

# Postgraduate Certificate

Cranial Nerve Disorders, Vestibular Syndrome, Canine and Feline Epilepsy and Involuntary Movement Disorders





## Postgraduate Certificate

### Cranial Nerve Disorders, Vestibular Syndrome, Canine and Feline Epilepsy and Involuntary Movement Disorders

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/cranial-nerve-disorders-vestibular-syndrome-canine-feline-epilepsy-involuntary-movement-disorders](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/cranial-nerve-disorders-vestibular-syndrome-canine-feline-epilepsy-involuntary-movement-disorders)

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# 01

# Introduction

Vestibular syndromes and canine and feline epilepsies are some of the most anxiety-provoking pathologies for pet owners. Their management, treatment and, if necessary, surgical intervention are competencies that the up-to-date veterinarian must possess. This program has been created as a complete compilation of up-to-date information, with the complete study of the scientific and technological advances that have propelled this area of intervention to a level never before reached.







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*A complete update on the approach to canine and feline epilepsies, vestibular syndromes and cranial nerve disorders, including new ways to proceed in these fields"*

This module makes a study of the alterations of the cranial pairs.

Due to its special importance and given its high incidence, it analyzes the vestibular syndrome, the anatomical notions of relevance in this syndrome, the assessment of whether we are dealing with a vestibular or peripheral syndrome, diagnosis and treatment.

It addresses everything related to neuro-ophthalmology, establishes the differences between a neurological problem versus an ophthalmological problem, assessing the different causes of internal and external ophthalmoplegia.

Finally, it examines movement disorders: canine and feline epilepsy and involuntary movement disorders analyzed and schematized, compression, management and treatment are a very important group of nervous pathologies in the specialty of neurology.



*An intensive tour through the most common vestibular syndromes in the veterinary practice, with an analysis of the different possible approaches and their prognoses"*

This online Postgraduate Certificate in **Cranial Nerve Disorders, Vestibular Syndrome, Canine and Feline Epilepsy and Involuntary Movement Disorders** offers the characteristics of a program of high scientific, teaching and technological level. These are some of its most notable features:

- ♦ The latest technology in online teaching software
- ♦ Intensely visual teaching system, supported by graphic and schematic contents, 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.
- ♦ Supplementary documentation databases are permanently available, even after the program.

“*Integrate what has been learned by observing how techniques and procedures are carried out, using the most advanced audiovisual systems of online teaching*”

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. In 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.

*With the latest advances in neuro-ophthalmology, this Postgraduate Certificate is configured as a high-quality training tool for the veterinary professional.*

*Learn from the experience of great professionals, learning about the immediate reality of this field of work.*





# 02

## Objectives

The student will integrate in your skills, the advances in the diagnosis and treatment of cranial nerve disorders, vestibular syndrome and epilepsies in dogs and cats. The objective is to generate specialized knowledge in the student by 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 accurately to achieve the best possible prognosis in patients.





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*Incorporate into your practice the new diagnostic and treatment techniques that research has brought to veterinary medicine in this field"*



