

# Postgraduate Certificate Wound Management and Reconstructive Surgery in Small Animals





## Postgraduate Certificate Wound Management and Reconstructive Surgery in Small Animals

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

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/wound-management-reconstructive-surgery-small-animals](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/wound-management-reconstructive-surgery-small-animals)

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01

# Introduction

The skin is, in one way or another, part of almost all surgeries performed, even those aimed at deeper structures. Knowing how to respect and care for it, or how it behaves when healing, is part of the very essence of veterinary surgery.





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*Better educated veterinarians means longer life expectancy for our pets. Join the us and improve your skills"*



The Postgraduate Certificate in Wound Management and Reconstructive Surgery in Small Animals is an educational project committed to educating high-quality professionals. It is a program designed by professionals specialized in each specific field who are faced with new surgical challenges every day.

From the most basic to the most specialized clinical practice, all manage wounds of one kind or another. It is therefore essential to be able to recognize what is happening at any given moment in the tissue in front of us. Throughout this Postgraduate Certificate the necessary steps to achieve a correct healing for different types of wounds will be defined. It will be shown why it is better to cover wounds, what materials are available for this purpose and how to proceed according to the wound and its degree of evolution. In addition, new materials and techniques, such as laser therapy to improve healing, will be discussed in detail.

The best options for each case will also be specified, as well as the useful techniques to solve skin defects in each area, whether they are programmed defects due to the resection of a tumor, or accidental defects from traumatic wounds.

Likewise, the simplest plastic techniques to relieve tension locally, and the more complex ones, such as grafts, will be explained. The various axial flaps will be described, with practical advice on planning, execution and postoperative care, not forgetting that the simpler techniques are at least as important. One of the principles of plastic surgery is to solve every wound with the simplest possible technique.

The student, after completing this Postgraduate Certificate, will have sufficient knowledge to deal with any surgery that may arise in these areas. You will know from the first moment everything that a surgery entails, from the specific material and instruments for each region or surgery, anesthetics and medications used, to the most specific details that make a surgery a success.

This **Postgraduate Certificate in Wound Management and Reconstructive Surgery in Small Animals** contains the most complete and up-to-date educational program on the market. The most important features include:

- ◆ The development of case studies presented by experts in Wound Management and Reconstructive Surgery in Small Animals
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- ◆ What's New in Wound Management and Reconstructive Surgery in Small Animals?
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Special emphasis on innovative methodologies in Wound Management and Reconstructive Surgery in Small Animals
- ◆ 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



*If you want to advance your career, this is the perfect opportunity. Study with us this Postgraduate Certificate in Wound Management and Reconstructive Surgery in Small Animals and increase your skills"*

“

*This Postgraduate Certificate is the best investment you can make in selecting a refresher program to update your knowledge in Wound Management and Reconstructive Surgery in Small Animals”*

The program's teaching staff includes professionals from the sector who contribute their work experience to this program, in addition to renowned specialists from leading societies and prestigious universities.

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

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

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



# 02 Objectives

The Postgraduate Certificate in Wound Management and Reconstructive Surgery in Small Animals is designed to facilitate the performance of veterinary professionals with the latest advances and most innovative treatments in the sector.







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*Enroll at TECH and learn about the main treatments to save pets' lives"*



## General Objectives

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- Develop knowledge of the techniques used to deal with wounds, establishing guidelines according to clinical characteristics
- Offer a clear and global vision of the healing process, the factors that promote it and those that hinder it
- Analyze how a decision is made to close a wound in one way or another, establish what complications there may be and how to prevent or solve them
- Compile a list of the available flap techniques



*Take the opportunity and take the step to get up to date on the latest developments in Wound Management and Reconstructive Surgery in Small Animals"*





## Specific Objectives

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- ◆ Understand the types of wounds there are, not only from an etiopathogenesis point of view, but also from a microbiological point of view
- ◆ Develop an understanding of the criteria involved in making decisions about the medical and surgical treatment of wounds
- ◆ Specify the local and systemic factors affecting healing
- ◆ Understand what laser therapy consists of, which parameters are important, their indications and their contraindications
- ◆ Study in depth the management of the subdermal plexus with the local options available.
- ◆ Propose techniques specially adapted to each different zone on the body, from the head to interdigital areas
- ◆ Specify how axial plexus flaps are designed and implemented in each area
- ◆ Explain grafting and the importance of correct patient selection and postoperative management



03

# Course Management

The program's teaching staff includes leading experts in Veterinary Surgery in Small Animals, who contribute their vast work experience to this training program. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.





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*Our teaching team, experts in Wound Management and Reconstructive Surgery in Small Animals, will help you achieve success in your profession"*



## International Guest Director

Dr. Wendy Baltzer is a leading figure in the international veterinary community. Her passion and extensive experience in Veterinary Medicine have led her to become involved in the field of research in Small Animal Veterinary Surgery. In this way, she has multiple publications in academic and scientific media, most of them very well positioned, reflecting an index H 20 in Google Scholar.

