

# Postgraduate Certificate

Medical and Surgical Treatments on  
Reptiles and Wildlife





## Postgraduate Certificate Medical and Surgical Treatments on Reptiles and Wildlife

- » Modality: online
- » Duration: 3 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/medical-surgical-treatments-reptiles-wildlife](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/medical-surgical-treatments-reptiles-wildlife)

# Index

01

Introduction

---

p. 4

02

Objectives

---

p. 8

03

Course Management

---

p. 14

04

Structure and Content

---

p. 20

05

Methodology

---

p. 28

06

Certificate

---

p. 36

# 01

# Introduction

Reptiles and wild animals need veterinarians specialized in their pathologies in order to have specialized and effective treatments. On this occasion we offer you the most complete training in this field to update your knowledge in a rigorous way. A key academic program that will allow you to make a strategic leap in your profession.

*Specialize in the treatment of reptiles and wild animals and broaden your scope of practice in the veterinary medicine sector.*



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*Expand your skills in the management and treatment of reptiles and wildlife with this highly interesting and up-to-date course with the most rigorous material available on the market"*

The Postgraduate Certificate in Medical and Surgical Treatments on Reptiles and Wildlife is a high quality training program that focuses on the study of the main pathologies, diagnostic techniques and treatments in this type of animals to provide high level training to veterinarians who want to specialize in this field.

Wild animal care is mainly provided by zoos, aquariums, rescue centers, confiscation centers, rehabilitation centers, sanctuaries and also by veterinarians working with wild animals in their own habitat. Some species of reptiles, in addition to being found in these spaces, are increasingly being seen in veterinary clinics, due to the increase in the number of reptiles kept in homes.

This training will specialize you in the pathologies that can affect this type of animals, with a complete educational program and with the maximum scientific rigor, which will help you to practice in this field of veterinary medicine. In addition, as it is an online Postgraduate Certificate, the student is not constrained by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life as they wish.

Don't hesitate any longer and join the world's leading private Spanish-speaking online university, where we offer you the best training program accompanied by the best teaching methodology in the educational panorama, which will help you acquire the necessary knowledge in an agile and simple way.

This **Postgraduate Certificate in Medical and Surgical Treatments on Reptiles and Wildlife** is the most comprehensive and up-to-date educational program on the market.

The most important features of the program include:

- ♦ Developing practical cases presented by experts in exotic animal medicine and surgery
- ♦ The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- ♦ News on medical and surgical treatment in reptiles and wildlife
- ♦ Practical exercises where self-assessment can be used to improve learning.
- ♦ A special emphasis on innovative methodologies in the field of medical and surgical treatment in reptiles and wildlife
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Do not miss the opportunity to do a Postgraduate Certificate in Medical and Surgical Treatments on Reptiles and Wildlife. It's the perfect opportunity to advance your career"*



*This Postgraduate Certificate is the best investment you can make in selecting a refresher program to update your knowledge in Medical and Surgical Treatments on reptiles and wildlife”*