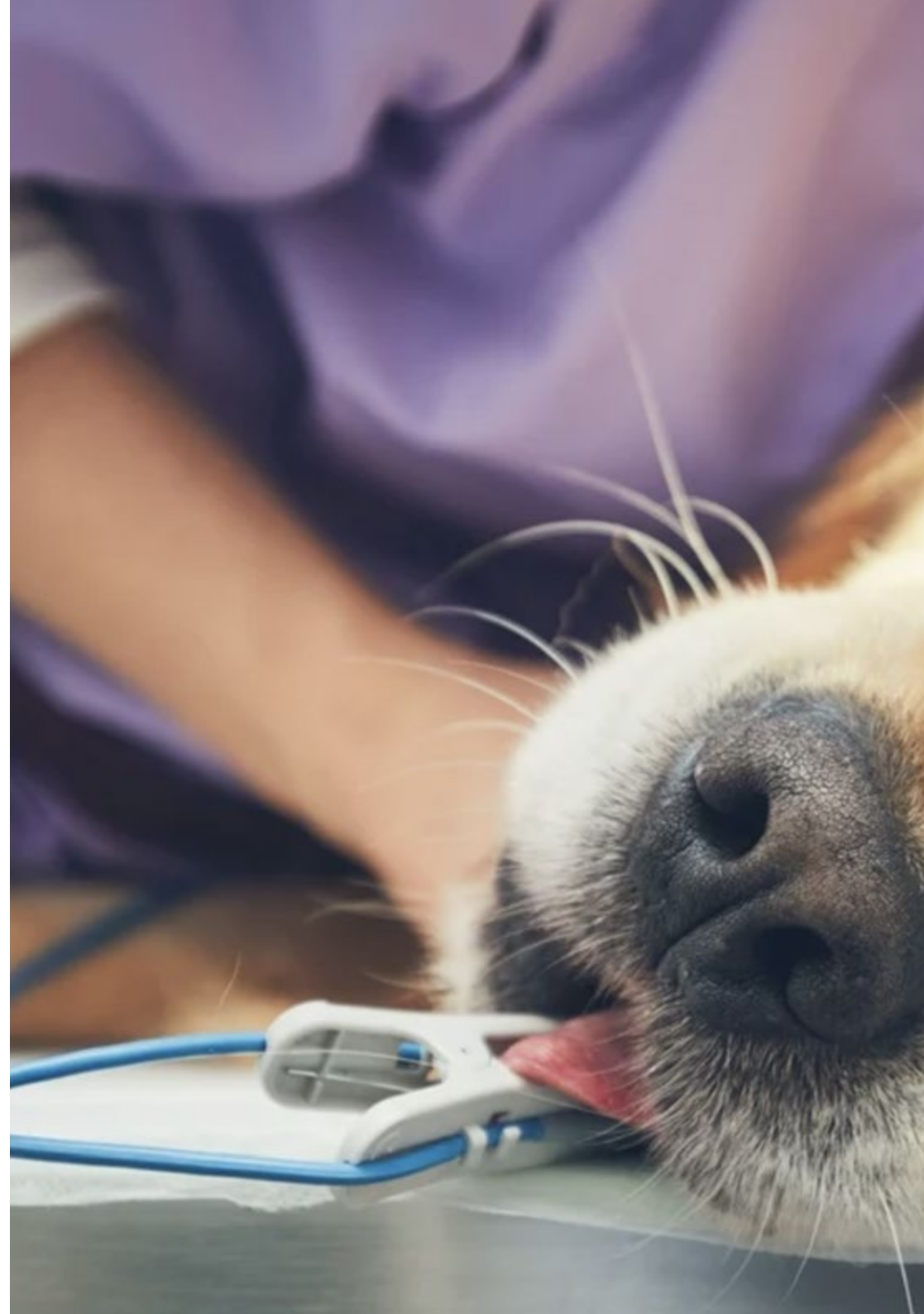
## General Objectives

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- Develop the different alterations of the cranial pairs
- Present vestibular syndrome, types and its management
- Define the different entities of movement disorders
- Deepen and develop knowledge of neuro-ophthalmology.

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*A quality study that will translate into better care for this type of pathology: a growth in care that your patients will appreciate immediately”*





## Specific Objectives

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- ♦ Identify cranial nerve disorders
- ♦ Develop the causes, diagnosis and treatment of vestibular syndrome and facial paralysis.
- ♦ Analyze neuro-ophthalmology as a fundamental basis of neurology.
- ♦ Define and identify the causes of laryngeal paralysis and megaesophagus.
- ♦ Developing canine and feline epilepsy
- ♦ Examine the different types of movement disorders



03

# Course Management

The teaching staff has been chosen from among professionals with proven experience in this field. Coming from different areas of expertise, they make up an exceptional multidisciplinary cast. 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

