

# Hybrid Professional Master's Degree Physiotherapy and Rehabilitation in Small Animals





## Hybrid Professional Master's Degree Physiotherapy and Rehabilitation in Small Animals

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 créditos ECTS

Website: [www.techtute.com/us/veterinary-medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-physiotherapy-rehabilitation-small-animals](http://www.techtute.com/us/veterinary-medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-physiotherapy-rehabilitation-small-animals)

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# 01

# Introduction

Next to injuries, the main reason why a pet is taken to a specialist is because of its longevity. Dogs and cats suffer, with age, from joint problems or osteoarthritis. These conditions can degenerate into serious muscular atrophy, profoundly impairing the well-being of the animals. Therefore, the presence in the veterinary practice of a specialist in physiotherapy and rehabilitation is essential, as well as the constant updating of their knowledge to establish efficient treatments for each animal. For this reason, TECH has created this program, which will allow the student to obtain a 100% online theoretical education on the latest methods of electrotherapy or kinesitherapy, and then put into practice everything they have learned in a prestigious veterinary clinic for 3 weeks.



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*Expand your career growth with an academic program that will allow you to expand your knowledge in one of the most in-demand areas of small animal veterinary medicine”*

The advances achieved in recent decades in the field of Physiotherapy and Rehabilitation in Small Animals and a greater awareness of responsibility on the part of owners have led to an increase in the quality and life expectancy of pets. The small animal physiotherapist is, therefore, more necessary than ever in a society that is beginning to internalize love for animals as a value for its own evolution. Because of this, these experts must know and learn how to apply all the innovations in therapy to respond satisfactorily to the demands of their users and patients. In this sense, the Hybrid Professional Master's Degree in Physiotherapy and Rehabilitation in Small Animals is created in response to the growing need to update these professionals.

Therefore, the knowledge acquired by students emanates directly from the personal experience of a teaching team well versed in the veterinary physiotherapy and rehabilitation practice. During 12 months of teaching, the student will master the less invasive practices and techniques that will shape the future of veterinary medicine. In this way, they will adopt new guidelines for manual therapies aimed at relieving pain or identify the most effective strategies for bandaging the injured small animal.

On the other hand, the specialist will delve into the particularities of sports medicine for sporting dogs, outlining excellent plans aimed at injury prevention or establishing the latest mechanisms for successful recovery from the most common pathologies in this practice.

As for the conciliation of the studies with the rest of aspects of personal and professional life, we simply have to mention the ease with which the student will be able to organize themselves, since this Hybrid Professional Master's Degree has a theoretical part with a 100% online format, completely flexible and adapted to the needs of the student. The internship period has been designed to be carried out intensively over a period of 3 weeks. During this period of time, the expert will work in a highly prestigious veterinary clinic and, surrounded by the best professionals in the field of animal physiotherapy and rehabilitation, will put into practice all the knowledge learned to enhance their daily work practice.

This **Hybrid Professional Master's Degree in Physiotherapy and Rehabilitation in Small Animals** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ◆ Development of more than 100 clinical cases presented by veterinary professionals with expertise in physiotherapy and rehabilitation in small 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
- ◆ Innovative methods for the assessment of pain in canine or feline patients who have suffered various injuries or who experience ailments derived from age
- ◆ Electrotherapy, lasertherapy or ultrasound techniques, with the use of the most advanced instrumentation on the market
- ◆ Use of hydrotherapy as a method of rehabilitation in the feline patient
- ◆ Injury prevention plans oriented to the sports dog
- ◆ All of this will be complemented by 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
- ◆ Furthermore, they will be able to carry out a clinical internship in one of the best veterinary centers

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*A Hybrid Professional Master's Degree that will enable you to perform the activity of the physiotherapist in veterinary medicine based on the latest needs of this professional field”*

This Master's program, which has a professionalizing nature and a hybrid learning modality, is aimed at updating veterinary professionals who develop physiotherapy and rehabilitation functions with small animals, with special emphasis on therapeutic care for dogs and cats. The contents are based on the latest scientific evidence, and oriented in a educational way to integrate theoretical knowledge in the veterinary practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision-making in animal management.

Thanks to the multimedia content, developed with the latest educational technology, will allow the veterinary professional a situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

*In TECH you will acquire a solid theoretical knowledge and a solid practical expertise for the practice of veterinary physiotherapy and rehabilitation.*

*With this Hybrid Professional Master's Degree, you will be able to balance without obstacles your academic life with your professional work.*



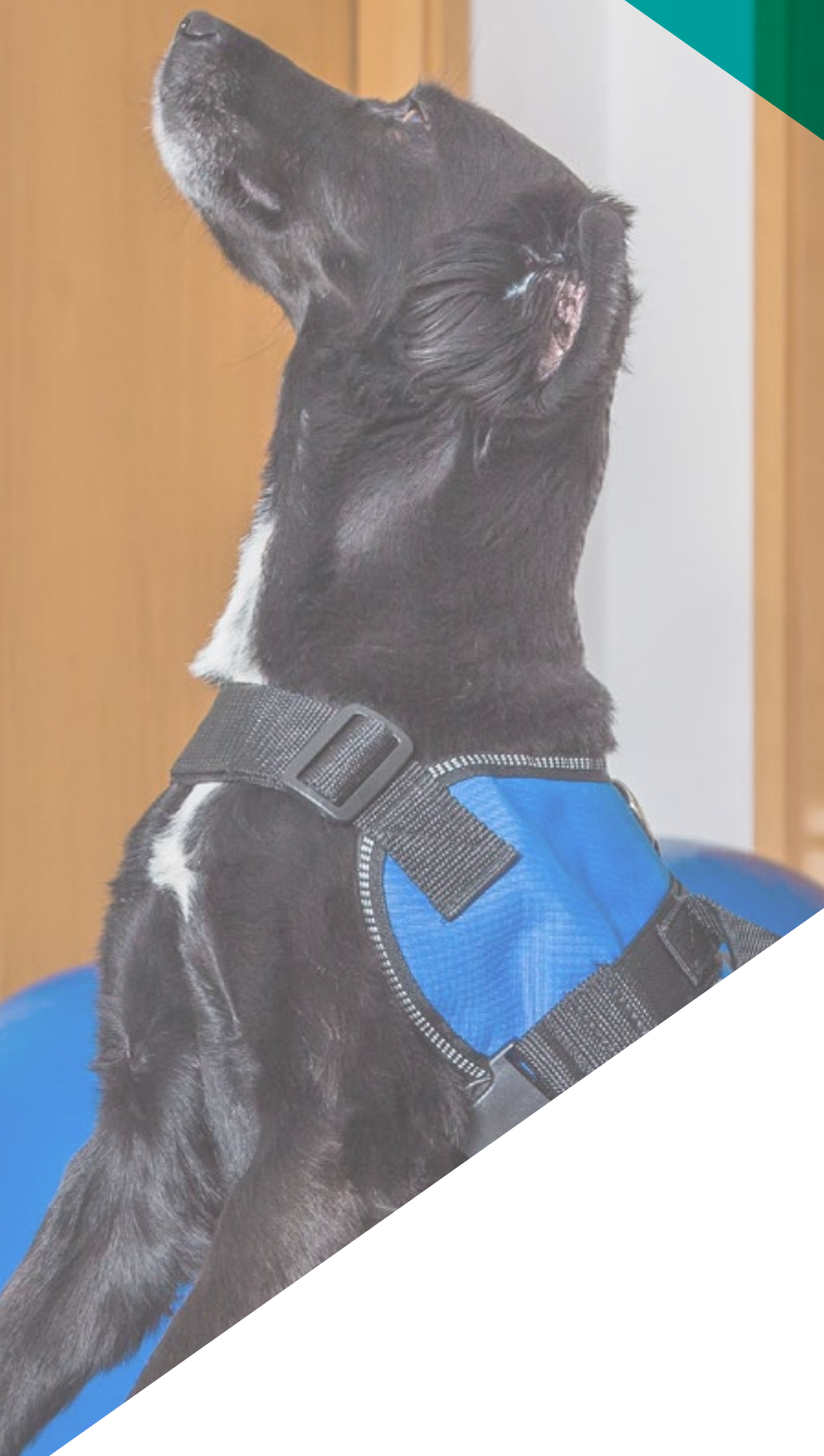
02

# Why Study this Hybrid Professional Master's Degree?

In the world of animal physiotherapy and rehabilitation, it is just as important to know the latest techniques and procedures for treatment as it is to master their practical application in the work environment. Because of this, TECH has created this Hybrid Professional Master's Degree, which allows the student to combine an excellent theoretical learning in this field with a 3-week internship in a first-class veterinary clinic. In this way, the student will acquire a series of up-to-date competencies based on the current needs of the sector.