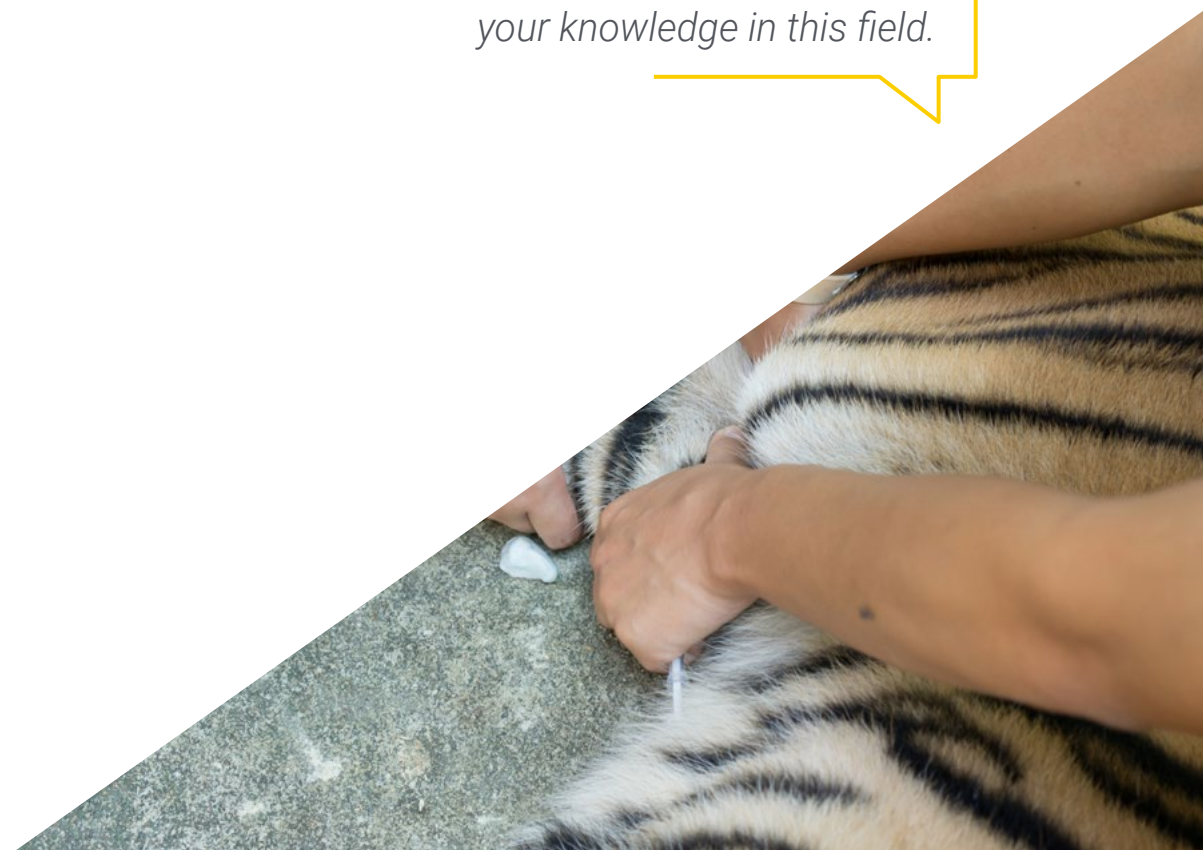
It includes in its teaching staff, professionals belonging to the veterinary field, who pour into this training the experience of their work, in addition to recognized specialists from reference societies and prestigious universities.

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 training programmed to train in real situations.

This program is designed around Problem Based Learning, whereby the specialist must try to solve the different professional practice situations that arise during the academic year. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in medical and surgical treatment in reptiles and wildlife.

*This training comes with the best didactic material, providing you with a contextual approach that will facilitate your learning.*

*This 100% online course will allow you to combine your studies with your professional work while increasing your knowledge in this field.*



# 02 Objectives

The **Postgraduate Certificate in Medical and Surgical Treatments on Reptiles and Wildlife** is oriented to facilitate the performance of the veterinary professional with the latest advances and newest treatments in the sector.







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*Our main objective is to offer you quality training that allows you to keep up to date with the main advances in the field"*



## General Objective

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- Determine the main pathologies of reptiles
- Examine the changes in behavior or other aspects of the animal following a pathology
- Establish treatments and cures for the most frequent pathologies
- Develop specialized knowledge on the most advanced surgical techniques, with updated anesthetic protocols
- Develop risk prevention for the public, zoonosis and animal escape.
- Carry out management, nutrition, deworming, vaccination, reproductive management and hygiene plans.
- Determine the main diseases, required diagnostics and therapeutics in the main animal species
- Analyze the principles of anesthesia y the main techniques