“

*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



## Professors

### Dr. Ródenas González, Sergio

- ◆ Graduated from the Veterinary University of Cáceres (Uex), he did an internship in the Surgery Department of the same faculty
- ◆ Doctorate in Neurology at the Faculty of Veterinary Medicine of Maisons Alfort
- ◆ Stays in American Universities and European reference centers in Neurology and Neurology services (University of Davis California, Pennsylvania, Guelph (OVC), Animal Health Trust, etc).
- ◆ ECVN Diplomate and European specialist in veterinary neurology
- ◆ 2 years in a referral center in England (SCVS) in the Neurology and Neurosurgery service
- ◆ One year clinical instructor in Neurology and Neurosurgery at the Faculty of Veterinary Medicine of the University of Montreal (Canada)
- ◆ In Canada, responsible for Neurology and Neurosurgery in two referral centers while continuing his work in England for two years
- ◆ Numerous national and international publications, as well as speaker at numerous international congresses on veterinary neurology and neurosurgery

### Dr. Maeso Ordás, Christian

- ◆ LV. PGCert Neuro. Degree in Veterinary Medicine from the University of Extremadura (2011)
- ◆ 2020, he joined Anicura Ars Veterinaria as a clinical veterinarian in the Neurology Service
- ◆ General veterinarian for three years in different veterinary clinics nationwide
- ◆ Two general internships at Rof Codina Veterinary Hospitals in Lugo (University of Compostela) and Ars Veterinaria (Barcelona) in 2013 and 2015, respectively
- ◆ 2016: a specialty internship in Neurology and Neurosurgery at the Anicura Valencia Sur Veterinary Hospital
- ◆ ECVN European Residency in 2017 at Ars Veterinaria
- ◆ He has attended multiple national and international courses and congresses in the specialty of Neurology
- ◆ Dr. Blasco has published in national and international journals and congresses. Training in different European reference veterinary hospitals (United Kingdom, Italy).
- ◆ Member of veterinary associations such as AVEPA and ESVN. He focuses his current interest within the field of neurology on neuromuscular diseases, epilepsy, as well as neurosurgery



*An impressive group of teachers, experts in the sector, will be your teachers during your apprenticeship: a unique occasion not to be missed"*

# 04

# Structure and Content

Throughout the course of study, the student will go through all the essential learning areas proposed, 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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*You will learn in an integrative way,  
turning study into real skills"*



**Module 1.** Cranial Nerve Disorders, Vestibular Syndrome and Canine and Feline Epilepsy. Involuntary Movement Disorders

- 1.1. Neuro-Ophthalmology
  - 1.1.1. Anatomy
  - 1.1.2. Clinical Examination and Tests
- 1.2. CN III, IV and VI Disorders
  - 1.2.1. Anatomy
  - 1.2.2. Clinical Examination and Tests
- 1.3. Chewing and Swallowing Disorders
  - 1.3.1. Anatomy of the Affected Cranial Nerves
  - 1.3.2. Clinical Examination and Tests
- 1.4. Laryngeal Paralysis and Megaesophagus
  - 1.4.1. Anatomy of the Affected Cranial Nerves
  - 1.4.2. Physical Examination and Tests
- 1.5 Facial Paralysis
  - 1.5.1. Anatomy and Function of Facial Nerves
  - 1.5.2. Physical Examination and Tests
  - 1.5.3. Causes of Facial Paralysis
- 1.6. Vestibular Syndrome I
  - 1.6.1. Vestibular System Anatomy
  - 1.6.2. Causes of Peripheral Vestibular Syndrome
  - 1.6.3. Causes of Central Vestibular Syndrome
- 1.7. Vestibular Syndrome II
  - 1.7.1. Diagnosis
  - 1.7.2. Treatment





- 1.8. Canine Epilepsy
  - 1.8.1. Etiology and Pathophysiology
  - 1.8.2. Classification
  - 1.8.3. Treatment
- 1.9. Feline Epilepsy
  - 1.9.1. Etiology and Pathophysiology
  - 1.9.2. Classification
  - 1.9.3. Treatment
- 1.10. Involuntary Movement Disorders
  - 1.10.1. Etiology and Classification
  - 1.10.2. Treatment

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*A structured and comprehensive study that will cover all the points of interest you need to update your intervention in cranial nerve disorders, vestibular syndromes and epilepsies 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. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.



