

# Postgraduate Certificate Feline Endocrinology





## Postgraduate Certificate Feline Endocrinology

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

Website: [www.techtitute.com/in/veterinary-medicine/postgraduate-certificate/feline-endocrinology](http://www.techtitute.com/in/veterinary-medicine/postgraduate-certificate/feline-endocrinology)

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# 01

# Introduction

Endocrine diseases in the feline species are frequent in daily clinical practice. Among them, the main endocrinopathy in cats is hyperthyroidism, affecting more than 10% of cats older than 7 years. Due to its high frequency, feline diabetes is also of great importance. On the other hand, although diagnosed less frequently, hyperaldosteronism and hypercalcemia have been included in this program, since it is essential for the veterinarian specialized in Feline Medicine to know them in order to be able to provide a comprehensive response to the care of this type of conditions in domestic felines.







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*With this Postgraduate Certificate you will update your approach to hyperthyroidism in cats, incorporating the latest treatments and pharmacological monitoring”*

Endocrine diseases present great differences with the canine species, both in their origin, as well as in their presentation and evolution. These particularities mark important differences in the diagnosis, management of the disease and follow-up.

Without forgetting the basic aspects of these diseases, the Postgraduate Certificate course delves deeper into each of them, with speakers with extensive experience in each subject in order to expand knowledge at a high level and with an eminently practical character.

This intensive program addresses a specific topic of anesthesia in the feline patient with endocrine pathologies, due to the fact that endocrine diseases have a great systemic influence on the cat, making anesthesia in these patients require an in-depth knowledge of the mechanisms that may be affected.

As it is an online program, the student is not constrained by fixed schedules or the need to move to another physical location, but rather, they can access the contents at any time of the day, allowing them to balance their professional or personal life with their academic life as they please.

This **Postgraduate Certificate in Feline Endocrinology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of case studies presented by experts in Feline Medicine and Surgery
- 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
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions for experts and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection



*This program is developed with the support of a methodology designed to give you a real and practical vision of what you learn, which will allow you a contextual study that will facilitate your learning"*

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*Feline care has increased in recent years, which requires the veterinarian to specialize in the specific ways of intervening that this species requires”*

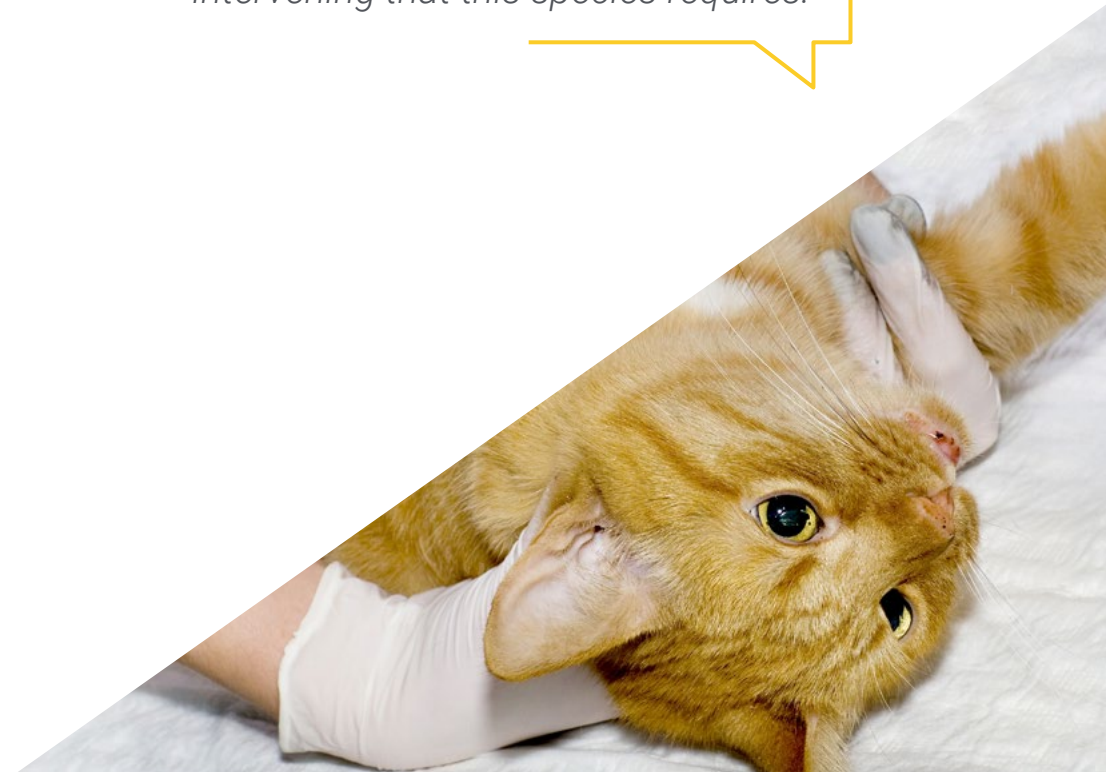
*Delve into diabetes mellitus, calcium disorders, hyperthyroidism and other endocrine pathologies of the feline patient.*

