

# Postgraduate Certificate Ultrasound in Exotic Animals





## Postgraduate Certificate

### Ultrasound in Exotic Animals

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH - Technological University**

**6 ECTS Credits**

Teaching Hours: **150 hours**

Website: [www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/ultrasound-exotic-animals](http://www.techtitute.com/us/veterinary-medicine/postgraduate-certificate/ultrasound-exotic-animals)

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# 01

# Introduction

Ultrasound is not a commonly-used diagnostic tool in exotic animal clinics. The large number of species included in this field, the anatomical differences and the different methods of restraint mean that the clinician is not confident in the use of this imaging technique. Therefore, it is essential for veterinarians to acquire advanced and updated knowledge for the use and ultrasound diagnosis of exotic animals.





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*Specialize in Ultrasound in Exotic Animals with the first-hand help of renowned professionals. A booming sector due to the growing demand for exotic pets"*

Technological advances and the development of new equipment with higher resolution have allowed the progression of ultrasound in these varied species, making it an essential diagnostic test.

In the **Postgraduate Certificate in Ultrasound in Exotic Animals** we face this challenge by providing students with an understanding of the ultrasound procedures that can be used in the various species of exotic animals, acquiring the necessary knowledge for their routine use.

With this specialization you will develop confidence, assurance and greater knowledge of pathologies and differential diagnoses when it comes to providing relevant and necessary information in daily ultrasound practice.

As it is an online Postgraduate Certificate course, students are not restricted by set timetables, nor do they need to physically move to another location. All of the content can be accessed at any time of the day, so you can balance your working or personal life with your academic life.



*Tackle the daily challenges you may face in Exotic Animal Ultrasound with this high-level program designed by and for veterinarians"*

This **Postgraduate Certificate in Ultrasound in Exotic Animals** offers you the advantages of a high-level scientific, teaching, and technological course. These are some of its most notable features:

- ◆ The latest technology in online teaching software.
- ◆ 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.
- ◆ 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 course

“*Open new doors in your professional development with this effective program”*

Our teaching staff is made up of professionals from different fields related to this specialty. In this way, we ensure that we provide you with the training update we are aiming 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 in Ultrasound in Exotic Animals**. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in.

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, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

*You will have the most advanced didactic resources and the most innovative knowledge in a program that stands out for the quality of its contents and its excellent teaching staff*

*As the course is online, you will be able to train wherever and whenever you want, balancing your professional and personal life*



# 02

# Objectives

The general objective of this program is to update the professional's knowledge on ultrasound procedures in daily practice. For this purpose, the theoretical learning of the subject will be provided, with the most current and interesting contents in this sector.







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*The most effective resources in online teaching, in a practical, comfortable and high-impact learning”*



## General Objectives

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- Establish ultrasonography as a diagnostic imaging tool in exotic animals or new companion animals (NCA)
- Study the difficulties of diagnostic ultrasound in different species
- Develop specialized knowledge for the correct ultrasound interpretation of NCA anatomy
- Identify the advantages of ultrasound scanning over other diagnostic imaging tests in small mammals, birds and reptiles.



*This specialization course will provide you with the necessary personal and professional skills to use ultrasound scanners correctly*





## Specific Objectives

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- ◆ Develop containment and positioning methods for the ultrasound study of small mammals, birds and reptiles
- ◆ Study existing ultrasound equipment and diagnostic options
- ◆ Determine the ultrasound protocol for small mammals: rabbits, ferrets, guinea pigs and small rodents
- ◆ Determine the ultrasound protocol for birds and reptiles
- ◆ Determine the anatomical references for New Companion Animals (NCA) in ultrasonography
- ◆ Identify ultrasound findings in the most common pathologies of New Companion Animals (NCA)
- ◆ Evaluate the different possibilities provided by ultrasound in daily clinical practice with New Companion Animals (NCA)

03

# Course Management

Professionals from different areas and skill sets with extensive experience in animal ultrasound will be your tutors throughout this specialist course. A complete multidisciplinary team that stands out for its illustrious professional trajectory and teaching experience.