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*TECH offers you a unique opportunity to combine a first-class theoretical learning with a clinical internship in a prestigious veterinary clinic to promote the best update in the field of animal physiotherapy and rehabilitation”*

### 1. Updating from the latest technology available

The area of Physiotherapy and Rehabilitation in Small Animals has evolved in recent years due to the appearance of new techniques and up-to-date technological devices that favor a rapid recovery of ailments and injuries in pets. For this reason, TECH has created this theoretical-practical program with the aim of providing experts with the knowledge and adequate application of all these innovations.

### 2. Gaining In-Depth Knowledge from the Experience of Top Specialists

This Hybrid Professional Master's Degree is directed and taught by experts with extensive experience in the field of veterinary medicine, who will offer the student the most up-to-date theoretical content in animal physiotherapy and rehabilitation. In addition, during their internship in a prestigious clinic, students will be integrated into an excellent work team, which will allow them to apply the most efficient and innovative techniques in the sector in their daily methodology.

### 3. Entering First-Class Clinical Environments

TECH carefully selects all the centers available for internships after the completion of this program. Thanks to this, the specialist will have guaranteed access to a prestigious clinical environment in the area of Physiotherapy and Rehabilitation in Small Animals. In this way, they will be able to experience the day-to-day of a demanding, rigorous and exhaustive area of work, always applying the most up-to-date therapeutic techniques in its work methodology.





#### 4. Combining the Best Theory with State-of-the-Art Practice

In the academic panorama, there are a large number of programs focused on offering an immense amount of teaching content that lacks real applicability in the workplace. For this reason, TECH has created this program, which combines an excellent theoretical learning with a 3-week internship in a veterinary clinic to provide its students with the most useful skills in their professional life.

#### 5. Expanding the Boundaries of Knowledge

TECH offers the possibility of carrying out the internship in centers of international importance. In this way, the specialist will be able to expand their boundaries and keep up-to-date with the best professionals, who practice in first-class veterinary clinics and in different continents. A unique opportunity that only TECH could offer.

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*You will have full practical immersion  
at the center of your choice”*

# 03 Objectives

The main objective of this program is to train veterinarians who are experts in Physiotherapy and Rehabilitation in Small Animals based on avant-garde contents and updated with the latest advances in this field of study. After successfully completing the academic program, the graduate professional will be fully empowered to design and implement this type of interventions, offering optimal conditions for the animal and ensuring its welfare, which will make them an optimal specialist to become part of an increasingly growing job market.





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*This Hybrid Professional Master's Degree from TECH is the best option if you want to become an excellent specialist in Physiotherapy and Rehabilitation in Small Animals”*



## General Objective

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- The general objective of the Hybrid Professional Master's Degree in Physiotherapy and Rehabilitation in Small Animals is to ensure that the expert updates their theoretical and practical knowledge in this field of the veterinary profession, with the aim of responding adequately to the new challenges that arise in the profession, using the latest techniques and therapeutic tools



*Through this Hybrid Professional Master's Degree, the expert will obtain the ability to design rehabilitation plans for injuries adapted to the physical characteristics of each animal"*





## Specific Objectives

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### **Module 1. Veterinary Physiotherapy and Rehabilitation. Functional Anatomy in Small Animals**

- ♦ Determine the use of Physiotherapy in Small Animals
- ♦ Examine the main anatomical bone references and the different muscle groups
- ♦ Analyze the movement of each muscle group
- ♦ Develop the most important concepts related to Rehabilitation
- ♦ Addressing muscle components
- ♦ Analyze the different phases of inflammation

### **Module 2. Biomechanics. Functional Assessment**

- ♦ Examine the patient as a whole, taking into account the locomotor system and associated structures
- ♦ Define gait characteristics and identify gait abnormalities
- ♦ Assess and identify injuries that may be affecting the forelimb and hind limb
- ♦ Examine the spine and identify tender points and/or lesions present, as well as neurological deficits associated with these alterations
- ♦ Establish the bases of Biomechanics and the elements used for its study
- ♦ Analyze the Biomechanics of a patient, theoretically, by means of a system of levers

### **Module 3. Physiology of Pain. Neurological Evaluation**

- ♦ Identify signs related to pain
- ♦ Determine the most useful tools to assist in the assessment of pain
- ♦ Develop specialized knowledge about pain
- ♦ Compile the latest therapies used in rehabilitation for the treatment of pain and for the management of neurological patients in rehabilitation
- ♦ Review the functioning of the Nervous System to understand the rationale for neurological evaluation
- ♦ Examine the different parts of the neurological examination

### **Module 4. Manual Therapies and Kinesitherapy. Bandages**

- ♦ Develop specialized knowledge through touch and manipulation
- ♦ Using movement for therapeutic purposes
- ♦ Treatment planning through the use of the therapist's hands
- ♦ Restore range of motion to the patient
- ♦ Identify a series of limitations in the patient
- ♦ Maintain or increase muscle power in the animal

**Module 5. Physical therapies I: Electrotherapy, Laser Therapy, Therapeutic Ultrasound. Thermotherapy**

- ♦ Determine the benefits and uses of thermotherapy
- ♦ Establish the ultrasound parameters that can be modified in the different therapies, depending on the desired effect
- ♦ Examine the parameters of laser therapy and electrotherapy that can be modified in the different therapies, depending on the desired effect
- ♦ Analyze the differences between physiological and evoked muscle recruitment
- ♦ Develop the mechanisms of pain relief worked with electrotherapy

**Module 6. Physical Therapies II-Diathermy, Magnetotherapy, INDIBA, Shockwaves, other Therapies used in Rehabilitation. Nutrition**

- ♦ Examine the different types of diathermy, the parameters and functions of each of them
- ♦ Define Indiba therapy and develop in depth in which cases it is used
- ♦ Identify the parameters and functions of magnetotherapy and shock waves that can be modified according to the desired effect
- ♦ Justify the use of alternative therapies as a complement to Physiotherapy and Rehabilitation in Small Animals
- ♦ Define the concept of modalities such as chiropractic, cranio-sacral therapy and ozone therapy and propose their use as complementary therapies
- ♦ Develop the most important concepts of canine nutrition in terms of obesity and osteoarthritis

**Module 7. Feline Rehabilitation. Hydrotherapy**

- ♦ Propose rehabilitation plans adjusted to the peculiarities in the character and management of the feline species both in the clinic environment and at home
- ♦ Generate specialized knowledge to detect signs of osteoarthritis in the feline species
- ♦ Compile therapies and strategies that are well tolerated by the feline species in the Rehabilitation Sessions
- ♦ Recognize the main differences between the principles of pool hydrotherapy and underwater treadmill hydrotherapy
- ♦ Analyze the indications and contraindications of hydrotherapy
- ♦ Examining the differences between swimming and walking in water
- ♦ Develop a rehabilitation plan that includes hydrotherapy

**Module 8. Sports Medicine. Sports modalities in dogs. Most frequent pathologies and prevention**

- ♦ Examine the key points in the rehabilitation of the performance dog
- ♦ Develop a Training Plan
- ♦ Analyzing the weak points of a performance dog
- ♦ Identifying abnormalities in a performance dog
- ♦ Generate Training Plans
- ♦ Establishing a recovery plan after an injury
- ♦ Determine the importance of sports rehabilitation





### **Module 9. Traumatologic Examination. Effects of Immobilization on Tissues Traumatologic Pathologies in Rehabilitation**

- ◆ 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

### **Module 10. Rehabilitation Plan: Design of a Rehabilitation Program and Communication with the Owner**

- ◆ Choose the appropriate intervention methods and techniques in each case
- ◆ Prevent secondary diseases, complications and sequelae
- ◆ Adapt the residual capacity, modifying the environment to facilitate the animal's daily tasks
- ◆ Maintain the follow-up of the pathological process and evolution of the patient
- ◆ Improve the patient's physical capabilities
- ◆ Alleviate the patient's pain
- ◆ Informing those responsible for the patients about their status

# 04 Skills

After successfully passing the final evaluations of the Hybrid Professional Master's Degree, the student will be in full possession of the necessary skills for a quality and up-to-date veterinary practice, as a result of the most innovative teaching methodology of the current university panorama. In this sense, they will treat and cure all types of physical, sensory and/or motor pathologies in small animals, by means of the most avant-garde physiotherapeutic and rehabilitation techniques.



