



# Postgraduate Certificate Glaucoma in Dogs and Cats

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

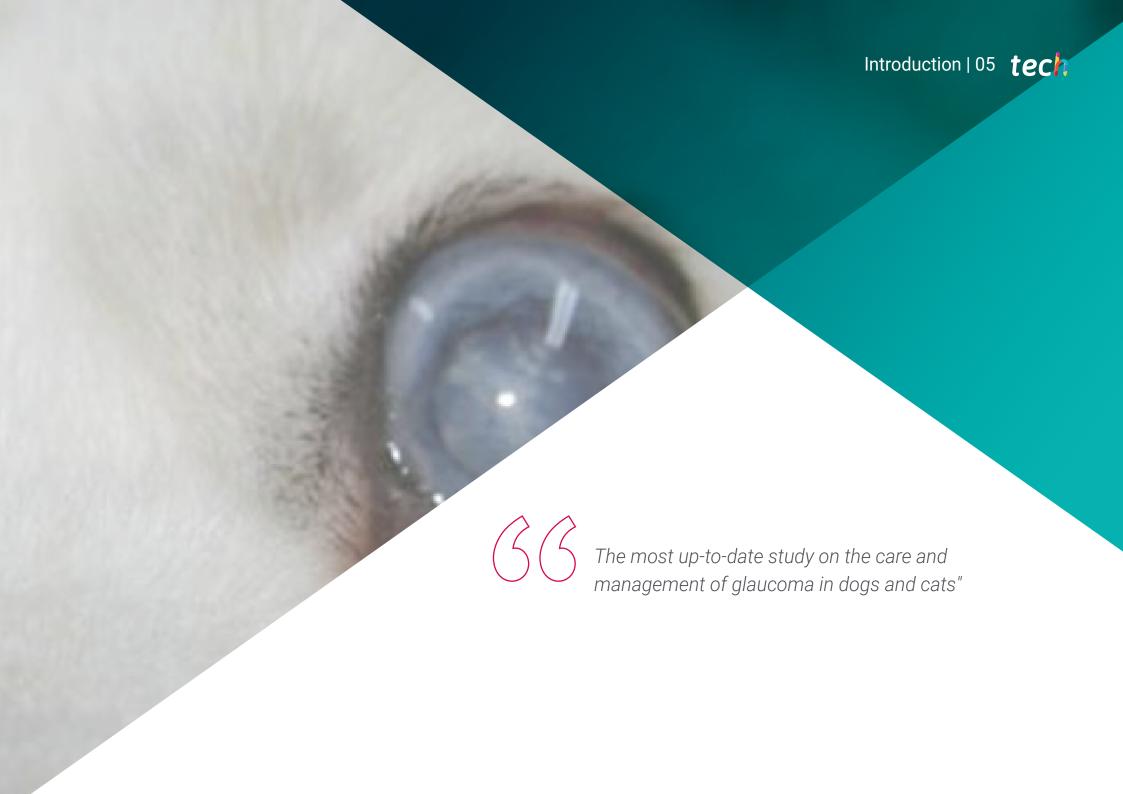
Website: www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/glaucoma-dogs-cats

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Certificate





## tech 06 | Introduction

Glaucoma Treatment and Surgery has made great progress in recent years. The ability to retain sight continues to be one of the greatest challenges in veterinary ophthalmology; however, Glaucoma remains one of the leading causes of blindness in our patients.

Early diagnosis and optimized treatments will improve visual viability. In this module, we will develop guidelines that will enable us to manage chronic patients in the best way possible, and allow them to maintain their vision as long as possible, as well as their quality of life during the final moments of the disease.

This Postgraduate Certificate offers an intensive and practical learning process that will allow professionals to acquire the veterinary skills they need to care for glaucoma patients safely and successfully.

This **Postgraduate Certificate in Glaucoma in Dogs and Cats** contains the most complete and up-to-date scientific program on the market. Its most important features include:

- Case studies presented and developed by experts in Veterinary Ophthalmology
- Graphic, schematic, and practical contents created to provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- 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



A comprehensive program that will propel your career to a higher level of proficiency, with ease and efficiency"



New practices in glaucoma care for dogs and cats explained clearly and precisely through a high-level education process"

The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersion training 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 student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Through the efficiency of a study system created for online teaching, this Postgraduate Certificate is the best option available to boost your professional growth"

Studies that will offer you the knowledge from a unique and highly effective perspective.







