Hybrid Professional Master's Degree Veterinary Oncology in Small Animals





## Hybrid Professional Master's Degree Veterinary Oncology in Small Animals

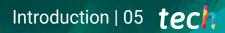
Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Technological University Teaching Hours: 1,620 h. Website: www.techtitute.com/us/veterinary-medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-veterinary-ocnology-small-animals

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## 01 Introduction

Veterinary Oncology continues to be a challenge for professionals who see dogs and cats suffering from cancer in their offices on a daily basis. However, in this scenario, pharmacological advances and the very important progress in radiotherapy have improved the quality of life and the evolution of the disease in these small animals. Given its current relevance, TECH has created this program that provides professionals with the most advanced theoretical knowledge combined with a practical stay in a prestigious center. All this in a maximum of 12 months, where the specialists will be guided by real professionals in Veterinary Oncology, with whom they will update the diagnostic and treatment techniques in this field.



Add to your online study the realization of a Clinical Internship with the highest standards of quality and technological level in a first level veterinary clinical center"

## tech 06 | Introduction

There is currently a phenomenon where dogs and cats are much more frequent in homes than a few decades ago. Therefore, it is not surprising that clinical practices have increased their attention to these small and adorable pets. However, more and more oncology patients are detected in these clinics, who require the most advanced techniques and treatments to promote their recovery or a less painful evolution of the cancer.

This is a scenario that puts veterinary professionals to the test on a daily basis, as they have seen how in recent years, at the same time as with human cancer, there have been advances in equipment and drugs. Faced with this reality, TECH provides this Hybrid Professional Master's Degree in Veterinary Oncology in Small Animals, which gives veterinarians the opportunity to update their knowledge through a 100% online theory and a first class practical stay in a leading clinical center.

Therefore, with this approach, the professionals will be able to update their knowledge on the most effective radiotherapy techniques, the different types of examinations and analysis, as well as the most efficient interventions on tumors in small animals. For this purpose, they will have access to innovative teaching resources, which can be accessed comfortably from any device with an Internet connection.

Once this theoretical phase is completed, the professional will enter into a practical stay, which distinguishes this program from the rest of the academic panorama. For 3 weeks the veterinarians will be integrated into an excellent team, which will show the most relevant advances in the approach to cancer patients. All this in an ideal setting to enhance the capabilities and technical skills, with the help of the best specialists.

TECH offers an excellent opportunity to take an advanced Hybrid Professional Master's Degree, compatible with work and personal responsibilities, while providing a unique practical experience to perform a complete update of knowledge in the field of Veterinary Oncology in Small Animals. This **Hybrid Professional Master's Degree in Veterinary Oncology 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 extensive experience in the critical animal
- 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
- Assessment and monitoring of the critical animal, the latest recommendations in critical animal care
- Comprehensive systematized action plans for the main oncological pathologies
- Presentation of practical workshops on diagnostic and therapeutic techniques for animals with cancer
- Practical clinical guides on approaching different pathologies
- Special emphasis on test-based medicine and research methodologies in Oncology
- 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
- In addition, you will be able to carry out a clinical internship in one of the best hospitals in the world

A program that will allow you to learn about the latest advances in endocrine system tumors"

### Introduction | 07 tech

You will have the experience of expert professionals who will contribute to the program with their knowledge in this area of action, making this specialization a unique opportunity to update your knowledge"

In this proposal for a Hybrid Professional Master's Degree, of a professionalizing nature and hybrid learning modality, the program is aimed at updating veterinary professionals who carry out their functions in clinical centers and who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in veterinary practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision making in the management of the oncological patient.

Thanks to its multimedia content elaborated with the latest educational technology, they will allow the veterinary professional to obtain a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed 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 throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

This Hybrid Professional Master's Degree provides you with the most innovative and updated syllabus in the approach to dogs and cats with advanced stage cancer.

## 02 Why Study this Hybrid Professional Master's Degree?

Undoubtedly, the complexity of the multiple diseases and different stages that veterinary professionals must attend to in dogs and cats, requires not only theoretical knowledge, but also a practical application of the concepts. Under this premise is born this program, which provides the professional with the latest techniques and approaches in Veterinary Oncology in Small Animals. TECH has created a program that perfectly combines the update in areas such as nervous system tumors, diagnostic techniques and the use of chemotherapy with a practical stay in a prestigious clinical center. The professionals will get a complete vision of the most current panorama in Veterinary Oncology, being guided throughout the process by real experts in the field. Why Study this Hybrid Professional Master's Degree? | 09 tech

With TECH you will enter into real clinical environments and maximum demand, so that you can delve into the advances in Veterinary Oncology, with the help of the best specialists"

## **tech** 10 | Why Study this Hybrid Professional Master's Degree?

#### 1. Updating from the Latest Technology Available

New technologies in the area of Veterinary Oncology have revolutionized diagnostic and analysis techniques, thanks to the precession and image quality, as well as the possibilities of applying less invasive treatments. For this reason, and with the aim of bringing the specialist closer to this technology, TECH presents this Hybrid Professional Master's Degree, which includes a practical stay in a cutting-edge clinical environment, accessing the latest technology in this field.

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

TECH incorporates in all its programs real professionals with experience in the field they are going to teach. Therefore, firstly, the veterinarian will have a specialized teaching team, and secondly, during the on-site stay will be guided by a professional from the center where the practice is developed. This will allow them to incorporate the most current procedures and approaches in the area of Veterinary Oncology into their daily practice.

#### 3. Entering First-Class Clinical Environments

TECH carefully selects all available centers for Internship Programs. Thanks to this, the specialist will have guaranteed access to a prestigious clinical environment in the field of Veterinary Oncology. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology.



### Why Study this Hybrid Professional | 11 **tech** Master's Degree?

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

TECH meets the real demands of professionals and therefore combines a flexible 100% online theoretical framework with the most advanced practice in the field of Veterinary Oncology. In this way, it offers a completely new modality and adapts to the real needs of updating professionals. All this, in addition, always accompanied by specialists in this field.

#### 5. Expanding the Boundaries of Knowledge

The veterinary professional will obtain in only 12 months a much more complete vision, with a theoretical-practical vision of the new advances in Veterinary Oncology. In this way, the professionals will not only have the opportunity to update their knowledge, but will do so with the help of the best professionals with extensive experience in the sector and developing their careers in leading clinical centers.

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

# 03 **Objectives**

The general objective of the Hybrid Professional Master's Degree in Veterinary Oncology in Small Animals is to graduate highly qualified professionals for work experience. This objective is materialized in helping veterinary professionals to access a much higher level of competence and control. A goal that can be achieved with this high intensity and precision specialization.

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The constant updating of knowledge is key to provide better patient care, especially in the oncological field"

## tech 14 | Objectives

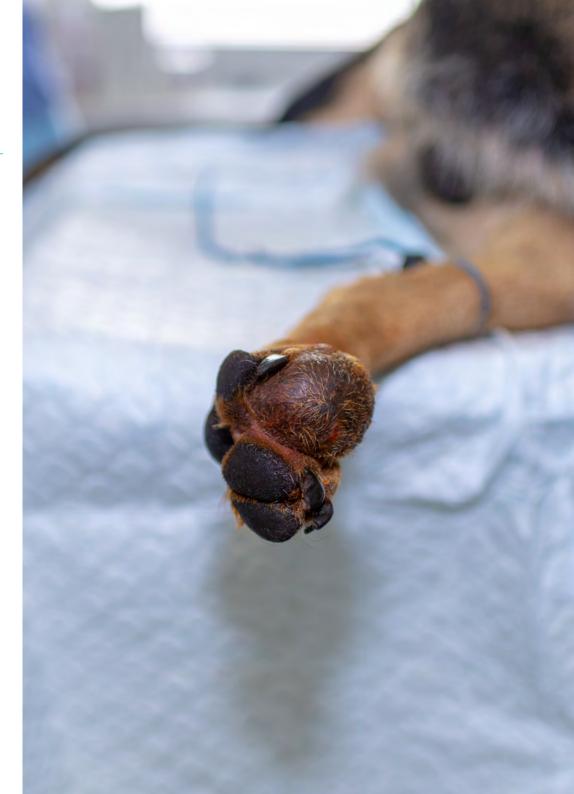


## **General Objectives**

- Analyze key aspects of owner communication about small animal cancers
- Specify palliative care in cancer patients
- Examine the basis of tumor biology and etiology of cancer
- Analyze the different types of epidemiologic studies used in cancer research
- Establish action, staging and therapeutic protocols for melanoma in Animals



With this program you will be aware of new strategies for th aware of new strategies for the approach to canine osteosarcoma"





