

Postgraduate Certificate

Management of Cardiovascular Emergencies in Small Animals





Postgraduate Certificate Management of Cardiovascular Emergencies in Small Animals

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/veterinary-medicine/postgraduate-certificate/management-cardiovascular-emergencies-small-animals

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01

Introduction

One of the characteristics of emergency department care is the need for very rapid and precise intervention. In many cases, patients with cardiovascular processes requiring very rapid and precise action will be received in the emergency department. In order to adequately care for patients in these situations, the veterinarian needs to master a compendium of protocols and actions that allow them to act safely and effectively. In this program the professional will learn to master the new forms of intervention and all aspects of the approach to these cases in the emergency department.



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Acquire the skills of an expert in the area of cardiovascular emergencies, with the most up-to-date knowledge and the latest advances in intervention with this high-intensity Postgraduate Certificate”

A high percentage of patients who arrive at the emergency department with a cardiovascular process are patients with aggravated chronic diseases or secondary complications, in many cases with an associated respiratory condition, either due to involvement of the pulmonary parenchyma, pleural space or airway.

However, there are many other ailments with an acute or over-acute course in which the patient, in many cases, will have no medical history to provide information to the clinician, so a complete battery of tests will be necessary to reach a diagnosis.

This Postgraduate Certificate will cover the care of a patient with cardiovascular compromise, arrival at the emergency department, initial stabilization, as well as anamnesis, examination, complementary tests and medical treatment.

In short, we offer you a complete tour of all the areas of knowledge you need to provide quality emergency care. The topics and clinical cases proposed, as well as their resolution, are based on the practical experience of the teachers and on the cases most frequently seen in emergency veterinary services.

This program is designed to provide an online education, providing all the theoretical and practical knowledge presented through high-quality multimedia content, analysis of clinical cases prepared by staff to, master classes and video techniques that allow the exchange of knowledge and experiences.

This **Postgraduate Certificate in Management of Cardiovascular Emergencies in Small Animals** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ 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-assessment 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



The latest advances and techniques for approaching cardiovascular emergencies in the small animal veterinary emergency department

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The knowledge needed to act with the necessary speed in the care of patients with cardiovascular conditions”

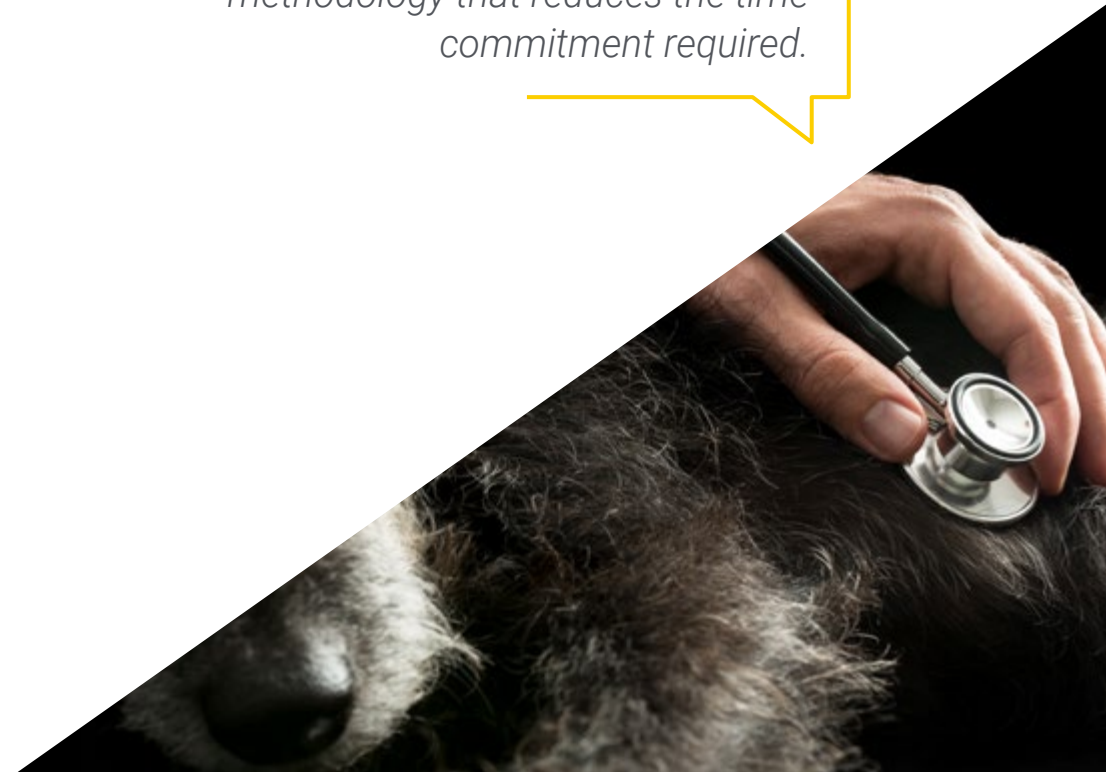
Its teaching staff includes professionals belonging to the field of emergency medicine who contribute their work experience to this training, as well as renowned specialists belonging to reference societies and prestigious universities.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