A close-up photograph of a microscope lens, showing its circular structure and a small orange spot in the center. The background is blurred, showing other parts of the microscope and a blue object.

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*This academic program is designed for you to acquire with a unique level of depth the competencies required in the veterinary physiotherapy and rehabilitation practice”*



## General Skills

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- Be able to carry out physiotherapeutic rehabilitation therapies in small animals
- Ensure the welfare of the animals during rehabilitations, respecting their resting times
- Assess, design, develop and implement work programs with small animals
- Have up-to-date theoretical and practical knowledge to be able to safely deal with any situation that may arise during the professional activity

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*After completing this Hybrid Professional Master's Degree, you will be able to use the latest manual techniques to alleviate the natural pain of small animals”*





## Specific Skills

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- ♦ Master the fields of Anatomy and Biomechanics, Neurology and Traumatology, as well as the methodology and application of the different physiotherapeutic techniques
- ♦ Have a broad knowledge of all the pathologies and situations that can be treated by the rehabilitation veterinarian, beyond the sports world
- ♦ Manage the most relevant aspects of the musculoskeletal system in Rehabilitation
- ♦ Identify the main aspects of functional anatomy and the main external skeletal references, as well as the most important muscle groups and their main function in the organism
- ♦ Perform a functional assessment of the patient in Physiotherapy, which is essential to be able to perform a correct clinical action
- ♦ Examine the physiological mechanisms of pain in order to understand the mode of action of most of the techniques used in rehabilitation
- ♦ Recognize, identify and locate a neurological condition
- ♦ Use the forms of natural manual therapy that include physical, psychological and emotional terms
- ♦ Re-establish the functionality of the tissues using different modalities through manual therapies, thermotherapy, laser therapy or electrotherapy, among others
- ♦ Analyze the characteristics of ultrasound therapy, laser therapy and electrostimulation
- ♦ Assimilate the characteristics of diathermy Indiba, magnetotherapy and shockwave therapy
- ♦ Determine how to prevent and treat injuries derived from sports practice, recovering the functionality of the injured area as soon as possible and avoiding the appearance of sequels
- ♦ Understand the importance of preventive medicine to improve sports performance and prevent injuries through nutrition, physical training, and pre- and post-competition preparation
- ♦ Detect the therapeutic possibilities of each pathology and the complications of these treatments, in order to be able to monitor the patient's evolution, adapt the therapies and achieve optimal results

# 05

# Course Management

The program includes in its teaching staff experts from different areas related to animal physiotherapy rehabilitation. Therefore, by completing this program, the student will have the experience and prestige of professionals from different fields, who will help them to update their work methodology in physiotherapy and rehabilitation of small animals from a multidisciplinary approach, knowing better those pathologies and conditions on which these interventions have a higher rate of positive results.





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*Leading professionals in the field have joined forces to teach you the latest advances in Physiotherapy and Rehabilitation in Small Animals”*

## Management



### Dr. Ceres Vega-Leal, Carmen

- Rehabilitation Veterinarian and Founder of Clínica Carmen Ceres Rehabilitation of Small Animals
- Veterinarian in the Physiotherapy and Rehabilitation Service at A Raposeira Veterinary Clinic
- Veterinarian at Tierklinik Scherzingen, Germany
- Degree in Veterinary Medicine from the Faculty of Veterinary Medicine, University of León
- 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, Universidad Complutense de Madrid
- Master's Degree in Aquaculture by the University of Vigo
- Expert in Bases of Physiotherapy and Animal Rehabilitation, Complutense University of Madrid



## Professors

### Dr. Picón Costa, Marta

- ♦ Veterinarian Specializing in Rehabilitation and Physiotherapy in Marta Picon Veterinary Rehabilitation
- ♦ Manager of Yeguada Campo Alegre
- ♦ Veterinarian of the Internal Medicine and Small Animal Emergency Services at Puerta del Sur Veterinary Clinic
- ♦ Veterinarian of the Internal Medicine and Small Animal Surgery Services at Gaia Veterinary Clinic
- ♦ Graduate in Veterinary Medicine from the Alfonso X El Sabio University
- ♦ Postgraduate in Equine Internal Medicine by Improve Ibérica
- ♦ Expert in the Basis of Physiotherapy and Animal Rehabilitation by the Complutense University of Madrid

### Dr. Pascual Veganzones, María

- ♦ Responsible and Coordinator of the Home Rehabilitation and Physiotherapy Service at Vetterapia Animal
- ♦ Responsible Veterinarian of the Physiotherapy and Rehabilitation Service at the Rehabilitation and Hydrotherapy Center Narub
- ♦ Clinical Veterinarian at Don Pelanas Veterinary Center
- ♦ Graduate in Veterinary Medicine from the University of Leon
- ♦ Master's Degree in Education and Canine Training by the Complutense University of Madrid
- ♦ Postgraduate Course in Rehabilitation and Veterinary Physiotherapy in Small Animals from the FORVET School
- ♦ Training in Principles in Small Animal Orthopedics by Royal Veterinary College of London

### Dr. Laliena Aznar, Julia

- ♦ Veterinary Specialist in Small Animals
- ♦ Responsible for the Rehabilitation Service at the Veterinary Hospital Anicura Valencia Sur
- ♦ Degree in Veterinary from the University of Zaragoza
- ♦ Master's Degree in Small Animal Clinic I and II
- ♦ Postgraduate Certificate in Veterinary Rehabilitation in Small Animals
- ♦ Postgraduate Certificate in Clinical Diagnosis in the Canine and Feline Patient

### Dr. Hernández Jurado, Lidia

- ♦ Veterinary Rehabilitation Specialist
- ♦ Co-owner and Head of the Animal Physical Rehabilitation Service of the Amodiño Veterinary Clinic
- ♦ Graduate in Veterinary Medicine from the University of Santiago de Compostela
- ♦ Degree in Biology from the University of Santiago de Compostela
- ♦ Specialization Course in Small Animal Rehabilitation

### Dr. Rodríguez-Moya Rodríguez, Paula

- ♦ Veterinarian at the Traditional Chinese Veterinary Medicine Service at Rehabcan Center
- ♦ Veterinarian in the Traditional Chinese Veterinary Medicine Service at the Tao Vet Center
- ♦ Graduate in Veterinary Medicine, Catholic University of Valencia
- ♦ Specialty in Traditional Chinese Medicine by Chi Institute
- ♦ Postgraduate Degree in Physiotherapy and Rehabilitation in Small Animals by Euroinnova Business School

# 06

## Educational Plan

For this Hybrid Professional Master's Degree, TECH has designed a progressive and deep educational program that starts from the basics of the discipline and continues to delve into the more specific aspects of the practice of the profession. That is, it reviews anatomical issues of mandatory prior knowledge; it emphasizes the neurology of the animal; it delves into all therapeutic and rehabilitation categories, also addressing sports injuries and trauma casuistry, among other subjects.



