

# Postgraduate Certificate

## Traumatology and Orthopedics in the Rehabilitation of Small Animals





## Postgraduate Certificate Traumatology and Orthopedics in the Rehabilitation of Small Animals

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

Website: [www.techtute.com/in/veterinary-medicine/postgraduate-certificate/traumatology-orthopedics-rehabilitation-small-animals](http://www.techtute.com/in/veterinary-medicine/postgraduate-certificate/traumatology-orthopedics-rehabilitation-small-animals)

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Certificate

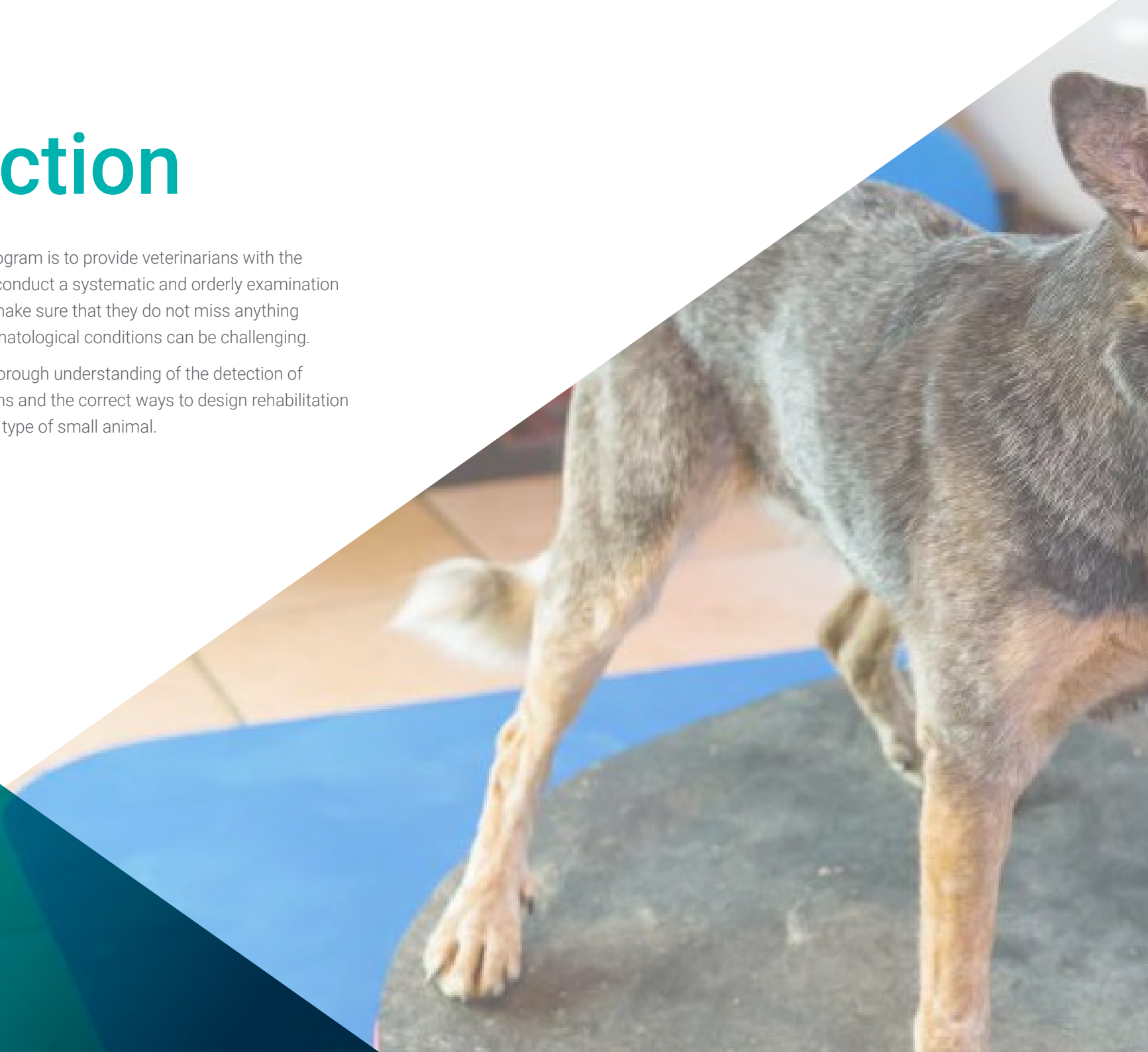
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# 01 Introduction