The design of this program is based on problem-based learning, by means of which the professional must try to solve the different professional practice situations that arise throughout the course. For this purpose, the physician will be assisted by an innovative interactive video system developed by renowned experts in the field of veterinary medicine who have extensive teaching experience.

With the experience of veterinarians specializing in the different branches of the small animal veterinary clinic.

This Postgraduate Certificate in Management of Cardiovascular Emergencies in Small Animals is based on the use of a highly efficient methodology that reduces the time commitment required.



02 Objectives

The Postgraduate Certificate in Management of Cardiovascular Emergencies in Small Animals compiles the most current knowledge based on the latest scientific research. Therefore, TECHs main goal is that the veterinary professional can deal with all the emergencies that arise, both in a center dedicated exclusively to emergency medicine and in a generalist center where this service is available.





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Our goal is simple: to provide the knowledge and skills necessary to increase your skills in veterinary emergency care”



General Objectives

- ◆ Compile the fundamental knowledge and competences in relation to the initial patient care and diagnostic and therapeutic procedures for the most frequent emergency situations in an emergency department
- ◆ Identify the main emergency situations related to respiratory pathology
- ◆ Establish fundamental knowledge and skills in the care of the patient with respiratory compromise in order to improve specific competencies in the professional or disciplinary field
- ◆ Demonstrate the action procedures in emergency respiratory situations by mastering the available therapeutic procedures
- ◆ Establish the knowledge and skills that the veterinary professional needs to care for a patient with cardiovascular problems, with the aim of improving the specific skills needed in this professional field
- ◆ Analyze the main dermatological diseases in the field of Veterinary Science
- ◆ Develop the different dermatological treatments in Clinical Veterinary
- ◆ Develop the most advanced knowledge in ophthalmologic emergencies as a reference for the diagnosis and treatment of the most common ophthalmologic diseases in small animals
- ◆ Gain a deeper understanding of the most advanced treatment and therapy in gastrointestinal emergencies in small animals
- ◆ Establish the fundamental knowledge and skills needed to care for a patient with gastrointestinal problems, with the aim of improving the specific skills needed in this professional field
- ◆ Compile the knowledge and skills needed to care for a patient with hematologic and/or oncologic emergency problems, with the aim of improving the specific skills needed in this professional field
- ◆ Offer the most appropriate treatments or therapies for the patient with a hematologic and/or oncologic emergency problem after correct anamnesis and initial assessment
- ◆ Establish the action protocol for patients in pain or with behavioral problems according to the latest scientific advances
- ◆ Gain a deeper understanding of the most appropriate medical-surgical techniques for patients with nephrological, urological and/or reproductive problems
- ◆ Offer the most up-to-date treatments for patients with metabolic and/or toxicologic problems according to the latest research in the field



A path to achieve education and professional growth that will propel you towards a greater level of competitiveness in the employment market