## Module 1. Introduction to Oncology. Etiology, Biology and Epidemiology of Cancer Anatomopathologic Diagnosis

- Analyze the genetic basis of cancer, as well as the influence of chemical, physical, hormonal and viral factors in its development
- Define tumor biology and metastases formation
- Compile the different types of epidemiologic research used in the study of cancer
- Define the concept of translational medicine and its implication in human cancer research
- Propose protocols for the diagnostic and therapeutic approach in cancer patients
- Develop the cytologic technique and interpretation in depth
- Identify the key points to correctly refer biological samples t o anatomic pathology laboratories
- Establish the guidelines to correctly interpret anatomic pathology reports

#### Module 2. Cancer Diagnosis. Imaging and Molecular Diagnostic Techniques. Chemotherapy, Electrochemotherapy and Molecular/Targeted Therapy

- Develop radiology as an imaging technique in cancer patient staging
- Analyze ultrasound as an imaging technique in the diagnosis of cancer patients
- Evaluate computed tomography and magnetic resonance imaging as advanced imaging techniques in the diagnosis of oncologic patients
- Specify the advantages and limitations of diagnostic imaging techniques to define their scope of application
- Evaluate surgery as one of the first cancer treatment modalities
- Define the concepts of surgical margins and types of surgery in oncology, as well as the advantages and limitations of this therapeutic modality in cancer treatment

- Develop new therapeutic modalities in the treatment of oncology patients such as electrochemotherapy and molecular/targeted therapy
- Establish the side effects, advantages and limitations of chemotherapy, electrochemotherapy and molecular/targeted therapy in the treatment of oncology patients

#### Module 3. Cancer Patient Treatment. Radiotherapy, Immunotherapy, Interventional Oncology. Complications in Oncological Therapy. Palliative Care

- Analyze the indications, advantages, limitations, and side effects of radiation therapy as an oncological treatment modality in small animals
- Examine the indications, advantages, limitations, and side effects of immunotherapy as a small animal oncology treatment modality
- Evaluate the indications, advantages, limitations, and side effects of interventional oncology as a small animal oncology treatment modality
- Define paraneoplastic syndromes in dogs and cats
- Propose action protocols for oncological emergencies
- Establish guidelines to establish a proper line of communication with cancer patient owners
- Analyze the treatment of pain in oncological patients
- Develop nutritional support plans for cancer patients

## tech 16 | Objectives

#### Module 4. Cutaneous and Subcutaneous Tumors

- Present general protocols for the diagnosis of cutaneous and subcutaneous tumors in dogs and cats
- Define epithelial tumors in dogs and cats
- Analyze the diagnostic and therapeutic approach to mastocytoma in dogs and cats
- Present the classification of soft tissue sarcomas
- Propose diagnostic and therapeutic protocols for soft tissue sarcomas
- Define risk factors and prognoses in canine and feline mastocytomas
- Establish the factors involved in the recurrence of soft tissue sarcomas

#### Module 5. Injection Site Sarcomas. Melanoma. Respiratory Tumors

- Generate expertise in the diagnosis, treatment, prognosis and prevention of feline injection site sarcomas
- Develop a systematic approach to the evaluation and treatment of canine melanoma
- Establish prognostic criteria in canine melanoma
- Define skin anatomy and healing as principles that enable the surgical approach to cutaneous and subcutaneous tumors
- Evaluate the different reconstructive techniques that can be used in extensive resections of cutaneous tumors
- Establish diagnostic and therapeutic protocols for tumors of the nasal plane, nasal cavity and sinuses, larynx, trachea and lung parenchyma
- Develop the different techniques that can be used in the surgical treatment of tumors of the nasal plane, nasal cavity and sinuses, larynx, trachea and lung parenchyma

#### Module 6. Digestive Tract Tumors. Mesothelioma

- Define tumors in dogs and cats affecting the oral cavity, esophagus, stomach, small and large intestine, anal sacs and liver
- Establish diagnostic and therapeutic protocols for the main tumors affecting the oral cavity, esophagus, stomach, small and large intestine and anal sacs
- Analyze the main risk factors influencing the prognosis of patients with tumors of the oral cavity, esophagus, stomach, small and large intestine, anal sacs
- Identify the anatomy and type of scarring of the digestive tract that is clinically relevant for the surgical approach to oncological diseases of the digestive tract
- Define the main surgical techniques of the digestive tract that can be used in the treatment of digestive tumors in dogs and cats
- Perform the diagnostic and therapeutic approach and evaluate the risk and prognostic factors in liver tumors in dogs and cats
- Generate diagnostic and therapeutic protocols for mesothelioma

#### Module 7. Endocrine System Tumors. Breast Tumors. Ophthalmologic Tumors

- Generate diagnostic and therapeutic protocols for the main pituitary, adrenal and thyroid gland and exocrine pancreas tumors in dogs and cats
- Establish clear, patient-based recommendations on the therapeutic alternatives for pituitary, adrenal, thyroid and exocrine pancreas tumors in dogs and cats
- Develop, in detail, the techniques involved in the surgical approach to pituitary, adrenal and thyroid gland and exocrine pancreas tumors in dogs and cats potential complications
- Compile the information available on the therapy of chronic degenerative valve disease
- Propose protocols for making decisions in breast oncology
- Define the risk factors associated with the occurrence and prognosis of canine and feline mammary tumors
- Demonstrate the importance of peri-operative care of patients with breast tumors.
- Establish action protocols for the main canine and feline ophthalmologic tumors

## Objectives | 17 tech

#### Module 8. Genitourinary Tumors. Nervous System Tumours

- Define the different tumors affecting the urogenital tract in dogs and cats
- Evaluate the classical and minimally invasive diagnostic techniques used in tumors affecting the urogenital tract in dogs and cats
- Establish the different medical and surgical treatments for urogenital tumors in dogs and cats
- Analyze the new minimally invasive therapeutic strategies and interventional radiology in tumors affecting the urogenital system in dogs and cats
- Establish the risk and prognostic factors in canine and feline urogenital tumors
- Define the different brain and spinal cord tumors affecting dogs and cats
- Generate algorithms for the diagnosis of nervous system tumors in dogs and cats based on clinical history, physical examination and imaging techniques
- Develop the different therapeutic alternatives for the treatment of nervous system tumors in dogs and cats

#### Module 9. Hematopoietic Tumors

- Define the appropriate diagnosis and clinical staging of canine and feline lymphoma
- · Compile the different classifications of canine and feline lymphoma
- Establish the different treatments for induction, reinduction and rescue of canine and feline lymphoma
- Discuss new treatment strategies and future alternatives for canine lymphoma
- Examine the diagnostic and therapeutic approach to both canine and feline lymphocytic leukemia
- Implement the diagnostic and therapeutic approach to myeloproliferative diseases
- Demonstrate knowledge of the different aspects of tumor behavior in histiocytic diseases
- Substantiate the appropriate prognosis for each hematopoietic neoplasm and histiocytic disease according to its presentation and response to treatment

#### Module 10. Hemangiosarcoma. Thymoma. Cardiac Tumors. Musculoskeletal Tumors

- Establish the basis for the diagnosis of hemangiosarcoma in dogs and cats
- Develop the medical and surgical treatment of splenic hemangiosarcoma
- Identify the key aspects in the diagnosis of thymoma
- Define cardiac tumors affecting dogs and cats
- Evaluate techniques for treating complications secondary to cardiac tumors
- Define musculoskeletal tumors
- Establish management protocols for musculoskeletal tumors
- Develop conventional treatment and new strategies in the approach to canine osteosarcoma

## 04 **Skills**

After passing the evaluations of the Hybrid Professional Master's Degree in Veterinary Oncology in Small Animals, the professional will have acquired the necessary skills for quality veterinary care and up to date based on the latest scientific evidence. In this way, the veterinarian will ensure a growth in their area of work and an improvement in their personal and professional conditions. A unique opportunity that allows the veterinarian to study not only in a theoretical but also in a practical way.