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*Thanks to the 100% online methodology offered in the theoretical part of this Hybrid Professional Master's Degree program, you will obtain an excellent learning experience by managing your own study time as you wish”*

## Module 1. Veterinary Physiotherapy and Rehabilitation. Functional Anatomy in Small Animals

- 1.1. Physiotherapy and Rehabilitation in Small Animals
  - 1.1.1. Introduction
    - 1.1.1.1. Background
    - 1.1.1.2. Veterinary Rehabilitation and Physical Therapy
  - 1.1.2. Species Susceptible to be Treated with Physiotherapy
  - 1.1.3. Objectives of Physiotherapy
  - 1.1.4. Techniques in Veterinary Physiotherapy
  - 1.1.5. Indications of Physiotherapy
- 1.2. Morphology, Structure and Function
  - 1.2.1. Bones
  - 1.2.2. Joints
  - 1.2.3. Muscle
- 1.3. The Skeleton of the Dog. Important Anatomical Bone References
  - 1.3.1. Head and Vertebrae
  - 1.3.2. Thoracic Limb
  - 1.3.3. Pelvic Limb
- 1.4. Head and Neck Muscle
  - 1.4.1. Muscles of the Head
  - 1.4.2. Motor Muscles of the Head
  - 1.4.3. Neck Muscles
- 1.5. Trunk and Tail Muscles
  - 1.5.1. Muscles of the Spine
  - 1.5.2. Thoracic Muscles
  - 1.5.3. Abdominal Muscles
  - 1.5.4. Tail Muscles
- 1.6. Thoracic Limb Muscles
  - 1.6.1. Thoracic Girdle Muscles
  - 1.6.2. Shoulder Muscles
  - 1.6.3. Elbow Muscles
  - 1.6.4. Muscles of Carpus and Fingers

- 1.7. Pelvic Limb Muscles
  - 1.7.1. Pelvic Girdle Muscles
  - 1.7.2. Muscles of the Hip
  - 1.7.3. Muscles of the knee
  - 1.7.4. Muscles of Tarsus and Fingers
- 1.8. Innervation and Vascularization
  - 1.8.1. Brachial Plexus
  - 1.8.2. Lumbosacral Plexus
  - 1.8.3. Other Important Nerves
- 1.9. Skeletal Muscle Contraction
  - 1.9.1. Mechanism of Muscle Contraction
  - 1.9.2. Type of Muscle Contraction
  - 1.9.3. Definitions
- 1.10. Physiology of Inflammation
  - 1.10.1. What Is Inflammation?
  - 1.10.2. Phases of Inflammation
  - 1.10.3. Tissue Repair

## Module 2. Biomechanics. Functional Assessment

- 2.1. Overall Functional Assessment
  - 2.1.1. Patient Identification
  - 2.1.2. Qualitative and Quantitative Assessment of the Patient
  - 2.1.3. Assessment of Skin, Subcutaneous Tissue and Musculature
    - 2.1.3.1. Muscle Modifications
- 2.2. Assessment of Gait and Static Positioning
  - 2.2.1. Dynamic Physical Evaluation
    - 2.2.1.1. Characteristics of the Gait
  - 2.2.2. Static Physical Examination
- 2.3. Functional Examination of the Locomotor System: Forelimb
  - 2.3.1. Shoulder
  - 2.3.2. Elbow
  - 2.3.3. Carpus and Metacarpus
  - 2.3.4. Phalanges

- 2.4. Functional Examination of the Locomotor System: Hind Limb
  - 2.4.1. Hip
    - 2.4.1.1. Techniques Used in Hip Examination
  - 2.4.2. knee
  - 2.4.3. Tarsus and Metatarsus
  - 2.4.4. Brief Mention of the Bioarth Scale
- 2.5. Functional Examination of the Spine
  - 2.5.1. Cervical Spine
  - 2.5.2. Thoracic Spine
  - 2.5.3. Lumbar and Sacral Spine
- 2.6. Biomechanics
  - 2.6.1. Basis of Biomechanics
  - 2.6.2. Dempster Diagram
  - 2.6.3. Free Body Diagram
- 2.7. Motor Gesture and Background Automatism
  - 2.7.1. Motor Gesture
  - 2.7.2. Bottom Automatism
- 2.8. Levers and Pulleys
  - 2.8.1. Newton's Laws
  - 2.8.2. Lever System
  - 2.8.3. Types of Levers
  - 2.8.4. Pulleys
- 2.9. Functional Assessment Most Frequent Forelimb and Spine Injuries
  - 2.9.1. Anterior Member
    - 2.9.1.1. Elbow Dysplasia
  - 2.9.2. Rachis
    - 2.9.2.1. Hernia in Thoracolumbar Region
    - 2.9.2.2. Cauda Equina Syndrome
- 2.10. Functional Assessment of the Most Frequently Occurring Hind Limb Injuries
  - 2.10.1. Posterior Limb
    - 2.10.1.1. Hip Dysplasia
    - 2.10.1.2. Patella Dislocation
    - 2.10.1.3. Ruptured Anterior Cruciate Ligament of the Knee

### Module 3. Physiology of Pain. Neurological Evaluation

- 3.1. Introduction
  - 3.1.1. What is Pain?
  - 3.1.2. How to Identify Pain?
  - 3.1.3. How to Quantify Pain?
  - 3.1.4. Perception of Pain in Different Organs and Tissues
- 3.2. Types of Pain
  - 3.2.1. Classification of the Types of Pain
  - 3.2.2. Terminology Related to Pain
  - 3.2.3. Components of Pain
- 3.3. Neurophysiology of Pain
  - 3.3.1. Transduction
  - 3.3.2. Transmission
  - 3.3.3. Modulation
  - 3.3.4. Perception
- 3.4. Chronic Pain and Related Types of Pain
  - 3.4.1. Neurophysiology of Chronic Pain
  - 3.4.2. Pain due to Osteoarthritis (oa)
  - 3.4.3. Neuropathic Pain
  - 3.4.4. Myofascial Pain
- 3.5. The Role of Rehabilitation in Pain Management
  - 3.5.1. Review of Pain Inhibition Mechanisms
  - 3.5.2. Analgesic Therapies Used in Rehabilitation
  - 3.5.3. Management of the Patient with Acute Pain
  - 3.5.4. Management of the Chronic Pain Patient
- 3.6. Neurological Evaluation I
  - 3.6.1. Introduction
  - 3.6.2. Motor System: Review of the Concepts of Upper Motor Neuron and Lower Motor Neuron
  - 3.6.3. Sensory System: Review of Cranial Nerves and Spinal Nerves

- 3.7. Neurological Evaluation II
  - 3.7.1. Review
  - 3.7.2. Observation of Mental State
  - 3.7.3. Behavioral Assessment
  - 3.7.4. Posture Observation
  - 3.7.5. Gait Evaluation
- 3.8. Neurological Evaluation III. Neurological Tests
  - 3.8.1. Evaluation of Cranial Nerves
  - 3.8.2. Evaluation of Spinal Reflexes
  - 3.8.3. Postural Reaction Tests
- 3.9. Neurological Evaluation III
  - 3.9.1. Evaluation of Cranial Nerves
  - 3.9.2. Postural Reactions
- 3.10. Neurological Patient
  - 3.10.1. General Care
  - 3.10.2. Postural Rehabilitation Exercises
  - 3.10.3. Neurological Facilitation Exercises

## Module 4. Manual Therapies and Kinesitherapy. Bandages

- 4.1. Manual Therapy I
  - 4.1.1. Manual Therapy
  - 4.1.2. Physiological Modifications
  - 4.1.3. Therapeutic Effects
- 4.2. Massage
  - 4.2.1. Types of Massages
  - 4.2.2. Indications
  - 4.2.3. Contraindications
- 4.3. Lymphatic Drainage
  - 4.3.1. Lymphatic system
  - 4.3.2. Purpose of Lymphatic Drainage
  - 4.3.3. Indications
  - 4.3.4. Contraindications

