

# Postgraduate Certificate

## Brain Pathologies in Small Animals





## Postgraduate Certificate Brain Pathologies in Small Animals

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

Website: [www.techtitute.com/pk/veterinary-medicine/postgraduate-certificate/brain-pathologies-small-animals](http://www.techtitute.com/pk/veterinary-medicine/postgraduate-certificate/brain-pathologies-small-animals)

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# 01

# Introduction

This high-impact program examines the different pathologies affecting the brain and the most common clinical signs that identify a localization at the level of the thalamus-cortex in small animal neurology intervention. A study that will allow the student to learn to comprehensively identify all the physiological mechanisms involved in the correct functioning of the brain.





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*A high-quality program including  
brain pathologies affecting small  
animals”*

The different pathologies affecting the brain are presented divided by their etiology, studying and analyzing inflammatory, toxic, vascular and traumatic processes.

It deals with the different neoplasms that occur in the brain, their diagnosis, the different types and their histopathological study. It also deals with congenital anomalies and their identification by means of different diagnostic tests.

Finally, it examines the different degenerative pathologies and primary and acquired metabolic diseases affecting the brain.

The units and clinical cases proposed, as well as their resolution, are based on both the teachers' practical experience and on the latest advances in research and development that contribute to this field of work.

All knowledge is presented through high-quality multimedia content, analysis of clinical cases prepared by the teachers, master classes and video techniques that allow the exchange of knowledge and experience, maintain and update the level of training of its members, create protocols for action and disseminate the most important developments in emergency medicine in small animal medicine.



*A study that includes the pathologies that are associated with the different moments of the animal's life, both primary and acquired"*

This Postgraduate Certificate in **Brain Pathologies in Small Animals** offers the characteristics of a course of high scientific, teaching and technological level. These are some of its most notable features:

- ♦ The latest technology in online teaching software
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ♦ Practical cases presented by practising experts
- ♦ State-of-the-art interactive video systems.
- ♦ Teaching supported by telepractice
- ♦ Continuous updating and recycling systems
- ♦ Autonomous learning: full compatibility with other occupations
- ♦ Practical exercises for self-evaluation and learning verification
- ♦ Support groups and educational synergies: questions to the expert, debate and knowledge forums.
- ♦ Communication with the teacher and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection.
- ♦ internet connection
- ♦ Supplementary documentation databases are permanently available, even after the course

“ *Acquire the necessary knowledge for a precision approach to neoplasms of the brain*”