*The attention to felines has increased in the last years, which demands from the veterinarian a specialization that provides him with the specific ways of intervening that this species requires.*

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 immersive education programmed to learn 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.





# 02 Objectives

This Postgraduate Certificate in Feline Endocrinology aims to upgrade veterinary professionals in the specific aspects involved in the diagnosis and approach to pathologies of this specialty. A high-quality program that will optimize your efforts, converting them quickly into results.





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*The objective of this Postgraduate Certificate is to provide the professional with the most comprehensive and updated knowledge in the approach to endocrine system pathologies in cats”*



## General Objectives

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- Determine the specific anesthetic techniques in the feline patient
- Recognize the symptoms of pain in a cat and know how to manage it
- Establish an adequate diagnostic and therapeutic protocol in a non-regenerative anemia
- Address the main controversies in feline nutrition
- Recognize the main peculiarities of drug metabolism in the cat
- Examine which are the less common signs that can lead to suspect a digestive pathology
- Establish the differences between periodontal disease and chronic gingivostomatitis
- Selecting and assessing the critically ill patient
- Establish a proper nutrition plan for the hyporexic or anorexic feline patient
- Master the methods of monitoring in the ICU



*A high-quality step that will mean an intensive growth in your ability to intervene in this field of work"*





## Specific Objectives

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- ◆ Delve into the treatment options and monitoring systems for diabetes mellitus
- ◆ Analyze all the factors that can influence a difficult management of the diabetic patient
- ◆ Develop a good protocol for the management of diabetic ketoacidosis and hyperosmolar syndrome
- ◆ Propose different therapeutic options in the hyperthyroid patient, as well as to assess the effect of this disease on the organism
- ◆ Assess calcium disorders in the feline patient and establish a diagnostic and therapeutic plan
- ◆ Identify the alterations of the adrenal glands and the pathophysiological alterations that they entail in the feline patient
- ◆ Present in the foreground feline Cushing's Syndrome and acromegaly, often underdiagnosed or masked by other pathologies



03

# Course Management

The program includes in its teaching staff experts from different areas related to veterinary care of cats. A multidisciplinary faculty that will allow you to acquire not only the knowledge you need in the area of Endocrinology, but also the direct and contextual vision of professionals involved in this sector and that will allow you to approach the most immediate reality of the profession by responding to current situations.







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*A teaching staff made up of specialists in different areas of veterinary medicine that will give you the multidisciplinary vision essential for quality intervention in Endocrinology"*

## International Guest Director

Dr. Karen Perry has become one of the most prominent professionals in the world of veterinary medicine. Specialized in small animal orthopedics, her prestige lies in her constant work in this area, where she has passionately devoted herself to finding the most effective treatments to reduce the complication rates associated with common orthopedic procedures.

Her work has focused especially on Feline Orthopedics and Minimally Invasive Osteosynthesis, areas that have allowed her to occupy positions of high responsibility. In this way, she has successfully served as Head of the Small Animal Surgery Department and as an associate professor at Michigan State University. In this sense, throughout her long professional career, Perry has perfectly combined the clinical facet with teaching at higher academic institutions.