*Join one of the largest online universities in the world"*





## Specific Objectives

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### Module 1

- ♦ Determine the most frequent zoonoses, prevention and indications for owners
- ♦ Analyze the most important diseases in reptiles
- ♦ Treat the species with specific drugs and doses
- ♦ Understand the use of the concepts MEC (Metabolic Energy Constant) and SMEC (Specific Metabolic Energy Constant), understanding that there are differences in the dose depending on the physiological state.
- ♦ Inspect updated anesthetic studies
- ♦ Analyze the anatomical and physiological particularities of each species in order to make the appropriate anesthetic considerations
- ♦ Establish the basic and routine surgical techniques in clinical practice
- ♦ Discuss other important surgical issues
- ♦ Describe the pathologies presented by reptiles with more complex causes

### Module 2

- ♦ Establish which are the handling tasks of the veterinarian, together with his work team.
- ♦ Develop specialized criteria to decide on the release of a wild species treated for a pathology
- ♦ Develop preventive medicine programs, such as vaccinations, coprologicals, and vermifugations
- ♦ Develop specialized knowledge to perform the mandatory clinical examination of any patient who is hospitalized or has just been admitted to a recovery center
- ♦ Interpret the laboratory tests performed on the animals in order to treat their disease
- ♦ Establish guidelines for nutrition and nutritional diseases, infectious diseases, reproductive aspects and rescue work of primates, ursids and wild felines.
- ♦ Analyze the most commonly used anesthesia techniques in zoo animals

04

# Course Management

The program's teaching staff includes leading experts in Exotic Animal Medicine and Surgery who contribute their vast work experience to this training program. Professionals of recognized prestige have joined forces to offer you this high-level training.



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*Train with the best professionals in the treatment of exotic animals. You will receive superior and fully updated training"*

Director



**Dr. Trigo García, María Soledad**

- ♦ Veterinarian in charge of the Internal Medicine and Exotic Animal Surgery Service at the Clinical Veterinary Hospital of the Alfonso X El Sabio University in Madrid
- ♦ Degree in Veterinary Medicine from the Alfonso X el Sabio University (2012)
- ♦ Postgraduate degree in General Practitioner Certificate Programme in Exotic Animals, Improve International
- ♦ Postgraduate degree in Food Safety from the Complutense University of Madrid
- ♦ Coordinator and Professor of the subject of Exotic Animal Symptoms and Therapeutics at the Faculty of Veterinary Medicine, Alfonso X El Sabio University of Madrid
- ♦ Lecturer in Food Science and Technology, Alfonso X El Sabio University.
- ♦ Veterinary consultant at the José Peña Wildlife Center, and various veterinary clinics in Madrid
- ♦ Director of the Exotic Animal Service at the PRADO DE BOADILLA veterinarian center
- ♦ Tutor of the Final Degree Dissertations of the Exotic and Wild Animal Medicine and Surgery at the Alfonso X El Sabio University
- ♦ External expert evaluator and member of the tribunal of different Final Degree Dissertations



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*Expand your training with the best specialists in the field”*

05

# Structure and Content

The structure of the content has been designed by the best professionals in the Exotic Animal Medicine and Surgery sector, with extensive experience and recognized prestige in the profession, backed by the volume of cases reviewed, studied, and diagnosed, and with extensive knowledge of new technologies applied to veterinary studies.







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*We have the most complete and up-to-date academic program in the market. We strive for excellence and for you to achieve it too"*