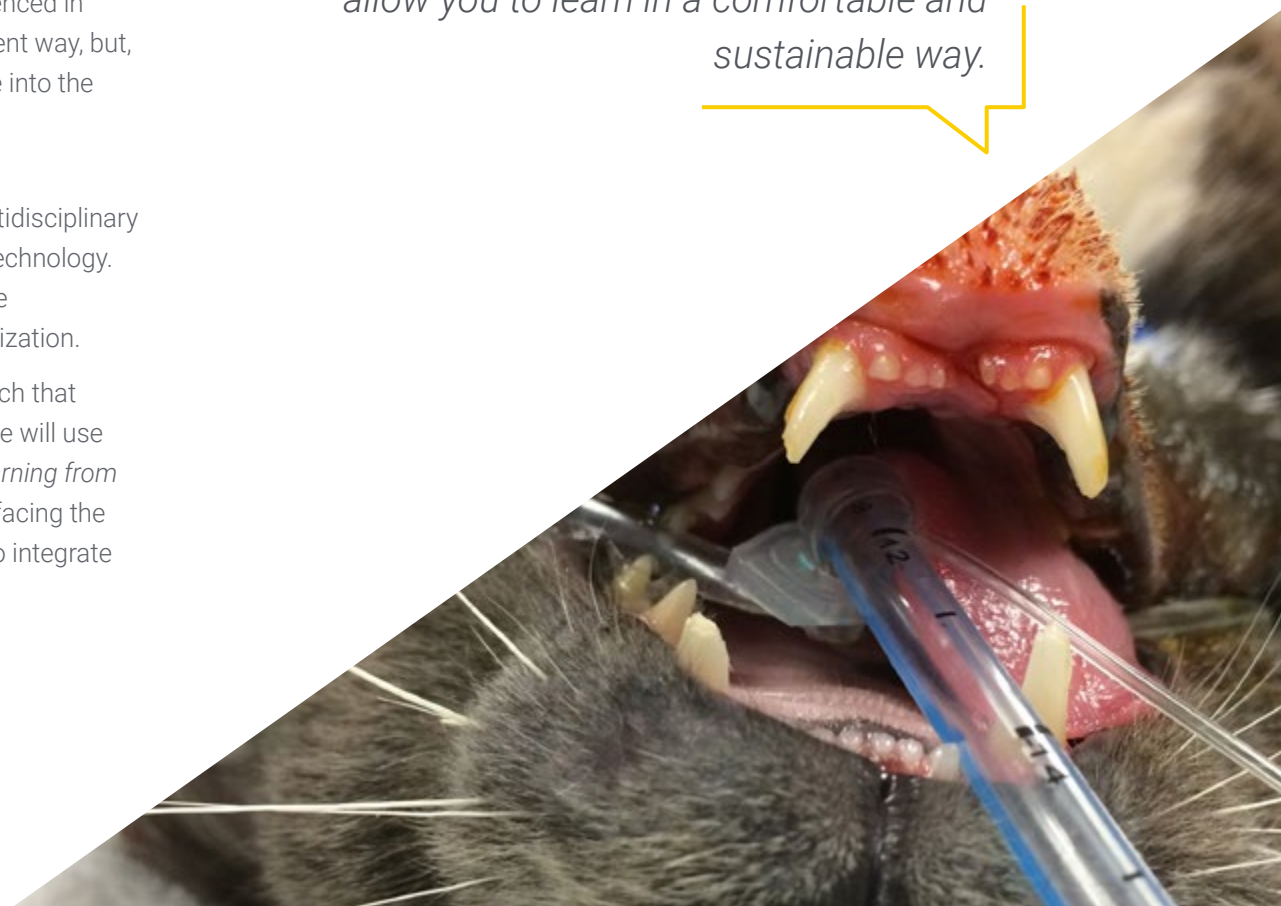
TECH's teaching staff is made up of professionals from different fields related to this specialty. In this way TECH makes sure to offer the student the update objective they are looking for. A multidisciplinary team of professionals trained and experienced in different environments, who will cover the theoretical knowledge in an efficient way, but, above all, will put the practical knowledge derived from their own experience into the course: one of the differential qualities of this course.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. Developed by a multidisciplinary team of *e-learning* experts, it integrates the latest advances in educational technology. This way, the student will be able to use a range of comfortable and versatile multimedia tools that will give them the operability they need in their specialization.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice: With the help of an innovative interactive video system, and *learning from an expert*, the student will be able to acquire the knowledge as if they were facing the scenario being learned at that moment. A concept that will allow students to integrate and memorize what they have learnt in a more realistic and permanent way.

*Contextual and realistic learning, for which you will be able to count on the vision of professionals who bring their direct experience in this field of work.*

*Learn at your own pace, in a process that combines intensity and flexibility to allow you to learn in a comfortable and sustainable way.*



# 02

# Objectives

A complete development around the pathologies affecting the brain in small animals, created to train you comprehensively in this field. The objective is for students to generate specialized knowledge, creating a well-structured basis to identify the clinical signs associated with each neurological location and to be able to establish a list of differential diagnoses, acting correctly to achieve the best possible prognosis in patients.





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*Neoplasms, congenital or degenerative pathologies, recurrent disease... in this course we will review all the contents that the professional needs to intervene in the ailments that concern the brain"*



## General Objectives

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- Identify common clinical signs affecting the brain
- Analyze inflammatory and vascular diseases, various toxic, traumatic and metabolic diseases.
- Compile and classify the most common neoplasms of the brain.

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*The learning you will achieve in this Diploma will translate into the growth of the quality of care for your patients that today's pet owners demand"*





## Specific Objectives

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- ◆ Define, develop and classify vascular accidents affecting the brain
- ◆ Examine the different inflammatory and infectious pathologies affecting the brain
- ◆ Analyze and classify neoplasms of the brain
- ◆ Determine the different metabolic and degenerative diseases of the brain
- ◆ Present congenital anomalies and identify them
- ◆ Structure and define toxic diseases

03

# Course Management

We put at your disposal a teaching staff of the highest level, chosen for their proven experience. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.



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*Experts in this field, our teachers will be in charge of accompanying you in your study, supporting your learning in a direct way"*

## Director Invitado Internacional

Dr. Steven de Decker's interest in the field of Veterinary Neurology has led him to be one of the most important figures in this area worldwide. He has participated in several international congresses, including the Singapore Vet Show, the largest veterinary conference in the Asian continent.

