteotomies in TPLO (TFG Ana Gandía)
- Studies of biomaterials and xenografts for orthopedic surgery

## Professors

### Dr. Borja Vega, Alonso

- ♦ Advanced PGCert in Small Animal Orthopedics
- ♦ Postgraduate Course in Veterinary Ophthalmology UAB
- ♦ SETOV practical course on initiation to osteosynthesis.
- ♦ Advanced elbow course

### Dr. García Montero, Javier

- ♦ Member of the Official College of Veterinarians of Ciudad Real, Veterinary Hospital Cruz Verde (Alcazar de San Juan).
- ♦ Traumatology and Orthopedics, Surgery and Anesthesia Service Manager
- ♦ El Pinar Veterinary Clinic (Madrid)

### Dr. Guerrero Campuzano, María Luisa

- ♦ Director, exotic animal and small animal veterinarian, Petiberia Veterinary Clinic
- ♦ Zoo veterinarian
- ♦ Member of the Official College of Veterinarians of Madrid

### Dr. Monje Salvador, Carlos Alberto

- ♦ Head of the Outpatient Surgery and Endoscopy Service
- ♦ Head of Surgery and Minimally Invasive Service (endoscopy, laparoscopy, bronchoscopy, rhinoscopy etc.)
- ♦ Head of the Diagnostic Imaging Service (advanced abdominal ultrasound and radiology).

### Dr. Flores Galán, José A.

- ♦ Head of the Traumatology, Orthopedics and Neurosurgery Service at Privet Veterinary Hospitals.
- ♦ Degree in Veterinary Medicine from the Complutense University of Madrid
- ♦ PhD student at the Complutense University of Madrid in the field of traumatological surgery in the Dept. of Animal Medicine and Surgery of the Faculty of Veterinary Medicine.
- ♦ Specialist in Traumatology and Orthopedic Surgery in Companion Animals, Complutense University of Madrid

# 04

# Structure and Content

The structure of the content has been designed by the best professionals in Veterinary Traumatology and Orthopedic Surgery sector, 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.







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

## Module 1. Thoracic Limb Fractures

- 1.1. General Overview of Pelvic Limb Fractures
  - 1.1.1. Soft Tissue Damage
  - 1.1.2. Neurological Assessment
  - 1.1.3. Preoperative Care
    - 1.1.3.1. Temporary Immobilization
    - 1.1.3.2. Radiographic Studies
    - 1.1.3.3. Laboratory Exams
  - 1.1.4. Surgical Preparation
- 1.2. Fractures of the Proximal Femoral Proximal Third
  - 1.2.1. Surgical Approach
  - 1.2.2. Fractures of the Femoral Head. Pre-surgical Assessment
  - 1.2.3. Fractures of the Femoral Neck, Greater Trochanter and Femoral Body
- 1.3. Surgical Treatment for Complications of the Femoral Head and Neck
  - 1.3.1. Arthroplastic Excision of the Femoral Head and Neck
  - 1.3.2. Total Hip Replacement of Prosthesis
    - 1.3.2.1. Cemented System
    - 1.3.2.2. Biological System
    - 1.3.2.3. Locked System
- 1.4. Fractures of the Middle Third of the Femur
  - 1.4.1. Surgical Approach to the Femoral Body
  - 1.4.2. Femoral Body Fracture Fixation
    - 1.4.2.1. Steinmann Nail
    - 1.4.2.2. Locked Nails
    - 1.4.2.3. Plates and Screws
      - 1.4.2.3.1. External Fixators
      - 1.4.2.3.2. System Combinations
  - 1.4.3. Postoperative Care
- 1.5. Fractures of the Distal Femoral Third
  - 1.5.1. Surgical Approach
  - 1.5.2. Fracture by Separation of the Distal Femoral Epiphysis or Supracondylar
  - 1.5.3. Intercondylar Femoral Fracture
  - 1.5.4. Fracture of the Femoral Condyles. "T- or "Y-Fractures"





- 1.6. Fractures of the Patella
  - 1.6.1. Surgical Approach
  - 1.6.2. Surgical Technique
  - 1.6.3. Post-Surgical Treatment
  - 1.6.4. Fracture of the Patellar Ligament
- 1.7. Fractures of the Proximal Tibia and Fibula
  - 1.7.1. Surgical Approach
  - 1.7.2. Classification
  - 1.7.3. Avulsion of the Tibial Tubercle
  - 1.7.4. Fracture Separation of the Proximal Tibial Epiphysis
- 1.8. Fractures of the Body of the Tibia and Fibula
  - 1.8.1. Surgical Approach
  - 1.8.2. Internal/External/Open/Conservative Fixation
  - 1.8.3. Intramedullary Nails
  - 1.8.4. Intramedullary Nail and Supplementary Fixation
  - 1.8.5. Skeletal External Fixator
  - 1.8.6. Bone Plates
  - 1.8.7. MIPO
- 1.9. Fractures of the Distal Portion of the Tibia
  - 1.9.1. Surgical Approach
  - 1.9.2. Separation Fracture of the Distal Epiphysis of the Tibia
  - 1.9.3. Fractures of the Lateral or Medial Malleolus or Both
- 1.10. Clavicle Fractures and Dislocations
  - 1.10.1. Surgical Approach
  - 1.10.2. Calcaneal Fracture
  - 1.10.3. Fracture or Dislocation of the Central Bone of the Tarsus
  - 1.10.4. Achilles Tendon Fracture
  - 1.10.5. Tarsal Arthrodesis

# 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.





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*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.

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*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 Harvard 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 Pelvic Limb Fractures guarantees, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Global University.



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*Successfully complete this training program  
and receive your university certificate  
without travel or laborious paperwork"*

This program will allow you to obtain your **Postgraduate Certificate in Pelvic Limb Fractures** 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 Pelvic Limb Fractures**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 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.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development language  
classroom



## Postgraduate Certificate Pelvic Limb Fractures

- › Modality: online
- › Duration: 6 weeks
- › Certificate: TECH Global University
- › Credits: 6 ECTS
- › Schedule: at your own pace
- › Exams: online

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