## tech 10 | Objectives

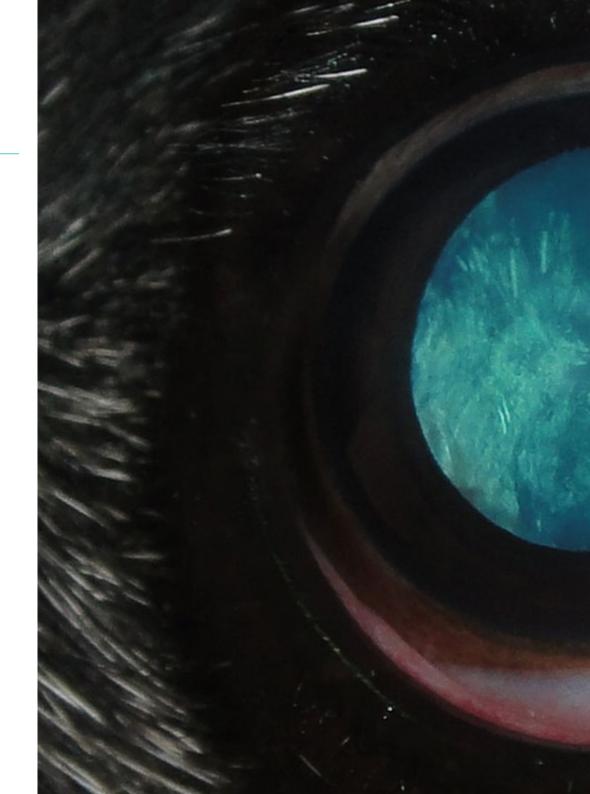


## **General Objectives**

- Develop specialized knowledge of the glaucoma
- In-depth study and adequacy of medical guidelines according to etiology
- Examine from the more traditional to the most advanced surgical techniques
- Analyze differences in feline glaucoma



A Postgraduate Certificate of exceptional quality that will allow you to learn and grow in a real way, by applying what you have learned to your professional practice"