This Hybrid Professional Master's Degree will provide you with the personal and professional skills necessary to know how to act in any professional situation in this field of intervention"

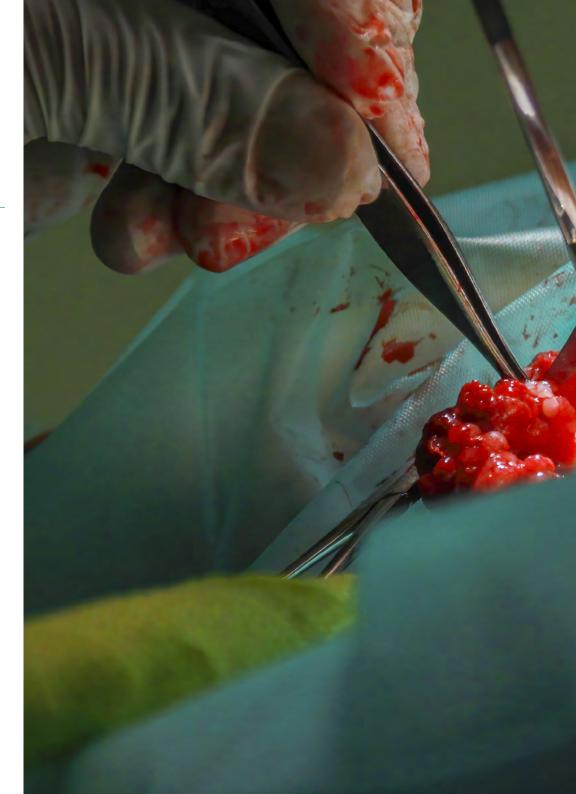
## tech 20 | Skills



Analyze clinical cases objectively and precisely

- Generate specialized knowledge to correctly examine, diagnose and treat oncological pathologies based on the latest advances in the specialty
- Effective use of the necessary tools
- Implement existing protocols
- Develop preoperative, operative and postoperative management

**66** Through this program you will be able to update your knowledge in Veterinary Oncology, and be able to perform quality critical patient care based on the latest scientific evidence"



## Skills | 21 tech

### Specific Skills

- Generate protocols for a general approach to cancer patients
- Perform cytological technique and interpretation
- Propose a system for biological specimen referral to anatomic pathology laboratories and analyze the information provided in the anatomopathological report
- Examine the different modalities in imaging techniques used to diagnose cancer patients
- Present the molecular diagnostic techniques available in oncology
- Evaluate the therapeutic modalities of cancer treatment such as surgery and chemotherapy

Delve into the most relevant theory in this field, subsequently applying it in a real work environment"

## 05 Course Management

TECH offers the professional a teaching staff of the highest level, chosen for their proven experience in the field of Veterinary Oncology. This is reflected in an advanced and intensive syllabus, which will be accessible 24 hours a day, from any electronic device with an Internet connection. In addition, its human quality and proximity will allow the graduates to solve any doubts they may have about the content of this program.

TECH has selected an excellent team of professionals specialized in Veterinary Oncology and belonging to renowned clinical centers"

## tech 24 | Course Management

#### Management



#### Dr. Ortiz Díez, Gustavo

- Head of the Small Animal Department at the Complutense Veterinary Clinic Hospital
- Chief of the Soft Tissue Surgery and Minimally Invasive Procedures Service at the Veterinary Hospital 4 de Octubre
- Accredited by the Association of Spanish Veterinarians Specializing in Small Animals (AVEPA) in Soft Tissue Surgery
- Professional Master's Degree in Research Methodology in Health Sciences by the Autonomous University of Barcelona
- Specialist in Traumatology and Orthopedic Surgery in Companion Animals by the Complutense University of Madrid
- Degree in Small Animal Cardiology from the Complutense University of Madrid
- PhD and Degree in Veterinary Medicine from the Complutense University of Madrid
- Courses of laparoscopic and thoracoscopic surgery at the Minimally Invasive Center Jesús Usón. Accredited in functions B, C, D and E of Experimentation Animals by the Community of Madrid
- ICT Competencies Course for Teachers, UNED
- Member of the Scientific Committee and current President of the Specialty Group of Soft Tissue Surgery of the Spanish Association of Veterinarians Specializing in Small Animals (AVEPA)

#### Professors

#### Dr. De Andrés Gamazo, Paloma Jimena

- Veterinary Specialized in Oncology
- Head of the Cytological Diagnostic and Clinical Oncology Service, Retiro Veterinary Hospital
- Veterinary Specialist in the Anatomopathological Diagnosis of Biopsies and Necropsies of the Diagnostic Service at the Complutense Veterinary Hospital Clinic
- Clinical Veterinarian in the Emergency and Hospitalization Services in Ervet Urgencias
- Veterinary Services at the Veterinary Hospital Surbatán and at the Veterinary Hospital Archiduque Carlos

- Responsible for Conservation, Research and Education in the field of Wild Animal Medicine and Conservation at the Castillo de las Guardas Reserve.
- Author of numerous scientific articles in Veterinary Pathology journals.
- Speaker at national and international congresses and conferences.
- PhD in Veterinary Sciences from the Complutense University of Madrid.
- Degree in Veterinary Medicine from the Complutense University Madrid
- Member of the Research Group of the University Complutense University of Madrid

## Course Management | 25 tech

#### Dr. Migoya Ramos, Verónica

- Veterinarian at the at Donostia Veterinary Hospital
- Veterinarian at Lur Gorri Veterinary Clinic
- Degree in Veterinary rom the University of León
- Professional Master's Degree in Clinical Oncology Veterinary by the AEVA Veterinary
- Course of Accreditation of Radiodiagnostic Facilities Director approved by the Nuclear Safety Council (CSN)

#### Dr. Gómez Poveda, Bárbara

- Veterinarian specialist in Small Animals
- Veterinary Director at Barvet Home Veterinary
- General Veterinarian at Parque Grand Veterinary Clinic
- Veterinary Emergency and Hospitalization at the Las Rozas Veterinary Emergency Center
- Emergency and Hospitalization Veterinarian at the Parla Sur Veterinary Hospital
- Degree in Veterinary Medicine, Complutense University Madrid
- Postgraduate in Small Animals Medicine from Improve International
- Specialization in Diagnostic Imaging in Small Animals in Autonomous University of Barcelona
- Specialization in Medicine and Diagnostic Imaging in Exotic Animals, in Autonomous University of Barcelona

#### Dr. Montoya Landa, Blanca

- Veterinarian in the Internal Medicine, Hospitalization and Emergency Department
- Veterinarian in the Internal Medicine, Hospitalization and Emergency Department at the San Antón Veterinary Hospital. Colmenar Viejo, Spain
- Veterinarian at the Veterinary Hospital Madrid Norte
- Veterinarian in the Oncology Service at the Veterinary Clinic Hospital of the Complutense University of Madrid.
- Auxiliary of Consultation and Operating Room at La Pedriza Veterinary Clinic.
- Veterinary Degree at the Complutense University of Madrid
- Educational stay in Wildlife Biomedicine in AMUS

#### Dr. Álvarez Ibañez, Jorge

- Head of Neurology and Neurosurgery Service at the Veterinary Hospital 4th of October
- Head of the Neurology and Neurosurgery Service at the San Fermín Veterinary Hospital
- Degree in Veterinary Medicine from the University of Santiago de Compostela
- Specialization in Neurology, Neurosurgery and Neuroimaging by the University of Luxembourg, the ESAVS Neurology in Switzerland and the Neurosurgery in Germany
- Specialization and Accreditation Courses in the areas of Neurology, Neurosurgery,
- Traumatology and Orthopedics, Vascular and Interventional Surgery and General Surgery
- Member of the Working Groups of Neurology and Orthopedics of the Association of Spanish Veterinarians Specialists in Small Animals (AVEPA), Traumatology and Orthopedics Group (GEVO)

## tech 26 | Course Management

#### Dr. González de Ramos, Paloma

- Director and Head of Anesthesiology and Resuscitation Service at the Veterinary Hospital 4th of October
- Degree in Veterinary Medicine from Alfonso X El Sabio University
- Specialization in Anesthesiology, Resuscitation and Pain Therapeutics, Alfonso X el Sabio University
- Training stay of the Anesthesiology and Resuscitation Service, from the University de Cornell Veterinary Hospital. New York
- Director and Head of Anesthesiology and Resuscitation Service at the Veterinary Hospital from the University of Berna. Switzerland
- Member of the Spanish Society of Veterinary Anesthesia and Analgesia (SEAAV), Anesthesia Working Group of the Association of Spanish Veterinarians Specialists in Small Animals (AVEPA) in Small Animals (AVEPA)

#### Dr. González Villacieros, Álvaro

- Member of the Anesthesiology and Resuscitation Service, 4 de Octubre Veterinary Hospital
- Veterinary Specialist in Anesthesiology, Ophthalmology and Intensive Care at the Arealonga Veterinary Clinic SL
- General Veterinarian at the Ártabro Veterinary Center.
- Veterinarian of the Emergency, Hospitalization, Surgery and Anesthesia Departments at Servicios Veterinarios del SIL SL
- Degree in Veterinary Medicine from the University of León
- Professional Master's Degree in Anesthesiology, Pharmacology and Therapeutics in Veterinary Medicine by the CIU.
- Postgraduate in Small Animal Clinic from the Autonomous University of Barcelona
- Postgraduate degree in Small Animal Ophthalmology from the Complutense University
  of Madrid



## Course Management | 27 tech

#### Dr. Hernández Bonilla, Milagros

- Veterinarian in charge of the Internal Medicine and Oncology Service at La Salle Veterinary Center
- General Veterinary in different private centers in Asturias
- Degree in Veterinary Medicine from the University of Leon
- Professional Master's Degree in Veterinary Research and CTA from the University of León
- General Practitioner Certificate Programme in Oncology by Improve International
- Member of the Veterinary Association of Small Animal Specialists (AVEPA), Group of Specialists in Veterinary Oncology (GEVONC).