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

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

1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. 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

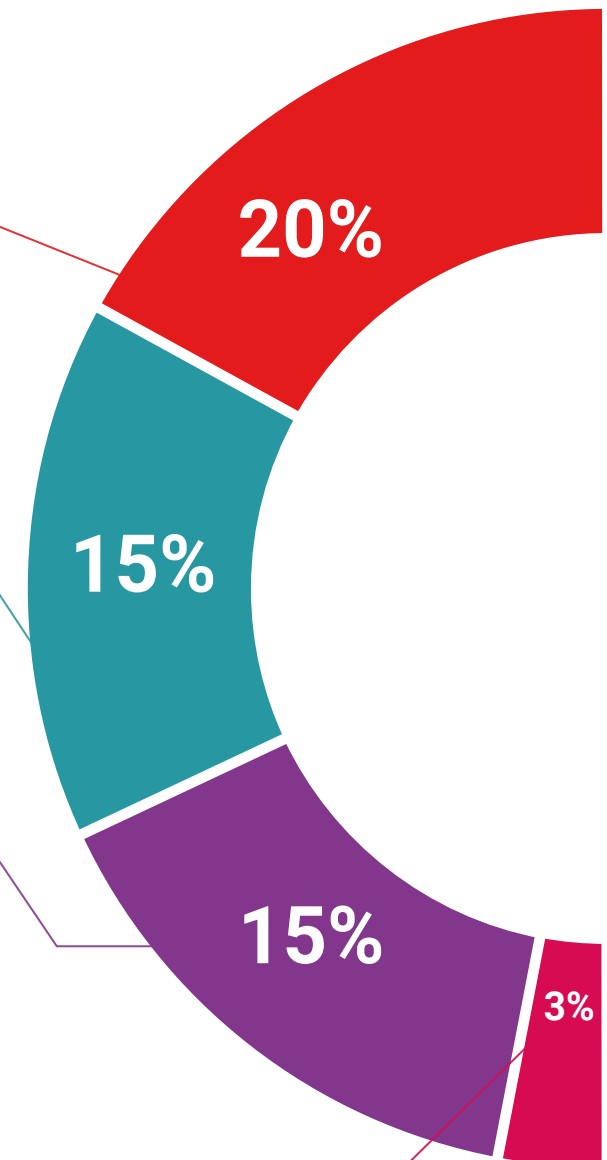
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