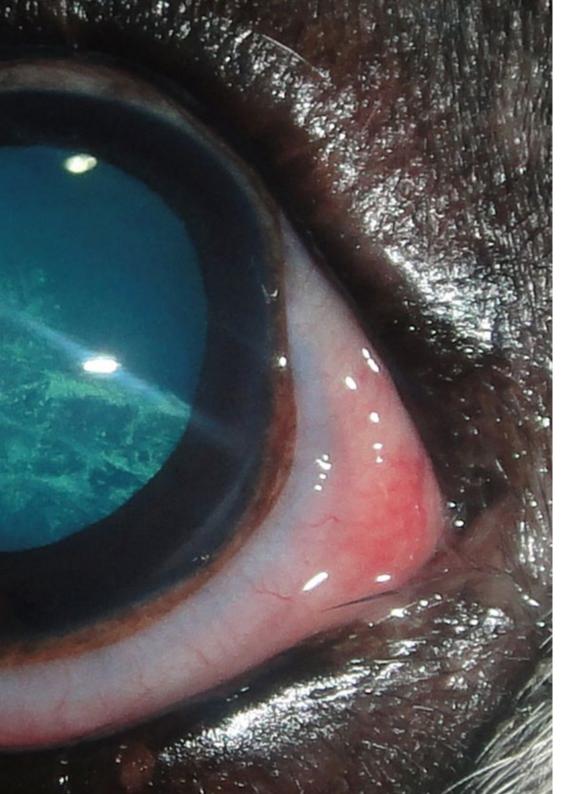




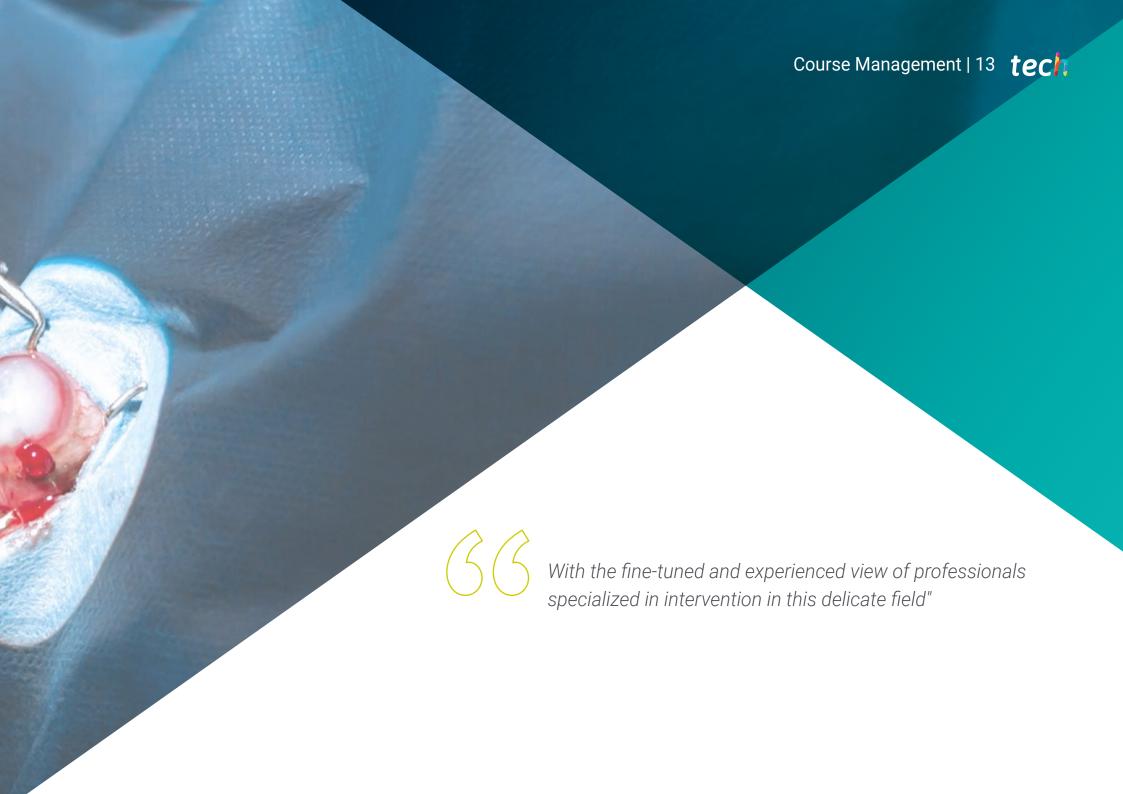


## **Specific Objectives**

- Examine different types of glaucoma, as well as intraocular fluid dynamics
- Optimize use of diagnostic tools such as Tonometry and Gonioscopy, in order to obtain key data for subsequent treatment
- Analyze the effect of elevated intraocular pressure on the various intraocular structures







## tech 14 | Course Management

#### **International Guest Director**

Dr. Caryn Plummer is a true international reference in the field of Veterinary Medicine. Her research interests include corneal wound healing, glaucoma and other aspects of clinical ophthalmology in animals. She has also developed different models of diseases that afflict the eyesight of pets.

The lectures of this expert are widely recognized and expected in the academic framework, developing many of these in the United States, the University of Copenhagen and other parts of the world. She is also a member of the School of Veterinary Medicine at the University of Florida.

Other lines in which this expert has completed her professional development are Pharmacology and the use of medical devices through administration and ocular penetration. In the same way, she has deepened her knowledge in Equine Corneal Disease, Primary Open Angle Glaucoma in the Dog and other immune-mediated pathologies. In turn, Plummer has ventured into the application of new surgical techniques for the healing of corneal wounds, facial reconstruction of animal eyelids and the prolapse of nictitating glands. On these topics he has published a large number of articles in leading journals such as Veterinary ophthalmology and American journal of veterinary research.

Dr. Plummer's professional development has also been intensive and regular. Her specialization in Veterinary Ophthalmology was developed at the University of Florida. She also completed her advanced education in Small Animal Medicine and Surgery at Michigan State University.

On the other hand, this scientist has received several awards, among them the Clinical Researcher of the Year Award, granted by the Florida Veterinary Medical Association. She is also the author of Gelatt's classic textbook Veterinary Ophthalmology and an associate editor.