#### Dr. Lorenzo Toja, María

- Veterinary Specialist in Diagnostic Imaging
- Veterinarian of the Diagnostic Imaging Service at the Veterinary Hospital 4 de Octubre
- Veterinarian of the Internal Medicine, Ultrasound and Echocardiography Service at the Can y Cat Veterinary Clinic
- Veterinarian of the Continuous Care Service at the Rof Codina Veterinary Hospital
- Author of numerous Specialized publications
- Degree in Veterinary Medicine from the University of Santiago de Compostela
- Official Master's Degree in Basic and Applied Research in Veterinary Sciences from the University of Santiago de Compostela.

## 06 Educational Plan

The structure of the contents has been designed by the best professionals in the field of Veterinary Oncology in Small Animals, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied and diagnosed, and with extensive knowledge of new technologies applied to veterinary medicine.

Multimedia pills, essential readings and case studies make up the resource library that you can access 24 hours a day, 7 days a week"

## tech 30 | Educational Plan

## **Module 1.** Introduction to Oncology. Etiology, Biology and Epidemiology of Cancer. Anatomopathologic Diagnosis.

- 1.1. Etiology of Cancer
  - 1.1.1. Genetic Factors
  - 1.1.2. Chemical, Physical and Hormonal Factors
  - 1.1.3. Viral Origin
- 1.2. Biology of Cancer: Metastasis
  - 1.2.1. Normal Cellular Cycle
  - 1.2.2. Tumor Cells
  - 1.2.3. Metastasis
- 1.3. Epidemiology and Evidence-Based Medicine: Translational Medicine
  - 1.3.1. Epidemiological Terms
  - 1.3.2. Factors Linked to Cancer
  - 1.3.3. Translational Medicine
- 1.4. Approach to Cancer Patients (I)
  - 1.4.1. Cancer Patient Overview
  - 1.4.2. Initial Interview
  - 1.4.3. Physical Examination
- 1.5. Approach to Cancer Patients (II)
  - 1.5.1. Diagnostic Techniques
  - 1.5.2. Therapeutic Approach
  - 1.5.3. Concomitant Pathologies
- 1.6. Cytology (I)
  - 1.6.1. Cytological Sampling Technique
  - 1.6.2. Most Frequent Stains in Cytological Diagnosis
  - 1.6.3. Principle of Cytological Interpretation
- 1.7. Cytology (II)
  - 1.7.1. Delivery Protocol for Cytological Samples
  - 1.7.2. Epithelial Tumors
  - 1.7.3. Mesenchymal Tumors

- 1.8. Cytology (III)
  - 1.8.1. Round Cell Tumours
  - 1.8.2. Metastatic Tumors and Cavity-Exfoliating Tumors
  - 1.8.3. Interpreting Cytology Reports
- 1.9. Pathological Anatomy (I): Biopsy and Specimen Referral
  - 1.9.1. Biopsy Techniques
  - 1.9.2. How to Refer a Specimen Properly
  - 1.9.3. Interpreting Histopathological Reports
- 1.10. Pathological Anatomy (II): Interpreting Histological Reports
  - 1.10.1. Immunohistochemistry Techniques and Molecular Biology
  - 1.10.2. Utility and Advantages in Oncology Management
  - 1.10.3. Tumor Markers

## **Module 2.** Cancer Diagnosis. Imaging and Molecular Diagnostic Techniques. Chemotherapy, Electrochemotherapy and Molecular/Targeted Therapy

- 2.1. Diagnostic Imaging in Cancer Patients (I)
  - 2.1.1. Introduction to Imaging Techniques in Oncology
    - 2.1.1.1. Radiology
    - 2.1.1.2. Ultrasound
    - 2.1.1.3. Computerized Tomography
    - 2.1.1.4. Magnetic Resonance
- 2.2. Diagnostic Imaging in Cancer Patients (II)
  - 2.2.1. Diagnostic Imaging Techniques in Digestive Tract Neoplasms
  - 2.2.2. Imaging Techniques in Respiratory System Neoplasms
  - 2.2.3. Diagnostic Imaging Techniques in Urinary System Neoplasms
  - 2.2.4. Diagnostic Imaging Techniques in Hepatopoietic Neoplasms
- 2.3. Diagnostic Imaging in Cancer Patients (III)
  - 2.3.1. Diagnostic Imaging Techniques in Cutaneous Neoplasms
  - 2.3.2. Diagnostic Imaging Techniques in Nervous System Neoplasms
  - 2.3.3. Diagnostic Imaging Techniques in Musculoskeletal Neoplasms

### Educational Plan | 31 tech

#### 2.4. Molecular Diagnoses

- 2.4.1. Molecular Diagnostic Techniques
- 2.4.2. Quantification and Gene Expression
- 2.4.3. Personalized Therapy in Cancer
- 2.5. Principles of Surgical Oncology (I)
  - 2.5.1. Pre-operative Considerations
  - 2.5.2. Preoperative Approach
  - 2.5.3. Biopsies and Sample Collecting
- 2.6. Principles of Surgical Oncology (II)
  - 2.6.1. Surgical Considerations
  - 2.6.2. Definition of Surgical Margins
  - 2.6.3. Cytoreductive and Palliative Surgeries
  - 2.6.4. Post-operative Considerations
- 2.7. Chemotherapy (I)
  - 2.7.1. What Is Chemotherapy?
  - 2.7.2. Dosage
  - 2.7.3. Species Characteristics
- 2.8. Chemotherapy (II)
  - 2.8.1. Antitumor Antibiotics
  - 2.8.2. Alkylating Agents
  - 2.8.3. Usage Inhibitors
- 2.9. Electrochemotherapy
  - 2.9.1. Basis of Electrochemotherapy
  - 2.9.2. Neuroeducation Applications
  - 2.9.3. New Horizons
- 2.10. Molecular/Targeted Therapy
  - 2.10.1. Genetic Therapy
  - 2.10.2. Tyrosine Kinase Inhibitors
  - 2.10.3. Angiogenic Therapy
  - 2.10.4. Metronomic Therapy
  - 2.10.5. Emerging Therapeutic Agents

## **Module 3.** Cancer Patient Treatment. Radiotherapy, Immunotherapy, Interventional Oncology. Complications in Oncological Therapy. Palliative Care

- 3.1. Radiotherapy (I)
  - 3.1.1. Principles of Biological Tissue Radiation
  - 3.1.2. Stereotactic Radiation
  - 3.1.3. Effective Biological Dose
- 3.2. Radiotherapy (II)
  - 3.2.1. Palliative Radiotherapy.
  - 3.2.2. Tumors Frequently Treated with Radiotherapy
- 3.3. Immunotherapy
  - 3.3.1. Immune System Control
  - 3.3.2. Immune System Control Therapies
  - 3.3.3. Antibody Therapy
  - 3.3.4. Future of Immunotherapy
- 3.4. Interventional Oncology
  - 3.4.1. Material
  - 3.4.2. Vascular Interventions.
  - 3.4.3. Non-Vascular Interventions.
- 3.5. Complications in Oncological Therapy
  - 3.5.1. Hematological Side Effects
  - 3.5.2. Digestive Side Effects
  - 3.5.3. Other Side Effects
- 3.6. Paraneoplastic Syndromes
  - 3.6.1. What Is a Paraneoplastic Syndrome?
  - 3.6.2. Hypercalcemia
  - 3.6.3. Others
- 3.7. Oncologic Emergencies
  - 3.7.1. What Is an Oncologic Emergency?
  - 3.7.2. Most Frequent Oncologic Emergencies
  - 3.7.3. Treating Oncologic Emergencies

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3.8. Communication With the Owner

- 3.8.1. How to Deliver the News
- 3.8.2. How to Face the End
- 3.8.3. How to Prepare Emotionally
- 3.9. Palliative Care. Pain Treatment in Oncologic Patients
  - 3.9.1. Mechanisms that Generate Pain in Cancer Patients
  - 3.9.2. Pain Assessment in Cancer Patients
  - 3.9.3. Pain Treatment in Cancer Patients
- 3.10. Palliative Care. Nutritional Support for Cancer Patients
  - 3.10.1. Metabolism in Cancer
  - 3.10.2. Nutritional Assessment of Cancer Patients
  - 3.10.3. Implementing Nutrition Plans for Cancer Patients