Such is his relevance that he has become president of the British Society of Veterinary Neurology. He is also a senior lecturer and head of the Neurology and Neurosurgery service at the Royal Veterinary College, considered one of the best veterinary institutions in the world.

His main area of research is spinal disorders and neurosurgery, having delved into the diagnosis and treatment of cervical disc-associated spondylomyelopathy or Wobbler's syndrome in dogs. His most cited studies deal with the prevalence of thoracic vertebral malformations, meningoencephalomyelitis of unknown origin and spinal arachnoid diverticula in dogs.



## Dr. De Decker, Steven

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- Head of Neurology and Neurosurgery Service, Royal Veterinary College - Hertfordshire, United Kingdom
- Head and Professor of the Neurology and Neurosurgery Service of the Royal Veterinary College - Hertfordshire, UK
- Past President of the British Veterinary Neurological Society.
- Doctor of Veterinary Neurology and Neurosurgery, University of Ghent, Belgium
- Graduate of the University of Ghent, Belgium

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*Gracias a TECH podrás aprender con los mejores profesionales del mundo”*

## Management



### Dr. Moya García, Sergio

- Doctoral candidate with the Chair of Surgery at the Faculty of Veterinary Medicine of Córdoba
- Miembro de Royal Collage Veterinary Surgeon (MRCVS)
- Member of the Endoscopy Group (GEA) of the Association of Veterinary Specialists in Small Animals (GEA-AVEPA) and of the Association of Veterinary Specialists in Minimally Invasive Medicine (AEVMI) and of the Neurology Group of AVEPA
- Vocal of Small Animals of the Official College of Veterinarians of Malaga since 2014
- Head of ATV training for AVEPA. Postgraduate in Neurology by the European School of Veterinary Studies Postgraduate (ESVP) Master's Degree in Clinical and Therapeutic Research from the University of Las Palmas de Gran Canaria
- Veterinary Specialist Degree in Endoscopy and Minimally Invasive Surgery by the University of Extremadura
- Assistance Director of the Vetsalud Dr. Moya Day Hospital and Head of the Neurology Department of the Bluecare Animal Hospital
- Currently pursuing neurology accreditation by AVEP





# 04

## Structure and Content

A complete and totally up-to-date syllabus will take the student through all the essential areas of learning in pathologies of the brain, gradually acquiring the necessary skills to put the necessary knowledge into practice. A well-developed learning scheme that will allow you to learn in a continuous, efficient and customized way.