The main objective of this TECH program is to provide veterinarians with the necessary knowledge and tools to conduct a systematic and orderly examination when evaluating an animal and to make sure that they do not miss anything important, as the diagnosis of traumatological conditions can be challenging.

It is therefore essential to have a thorough understanding of the detection of sensory, motor or physical conditions and the correct ways to design rehabilitation plans adapted to the needs of each type of small animal.





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*Thanks to this very complete Postgraduate Certificate, you will learn to diagnose and work with trauma pathologies in small animals”*

The diagnosis of trauma-related conditions can be challenging, so it is essential to have the necessary knowledge and tools to be capable of conducting a systematic and orderly examination when evaluating patients and not to miss anything important.

In this sense, any veterinarian who wants to be part of the rehabilitation team should be able to conduct physical examinations and traumatological and neurological evaluations. They should also have the ability to identify any conditions and their possible treatments.

It is important to have diagnosed the condition to be treated in physical rehabilitation prior to establishing the therapeutic techniques. Even though the referring veterinarian has made their diagnosis, a complete physical examination should be performed in the rehabilitation department, including a complete neurological and traumatological evaluation, to detect any possible underlying conditions that may have been missed.

Patients who come to the rehabilitation clinic may have been referred after orthopedic surgery or with the diagnosis of a non-surgical condition. Veterinarians must be aware of the therapeutic techniques which could be of benefit to each condition and the complications that could arise from them, in order to be able to monitor the patient's evolution and adapt the therapy to achieve the best results.

This **Postgraduate Certificate in Traumatology and Orthopedics in the Rehabilitation of Small Animals** contains the most complete and up to date scientific program on the market. The most important features of the program include:

- ♦ Case studies presented by experts in Traumatology and Orthopedics in the Rehabilitation of Small Animals
- ♦ 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
- ♦ What's new in Traumatology and Orthopedics in the Rehabilitation of Small Animals?
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Special emphasis on innovative methodologies in Traumatology and Orthopedics in the Rehabilitation of Small Animals
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Don't miss the opportunity to study with the best professionals in the industry with this TECH Postgraduate Certificate"*

“*Improve the diagnosis of your patients with trauma pathologies and give a boost to your career as a veterinarian”*

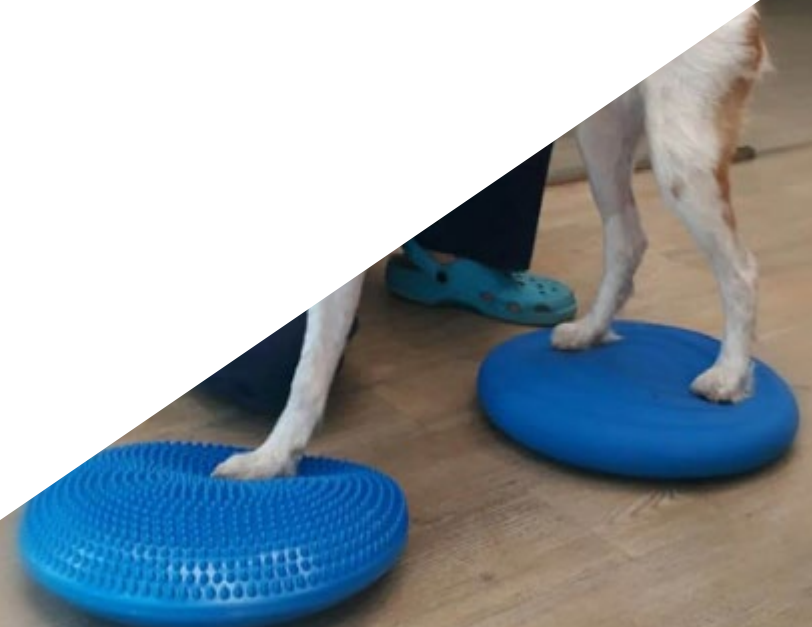
The program includes, in its teaching staff, professionals belonging to the veterinary field, who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