## Module 1: Relevant Aspects of Reptiles

- 1.1. The Most Important Zoonoses
  - 1.1.1. Prevention and Protection
  - 1.1.2. Risk of Zoonosis from Handling
  - 1.1.3. Risk of Zoonosis from Ingesting
- 1.2. Dermal Diseases:
  - 1.2.1. Lesions: Trauma and Aggressions
  - 1.2.2. Dysecdysis: Alteration of Skin Shedding
  - 1.2.3. Thermal Burns Caused by a Lack of Information of the Owner.
  - 1.2.4. Pyramiding: Deformation of the Shell
  - 1.2.5. Otic Abscesses: Habitual in Chelonians
  - 1.2.6. Ectoparasites.
  - 1.2.7. Hypovitaminosis A: Multifactorial Cause.
- 1.3. Digestive Alterations.
  - 1.3.1. Estomatitis: Very Common in Reptiles
  - 1.3.2. Intestinal Obstruction: Causes
  - 1.3.3. Hepatic Lipidosis: Obesity in Reptiles
  - 1.3.4. Internal Parasites: Different Species.
- 1.4. Other Pathologies
  - 1.4.1. Rhinitis: Dyspnea and Emergencies
  - 1.4.2. Pneumonia: The Deficient Mucociliary System of Their Lungs
  - 1.4.3. Renal Insufficiency: Very Common in Reptiles
  - 1.4.4. Gout: Multifactorial Cause.
5. What Dose of a Drug to Use?
  - 1.5.1. Metabolic Energy Constant
  - 1.5.2. MEC (Metabolic Energy Constant) and SMEC (Specific Metabolic Energy Constant) Dose Values.
  - 1.5.3. Dose Examples
- 1.6. Common Treatments.
  - 1.6.1. Antibiotics
  - 1.6.2. Disinfectants:
  - 1.6.3. Nutritional Treatments.
  - 1.6.4. Antimycotics
  - 1.6.5. Antiparasitics II
  - 1.6.6. Harmful Treatments.
- 1.7. The Success of Anesthesia
  - 1.7.1. Preanesthetic Evaluation.
  - 1.7.2. Pre-Medication
  - 1.7.3. Induction With Anesthetic Gas
    - 1.7.3.1. Types of Gases
    - 1.7.3.2. Anesthetic Circuitry.
  - 1.7.4. Anesthetic Recovery.
- 1.8. Techniques and Applications of Basic Surgery
  - 1.8.1. Esophagotomy.
  - 1.8.2. Intracellular access in Saurians and Ophidians: Celiotomy.
  - 1.8.3. Cloacal Replacement.
  - 1.8.4. Tympanic Removal Due to Abscesses
- 1.9. Advanced Surgical Techniques
  - 1.9.1. Cloaca or Penis Prolapse.
  - 1.9.2. Egg Retention
  - 1.9.3. Hepatic biopsy
  - 1.9.4. Renal Biopsy.
- 1.10. Common Orthopedic Surgeries
  - 1.10.1. Metabolic Bone Disease: SNHP (Secondary Nutritional Hyperparathyroidism)
  - 1.10.2. Tail Amputation
  - 1.10.3. Limb Amputation and Fractures
  - 1.10.4. Shell Fractures