Specific Objectives

- ◆ Perform the correct triage of patients who arrive at the emergency department
- ◆ Assess, manage and provide primary care to patients in the emergency
- ◆ Establish management guidelines to facilitate working with difficult patients (aggressive, fearful, etc.)
- ◆ Improve knowledge of anesthesia and analgesia in order to successfully perform a sedation, anesthesia and/or pain control procedure in critical patients
- ◆ Highlight the most common medication and treatments used in emergency medicine and their practical application
- ◆ Establish the diagnostic imaging tests and their practical application in emergency medicine in small animals
- ◆ Specify the characteristics and operation of an intensive care unit in small animal veterinary medicine
- ◆ Implement medical protocols in each critical situation to facilitate proper patient management
- ◆ Specify the patients which require specialized care in the intensive care unit
- ◆ Establish the management of nutritional therapy and metabolic support in patients in the Intensive Care Unit (ICU)
- ◆ Perform and interpret routine complementary tests in a patient with cardiovascular problems. These could include ECG, blood pressure measurement using different types of non-invasive measuring devices, oxygen saturation measurement, etc
- ◆ Perform a diagnosis based on the data from the physical examination and laboratory tests, ECG and the diagnostic imaging
- ◆ Administer drugs to patients with cardiovascular problems
- ◆ Perform stabilization techniques in patients with cardiovascular problems (CPR, cardioversion, etc.)

03

Course Management

For this program TECH has selected a highly qualified teaching staff, made up of specialists in the sector who have poured their extensive knowledge and experience into this Postgraduate Certificate. They have also created part of important and prestigious entities, as well as societies at the service of research.





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

Management



Dr. Quintana Diez, Germán

- ◆ Founder, CEO Veterinary Specialist in Wairua Genetics
- ◆ Dermatology and Behavioral Medicine Service Coordinator at Centro Policlínico A Marosa Veterinary Center
- ◆ Veterinarian at Rof Codina University Clinical Hospital
- ◆ PhD in Veterinary Medicine from the USC
- ◆ Degree in Veterinary Medicine from the USC
- ◆ Master's Degree in Small Animal and Exotic Animal Clinic by the USC
- ◆ Master's Degree in Clinical Ethology and Animal Welfare from UCM
- ◆ Member of: ESVD, ESVCE, AVEPA

Professors

Dr. Beceiro Hermida, Óscar

- ◆ Head of Kavuré Veterinary Hospital
- ◆ Veterinarian at Granavet Veterinary Clinic
- ◆ Speaker at various veterinary-related congresses
- ◆ Degree in Veterinary Medicine from the University of Santiago de Compostela
- ◆ Master's Degree in Clinical Ethology and Animal Welfare at the University of Zaragoza
- ◆ Postgraduate Degree in Animal Behavioral *Medicine at Improve Veterinary Education*
- ◆ Multi-species Behavior Modification Technician from the Bocalán Foundation- The Dog Trainers Factory