- 4.4. Kinesiotherapy I
  - 4.4.1. What Is Kinesitherapy?
  - 4.4.2. General Objectives
  - 4.4.3. Classification
- 4.5. Kinesiotherapy II
  - 4.5.1. Therapeutic Exercises
    - 4.5.1.1. Passive Kinesitherapy
    - 4.5.1.2. Active Kinesitherapy
      - 4.5.1.2.1. Active Resisted Kinesitherapy
      - 4.5.1.2.2. Active Assisted Kinesitherapy
  - 4.5.2. Stretching
  - 4.5.3. How to Establish an Exercise Plan?
- 4.6. Myofascial Manual Therapy
  - 4.6.1. Concept of Fascia and Fascial System
  - 4.6.2. Techniques of Myofascial Therapy
  - 4.6.3. Trigger Points
- 4.7. Evaluation of the Articular Arch
  - 4.7.1. Definition of Rom and Arom
  - 4.7.2. Elastic Barrier, Paraphysiological Zone and Anatomical Barrier
  - 4.7.3. *End feel*
- 4.8. Neuromuscular Bandaging
  - 4.8.1. Introduction
  - 4.8.2. Description and Characteristics
  - 4.8.3. Physiological Basis
  - 4.8.4. Applications
- 4.9. Gait Re-Evaluation
  - 4.9.1. How Motor Control is Altered?
  - 4.9.2. Consequences of Altered Motor Control
  - 4.9.3. Retraining Gait

- 4.10. Bandages
  - 4.10.1. Modified Robert Jones Bandage
  - 4.10.2. Ehmer Bandage
  - 4.10.3. Carpal Flexion Bandage
  - 4.10.4. Velpeau Bandage
  - 4.10.5. External Fixator Bandage
  - 4.10.6. Complications of Bandages

## Module 5. Physical therapies I: Electrotherapy, Laser Therapy, Therapeutic Ultrasound, Thermotherapy

- 5.1. Thermotherapy
  - 5.1.1. Thermotherapy
  - 5.1.2. Application of Thermotherapy
  - 5.1.3. Effects
  - 5.1.4. Indications
  - 5.1.5. Contraindications
- 5.2. Ultrasound I
  - 5.2.1. Definition
  - 5.2.2. Parameters
  - 5.2.3. Indications
  - 5.2.4. Contraindications/Precautions
- 5.3. Ultrasound II
  - 5.3.1. Thermal Effects
  - 5.3.2. Mechanical Effects
  - 5.3.3. Uses of Therapeutic Ultrasound
- 5.4. Laser Therapy I
  - 5.4.1. Introduction to Laser Therapy
  - 5.4.2. Laser Properties
  - 5.4.3. Laser Classification
  - 5.4.4. Types of Lasers Used in Rehabilitation
- 5.5. Laser Therapy II
  - 5.5.1. Effects of Lasers on Tissues
    - 5.5.1.1. Wound Healing
    - 5.5.1.2. Bone and Cartilage
    - 5.5.1.3. Tendon and Ligament
    - 5.5.1.4. Peripheral Nerves and Spinal Cord
  - 5.5.2. Analgesia and Pain Control
- 5.6. Laser Therapy III
  - 5.6.1. Application of Laser Therapy in Dogs
  - 5.6.2. Precautions
  - 5.6.3. Dosage Guide for Different Pathologies
- 5.7. Electrostimulation I
  - 5.7.1. Terminology
  - 5.7.2. History of Electrostimulation
  - 5.7.3. Indications
  - 5.7.4. Contraindications and Precautions
  - 5.7.5. Types of Current
- 5.8. Electrostimulation II
  - 5.8.1. Parameters
  - 5.8.2. Electrodes
  - 5.8.3. What to Look for When Buying an Electrostimulator?
- 5.9. Electrostimulation III-NMES
  - 5.9.1. Types of Muscle Fibers
  - 5.9.2. Recruitment of Muscle Fibers
  - 5.9.3. Biological Effects
  - 5.9.4. Parameters
  - 5.9.5. Placement of Electrodes
  - 5.9.6. Precautions
- 5.10. Electrostimulation IV-TENS
  - 5.10.1. Pain Control Mechanisms
  - 5.10.2. TENS for Acute Pain
  - 5.10.3. TENS for Chronic Pain
  - 5.10.4. Parameters
  - 5.10.5. Placement of Electrodes

**Module 6.** Physical Therapies II-Diathermy, Magnetotherapy, INDIBA, Shockwaves, other Therapies used in Rehabilitation. Nutrition

- 6.1. Diathermy
  - 6.1.1. Introduction and Definition of Diathermy
  - 6.1.2. Types of Diathermy
    - 6.1.2.1. Shortwave
    - 6.1.2.2. Microwave
  - 6.1.3. Physiological Effects and Clinical Use
  - 6.1.4. Indications
  - 6.1.5. Contraindications and Precautions
- 6.2. INDIBA®
  - 6.2.1. INDIBA® Radiofrequency Concept
  - 6.2.2. Physiological Effects of Radiofrequency
  - 6.2.3. Indications
  - 6.2.4. Contraindications and Precautions
- 6.3. Magnetotherapy
  - 6.3.1. Introduction and Definition of Magnetotherapy
  - 6.3.2. Biomagnetism
    - 6.3.2.1. Effects of Magnetotherapy
    - 6.3.2.2. Natural Magnets
    - 6.3.2.3. Properties of Magnetic Poles
  - 6.3.3. Pulsed Magnetic Fields
    - 6.3.3.1. Physiological Effects and Clinical Use
    - 6.3.3.2. Indications
    - 6.3.3.3. Contraindications and Precautions
- 6.4. Shock Waves
  - 6.4.1. Introduction and Definition of Shock Waves
  - 6.4.2. Types of Shockwaves
  - 6.4.3. Physiological Effects and Clinical Use
  - 6.4.4. Indications
  - 6.4.5. Contraindications and Precautions





- 6.5. Holistic Therapies and Integrative Medicine
  - 6.5.1. Introduction and Definitions
  - 6.5.2. Types of Holistic Therapy
  - 6.5.3. Physiological Effects and Clinical Use
  - 6.5.4. Indications
  - 6.5.5. Contraindications and Precautions
- 6.6. Traditional Chinese Medicine
  - 6.6.1. Basis of the MTC
  - 6.6.2. Acupuncture
    - 6.6.2.1. Acupoints and Meridians
    - 6.6.2.2. Actions and Effects
    - 6.6.2.3. Indications
    - 6.6.2.4. Contraindications and Precautions
  - 6.6.3. Chinese Herbal Medicine
  - 6.6.4. Tui-Na
  - 6.6.5. Diet Therapy
  - 6.6.6. Qi-Gong
- 6.7. Clinical Nutrition in Obesity and Osteoarthritis
  - 6.7.1. Introduction
  - 6.7.2. Definition of Obesity
    - 6.7.2.1. Body Condition Evaluation
  - 6.7.3. Nutritional Management and Feed-Based Dietary Plan
  - 6.7.4. Nutritional Management Based on Natural Food
  - 6.7.5. Supplements and Supplements
- 6.8. Chiropractic
  - 6.8.1. Introduction and Concept of Chiropractics
  - 6.8.2. Vertebral Subluxation Complex (VSVC)
  - 6.8.3. Physiological Effects
  - 6.8.4. Indications
  - 6.8.5. Contraindications and Precautions

- 6.9. Cranio-Sacral Therapy
  - 6.9.1. Introduction
  - 6.9.2. Use in Veterinary Medicine
  - 6.9.3. Physiological Effects and Benefits
  - 6.9.4. Indications
  - 6.9.5. Contraindications and Precautions
- 6.10. Ozone Therapy
  - 6.10.1. Introduction
    - 6.10.1.1. Oxidative stress
  - 6.10.2. Physiological Effects and Clinical Use
  - 6.10.3. Indications
  - 6.10.4. Contraindications and Precautions

## Module 7. Feline Rehabilitation. Hydrotherapy

- 7.1. Feline Rehabilitation I: Important Aspects
  - 7.1.1. Signs of Pain in the Feline Patient
  - 7.1.2. The Importance of the Environment and Management in the Feline Patient
  - 7.1.3. Main Pathologies Susceptible to Rehabilitation in Felines
- 7.2. Feline Rehabilitation II: Degenerative Joint Disease in Felines
  - 7.2.1. Clinical Manifestations
  - 7.2.2. Orthopedic Examination
  - 7.2.3. Radiological Peculiarities
  - 7.2.4. Weight Management
- 7.3. Feline Rehabilitation III: the Post-Surgical Patient
  - 7.3.1. Introduction
  - 7.3.2. Special Care and Stress Management
  - 7.3.3. Rehabilitation Therapies and Techniques
- 7.4. Feline Rehabilitation IV: Considerations in Rehabilitation Plans
  - 7.4.1. The Environment and Structuring of the Sessions
  - 7.4.2. Most Tolerated Therapies
  - 7.4.3. Strategies for the Execution of Therapeutic Exercises
  - 7.4.4. Home Modifications and Recommendations