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 an immersive learning program designed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic program. To do so, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Traumatology and Orthopedics in the Rehabilitation of Small Animals.

*The best content and the best professors are at the best university. Don't miss this great educational opportunity.*

*As it is an online program, you can study wherever and whenever you want.*





# 02 Objectives

The main objective of this educational program is to help veterinarians to understand the importance of physiotherapy and rehabilitation for small animals with physical, sensory and/or motor conditions and how they can help improve patient outcomes. In this way, after completing the program, the professional will be fully capable of designing and implementing plans based on this type of intervention, offering optimal conditions for the animal and ensuring its welfare.





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*The goal of all TECH specializations  
is to catapult professionals towards  
professional success”*



## General objectives

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- Establish the steps of a complete trauma examination
- Evaluate the effects of immobilization on tissues
- Identify the most frequent traumatologic pathologies
- Present the possible treatments for each pathology, as well as an approach to their management in physical rehabilitation



*Improve the quality of your patient care by incorporating the innovations that science and technology have brought to this field of work"*







### Specific objectives

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- ♦ Identify the changes in morphology and composition of different tissues when subjected to immobilization
- ♦ Substantiate the physical therapies carried out during the period of tissue remobilization
- ♦ Analyze the effects of different medications on immobilized tissues
- ♦ Compile the most frequent trauma pathologies of the forelimbs and hindlimbs
- ♦ Evaluate the most common musculoskeletal tumors
- ♦ Establish treatment guidelines for fractures and joint dislocations

03

# Course Management

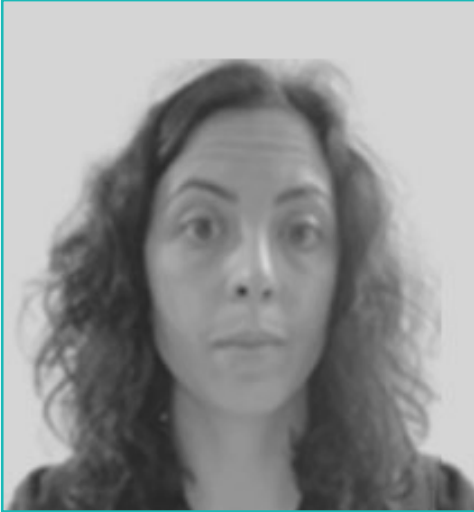
The program's teaching staff includes experts from different areas related to animal traumatological rehabilitation. In this way, if you decide to take this program, you will have the support of the experience and prestige of professionals of various kinds who will help you better understand the functioning of physiotherapy and rehabilitation of small animals from a multidisciplinary approach. This will allow you to gain a better understanding of those pathologies and conditions on which these interventions have a higher rate of positive results.