#### Module 4. Cutaneous and Subcutaneous Tumorst

- 4.1. Skin Tumors (I)
  - 4.1.1. Incidence
  - 4.1.2. Etiology
  - 4.1.3. Diagnosis
- 4.2. Skin Tumors (II)
  - 4.2.1. Treatment
  - 4.2.2. Prognosis
  - 4.2.3. Considerations
- 4.3. Canine Mastocytoma (I)
  - 4.3.1. Treatment
  - 4.3.2. Prognosis
  - 4.3.3. Considerations
- 4.4. Canine Mastocytoma (II)
  - 4.4.1. Diagnosis
  - 4.4.2. Staging
  - 4.4.3. Prognostic Factors
- 4.5. Canine Mastocytoma (III)
  - 4.5.1. Surgery
  - 4.5.2. Radiotherapy
  - 4.5.3. Chemotherapy

- 4.6. Canine Mastocytoma (IV)
  - 4.6.1. Prognosis
  - 4.6.2. Survival
  - 4.6.3. New Challenges
- 4.7. Feline Mastocytoma (I)
  - 4.7.1. Differential Considerations with Canine Mastocytoma
  - 4.7.2. Diagnosis
  - 4.7.3. Treatment
- 4.8. Sequence Tagged Site (I)
  - 4.8.1. Epidemiology
  - 4.8.2. Incidence
  - 4.8.3. Types of Soft Tissue Sarcomas
- 4.9. Sequence Tagged Site (II)
  - 4.9.1. Soft Tissue Sarcoma Diagnosis
  - 4.9.2. Complementary Tests
  - 4.9.3. Staging
- 4.10. Sequence Tagged Site (III)
  - 4.10.1. Treatment of Soft Tissues Sarcoma
  - 4.10.2. Medical Treatment of Soft Tissue Sarcoma
  - 4.10.3. Prognosis

#### Module 5. Injection Site Sarcomas. Melanoma. Respiratory tumors

- 5.1. Feline Injection Site Sarcoma
  - 5.1.1. Prevalence and Etiology
  - 5.1.2. Diagnosis
  - 5.1.3. Treatment
- 5.2. Melanoma (I)
  - 5.2.1. Etiology
  - 5.2.2. Diagnosis
  - 5.2.3. Staging
- 5.3. Melanoma (II)
  - 5.3.1. Surgical Management
  - 5.3.2. Medical Treatment
  - 5.3.3. Special considerations

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- 5.4. Skin Surgery (I)
  - 5.4.1. Anatomy, Vascularization and Tension
  - 5.4.2. Pathophysiology of Healing
  - 5.4.3. Injuries. Types and Management
- 5.5. Skin Surgery (II)
  - 5.5.1. Plasties and Subdermal Plexus Flaps
  - 5.5.2. Pedicle and Muscle Flaps
  - 5.5.3. Grafts
- 5.6. Respiratory Tumors (I): Nasal Plane
  - 5.6.1. Incidence and Risk Factors
  - 5.6.2. Diagnosis
  - 5.6.3. Treatment
- 5.7. Respiratory Tumors (II): Nasal Cavity.
  - 5.7.1. Incidence and Risk Factors
  - 5.7.2. Diagnosis
  - 5.7.3. Treatment
- 5.8. Respiratory Tumors (III), Larynx and Trachea
  - 5.8.1. Incidence and Risk Factors
  - 5.8.2. Diagnosis
  - 5.8.3. Treatment
- 5.9. Respiratory Tumors (IV): Pulmonary
  - 5.9.1. Incidence and Risk Factors
  - 5.9.2. Diagnosis
  - 5.9.3. Treatment
- 5.10. Respiratory Surgery
  - 5.10.1. Nasal Plane Surgery
  - 5.10.2. Nasal Cavity Surgery
  - 5.10.3. Laryngeal and Tracheal Surgery
  - 5.10.4. Pulmonary Lobectomy

#### Module 6. Digestive Tract Tumors. Mesothelioma

- 6.1. Digestive Tract Tumors (I): Oral Cavity. I
  - 6.1.1. Symptoms
  - 6.1.2. Diagnosis
  - 6.1.3. Treatment
- 6.2. Digestive Tract Tumors (II): Oral Cavity. II
  - 6.2.1. Symptoms
  - 6.2.2. Diagnosis
  - 6.2.3. Treatment
- 6.3. Digestive Tract Tumors (III): Esophagus, Stomach, Exocrine Pancreas
  - 6.3.1. Symptoms
  - 6.3.2. Diagnosis
  - 6.3.3. Treatment
- 6.4. Digestive Tract Tumors (IV): Intestine
  - 6.4.1. Symptoms
  - 6.4.2. Diagnosis
  - 6.4.3. Treatment
- 6.5. Digestive Tract Tumors (V): Nasal Sac Tumors
  - 6.5.1. Symptoms
  - 6.5.2. Diagnosis
  - 6.5.3. Treatment
- 6.6. Digestive Tract Tumors (VI): Liver Tumors.
  - 6.6.1. Prevalence and Etiology
  - 6.6.2. Diagnosis
  - 6.6.3. Treatment
- 6.7. Digestive Surgery (I)
  - 6.7.1. Anatomy
  - 6.7.2. Principles of Digestive Surgery
- 6.8. Digestive Surgery (II)
  - 6.8.1. Gastric Surgery
  - 6.8.2. Intestinal Surgery
- 6.9. Digestive Surgery (III) 6.9.1. Liver Surgery
- 6.10. Mesothelioma
  - 6.10.1. Diagnosis
  - 6.10.2. Treatment

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#### Module 7. Endocrine System Tumors. Breast Tumors. Ophthalmologic Tumors

- 7.1. Endocrine System Tumors (I): Adrenal Glands.
  - 7.1.1. Epidemiology
  - 7.1.2. Diagnosis
  - 7.1.3. Treatment
- 7.2. Endocrine System Tumors (II): Thyroid
  - 7.2.1. Epidemiology
  - 7.2.2. Diagnosis
  - 7.2.3. Treatment
- 7.3. Endocrine System Tumors (III): Insulinoma
  - 7.3.1. Epidemiology
  - 7.3.2. Diagnosis
  - 7.3.3. Treatment
- 7.4. Endocrine System Tumors (IV): Pituitary Tumors
  - 7.4.1. Epidemiology
  - 7.4.2. Diagnosis
  - 7.4.3. Treatment
- 7.5. Endocrine Surgery
  - 7.5.1. Adrenal Surgery
  - 7.5.2. Thyroid Surgery
  - 7.5.3. Pancreas Surgery
- 7.6. Breast Tumors. Canines (I)
  - 7.6.1. Epidemiology
  - 7.6.2. Risk Factors
  - 7.6.3. Diagnosis
- 7.7. Breast Tumors. Canines (II)
  - 7.7.1. Surgical Management
  - 7.7.2. Medical Treatment
  - 7.7.3. Prognosis
- 7.8. Breast Tumors. Felines (III)
  - 7.8.1. Epidemiology
  - 7.8.2. Diagnosis
  - 7.8.3. Treatment



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- 7.9. Ophthalmologic Tract Tumors (I)
  - 7.9.1. Epidemiology
  - 7.9.2. Clinical diagnosis
  - 7.9.3. Complementary Tests
- 7.10. Ophthalmologic Tract Tumors (II)
  - 7.10.1. Surgical Management
  - 7.10.2. Medical Treatment
  - 7.10.3. Surgical Management

#### Module 8. Genitourinary Tumors. Nervous System Tumours

- 8.1. Female Reproductive System Tumors
  - 8.1.1. Epidemiology
  - 8.1.2. Diagnosis
  - 8.1.3. Treatment
- 8.2. Male Reproductive System Tumors
  - 8.2.1. Epidemiology
  - 8.2.2. Diagnosis
  - 8.2.3. Treatment
- 8.3. Urinary System Tumors (I)
  - 8.3.1. Renal Tumors
  - 8.3.2. Diagnosis
  - 8.3.3. Treatment
- 8.4. Urinary System Tumors (II)
  - 8.4.1. Urinary Bladder Tumors
  - 8.4.2. Diagnosis
  - 8.4.3. Treatment
- 8.5. Genitourinary Surgery (I)
  - 8.5.1. General Principles of Reproductive System Surgery
  - 8.5.2. Surgical Techniques in the Male Genital Tract
  - 8.5.3. Surgical Techniques in the Female Genital Tract
- 8.6. Genitourinary Surgery (II)
  - 8.6.1. Kidney Surgical Techniques
  - 8.6.2. Ureter Surgical Techniques
  - 8.6.3. Bladder Surgical Techniques
  - 8.6.4. Urethra Surgical Techniques