- 7.5. Hydrotherapy I: Physical Principles of Water
  - 7.5.1. Introduction
  - 7.5.2. Relative Density
  - 7.5.3. Buoyancy
  - 7.5.4. Surface Tension
  - 7.5.5. Viscosity
  - 7.5.6. Hydrostatic Pressure
  - 7.5.7. Thermal Capacity
- 7.6. Hydrotherapy II: Benefits and Indications
  - 7.6.1. Indications in Patients with Neurological Problems
  - 7.6.2. Indications in Patients with Orthopedic Problems
  - 7.6.3. Indications in Overweight Patients
  - 7.6.4. Indications in Sports Patients
- 7.7. Hydrotherapy III: Precautions, Contraindications and Special Care
  - 7.7.1. Precautions
  - 7.7.2. Contraindications
  - 7.7.3. Special Care
- 7.8. Hydrotherapy IV: Modalities I
  - 7.8.1. Underwater Tape
  - 7.8.2. Indications and Advantages
  - 7.8.3. Precautions and Contraindications
- 7.9. Hydrotherapy V: Modalities II
  - 7.9.1. Swimming and Other Pool Exercises
  - 7.9.2. Indications and Advantages
  - 7.9.3. Precautions and Contraindications
  - 7.9.4. Main Differences between the Two Modalities
- 7.10. Hydrotherapy VI: Development of a Hydrotherapy Plan
  - 7.10.1. When to Implement Hydrotherapy in the Rehabilitation Plan?
  - 7.10.2. Duration of Therapy
  - 7.10.3. Water Temperature
  - 7.10.4. Water Quality Parameters
  - 7.10.5. The Importance of the Drying

## Module 8. Sports Medicine. Sports modalities in dogs. Most frequent pathologies and prevention

- 8.1. Characteristics of the Athletic Dog
  - 8.1.1. Definition of the Athletic Dog
  - 8.1.2. Characteristics of the Athletic Dog
  - 8.1.3. Importance of Rehabilitation in the Sporting Dog
- 8.2. Physiology of Exercise
  - 8.2.1. Definitions
  - 8.2.2. Phases of the Exercise
  - 8.2.3. Adaptations of the Organism
- 8.3. Sports Modalities I. Agility
  - 8.3.1. Definition
  - 8.3.2. Categories, Levels and Modalities
  - 8.3.3. Agility Dog Morphology
- 8.4. Sport Modalities II. Canicross, Bikejoring, Mushing
  - 8.4.1. Canicross
  - 8.4.2. Bikejoring
  - 8.4.3. Medium and Long Distance Mushing
  - 8.4.4. Other Sports Modalities
- 8.5. Specific Nutrition for Sporting Dogs
  - 8.5.1. Basic Concepts
    - 8.5.1.1. Energy Requirements
  - 8.5.2. Basic Food
    - 8.5.2.1. Concepts of Raw Food
  - 8.5.3. Supplements and Supplements
  - 8.5.4. Aspects to take into account
- 8.6. Most Common Pathologies
  - 8.6.1. Thoracic Limb
  - 8.6.2. Pelvic Limb
  - 8.6.3. Other Pathologies

- 8.7. Why Are They Injured?
  - 8.7.1. Main Causes of Injuries
  - 8.7.2. How to Prevent Injuries?
  - 8.7.3. Non-Musculoskeletal Pathologies
- 8.8. The Working Dog
  - 8.8.1. Selection of the Working Dog
  - 8.8.2. Preparation. of the Working Dog
  - 8.8.3. Care of the Working Dog
- 8.9. Sport and Proprioception
  - 8.9.1. What is Proprioception?
  - 8.9.2. Core Musculature
  - 8.9.3. Proprioceptive Exercises
- 8.10. Training Plan
  - 8.10.1. Start Training
  - 8.10.2. Importance of a Good Warm-Up
  - 8.10.3. Importance of Good Cool Down

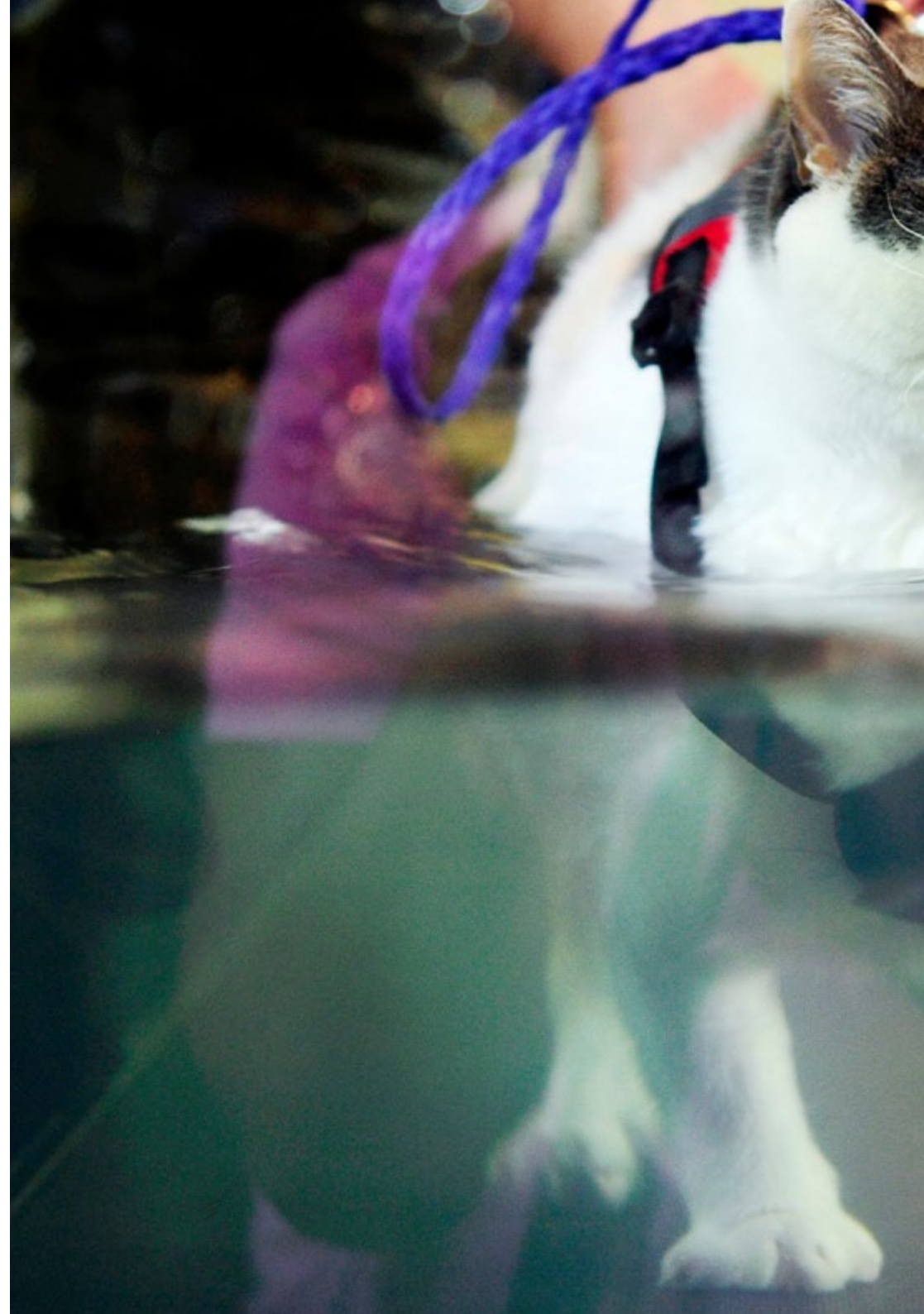
## Module 9. Traumatologic Examination. Effects of Immobilization on Tissues. Traumatologic Pathologies in Rehabilitation