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*We have the best teaching team to help you to specialize in a highly-demanded field”*

## Management



### Dr. Conde Torrente, María Isabel

- ♦ Head of the Diagnostic Imaging and Cardiology Service at Hospital Veterinario Alcor. Currently
- ♦ Degree in Veterinary Medicine from the University of Santiago de Compostela in 2012 with a certified European degree
- ♦ Advanced Postgraduate Course in Diagnostic Imaging (Computerized Axial Tomography). General Practitioner Advanced Certificate TCESMD. 2019
- ♦ Postgraduate General Practitioner Certificate in Diagnostic Imaging (GPCert- DI) 2016
- ♦ Professor in Veterinary Practical Training in 2015 as a teacher for the official qualification of veterinary technical assistant
- ♦ Gives training courses on clinical and laboratory analysis for veterinarians at Hospital Veterinario Alberto Alcocer
- ♦ Medical Director and head of the Advanced Diagnostic Imaging Service at Grupo Peñagrande. Exclusive handling of TC General Electrics TriAc Revolution 16 cuts. (2017-2019)
- ♦ Head of the Diagnostic Imaging Service at Centro Veterinario Mejorada. (2016-2017)
- ♦ Responsible for diagnostic services at Hospital Veterinario Alberto Alcocer. (2013-2016)
- ♦ University of Santiago de Compostela. Department of Animal Pathology. Collaboration with the research group on heavy metal accumulation in bovine meat in collaboration with Cornell University, New York; published in the Journal of Animal Science.



04

# Structure and Content

A complete and well-structured program, designed by renowned professionals in the field who will take you to the highest standards of quality and success using ultrasound in your daily practice.







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*We have the best content of the moment,  
developed according to the current teaching  
quality criteria”*

## Module 1. Ultrasound in Exotic Animals

- 1.1. Ultrasound Examination of New Companion Animals
  - 1.1.1. Features and handling of New Companion Animals
  - 1.1.2. Patient Preparation
  - 1.1.3. Ultrasound Equipment
- 1.2. Abdominal Ultrasonography in Rabbits
  - 1.2.1. Ultrasound Scan of the Urinary Tract
  - 1.2.2. Ultrasound Scan of the Reproductive System
  - 1.2.3. Ultrasound Scan of the Digestive System
  - 1.2.4. Ultrasound Scan of the Hepatic and Biliary Tracts
  - 1.2.5. Ultrasound Scan of the Adrenal Glands
  - 1.2.6. Ocular Ultrasonography
- 1.3. Abdominal Ultrasonography in Rodents
  - 1.3.1. Ultrasonography in Guinea Pigs
  - 1.3.2. Ultrasonography in Chinchillas
  - 1.3.3. Ultrasonography in Small Rodents
- 1.4. Abdominal Ultrasonography in Ferrets
  - 1.4.1. Ultrasound Scan of the Urinary Tract
  - 1.4.2. Ultrasound Scan of the Reproductive System
  - 1.4.3. Ultrasound Scan of the Digestive System
  - 1.4.4. Ultrasound Scan of the Hepatic and Biliary Tracts
  - 1.4.5. Ultrasound Scan of the Spleen and Pancreas
  - 1.4.6. Ultrasound Scan of the Lymph Nodes and Adrenal Glands
- 1.5. Ultrasonography in Turtles
  - 1.5.1. Ultrasound Scan of the Urinary Tract
  - 1.5.2. Ultrasound Scan of the Reproductive System
  - 1.5.3. Ultrasound Scan of the Digestive System
  - 1.5.4. Hepatic Ultrasound Scan
- 1.6. Ultrasonography in Lizards
  - 1.6.1. Diagnostic and Physiological Ultrasonography
  - 1.6.2. Renal Ultrasound Scan
  - 1.6.3. Ultrasound Scan of the Reproductive System
  - 1.6.4. Hepatic Ultrasound Scan





- 1.7. Ultrasonography in Snakes
  - 1.7.1. Diagnostic and Physiological Ultrasonography
  - 1.7.2. Renal Ultrasound Scan
  - 1.7.3. Ultrasound Scan of the Reproductive System
  - 1.7.4. Ultrasound Scan of the Digestive System
    - 1.7.5. Hepatic Ultrasound Scan
- 1.8. Ultrasonography in Birds
  - 1.8.1. Diagnostic and Physiological Ultrasonography
  - 1.8.2. Ultrasound Scan of the Reproductive System
  - 1.8.3. Hepatic Ultrasound Scan
  - 1.8.4. Echocardiography in Birds
- 1.9. Thoracic Ultrasound Scan
  - 1.9.1. Thoracic Ultrasonography in Rabbits
  - 1.9.2. Thoracic Ultrasonography in Guinea Pigs
  - 1.9.3. Thoracic Ultrasonography in Ferrets
- 1.10. Echocardiography
  - 1.10.1. Echocardiography in Rabbits
  - 1.10.2. Echocardiography in Ferrets

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*This Postgraduate Certificate in Ultrasound in Exotic Animals will take you through different teaching approaches which will allow you to learn in a dynamic and efficient way”*

05

# Methodology

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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.