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- 8.7. Transmissible Venereal Tumor
  - 8.7.1. Incidence and Pathology
  - 8.7.2. Diagnosis
  - 8.7.3. Treatment
- 8.8. Nervous System Tumors (I)
  - 8.8.1. Brain Tumors
  - 8.8.2. Diagnosis
  - 8.8.3. Treatment
- 8.9. Nervous System Tumors (II)
  - 8.9.1. Spinal Cord Tumors
  - 8.9.2. Diagnosis
  - 8.9.3. Treatment
- 8.10. Nervous System Surgery
  - 8.10.1. Surgical Techniques for the Approach to Intracranial Tumors
  - 8.10.2. Surgical Techniques for the Approach to Spinal Cord Tumors
  - 8.10.3. Frequent Complications in Nervous System Surgery

#### Module 9. Hematopoietic Tumors

- 9.1. Hematopoietic System Tumors (I): Canine Lymphoma (I)
  - 9.1.1. Etiology
  - 9.1.2. Classification and Pathology
  - 9.1.3. Clinical Signs
  - 9.1.4. Diagnosis
  - 9.1.5. Clinical Status
- 9.2. Hematopoietic System Tumors (II): Canine Lymphoma (II)
  - 9.2.1. Multicentric Lymphoma Treatment
    - 9.2.1.1. Re-Induction and Salvage Chemotherapy
    - 9.2.1.2. Strategies to Improve Treatment Effectiveness
    - 9.2.1.3. Immunotherapy and Other Treatments
- 9.3. Hematopoietic System Tumors (III): Canine Lymphoma (III)
  - 9.3.1. Extranodal Lymphoma Treatment
  - 9.3.2. Canine Lymphoma Prognosis

- 9.4. Hematopoietic System Tumors (IV): Canine Lymphoma (IV)
  - 9.4.1. Lymphocytic Leukemia
  - 9.4.2. Incidence, Etiology, Pathology and Classification
  - 9.4.3. Clinical Signs and Diagnosis
  - 9.4.4. Treatment
  - 9.4.5. Prognosis
- 9.5. Hematopoietic System Tumors (V): Feline Lymphoma (I)
  - 9.5.1. Incidence, Etiology and Pathology in Feline Lymphoma
  - 9.5.2. Gastrointestinal / Dietary Lymphoma
- 9.6. Hematopoietic System Tumors (VI): Feline Lymphoma (II)
  - 9.6.1. Peripheral Lymph Node Lymphoma 9.6.1.1. Mediastinal Lymphoma
  - 9.6.2. Extranodal Lymphoma
    - 9.6.2.1. Nasal Lymphoma
    - 9.6.2.2. Renal Lymphoma
    - 9.6.2.3. Central Nervous System Lymphoma
    - 9.6.2.4. Cutaneous Lymphoma
    - 9.6.2.5. Subcutaneous Lymphoma
    - 9.6.2.6. Laryngeal Lymphoma
    - 9.6.2.7. Ocular Lymphoma
    - 9.6.2.8. Felines Lymphoma Prognosis
- 9.7. Hematopoietic System Tumors (VII): Feline Lymphoma (III)
  - 9.7.1. Feline Leukemia, Myeloproliferative Disorders and Myelodysplasia
- 9.8. Hematopoietic System Tumors (VIII)
  - 9.8.1. Canine Acute Myeloid Leukemia, Myeloproliferative Neoplasms, and Myelodysplasia
    - 9.8.1.1. Incidence, Risk Factors
    - 9.8.1.2. Pathology
    - 9.8.1.3. Acute Myeloid Leukemia
  - 9.8.2. Myeloproliferative Neoplasms
    - 9.8.2.1. Polycythemia Vera
    - 9.8.2.2. Chronic Myelogenous Leukemia
      - 9.8.2.2.1. Eosinophilic and Basophilic Leukemia
      - 9.8.2.2.2. Essential Thrombocythemia/Primary Thrombocytosis

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9.9. Other Bone Marrow Disorders

9.9.1. Myelofibrosis

- 9.9.2. Myelodysplastic Syndromes
- 9.10. Hematopoietic System Tumors (IX): Plasma Cell Tumors
  - 9.10.1. Multiple Myeloma
  - 9.10.2. Solitary and Extramedullary Plasmacytic Tumors
  - 9.10.3. Canine Histiocytic Disease: Feline Histiocytic Disease
  - 9.10.4. Canine Histiocytic Disease
    - 9.10.4.1. Cutaneous Histiocytoma
    - 9.10.4.2. Cutaneous Langerhans Cell Histiocytosis
    - 9.10.4.3. Reactive Histiocytosis
  - 9.10.5. Histiocytic Sarcoma
  - 9.10.6. Hemophagocytic Histiocytic Sarcoma
  - 9.10.7. Feline Histiocytic Disease
  - 9.10.8. Feline Histiocytic Sarcoma
  - 9.10.9. Progressive Feline Histiocytosis
  - 9.10.10. Pulmonary Langerhans Cell Histiocytosis

# **Module 10.** Hemangiosarcoma. Thymoma. Cardiac Tumors. Musculoskeletal Tumors

- 10.1. Hemangiosarcoma (I)
  - 10.1.1. Incidence and Risk Factors
  - 10.1.2. Etiology
  - 10.1.3. Diagnosis
- 10.2. Hemangiosarcoma (II)
  - 10.2.1. Treatment
  - 10.2.2. Prognosis
- 10.3. Spleen Surgery
  - 10.3.1. Spleen Surgery Techniques
- 10.4. Thymoma
  - 10.4.1. Diagnosis
  - 10.4.2. Treatment
- 10.5. Cardiac Tumors
  - 10.5.1. Diagnosis
  - 10.5.2. Treatment

- 10.6. Thoracic Surgery (I)
  - 10.6.1. Anatomy
  - 10.6.2. Particularities of Thoracic Surgery
  - 10.6.3. Thoracic Cavity Approaches
- 10.7. Thoracic Surgery (II)
  - 10.7.1. Pericardiocentesis
  - 10.7.2. Pericardiectomy.
- 10.8. Musculoskeletal Tumors (I)
  - 10.8.1. Osteosarcoma
  - 10.8.2. Incidence and Risk Factors
  - 10.8.3. Etiology
  - 10.8.4. Diagnosis
  - 10.8.5. Treatment
- 10.9. Musculoskeletal Tumors (II)
  - 10.9.1. Other Bone Tumors
  - 10.9.2. Feline Bone Tumors
- 10.10. Musculoskeletal Surgery
  - 10.10.1. Biopsy Technique 10.10.2. Surgical Technique for Amputations



# 07 Clinical Internship

After passing the online theoretical period, the program includes a Internship Program in a reference veterinary clinic. The student will have at their disposal the support of a tutor who will accompany them during the whole process, both in the preparation and in the development of the clinical practice.

Do your clinical internship in one of the best clinical centers, which treat dogs and cats with malignant tumors on a daily basis"

## tech 40 | Clinical Internship

The Internship Program of this program in Veterinary Oncology in Small Animals consists of a practical stay of 3 weeks in a veterinary center of reference. From Monday to Friday, in days of 8 consecutive hours, the professional will check with the best specialists, the analysis and diagnostic techniques used in this specialty.

In this way, the professionals will be able to see first hand real cases alongside a professional team of reference in the Veterinary area, applying the most innovative procedures of the latest generation.

In this Internship Program. completely practical in nature, the activities are aimed at developing and perfecting the skills necessary for the provision of veterinary care in areas and conditions that require a high level of qualification, and are oriented to the specific education for the exercise of the activity, in an environment of safety and high professional performance.

TECH offers a unique experience that revolutionizes pedagogy and responds to the real demands of professionals seeking to improve their skills in a first class clinical environment.