“

*The best veterinary experts on the national and international scene can be found in this Postgraduate Certificate”*

## Management



### **Ms. Ceres Vega-Leal, Carmen**

- Veterinarian in the Physiotherapy and Rehabilitation Service at Clínica Veterinaria A Raposeira, Vigo (Pontevedra)
- Veterinarian in Tierklinik Scherzingen, Freiburg (Germany)
- Degree in Veterinary Medicine from the Faculty of Veterinary Medicine of León in 2008
- Master's Degree in Physiotherapy and Rehabilitation of Small Animals, Complutense University of Madrid
- Master's Degree in Veterinary Physiotherapy and Rehabilitation for Dogs and Cats, Complutense University of Madrid
- Postgraduate Diploma in Bases of Physiotherapy and Animal Rehabilitation, Complutense University of Madrid 2014



## Professors

### Ms. Hernández Jurado, Lidia

- ♦ Co-owner and head of the Animal Physical Rehabilitation Service of the Amodiño Veterinary Clinic in Lugo
- ♦ Graduate in Veterinary Medicine, University of Santiago de Compostela
- ♦ Degree in Biology, University of Santiago de Compostela
- ♦ Specialization Postgraduate Certificate in Small Animal Rehabilitation

### Ms. Laliena Aznar, Julia

- ♦ Head of the Rehabilitation Service, Veterinary Hospital Anicura Valencia Sur. Valencia
- ♦ I-VET academy teacher in Rehabilitation classes of the Veterinary Technical Assistant postgraduate course
- ♦ Degree in Veterinary Medicine, University of Zaragoza
- ♦ Master's Degree in Small Animal Clinic I and II
- ♦ Postgraduate Certificate in Small Animal Veterinary Rehabilitation
- ♦ Postgraduate Certificate in Clinical Diagnosis in the Canine and Feline Patient

### Ms. Pascual Vezanzones, María

- ♦ Head veterinarian at the Narub Rehabilitation and Hydrotherapy Center
- ♦ Coordinator of the Rehabilitation and Physiotherapy service at home, Animal Nutrition in Vetterapia Animal
- ♦ Head of the veterinary clinic at Centro Veterinario Don Pelanas. Animal Rehabilitation and Physiotherapy Service
- ♦ Graduate in Veterinary Medicine, University of León
- ♦ Postgraduate course in Rehabilitation and Veterinary Physiotherapy in Small Animals, FORVET school

### Ms. Picón Costa, Marta

- ♦ Outpatient Rehabilitation and Physiotherapy Service in Seville and Cadiz areas
- ♦ Veterinarian from the Faculty of Veterinary Medicine of Alfonso X the Wise
- ♦ Postgraduate Diploma in Physiotherapy and Animal Rehabilitation, Complutense University of Madrid

### Ms. Rodríguez-Moya Rodríguez, Paula

- ♦ Veterinarian at the Rehabcan Animal Rehabilitation and Physiotherapy Center. Traditional Chinese veterinary medicine service
- ♦ Graduate in Veterinary Medicine, Catholic University of Valencia
- ♦ Specialty in Traditional Chinese Medicine by Chi Institute. Certified acupuncturist. Certified Food Therapist
- ♦ Postgraduate Degree in Physiotherapy and Rehabilitation of Small Animals from Euroinnova Business School



*Enroll in this Postgraduate Certificate and learn from the best professionals in the sector*

04

# Structure and Content

The structure of the contents has been designed by the best professionals in the field of rehabilitation for animals with trauma-related conditions, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied and diagnosed, and with extensive knowledge of the latest technology applied to veterinary medicine. This will ensure that upon completion of the program you will be fully trained in this area from a multidisciplinary approach to promote longevity and quality of life of the animal.





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*As you progress through the program, you will be able to enjoy a wide range of first-class practical and theoretical content”*

**Module 1.** Traumatological Examination. Effects of Immobilization on Tissues  
Traumatological Pathologies in Rehabilitation