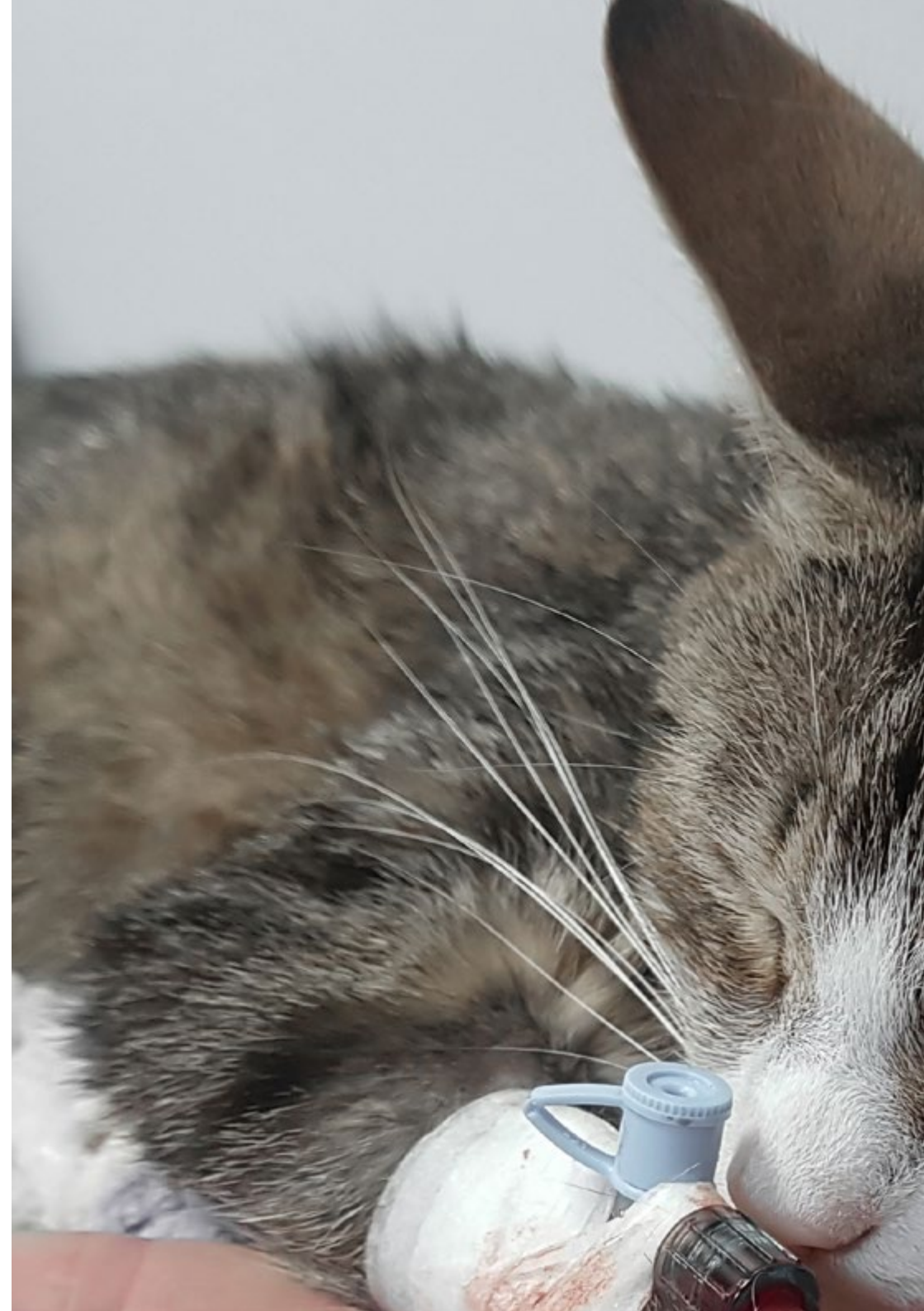


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*A stimulating and high-impact learning process, which will turn what has been studied into real competencies”*

## Module 1. Brain Pathologies

- 1.1. Basic Location
  - 1.1.1. Mental Status Disorders
- 1.2. Vascular Diseases
  - 1.2.1. Types
  - 1.2.2. Pathogenesis
- 1.3. Inflammatory and Infectious Diseases of the Brain
  - 1.3.1. Types
  - 1.3.2. Pathophysiology
- 1.4. Traumatic Diseases
  - 1.4.1. Types
  - 1.4.2. Pathophysiology
- 1.5. Congenital Brain Abnormalities
  - 1.5.1. Types
  - 1.5.2. Pathophysiology
- 1.6. Metabolic Acquired Diseases
  - 1.6.1. Types
  - 1.6.2. Pathophysiology
- 1.7. Primary Metabolic Diseases (Organic Aciduria, Mitochondrial)
  - 1.7.1. Types
  - 1.7.2. Pathophysiology
- 1.8. Brain Tumors
  - 1.8.1. Types
  - 1.8.2. Histopathology
  - 1.8.3. Prognosis
- 1.9. Degenerative Diseases
  - 1.9.1. Types and Clinical Signs
- 1.10. Toxic Diseases
  - 1.10.1. Types and Clinical Signs





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*Get up to date on all the areas of interest you need to update your intervention in Brain Pathologies in Small Animals"*

05

# Methodology

This academic program offers students a different way of learning. Our methodology follows a cyclical learning process: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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

## At TECH we use the Case Method

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

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



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



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

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

1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the program.



## Relearning Methodology

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

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

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



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

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

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



### Latest Techniques and Procedures on Video

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



### Interactive Summaries

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

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



### Additional Reading

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





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

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



#### Testing & Retesting

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



#### Classes

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

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



#### Quick Action Guides

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



06

# Certificate

Through a different and stimulating learning experience, the student will be able to achieve the necessary competencies to take a big step in their ability. An opportunity to progress, with the support and monitoring of a modern and specialized university, which will project you to another professional level.





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*Include a Postgraduate Certificate in Brain Pathologies in Small Animals in your professional profile: a high-quality added value for any professional in this area"*

This **Postgraduate Certificate in Brain Pathologies in Small Animals** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in Brain Pathologies in Small Animals**

Official N° of Hours: **150**



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





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