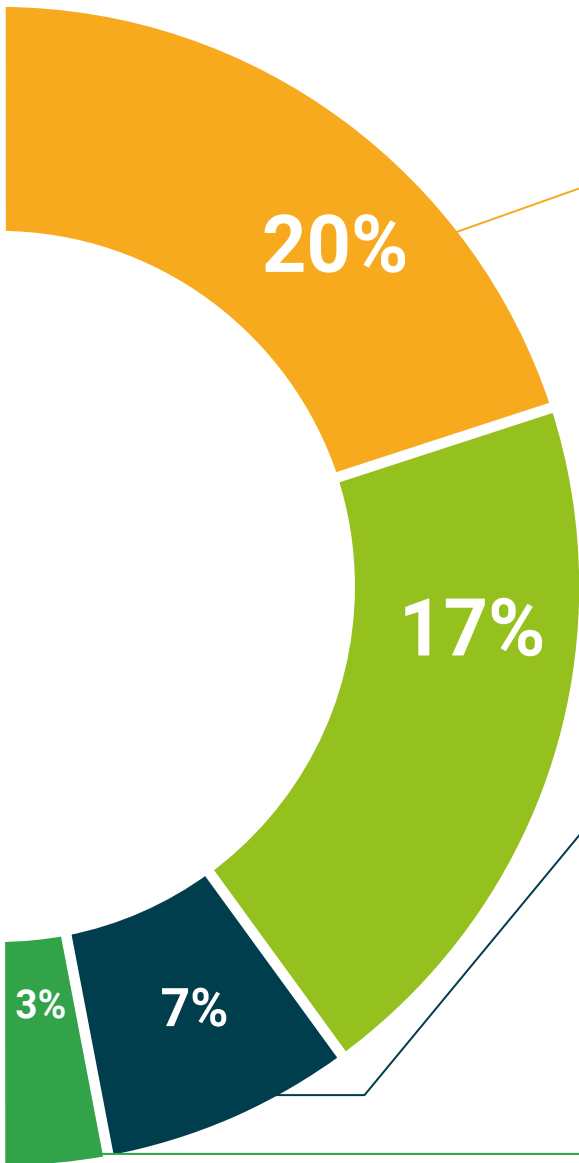


#### Additional Reading

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 diploma in cranial nerve disorders, vestibular syndrome and canine and feline epilepsy and involuntary movement disorders on your professional profile: a high-quality added value for any professional in this area"*

This program will allow you to obtain your **Postgraduate Certificate in Cranial Nerve Disorders, Vestibular Syndrome, Canine and Feline Epilepsy and Involuntary Movement Disorders** 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.

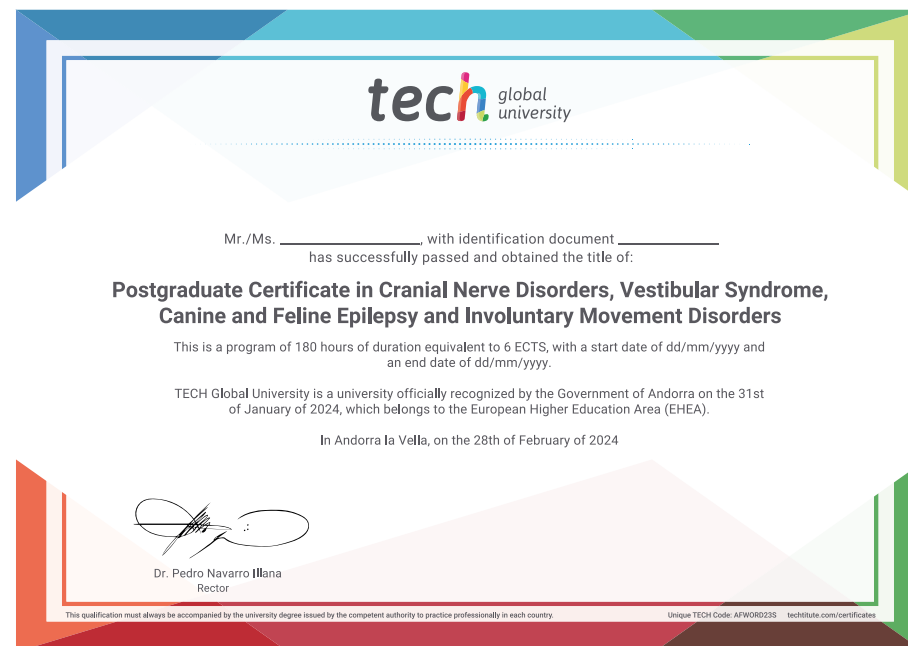
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Cranial Nerve Disorders, Vestibular Syndrome, Canine and Feline Epilepsy and Involuntary Movement Disorders**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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.





## Postgraduate Certificate

### Cranial Nerve Disorders, Vestibular Syndrome, Canine and Feline Epilepsy and Involuntary Movement Disorders

- » Modality: **online**
- » Duration: **6 weeks**
- » Certificate: **TECH Global University**
- » Credits: **6 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

# Postgraduate Certificate

Cranial Nerve Disorders, Vestibular Syndrome, Canine and Feline Epilepsy and Involuntary Movement Disorders