- 1.1. Traumatological Examination
  - 1.1.1. Forelimbs
  - 1.1.2. Hindlimbs
- 1.2. Effects of Immobilization on Different Tissues I
  - 1.2.1. Bone
  - 1.2.2. Ligaments and Tendons
- 1.3. Effects of Immobilization on Different Tissues II
  - 1.3.1. Muscle
  - 1.3.2. Cartilage
- 1.4. Fractures and Dislocations
  - 1.4.1. Fracture Management
  - 1.4.2. Dislocation Management
- 1.5. Hip
  - 1.5.1. Hip Dysplasia
  - 1.5.2. Avascular Necrosis of the Femoral Head
- 1.6. Knee
  - 1.6.1. Patella Dislocation
  - 1.6.2. Rupture of the Anterior Cruciate Ligament
  - 1.6.3. OCD of the Knee
- 1.7. Elbow and Shoulder
  - 1.7.1. Elbow Dysplasia
    - 1.7.1.1. Fragmented Medial Coronoid Process
    - 1.7.1.2. OCD of the Elbow
    - 1.7.1.3. Non-Union of the Anconic Process
    - 1.7.1.4. Joint Incongruence
  - 1.7.2. Shoulder OCD
  - 1.7.3. Medial Shoulder Instability







- 1.8. Muscular Pathologies
  - 1.8.1. Fibrotic Contracture of the Infraspinatus Muscle
  - 1.8.2. Contracture of the Flexor Muscles of the Forearm
  - 1.8.3. Quadriceps Contracture
  - 1.8.4. Fibrotic Myopathy of the Gracilis Muscle
- 1.9. Tendon and Ligament Pathologies
  - 1.9.1. Bicipital Tenosynovitis
  - 1.9.2. Tendinopathy of the Supraspinatus Muscle
  - 1.9.3. Carpal Hyperextension
  - 1.9.4. Patellar Tendon Rupture
  - 1.9.5. Achilles Tendon Rupture
- 1.10. Other Pathologies
  - 1.10.1. Panosteitis
  - 1.10.2. Hypertrophic Osteopathy
  - 1.10.3. Musculoskeletal Tumors

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*Welcome to the program that will  
take your career to the next level”*



# 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.



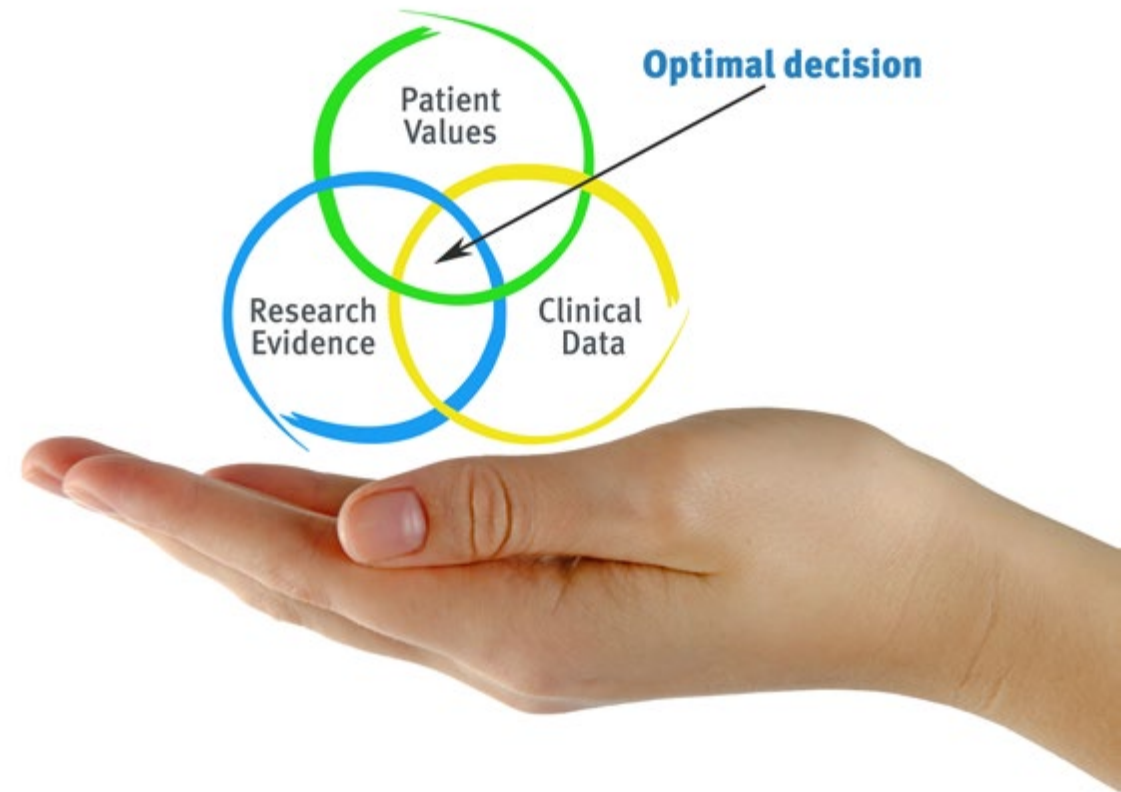
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization”*