## Dr. Plummer, Caryn

- · Research Fellow in Veterinary Ophthalmology at the University of Florida
- Veterinary Ophthalmologist specialized in Glaucoma and Corneal Disease in Small Animals.
- Founder and Secretary/Treasurer of the International Consortium for Equine Ophthalmology
- Treasurer of the Consortium for Animal Vision Foundation
- Author of the classic Gelatt textbook Veterinary Ophthalmology
- Diplomate of the American College of Veterinary Ophthalmology
- · Residency in Comparative Ophthalmology at the University of Florida
- Practical Instruction in Veterinary Medicine at the University of Michigan
- BA degree from Yale University
- Member of the Florida Veterinary Medical Association



Thanks to TECH, you will be able to learn with the best professionals in the world"

## tech 14 | Course Management

#### Management



#### Dr. Fernández Más, Uxue

- Veterinary Ophthalmology in the IVO
- Responsible for Ophthalmology at Vidavet
- Bachelor's Degree in Veterinary from the University of Zaragoza
- Postgraduate in Ophthalmology Veterinary Medicine, Autonomous University of Barcelona
- Lecturer in Introductory Courses in Veterinary Ophthalmology for the Vidavet group
- Member of SEOVET and AVEPA Ophthalmology group
- Presentations at SEOVET, ECVO and GTA of AVEPA Congresses
- Junior Resident at Oftalvet Mexico

#### **Professors**

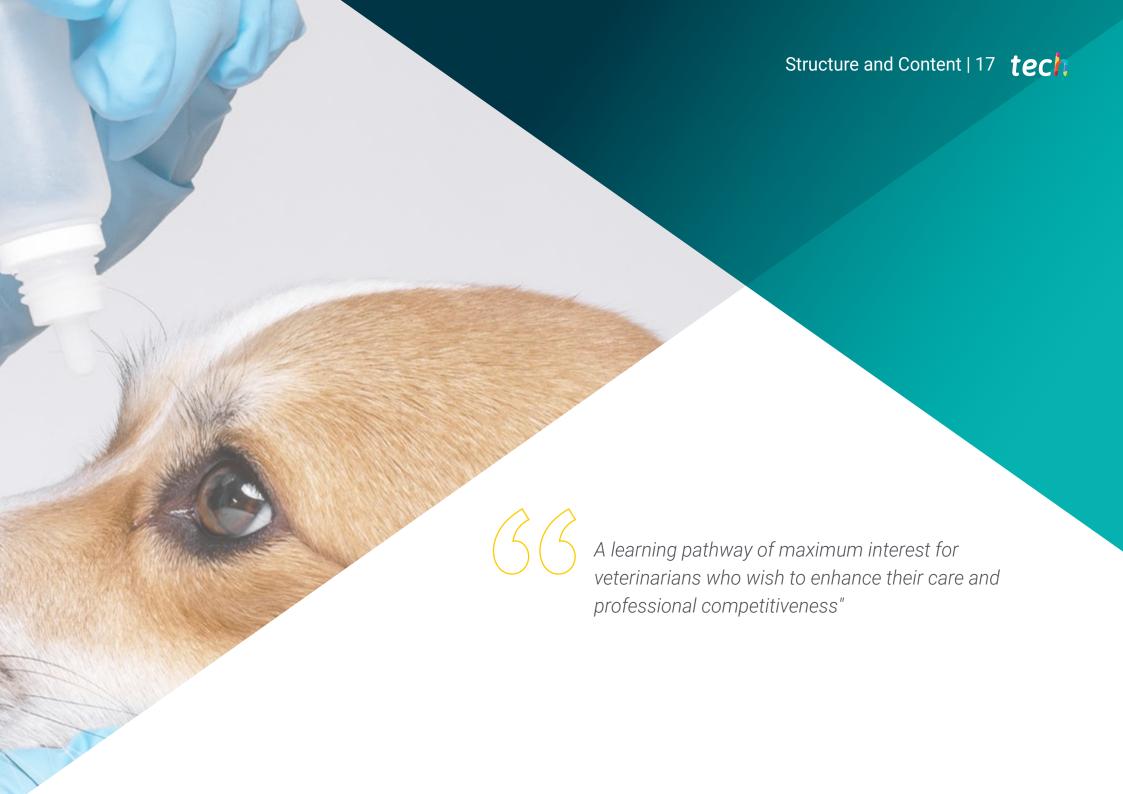
#### Dr. Torres Caballero, Maria Dolores