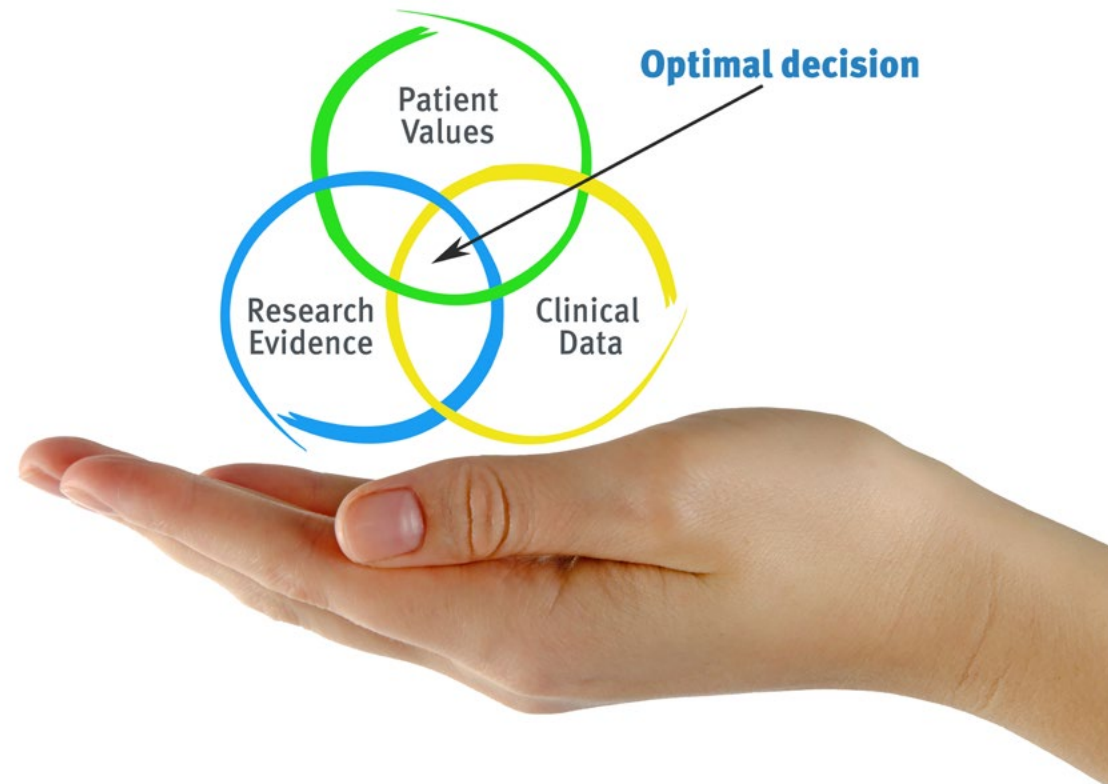
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*Successfully complete this training program and receive your university certificate without travel or laborious paperwork"*

## At TECH we use the Case Method

In a given clinical situation, what would you do? 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 abundant scientific evidence on the effectiveness of this method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can 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 potential or because of its uniqueness or rarity. It is essential that the case be based on current professional life, trying to recreate the real conditions in the 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 achieve the assimilation of concepts, but also a development of their mental capacity through exercises to evaluate real situations and the application of knowledge.
2. The learning process has a clear focus on 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.



## Re-learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

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

*Re-learning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success*

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

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



In this program you will have access to the best educational material, prepared with you in mind:



### Study Material

All the teaching materials are specifically created for the course, by specialists who teach on the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



### Latest Techniques and Procedures on Video

We bring you closer to the latest Techniques, to the latest Educational Advances, to the forefront of current Veterinary Techniques and Procedures. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



### Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



### Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.





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

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Re-Testing

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your 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 our future difficult decisions.



#### Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



06

# Certificate

Through a different and stimulating learning experience, you will be able to acquire the necessary skills to take a big step in your training. An opportunity to progress, with the support and monitoring of a modern and specialized university, which will propel you to another professional level.



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*Include in your training a Postgraduate Certificate in Ultrasound in Exotic Animals: a highly qualified added value for any professional in this area"*

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

After students have passed the evaluations, 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 Ultrasound in Exotic Animals**

ECTS: **6**

Official Number of Hours: **150**



\*Apostille Convention. In the event that the student wishes to have their paper diploma stamped with a Hague Apostille, TECH EDUCATION will make the necessary arrangements at an additional cost.

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



## Postgraduate Certificate

### Ultrasound in Exotic Animals

Course Modality: Online

Duration: 6 weeks

Certificate: TECH - Technological University

6 ECTS Credits

Teaching Hours: 150 hours

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