## 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. 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.



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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 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

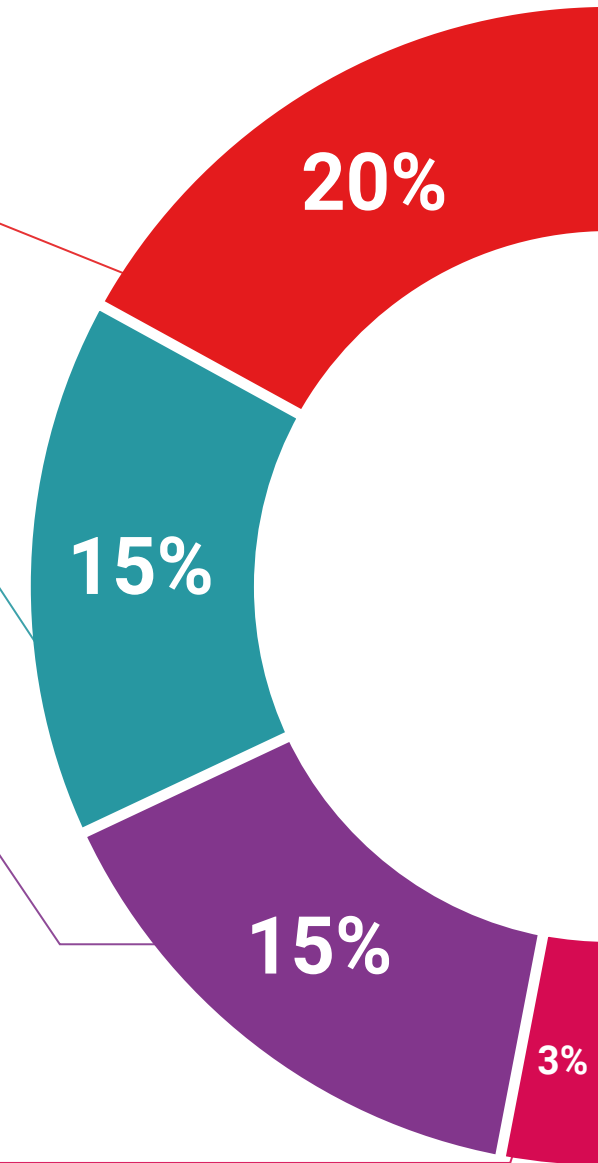
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