- 9.1. Traumatologic Examination
  - 9.1.1. Forelimbs
  - 9.1.2. Hind Limbs
- 9.2. Effects of Immobilization on different Tissues I
  - 9.2.1. Bone
  - 9.2.2. Ligaments and Tendons
- 9.3. Effects of Immobilization on different Tissues II
  - 9.3.1. Muscle
  - 9.3.2. Cartilage
- 9.4. Fractures and Dislocations
  - 9.4.1. Fracture Management
  - 9.4.2. Dislocation Management

- 9.5. Hip
  - 9.5.1. Hip Dysplasia
  - 9.5.2. Avascular Necrosis of the Femoral Head
- 9.6. knee
  - 9.6.1. Patella Dislocation
  - 9.6.2. Rupture of the Anterior Cruciate Ligament
  - 9.6.3. OCD of the Knee
- 9.7. Elbow and Shoulder
  - 9.7.1. Elbow Dysplasia
    - 9.7.1.1. Fragmented Medial Coronoid Process
    - 9.7.1.2. OCD of the Elbow
    - 9.7.1.3. Non-Union of the Anconic Process
    - 9.7.1.4. Joint Incongruence
  - 9.7.2. Shoulder OCD
  - 9.7.3. Medial Shoulder Instability
- 9.8. Muscular Pathologies
  - 9.8.1. Fibrotic Contracture of the Infraspinatus Muscle
  - 9.8.2. Contracture of the Flexor Muscles of the Forearm
  - 9.8.3. Quadriceps Contracture
  - 9.8.4. Fibrotic Myopathy of the Gracilis Muscle
- 9.9. Tendon and Ligament Pathologies
  - 9.9.1. Bicipital Tenosynovitis
  - 9.9.2. Tendinopathy of the Supraspinatus Muscle
  - 9.9.3. Carpal Hyperextension
  - 9.9.4. Patellar Tendon Rupture
  - 9.9.5. Achilles Tendon Rupture
- 9.10. Other Pathologies
  - 9.10.1. Panosteitis
  - 9.10.2. Hypertrophic Osteopathy
  - 9.10.3. Musculoskeletal Tumors

## Module 10. Rehabilitation Plan: Design of a Rehabilitation Program and Communication with the Owner

- 10.1. Establishing a Rehabilitation Plan, Where Do I start?
  - 10.1.1. What Cases Respond to Physical Therapy and Rehabilitation?
  - 10.1.2. Objectives and Working Methods
  - 10.1.3. Inconveniences and Circumstances to Consider
  - 10.1.4. What to Evaluate in Rehabilitation?
- 10.2. How do I Rehabilitate?
  - 10.2.1. The Therapist-Patient Bond
  - 10.2.2. Adaptation to the Patient
  - 10.2.3. Patient Motivation
  - 10.2.4. Fundamental Aspects of a Rehabilitation Program
    - 10.2.4.1. Frequency (F)
    - 10.2.4.2. Intensity
    - 10.2.4.3. Duration
    - 10.2.4.4. Types of Exercise
- 10.3. Designing a Rehabilitation Plan
  - 10.3.1. Optimize and Make the Rehabilitation Center's Time and Space Cost-Effective
  - 10.3.2. Individualization of the Therapeutic Protocol
  - 10.3.3. Success of the Rehabilitation Plan
- 10.4. Management of a Veterinary Center
  - 10.4.1. Factors to Consider
  - 10.4.2. Service to the Veterinarian/Referral Center
  - 10.4.3. Are Social Networks Important?





- 10.5. Communication with the Owner and/or Person Responsible for the Animal
  - 10.5.1. Quality of Care
  - 10.5.2. Owner Integration in Therapy
  - 10.5.3. Communication With the Owner
- 10.6. Rehabilitation and Physiotherapy in Spinal Cord Injuries
  - 10.6.1. Introduction
  - 10.6.2. Most frequent Neurology Pathologies
  - 10.6.3. Therapeutic Generalities
- 10.7. Rehabilitation and Physiotherapy of Patients with Osteoarthritis
  - 10.7.1. Environment
  - 10.7.2. Concomitant Diseases
  - 10.7.3. Weight Control
  - 10.7.4. Rehabilitation and Physical Therapy Plan
- 10.8. Fracture Rehabilitation
  - 10.8.1. Diaphyseal Fractures
  - 10.8.2. Joint Fractures
  - 10.8.3. Fractures that Do Not Close
- 10.9. Pre- and Post-Surgical Rehabilitation
  - 10.9.1. Elbow Dysplasia
  - 10.9.2. Hip Dysplasia
  - 10.9.3. Cruciate Ligament Rupture
- 10.10. Other Rehabilitation Plans
  - 10.10.1. Diseases of Young Children under 1 Year of Age
  - 10.10.2. Preventive Rehabilitation
  - 10.10.3. Considerations to Be Taken into Account in the Cardiopathy Patient

07

# Clinical Internship

After passing the theoretical phase of this Hybrid Professional Master's Degree in Physiotherapy and Rehabilitation in Small Animals, a clinical internship in a high-level veterinary center is contemplated. Together with an excellent group of specialists in the field, the student will be able to practice in a real environment everything learned throughout this program.



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*Learn from the best specialists all the latest details and insights related to veterinary Physiotherapy and Rehabilitation”*

The internship phase of this Hybrid Professional Master's Degree consists of a 3-week stay in a prestigious center, from Monday to Friday, with 8 consecutive hours of work under the guidance of an attending specialist. This period will allow the student to deal with real animals alongside a team of professionals of reference in the field of veterinary physiotherapy and rehabilitation, applying the most innovative treatments currently available.

In this completely practical program, the activities are aimed at developing and perfecting the skills necessary to provide Physiotherapy and Rehabilitation services for Small Animals that require a high level of qualification, and are oriented towards specific expertise for practicing the activity, in a safe environment for the patient and with highly professional performance.

It is undoubtedly an opportunity to learn by working in a prestigious veterinary clinic, where the application of innovative techniques and tools to alleviate animal pain is the basis of its activity. This is a new way of understanding and integrating the latest animal health processes, and turning a reference center into the ideal teaching scenario for this innovative experience in the improvement of professional competencies.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of knowledge (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the veterinary praxis (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:







Module	Practical Activity
<b>Manual Therapies and Kinesitherapy. Bandages</b>	Apply different types of massages to small animals to alleviate their ailments
	Perform physiotherapeutic treatments with animals based on kinesitherapy
	Apply different bandages to injured animals, depending on the particular characteristics of each animal
<b>Physical Therapies I: Electrotherapy, Laser Therapy, Therapeutic Ultrasound. Thermotherapy</b>	Use ultrasound as a mechanism for recovery of injuries in animals
	Use laser therapy as a method of injury rehabilitation in dogs
	Apply TENS as a tool to relieve acute and chronic pain in small animals
<b>Feline Rehabilitation. Hydrotherapy</b>	Design a post-surgical therapeutic plan for the feline patient
	Perform a hydrotherapy-based injury recovery plan for felines
	Adapt hydrotherapy programs to animals with various pathologies such as neurological or orthopedic problems
<b>Sports Medicine. Sports Modalities in Dogs. Most Frequent Pathologies and Prevention</b>	Establish a nutritional plan for the sporting dog aimed at injury prevention
	Perform a detailed analysis of a sporting dog to detect the possible causes of injuries
	Design a training program for a sporting dog
<b>Rehabilitation Plan: Design of a Rehabilitation Program and Communication with the Owner</b>	Design an injury rehabilitation plan, adapted to the pathology and characteristics of each animal
	Develop a rehabilitation program for animals with complex injuries such as hip dysplasia or cruciate ligament rupture
	Communicate adequately with the owner of the animal and promote the integration of the owner in the patient's recovery process

## Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



## General Conditions of the Internship Program

The general terms and conditions of the internship program agreement shall be as follows:

**1. TUTOR:** During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

**2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

**3. ABSENCE:** If the student does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

**4. CERTIFICATION:** Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** the Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

**7. DOES NOT INCLUDE:** The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

# 08

## Where Can I Do the Clinical Internship?

TECH offers its students the opportunity to put into practice the theoretical knowledge learned throughout this program in a renowned veterinary center in animal physiotherapy and rehabilitation. In this way, the student updates their skills alongside the best in the industry, boosting their career to the highest level in this veterinary field.