Thanks to her communication skills, she not only brings the content to the students in an attractive way, but also disseminates scientific advances in her field at national and international congresses in her specialty. She is also the author of numerous publications in veterinary literature and is positioned as a leading voice in her field, which has led her to participate in interviews where she encourages constant updating by professionals and the active participation of women in Veterinary Orthopedics. At the same time, she brings scientific and clinical progress closer to the general public through different digital communication channels.



## Dr. Perry, Karen

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- Head of the Small Animal Surgery Department at the Michigan State University
- Veterinary Medical Center.
- Professor at Michigan State University
- Professor of Veterinary Medicine at Royal Veterinary College
- Veterinarian at The Royal (Dick) Veterinary Studies
- Member of: : European College of Veterinary Surgeons

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

## Management



### Dr. Mayo Robles, Pedro Pablo

- Co-owner and head of the Internal Medicine Service of the Veterinary Hospital Nacho Menes, in Gijón
- Veterinarian at the Reference Center San Vicente del Raspeig, in Alicante
- Clinical veterinarian at the Quirurgical Veterinary Center Alfonso Chico in La Coruña
- Responsible for the accreditation of Nacho Menes Veterinary Hospital as "Cat friendly clinic gold level by the ISFM"
- Bachelor and graduate in Veterinary Medicine, specializing in Animal Medicine and Health, from the Faculty of Veterinary Medicine of the University of León

## Professors

### Dr. Fernández Ordóñez, Raquel

- Veterinarian in Internal Medicine and Hospitalization at the Veterinary Hospital Nacho Menes, in Asturias
- Veterinarian in charge of Emergency, Internal Medicine and Hospitalization at Anicura Marina Baixa Veterinary Hospital, in Alicante
- Veterinarian in General and Preventive Medicine at Covadonga Veterinary Clinic, in Asturias
- Freelance veterinarian in 24h Emergency and General Medicine services in the city of Milan
- Degree in Veterinary Medicine from the University of Leon
- Specialization term in Emergency and Intensive Care at the Institute Veterinario di Novara, Italy





# 04

# Structure and Content

The structure of the contents has been designed to allow the student to make an intensive and efficient journey through the indispensable knowledge in the field of Endocrinology and other related areas. A study that incorporates in a very specific way, the approach to the most common pathologies and others of lesser incidence, but of enormous interest to the professional.







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*A complete syllabus that covers all the latest developments in the sector, including the most relevant advances in the care of feline patients with endocrine pathologies”*