## Module 2: Wild Animal Medicine and Surgery

- 2.1. Triage and Emergency Care of Wildlife
  - 2.1.1. Legislation, Organization and Function of Animal Centers.
  - 2.1.2. The Philosophy and Ethics of Wild Life
  - 2.1.3. Answering Questions About Treatment and Release to Wildlife
  - 2.1.4. The Relationship With the Wildlife Rehabilitator
  - 2.1.5. Emergency Treatment of Wildlife
  - 2.1.6. Animal Identification Techniques: Indispensable for Population Control
- 2.2. Selection and Emergency Treatment in Wild Patients
  - 2.2.1 Trauma
  - 2.2.2. Oil Spills
  - 2.2.3. Intoxications
  - 2.2.4. Infectious Diseases
  - 2.2.5. Geriatric Animals.
  - 2.2.6. Natural Disasters.
  - 2.2.7. Rehabilitation and Release of Wild Patients
- 2.3. Real Situations of Wildlife Anesthesia and Immobilization
  - 2.3.1. Ideal Situation.
  - 2.3.2. Real Situation.
  - 2.3.3. Pre-Anesthetic Considerations
  - 2.3.4. Public Safety.
- 2.4. The Anesthetic Procedure in Wildlife
  - 2.4.1. The Immobilization Process
  - 2.4.2. Non-Injectable Anesthetics.
  - 2.4.3. Injectable Anesthetics.
  - 2.4.4. Anesthetic Recovery: Capture Myopathy
- 2.5. Bacterial Diseases of Wildlife I
  - 2.5.1. Leptospirosis: *Leptospira* spp
  - 2.5.2. Brucellosis: Undulant Fever.
  - 2.5.3. The Bubonic plague: *Yersinia Pestis*.
- 2.6. Bacterial Diseases of Wildlife II
  - 2.6.1. Psittacosis: Ornithosis and Chlamydiosis
  - 2.6.2. Salmonellosis: *Salmonella* spp
  - 2.6.3. Tetanus: *Clostridium Tetanii*.
  - 2.6.4. Tularemia: Rabbit Fever
- 2.7. Other Important Diseases in Wildlife III
  - 2.7.1. Aspergillosis: *Aspergillus Fumigatus*.
  - 2.7.2. Histoplasmosis: *Histoplasma Capsulatum*.
  - 2.7.3. Rabies: *Rhabdovirus*.
  - 2.7.4. Helminth Diseases: Parasites
- 2.8. Ursid Medicine
  - 2.8.1. Taxonomy: Ursidae Family.
  - 2.8.2. Most Common Species of Bears
  - 2.8.3. Eye Anesthesia: Required Drugs.
  - 2.8.4. Most Common Infectious Diseases
  - 2.8.5. Biometrics.
  - 2.8.6. Diagnostic Techniques
  - 2.8.7. Vaccination: Vaccine Types and Protocols
- 2.9. Wild Feline Medicine
  - 2.9.1. Taxonomy: Felidae Family.
  - 2.9.2. Most Common Species of Wild Felines
  - 2.9.3. Anesthesia in Wild Felines: Common Drugs.
  - 2.9.4. Most Common Infectious Diseases
  - 2.9.5. Other Important Diseases
  - 2.9.6. Biometrics.
  - 2.9.7. Diagnostic Techniques
- 2.10. Medicine in Primates
  - 2.10.1. Taxonomic Classification: Primates of the New World and the Old World
  - 2.10.2. The Most Common Species of Primates
  - 2.10.3. Anesthesia in Primates: Common Drugs.
  - 2.10.4. Most Common Infectious Diseases

06

# 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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*Discover Re-learning, 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

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 the 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.

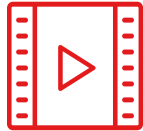
*Re-learning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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 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.

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

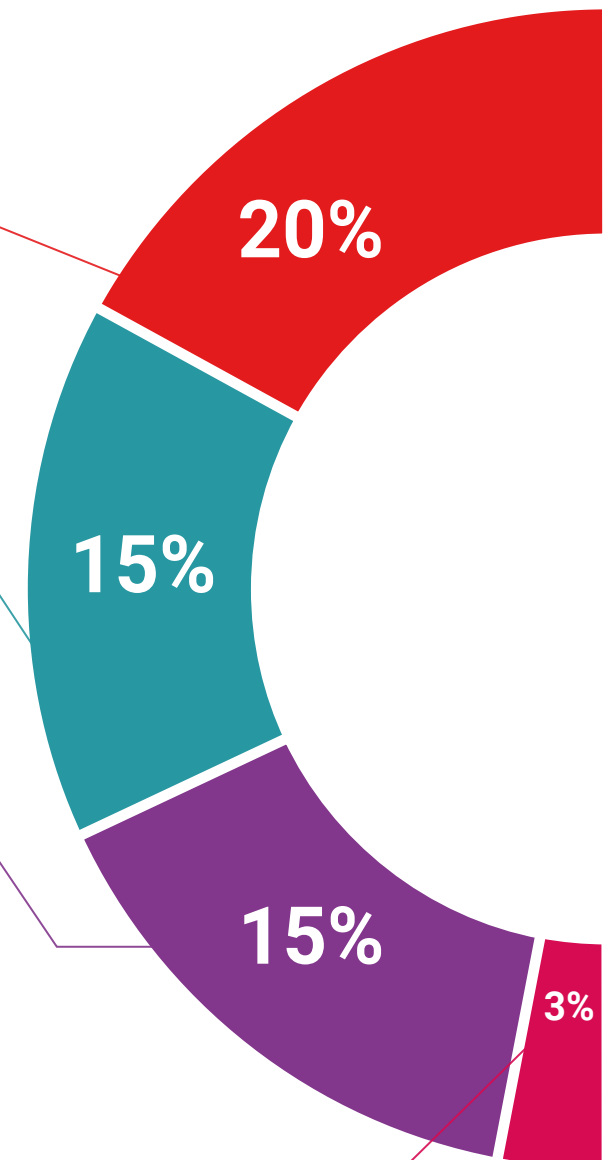
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