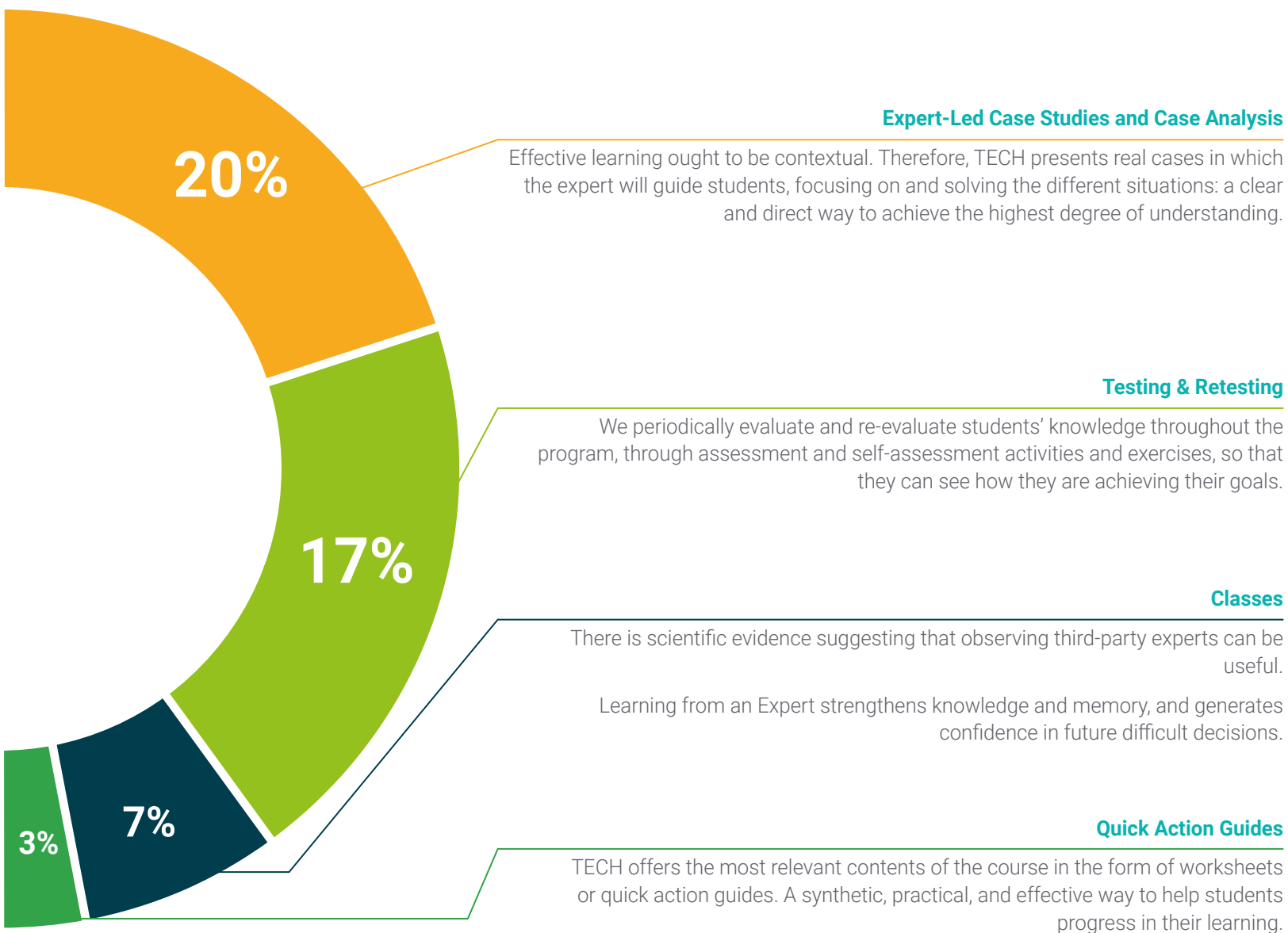
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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.







# 06 Certificate

The Postgraduate Certificate in Traumatology and Orthopedics in the Rehabilitation of Small Animals guarantees you, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.





*Successfully complete this program  
and receive your university degree  
without travel or laborious paperwork”*

This **Postgraduate Certificate in Traumatology and Orthopedics in the Rehabilitation of Small 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

The certificate 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 Traumatology and Orthopedics in the Rehabilitation of Small Animals**

Official N° of hours: **150 h.**





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