## Module 1. Endocrinopathies in Feline Species

- 1.1. Acromegaly
  - 1.1.1. Acromegaly
  - 1.1.2. Pathogenesis
  - 1.1.3. Clinical Manifestations
  - 1.1.4. Diagnostic tests
  - 1.1.5. Treatment
  - 1.1.6. Prognosis
- 1.2. Diabetes Mellitus: Treatment and Monitoring
  - 1.2.1. Insulin Treatment
  - 1.2.2. Non-Insulin Therapies
  - 1.2.3. Nutritional Treatment
  - 1.2.4. Monitoring
    - 1.2.4.1. Fructosamine
    - 1.2.4.2. Glucose in Urine
    - 1.2.4.3. Methods and Systems for Blood Glucose Monitoring
    - 1.2.4.4. Glycosylated Hemoglobin
- 1.3. Unstable Diabetic Cat
  - 1.3.1. Unstable Diabetic Cat
  - 1.3.2. Insulin: Type and Dosage
  - 1.3.3. Somogyi Effect
  - 1.3.4. Concomitant Diseases
  - 1.3.5. Owner-Dependent Factors
  - 1.3.6. Remission of Diabetes
- 1.4. Diabetic Ketoacidosis and Hyperosmolar Syndrome
  - 1.4.1. Pathophysiology
  - 1.4.2. Clinical and Laboratory Alterations
  - 1.4.3. Treatment
    - 1.4.3.1. Fluid Therapy
    - 1.4.3.2. Supplements to Fluid Therapy
    - 1.4.3.3. Insulin Therapy
      - 1.4.3.3.1. Intravenous Insulin
      - 1.4.3.3.2. Intramuscular Insulin
  - 1.4.4. Complementary Treatment
  - 1.4.5. Prognosis
- 1.5. Calcium Disorders
  - 1.5.1. Calcium Physiology and Regulation
  - 1.5.2. Hypercalcemia
    - 1.5.2.1. Differential Diagnosis
    - 1.5.2.2. Diagnostic Tests
    - 1.5.2.3. Treatment
  - 1.5.3. Hypocalcemia
    - 1.5.3.1. Differential Diagnosis
    - 1.5.3.2. Diagnostic tests
    - 1.5.3.3. Treatment
- 1.6. Hyperthyroidism
  - 1.6.1. Epidemiology of Hyperthyroidism
  - 1.6.2. Clinical Signs and Laboratory Abnormalities
  - 1.6.3. Thyroid Hormone Disorders
  - 1.6.4. Complementary Diagnostic Tests
- 1.7. Treatment of Hyperthyroidism
  - 1.7.1. Considerations Prior to Pharmacological Treatment
  - 1.7.2. Pharmacological Treatment and Monitoring
  - 1.7.3. Other Treatments
    - 1.7.3.1. Surgical Thyroidectomy
    - 1.7.3.2. Radioactive Iodine
    - 1.7.3.3. Diet
  - 1.7.4. Causes of Treatment Failure
- 1.8. Hyperthyroidism, Renal Disease and Hypertension
  - 1.8.1. Relationship Between Hyperthyroidism and Chronic Renal Disease
  - 1.8.2. Hyperthyroidism and Laboratory Tests of Renal Functionality
  - 1.8.3. Relationship Between Hyperthyroidism and Blood Pressure
  - 1.8.4. Treatment of Hyperthyroid Cats with CKD





- 1.9. Hyperadrenocorticism
  - 1.9.1. Etiology and Clinic
  - 1.9.2. Diagnosis
    - 1.9.2.1. Laboratorial Alterations
    - 1.9.2.2. Endocrine Tests
    - 1.9.2.3. Diagnostic Imaging
  - 1.9.3. Treatment
  - 1.9.4. Prognosis
- 1.10. Adrenal Tumors
  - 1.10.1. Adrenal Tumors
  - 1.10.2. Hyperaldosteronism
  - 1.10.3. Other Adrenal Tumors
    - 1.10.3.1. Pheochromocytoma
    - 1.10.3.2. Non-Functioning Adrenal Tumor
    - 1.10.3.3. Sex Hormone Secreting Adrenal Tumors

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*A highly specialized Postgraduate Certificate that will allow you to advance your skills in a comfortable but effective way”*

# 05 Methodology

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

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







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

## At TECH we use the Case Method

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

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



According to Dr. 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. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.