- Head of Ophthalmology Service in several veterinary hospitals, Barcelona
- Head of Ophthalmology Service, Veterinary Hospital Ars Veterinaria
- Degree in Veterinary Medicine from the University of Córdoba
- Experimental Microsurgery University Diploma, Paris VII
- Course of Advanced Studies in Veterinary Ophthalmology, Toulouse, France
- Teaching in veterinary ophthalmology specialization courses
- Presentation of training courses for general veterinarians in different locations in the Iberian Peninsula



An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed"

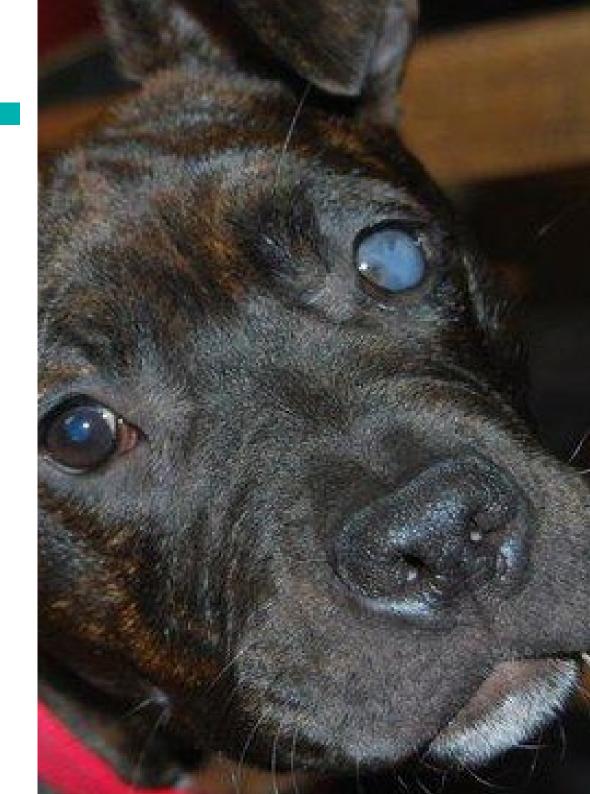




## tech 18 | Structure and Content

#### Module 1. Glaucoma

- 1.1. Anatomy and Embryology
  - 1.1.1 Embryological Development of the Iridocorneal Angle
  - 1.1.2. Embryological Development of the Trabecular Mesh
  - 1.1.3. Intraocular Hypertension-Associated Anatomical Changes
- 1.2. Glaucoma Classifications
  - 1.2.1. Classification According to Etiology
    - 1.2.1.1. Primary
    - 1.2.1.2. Secondary
- 1.3. Diagnosis
  - 1.3.1. Ophthalmologic Examination
    - 1.3.1.1. Funduscopy
    - 1.3.1.2. Neuro-Ophthalmology
  - 1.3.2. Tonometry
  - 1.3.3. Gonioscopy
  - 1.3.4. Complementary Imaging Techniques
    - 1.3.4.1. UBM
    - 1.3.4.2. High-Resolution Ultrasonography
    - 1.3.4.3. Optical Coherence Tomography (OCT)
- 1.4. Clinical Signs
  - 1.4.1. Intraocular Hypertension
  - 1.4.2. Acute Primary Glaucoma
  - 1.4.3. Secondary Glaucoma
    - 1.4.3.1. Acute
    - 1.4.3.2. Chronic
- 1.5. Primary Canine Glaucoma (According to Breeds)
  - 1.5.1. Heritability
  - 1.5.2. Genetic Tests
  - 1.5.3. Pectinate Ligament Dysplasia
  - 1.5.4. Sex-Age Relationship
  - 1.5.5. Open-Angle Glaucoma
    - 1.5.5.1. Beagle
    - 1.5.5.2. Norwegian Elkhound
    - 1.5.5.3. Petit Basset Griffon