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

The procedures described below will form the basis of the practical part of the internship, 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
Anatomopathologic Diagnosis	Provide support in performing analyses of chemical, physical and hormonal factors of cancer
	Evaluate small animal metastases
	Perform cytology analysis: epithelial tumors, mesenchymal tumors, round cell tumors and metastatic tumors and tumors exfoliating to cavities
	Interpret cytological and histological reports
	Performing biopsies and referral of a specimen
Imaging and Molecular Diagnostic Techniques.	Perform diagnostic imaging in the cancer patient: radiology, ultrasound, computed tomography and magnetic resonance imaging
	Perform diagnostic imaging techniques in neoplasms of the respiratory system, urinary system neoplasms, hepatopoietic neoplasms, skin neoplasms, nervous system neoplasms and musculoskeletal neoplasms
Chemotherapy, Electrochemotherapy	Evaluate molecular diagnostics in small animals
and Molecular/	Oncologic surgery examination: sampling and biopsies, cytoreductive and palliative surgeries, etc
Targeted Therapy	Evaluate the option of applying chemotherapy or electrochemotherapy
	Collaborate in the performance of molecular/targeted therapy
Treatment of the animal with cancer	Offering support in the performance of radiotherapy tests: radiation, stereotactic radiation, palliative radiotherapy, etc
	Perform immunotherapy evaluation in small animals
	Perform interventional oncology examination in small animals
	Analyze complications of oncologic therapy: hematologic, digestive and other side effects
	Analyze paraneoplastic syndromes in small animals
	Practice in communication with the owner: how to break the news, how to deal with the end and how to take care of yourself emotionally
Treatment of tumors	Perform analysis of tumors of the endocrine system: adrenal, thyroid, Insulinomas, pituitary tumors in small animals
	Evaluate the option of performing endocrine surgery: adrenal surgery, thyroid surgery, pancreas surgery
	Perform analysis of canine and feline mammary tumors
	Collaborate in the evaluation of ophthalmologic tumors
	Perform analysis of tumors of the male and female reproductive system
-	Use surgical techniques in the male and female genital apparatus, kidney surgical techniques, ureter surgical techniques, bladder surgical techniques and urethral surgical techniques

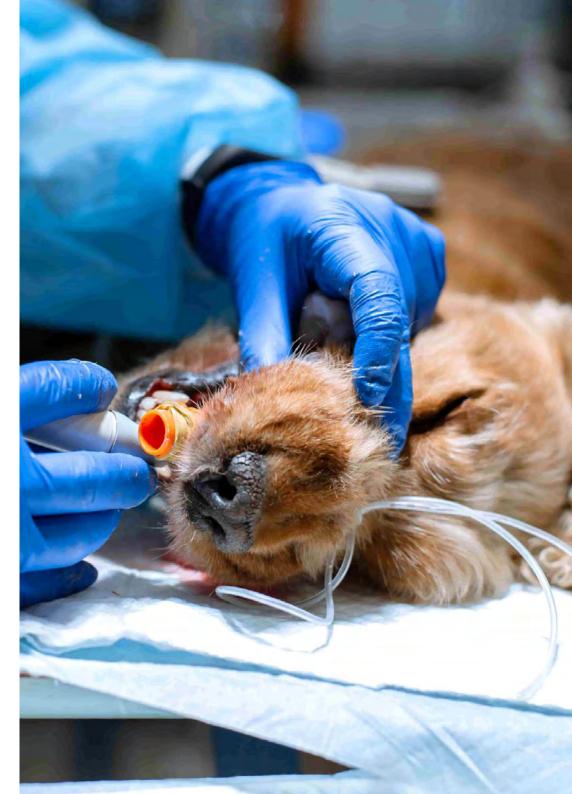
# tech 42 | Clinical Internship

### **Civil Liability Insurance**

This institution's main concern is to guarantee the safety of the students 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 agreement for the program are 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 students 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?

One of the elements that makes this program unique is the possibility of taking the practical part in different veterinary centers. In this way, TECH strengthens its commitment to the realization of quality qualifications within everyone's reach. An unprecedented fact that makes this program a reference in the academic panorama.

# Where Can I Do the Clinical Internship? | 45 tech

56 From the first day until the end of the 3 week stay you will live an intensive and unique practical experience"

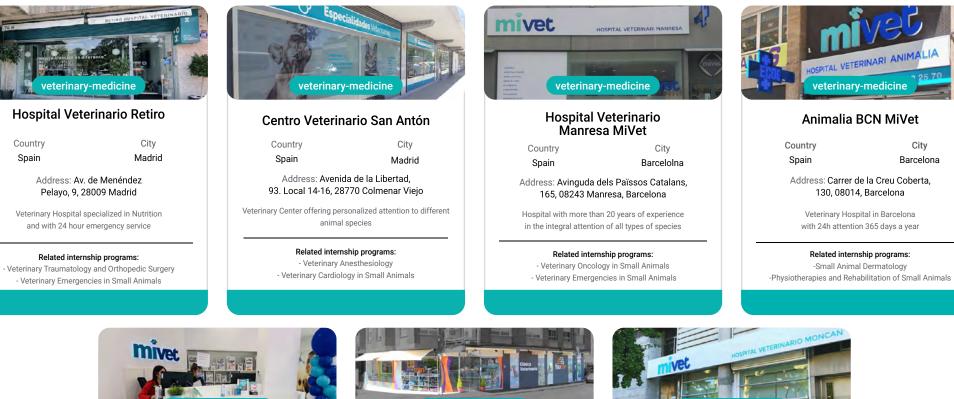
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### tech 46 | Where Can I Do the Clinical Internship?

Country

Spain

The students will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



#### **Hospital Veterinario** Faycan Catarroja MiVet

veterinary-medicine

Country	City
Spain	Valencia

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 - Small Animal Ultrasonography



#### **Centro Veterinario Faucan** Cartagena MiVet

Country	City
Spain	Murcia
Address: Av. Juan Carlos I, 5, 30310	

Cartagena, Murcia

Veterinary Hospital with state-of-the-art facilities and specialized care 24 hours a day

> Related internship programs: - Veterinary Surgery in Small Animals - Veterinary Oncology in Small Animals

veterinary-medicin **Hospital Veterinario** Moncan MiVet

Country	City
Spain	Madrid

Address: Av. del Monasterio de El Escorial, 55, Fuencarral-El Pardo, 28949 Madrid

Veterinary hospital specializing in the comprehensive care of sick animals and clinical problems that are difficult to diagnose

#### Related internship programs:

- Veterinary Traumatology and Orthopedic Surgery - Veterinary Emergencies in Small Animals



## Where Can I Do the Clinical Internship? | 47 tech



### **Hospital Veterinario Menes**

Country Spain

City Asturias

Address: Calle Daniel Palacio Fernández, 15, 33204 Gijón, Asturias

Veterinary clinic with exclusive dedication to pets.

Related internship programs:

- Small Animal Internal Medicine -Veterinary Ophthalmology in Small Animals



### Clínica Veterinaria Unzeta

Country	City
Spain	Madrid

Address: C. de Ferraz, 28, 28008 Madrid

Veterinary clinical assistance center for domestic animals

#### Related internship programs:

- Small Animal Internal Medicine - Veterinary Oncology in Small Animals

# tech 48 | Where Can I Do the Clinical Internship?



### Clínica Veterinaria Don Bosco

Country Argentina

**Buenos Aires** 

City

Address: Conquista de Desierto 662, Ezeiza, Bs. As

Clinic of general and specific specialties of Veterinary Medicine

Related internship programs: - Veterinary Anesthesiology - Veterinary Emergencies in Small Animals