## Relearning Methodology

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

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



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



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

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

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

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

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



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



### Study Material

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

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



### Latest Techniques and Procedures on Video

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



### Interactive Summaries

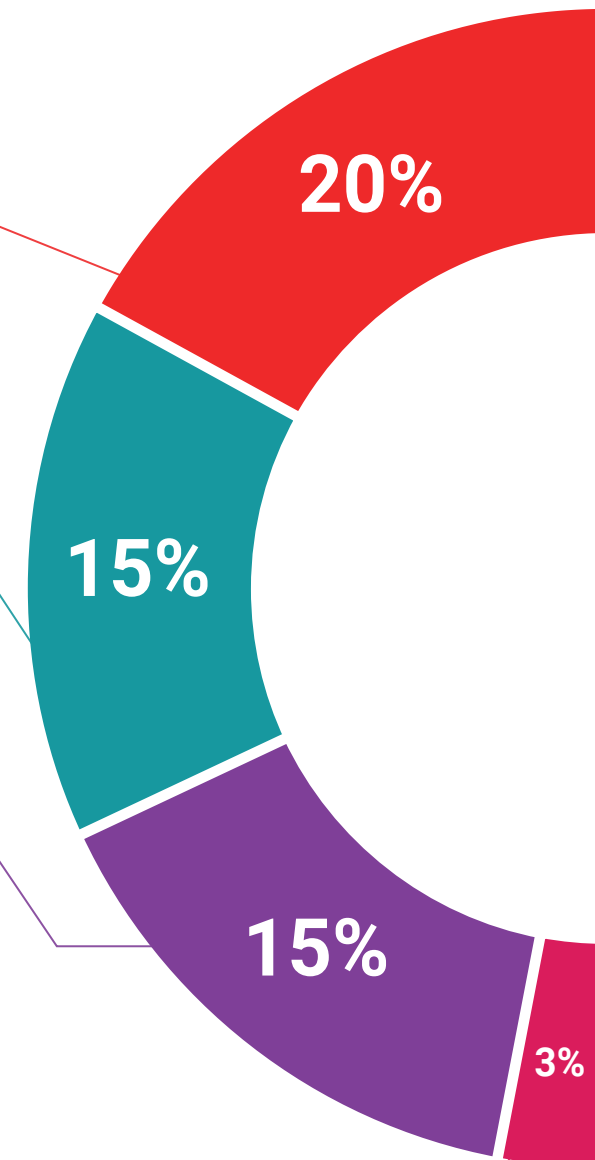
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

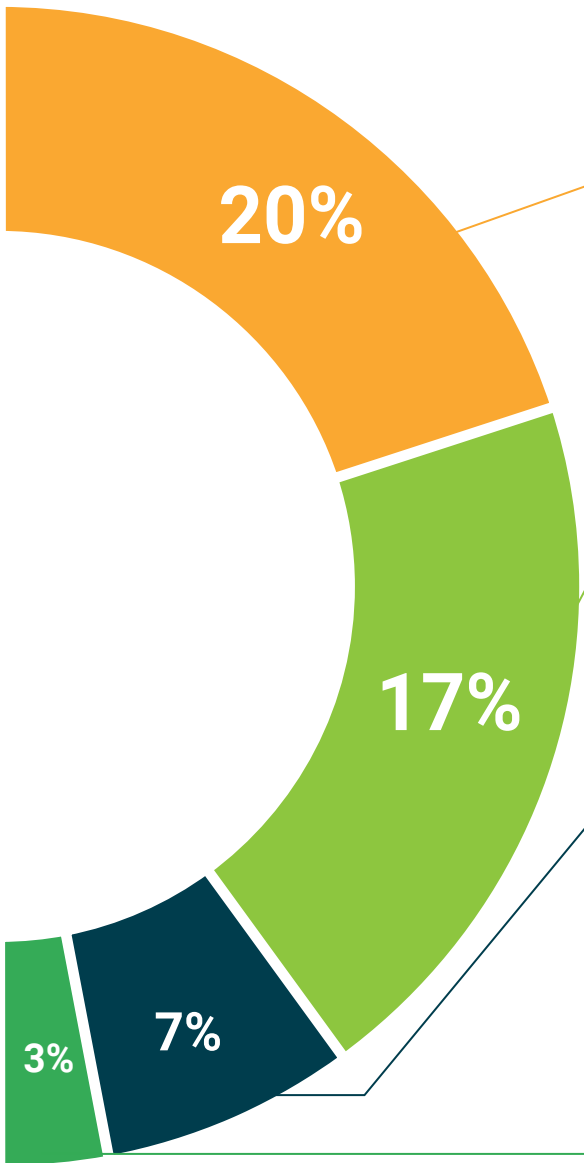


### Additional Reading

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







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

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



#### Testing & Retesting

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



#### Classes

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

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



#### Quick Action Guides

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



# 06 Certificate

The Postgraduate Certificate in Feline Endocrinology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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"*

The **Postgraduate Certificate in Feline Endocrinology** 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 Feline Endocrinology**

Official N° of Hours: **150 h.**



\*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.



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development language  
virtual classroom



## Postgraduate Certificate Feline Endocrinology

- » Modality: online
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