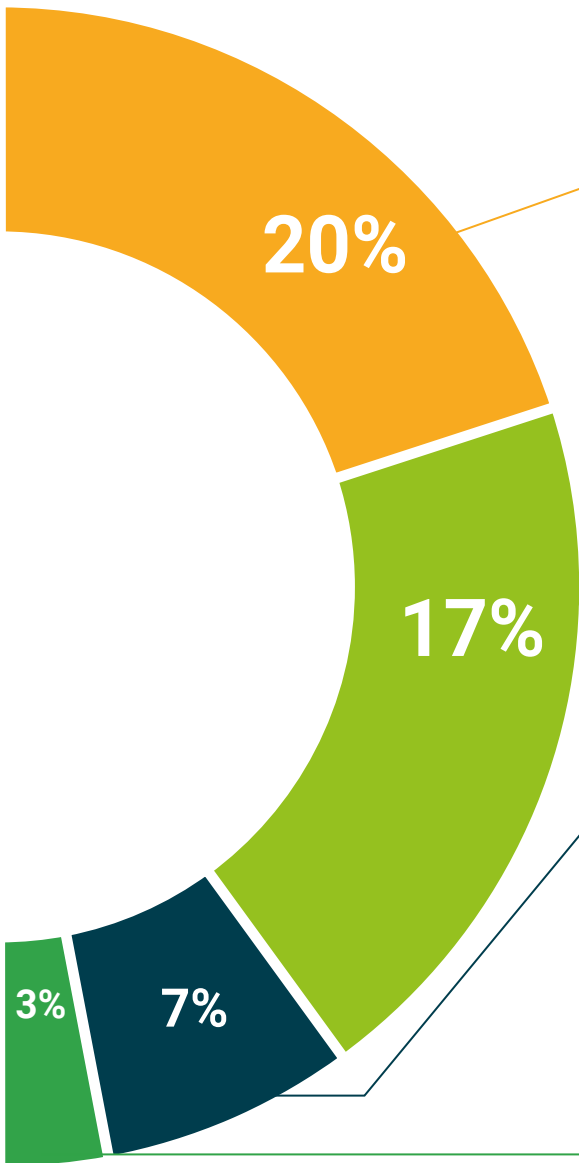
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### 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.



07

# Certificate

The **Postgraduate Certificate in Medical and Surgical Treatments on Reptiles and Wildlife** guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH - Technological University.





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

This **Postgraduate Certificate in Medical and Surgical Treatments on Reptiles and Wildlife** is the most comprehensive and up-to-date scientific program on the market.

After students have passed the evaluations, they will receive their **Postgraduate Certificate** issued by **TECH - Technological University**.

The diploma issued by **TECH - Technological University** will express the qualification obtained in the Course, and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional careers evaluation committees.

Official Number of Hours: **300**



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



**Postgraduate Certificate**  
Medical and Surgical  
Treatments on  
Reptiles and Wildlife

- » Modality: **online**
- » Duration: **3 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

# Postgraduate Certificate

Medical and Surgical Treatments on  
Reptiles and Wildlife