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*You will develop the necessary skills in  
Physiotherapy and Rehabilitation in Small  
Animals with the best veterinary experts  
thanks to TECH”*



The student will be able to complete the internship of this Hybrid Professional Master's Degree at the following centers:



Veterinary-medicine

### Hospital Veterinario Assistència veterinaria Vic

Country	City
Spain	Barcelona

Address: Carrer de Cervera, 6, Bajo; Pol.Ind, 08500 Vic, Barcelona

Clinic specialized in services such as Surgery, Diagnostic Imaging, Laboratory and Intensive Care, among others.

**Related internship programs:**

- Physiotherapy and Rehabilitation in Small Animals
- Small Animal Ultrasonography



Veterinary-medicine

### Animalia BCN MiVet

Country	City
Spain	Barcelona

Address: Carrer de la Creu Coberta, 130, Barcelona

Veterinary hospital in Barcelona with 24-hour care 365 days a year

**Related internship programs:**

- Dermatology in Small Animals
- Physiotherapy and Rehabilitation in Small Animals



Veterinary-medicine

### Hospital Veterinario MiVet Faycan Catarroja

Country	City
Spain	Valence

Address: Carrer Charco, 15, 46470 Catarroja, Valencia

Comprehensive animal care clinic with 24-hour emergency and hospitalization service

**Related internship programs:**

- Veterinary Surgery in Small Animals



Veterinary-medicine

### Reanimalia

Country	City
Spain	Cádiz

Address: C. Malta, 11011 Cádiz

Reanimalia, exclusive veterinary rehabilitation center in Cádiz

**Related internship programs:**

- Physiotherapy and Rehabilitation in Small Animals



Veterinary-medicine

### Centro Veterinario Fisiovet MiVet

Country	City
Spain	Madrid

Address: C. Petra Kelly, 3, 28919 Leganés, Madrid, España

Veterinary center specialized in physiotherapy and animal rehabilitation

**Related internship programs:**

- Physiotherapy and Rehabilitation in Small Animals



Veterinary-medicine

### Centre de Rehabilitació Animal de Referència de Barcelona (CRAR BCN)

Country	City
Spain	Barcelona

Address: C. de Pallars, 329, 08005 Barcelona

Veterinary center specialized in animal rehabilitation

**Related internship programs:**

- Physiotherapy and Rehabilitation in Small Animals



Veterinary-medicine

### Centro Veterinario Triscan

Country	City
Spain	Asturias

Address: Calle Santa Teresa nº 12, bj, 33007 Oviedo, Asturias

Veterinary center for canine rehabilitation and general care

**Related internship programs:**

- Physiotherapy and Rehabilitation in Small Animals



Veterinary-medicine

### Fisiodog

Country	City
Spain	León

Address: C. Bernardino de Sahagún, 13, 24004 León

Veterinary Center specialized in Rehabilitation, Orthopedic and Neurological Pathologies

**Related internship programs:**

- Physiotherapy and Rehabilitation in Small Animals



**Centro Veterinario  
Animal-Vetx El Saladillo**

Country	City
Spain	Huelva

Address: Cam. del Saladillo, 3, 21007 Huelva

AnimalVetx El Saladillo Veterinary Center in Huelva is a complete and innovative veterinary center since 2014

**Related internship programs:**

- Veterinary Surgery in Small Animals
- Small Animal Ultrasonography



Veterinary-medicine

### Centro Veterinario Puebla

Country	City
Mexico	Puebla

Address: Calzada zavaleta 115 Local 1  
Santa Cruz Buenavista C.P 72154

General veterinary center with 24-hour  
emergency service

**Related internship programs:**

- Veterinary Anesthesiology
- Veterinary Cardiology in Small Animals



Veterinary-medicine

### Hospital Imagen

Country	City
Mexico	Mexico City

Address: Sur 24 #54 Agricola Oriental  
Iztacalco C.P. 08500

Veterinary hospital specialized in neurology and diagnostic  
imaging

**Related internship programs:**

- Physiotherapy and Rehabilitation in Small Animals
- Small Animal Neurology



Veterinary-medicine

### Hospital Veterinario Reynoso

Country	City
Mexico	Mexico

Address: Guillermo roja No.201 Col. Federal  
Toluca Edomex

High specialty Veterinary Hospital

**Related internship programs:**

- Anesthesiology and Veterinary
- Management and Administration of Veterinary Centers



Veterinary-medicine

### Neuropets Veterinaria

Country	City
Mexico	Mexico City

Address: Laguna Tamiahua #61, Anáhuac  
I Secc, Miguel Hidalgo, 11320 Del. Miguel  
Hidalgo, CDMX

Group of veterinarians with more than 10  
years of experience in specialized veterinary  
medicine.

**Related internship programs:**

- Management and Administration of Veterinary Centers
- Physiotherapy and Rehabilitation in Small Animals







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*Take advantage of this opportunity to surround yourself with expert professionals and learn from their work methodology”*

09

# 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 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

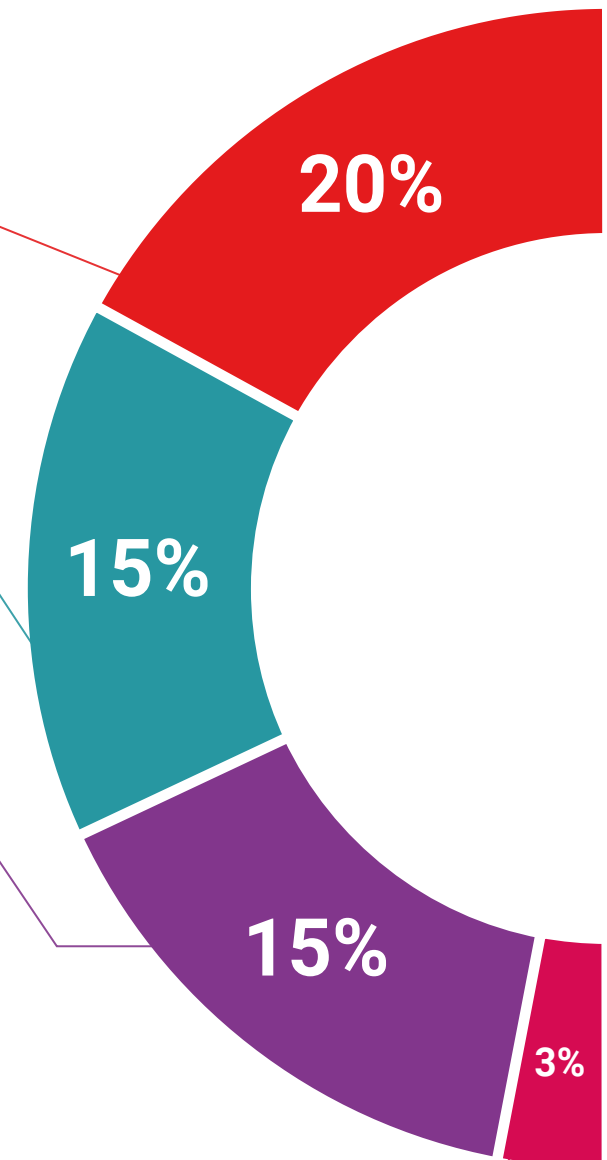
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.



# 10 Certificate

The Hybrid Professional Master's Degree in Physiotherapy and Rehabilitation in Small Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree diploma issued by TECH Global University.



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

This program will allow you to obtain your **Hybrid Professional Master's Degree diploma in Physiotherapy and Rehabilitation in Small 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: **Hybrid Professional Master's Degree in Physiotherapy and Rehabilitation in Small Animals**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Global University**

Recognition: **60 + 5 ECTS Credits**



\*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.



## Hybrid Professional Master's Degree

Physiotherapy and Rehabilitation  
in Small Animals

Modality: Hybrid (Online + Clinical Internship)

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60 + 5 créditos ECTS

# Hybrid Professional Master's Degree Physiotherapy and Rehabilitation in Small Animals