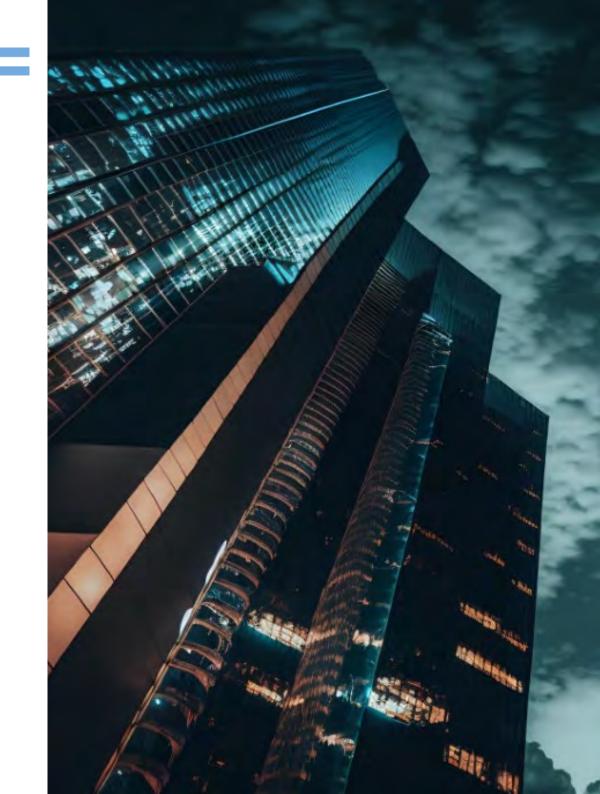
### Clínica Veterinaria Panda

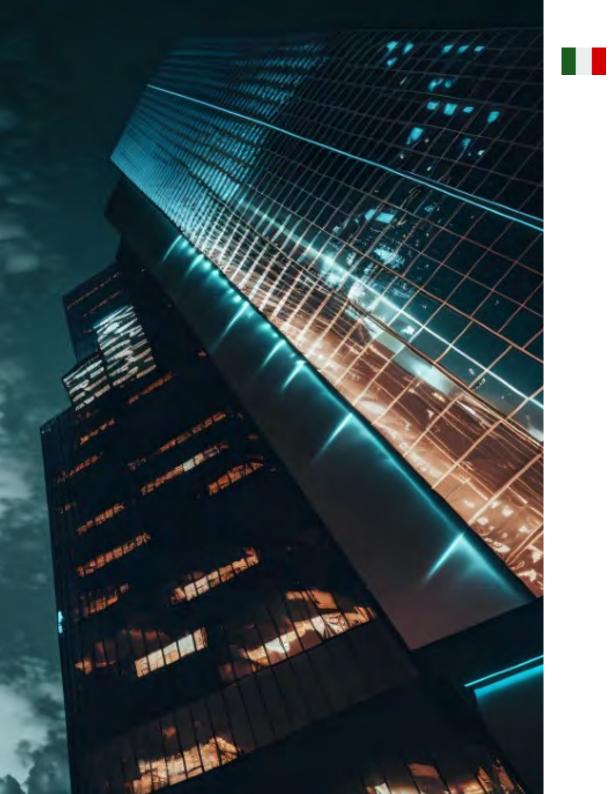
Country	City
Argentina	Buenos Aires

Address: Ruiz Huidobro 4771 Saavedra, Ciudad de Buenos Aires

Panda Veterinary Clinic with 25 years of experience and five locations in the City of Buenos Aires

> Related internship programs: - Small Animal Internal Medicine - MBA in Sales and Marketing Management





## Where Can I Do the Clinical Internship? | 49 tech



### Centro Veterinario Puebla

Country Mexico City Puebla

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

General veterinary center with 24-hour emergency care

Related internship programs: - Veterinary Anesthesiology - Veterinary Cardiology in Small Animals



### **Centro Veterinario CIMA**

Country Mexico City Mexico City

Address: Av. Vía Adolfo López Mateos 70, Jardines de San Mateo, 53240 Naucalpan de Juárez, CDMX, Méx.

Clinical pet care center

Related internship programs:

- Small Animal Internal Medicine - Veterinary Oncology in Small Animals

# 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.

# Methodology | 51 tech

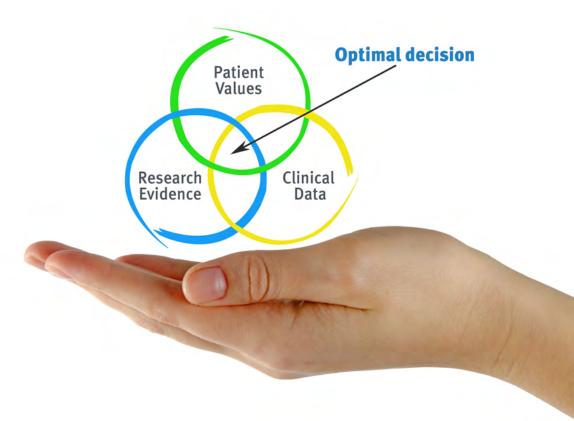
Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

# tech 52 | Methodology

### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.

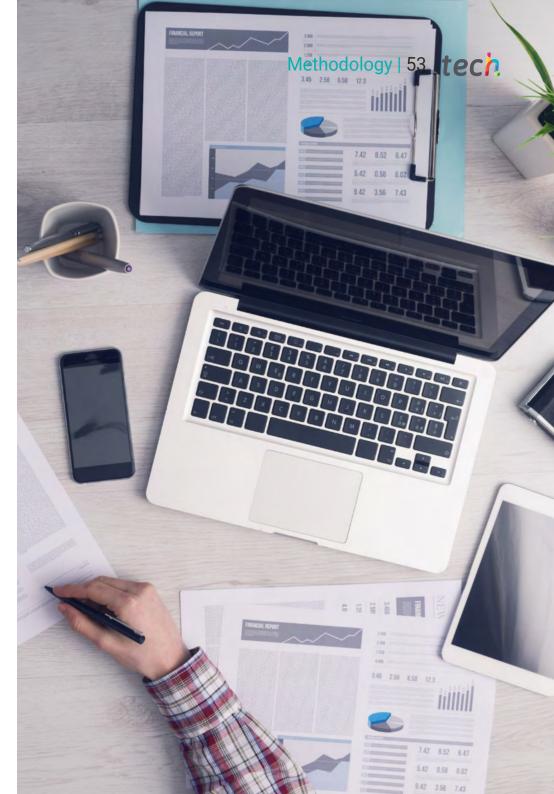


According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

The effectiveness of the method is justified by four fundamental achievements:

- 1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- 4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.



# tech 54 | Methodology

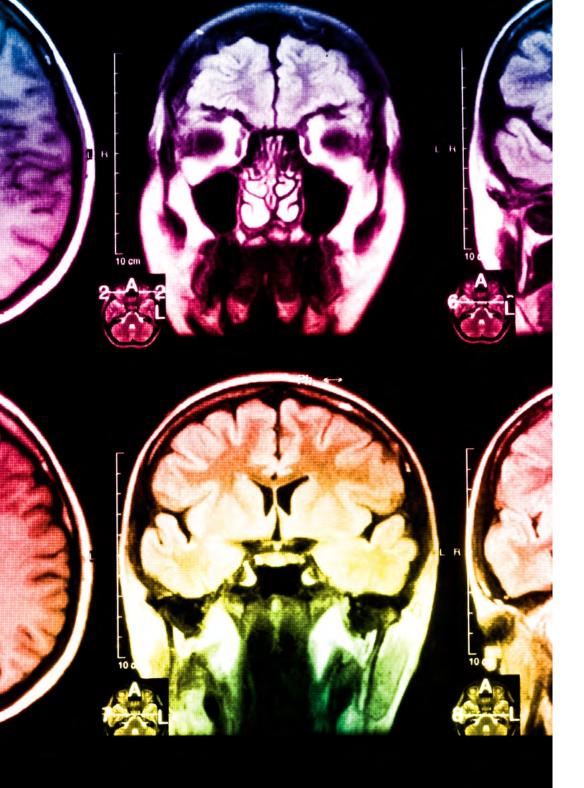
### **Relearning Methodology**

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Veterinarians will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.





# Methodology | 55 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology more than 65,000 veterinarians have been trained with unprecedented success in all clinical specialties, regardless of the surgical load. Our teaching method is developed in a highly demanding environment, where the students have a high socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

# tech 56 | Methodology

This program offers the best educational material, prepared with professionals in mind:



### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

20%

15%

3%

15%

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



### **Interactive Summaries**

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

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



### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

## Methodology | 57 tech



### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

20%

7%

3%

17%



### **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



### 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 Veterinary Oncology in Small Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree issued by TECH Technological University.



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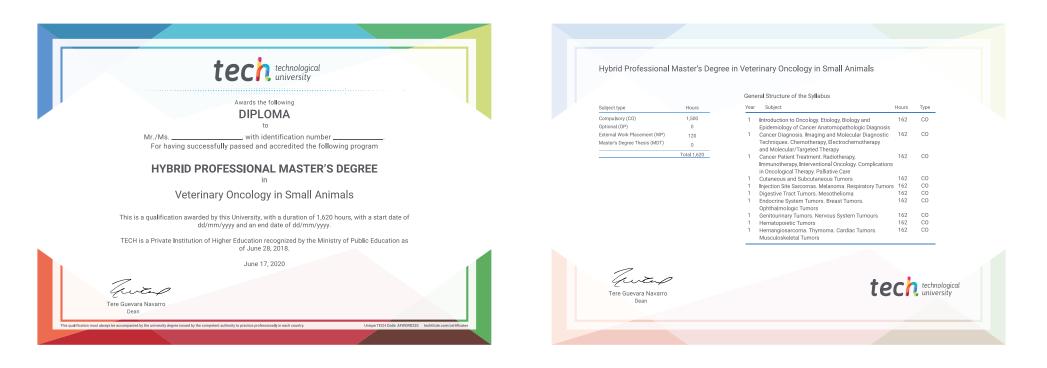
Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

# tech 60 | Certificate

This **Hybrid Professional Master's Degree in Veterinary Oncology in Small Animals** contains the most complete and up-to-date program on the professional and educational field.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree diploma issued by TECH Technological University via tracked delivery\*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information. Title: Hybrid Professional Master's Degree in Veterinary Oncology in Small Animals Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Technological University Teaching Hours: 1,620 h.



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

# technological university Hybrid Professional Master's Degree Veterinary Oncology in Small Animals Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Technological University Teaching Hours: 1,620 h.

# Hybrid Professional Master's Degree Veterinary Oncology in Small Animals