Dr. López Lamas, Cristina

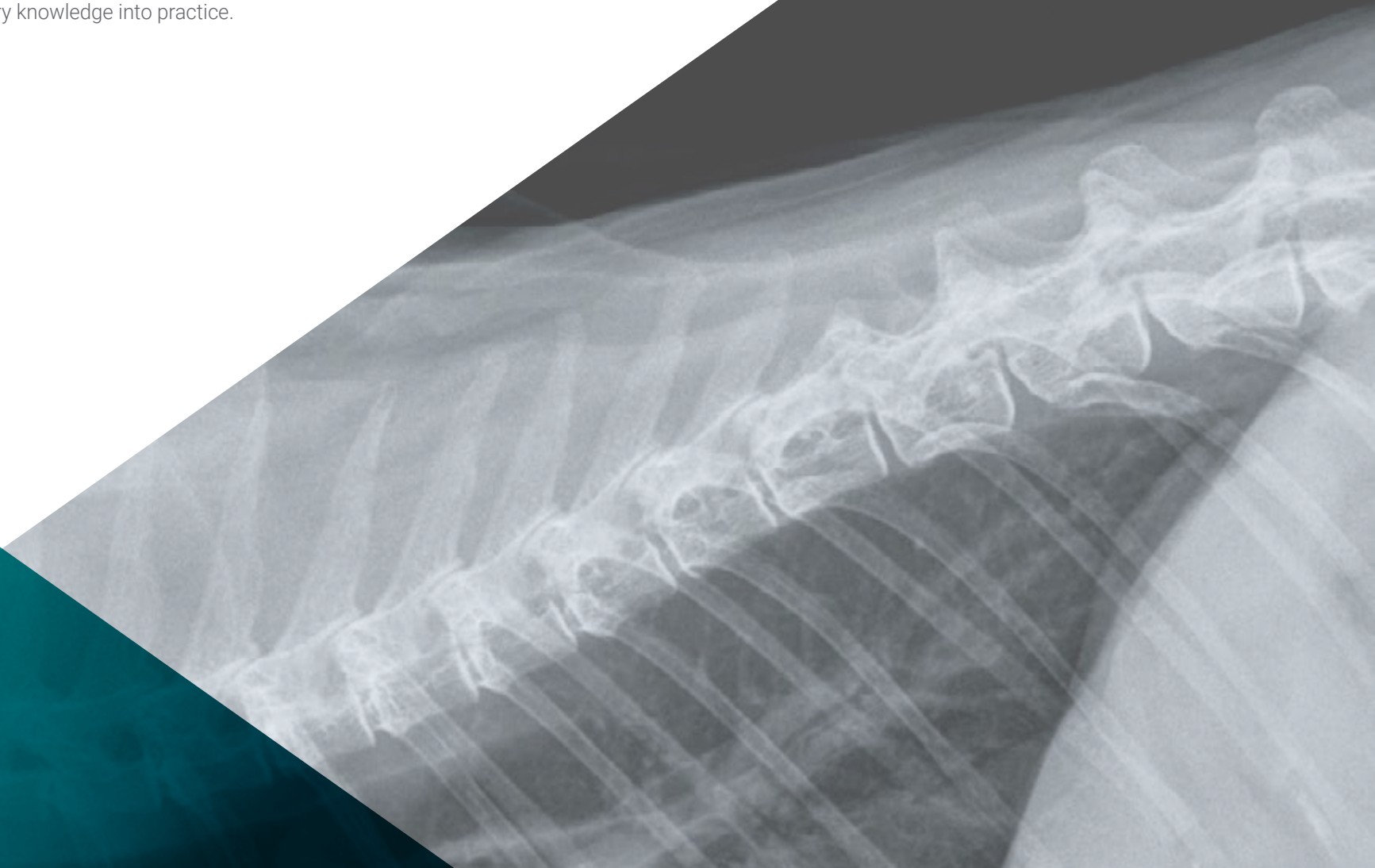
- ◆ Clinical Veterinarian Expert in Exotic Animals
- ◆ Clinical Veterinarian in the Polyclinic A Marosa Veterinary Center
- ◆ Head of Cardiology Service at the Polyclinica A Marosa Veterinary Center
- ◆ Veterinarian. Ultramar Veterinary Hospital
- ◆ Degree in Veterinary Medicine from the USC
- ◆ Postgraduate in Clinical Ultrasound from Improve Iberica
- ◆ General Practitioner Certificate in Clinical Ultrasound from the European School of Veterinary Postgraduate Studies
- ◆ Member of AVEPA and of AVEPA's study group in Cardiology



04

Structure and Content

The development of this Certificate has been carried out according to the criteria of effectiveness that TECH offers. Through a complete and concrete syllabus, the student will go through all the essential learning areas proposed, gradually acquiring the necessary skills to put the necessary knowledge into practice.





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This Postgraduate Certificate in Management of Cardiovascular Emergencies in Small Animals contains the most complete and up-to-date scientific program on the market”

Module 1. Introduction to Emergency Medicine in Small Animals

- 1.1. Triage and Initial Assessment
- 1.2. Initial Assessment
- 1.3. Primary Care and Management of Emergency Patients
- 1.4. Management of Difficult Canine Patient
- 1.5. Management of Difficult Feline Patient
- 1.6. Anesthesia and Analgesia in Emergency Patients
- 1.7. Pharmacology in Emergency Patients
- 1.8. Enteral Nutrition
- 1.9. Intensive Care Unit (ICU)
- 1.10. Diagnostic Imaging

Module 2. Management of Cardiovascular Emergencies

- 2.1. General Clinical Management
- 2.2. Complementary Diagnostic Procedures
- 2.3. Congestive Heart Failure
- 2.4. Cardiac Tamponade/Effusion
- 2.5. Dilated Cardiomyopathy
- 2.6. Feline Thromboembolism
- 2.7. Arrhythmias
- 2.8. Systemic Hypertension
- 2.9. Heat Stroke
- 2.10. Cardiopulmonary Arrest and Cardiopulmonary Resuscitation (CPR)





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A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life”

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. 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. 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 Management of Cardiovascular Emergencies in Small Animals guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in Management of Cardiovascular Emergencies in Small Animals** 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 progra.

Title: **Postgraduate Certificate in Management of Cardiovascular Emergencies in Small Animals**

Modality: **online**

Duration: **12 weeks**

Accreditation: **12 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.



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