#### 1.5.6. Closed-Angle Glaucoma

1.5.6.1. American Cocker Spaniel

1.5.6.2. Basset Hound

1.5.6.3. Chow Chow

1.5.6.4. Samoyed

1.5.6.5. Other Breeds

#### 1.6. Secondary Glaucoma

#### 1.6.1. Causes

1.6.1.1. Primary Lens Luxation

1.6.1.2. Uveitis

1.6.1.3. Phacomorphic

1.6.1.4. Associated with Crystalline Surgery

1.6.1.5. Malignant Glaucoma

1.6.1.6. Trauma

1.6.1.7. Pigmentary Glaucoma

1618 Retinal Disorders

1.6.1.9. Neoplasms

#### 1.7. Feline Glaucoma (Primary and Secondary)

#### 1.7.1. Causes

1.7.1.1. Congenital

1.7.1.2. Primary

1.7.1.3. Secondary

1.7.2. Clinical Signs

1.7.3. Medical Treatment

1.7.3.1. Feline Species-Specific Characteristics

1.7.4. Surgical Management

#### 1.8. Medical Treatment

1.8.1. Decreased Aqueous Humor Production

1.8.2. Increased Secondary Channel Drainage

1.8.3. Neuro-Protection

## Structure and Content | 19 tech

#### 1.9. Surgical Management

1.9.1. Patient Selection

1.9.2. Pre- and Post-Operative Patient Treatment

1.9.3. Valve Attachment

1.9.3.1. Surgical Technique

1.9.3.2. Post-Operative Care

1.9.3.3. Surgical Results

#### 1.9.4. Cyclodestruction

1.9.4.1. Photocoagulation

1.9.4.2. Chemical

1.9.4.3. Thermal

#### 1.10. Ocular Changes in Chronic Glaucomas

1.10.1. Cornea

1.10.2. Sclera

1.10.3. Lens

1.10.4. Uvea

1.10.5. Retina

1.10.6. Optic Nerve



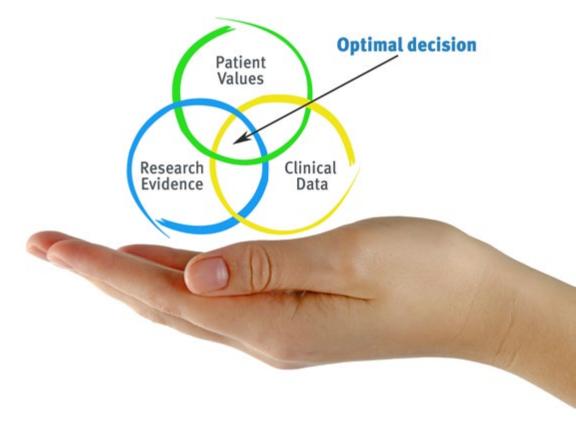


## tech 24 | Methodology

#### 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.





#### 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 | 27 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.

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**

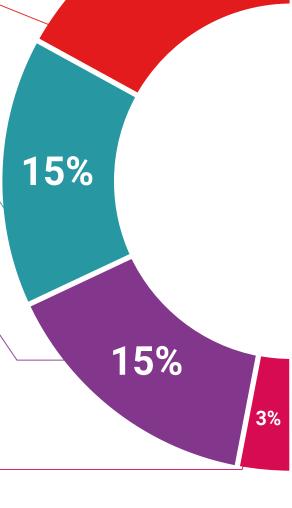
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current and procedures of veterinary techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch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



## Effective learning ought to be contextual. Therefore, TECH presents real cases in which

#### **Testing & Retesting**

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





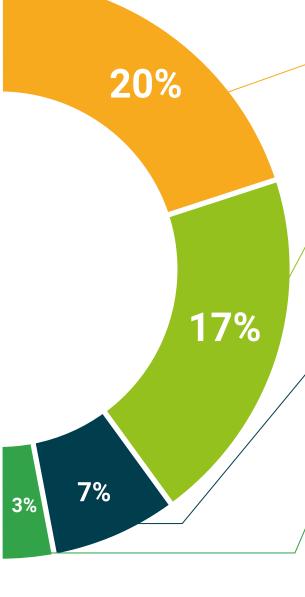
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

#### **Quick Action Guides**



TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.







## tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Glaucoma in Dogs and Cats** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Certificate in Glaucoma in Dogs and Cats

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in Glaucoma in Dogs and Cats

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.

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institutions technology learning
community commitment



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