Likewise, in her studies reflected in publications she defends the use of ultrasound and radiographs to predict the time of delivery in small animals, thereby reducing the likelihood of neonatal morbidity and mortality. In addition, she associates a decrease in pup vitality with the use of thiobarbiturates, ketamine and inhalation anesthetics.

Similarly, her work also focuses on the effects of oxidative stress on agility exercise in dogs, ligament and tendon injuries, improved impulse fracture repair, as well as injuries in working, sport, police and military dogs. She has also devoted much of her studies to **osteoarthritis**, **low back pain**, taping techniques and omentum grafting for bone healing.

She has taught at major academic institutions such as the **School of Veterinary Science at Massey University**, as well as **Oregon State University**. In the latter, she held a position of high responsibility, occupying the position of director of its Rehabilitation Center. Likewise, her work at **Sydeny University** focuses on teaching the clinical practice of **Small Animal Surgery**, while continuing to develop her research in the fields of **Surgery, Sports Medicine and Rehabilitation**.



## Dr. Baltzer, Wendy

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- Head of Veterinary Surgery at the University of Sydney
- Director of the Rehabilitation Center at the University of Oregon
- Associate Professor in the School of Veterinary Science at the University of Sydney
- Ph.D. in Veterinary Physiology, Texas A&M University
- Specialist in Small Animal Surgery at Texas A&M University

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

## Management



### Dr. Ortiz Díez, Gustavo

- ♦ Associate Professor, Department of Animal Medicine and Surgery, Faculty of Veterinary Medicine, Complutense University of Madrid.
- ♦ Head of Small Animal Unit at Complutense Clinical Veterinary Hospital.
- ♦ Head of the Department of Soft Tissue Surgery and Minimally Invasive Procedures at the Veterinary Specialties Hospital 4 Octubre (Arteixo, La Coruña, Spain).
- ♦ PhD and Undergraduate Degree in Veterinary Medicine from the UCM
- ♦ AVEPA Accredited Soft Tissue Surgery
- ♦ Member of the scientific committee and current president of GECIRA (AVEPA's Soft Tissue Surgery Specialty Group)
- ♦ Master's Degree in Research Methodology in Health Sciences from the UAB
- ♦ ICT competencies course for teachers by UNED
- ♦ Specialist in Traumatology and Orthopedic Surgery in Companion Animals by the UCM. Degree in Small Animal Cardiology from the UCM
- ♦ Courses of laparoscopic and thoracoscopic surgery at the Minimally Invasive Center Jesús Usón. Accredited in functions B, C, D and E of Experimentation Animals by the Community of Madrid
- ♦ Degree in Emotional Intelligence by UR. Completed training in Gestalt psychology



## Professors

### Dr Suárez Redondo, María

- ◆ PhD from the Complutense University of Madrid (UCM) in 2008
- ◆ Degree in Veterinary Medicine from the University of León 2003
- ◆ Master's Degree in Traumatology and Orthopedic Surgery of the UCM
- ◆ Small Animal Surgeon at the Veterinary Clinic Hospital at UCM

# 04

## Structure and Content

The structure of the content has been designed by leading professionals in the Veterinary 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 Science.





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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. Skin. Treatment of Wounds and Reconstructive Surgery.

- 1.1. Skin: Anatomy, Vascularization and Tension
  - 1.1.1. Skin Anatomy
  - 1.1.2. Vascular Contribution
  - 1.1.3. Correct Treatment of the Skin
  - 1.1.4. Tension Lines
  - 1.1.5. Ways to Manage Tension
    - 1.1.5.1. Sutures
    - 1.1.5.2. Local Techniques
    - 1.1.5.3. Flap Types
- 1.2. Pathophysiology of Healing
  - 1.2.1. Inflammatory Phase
  - 1.2.2. Types of Debridement
  - 1.2.3. Proliferative Phase
  - 1.2.4. Maturation Phase
  - 1.2.5. Local Factors Which Affect Healing
  - 1.2.6. Systemic Factors Which Affect Healing
- 1.3. Wounds: Types and How to Treat Them
  - 1.3.1. Types of Wounds (Etiology)
  - 1.3.2. Wound Assessment
  - 1.3.3. Wound Infection
    - 1.3.3.1. Surgical Site Infection (SSI)
  - 1.3.4. Wound Management
    - 1.3.4.1. Preparation and Cleaning
    - 1.3.4.2. Dressings
    - 1.3.4.3. Bandages
    - 1.3.4.4. Antibiotics: Yes or No
    - 1.3.4.5. Other Medication
- 1.4. New Techniques to Aid Healing
  - 1.4.1. Laser Therapy
  - 1.4.2. Vacuum Systems
  - 1.4.3. Others
- 1.5. Plasties and Subdermal Plexus Flaps
  - 1.5.1. Z-plasty, V-Y Plasty
  - 1.5.2. Bow-tie Technique
  - 1.5.3. Advance Flaps
    - 1.5.3.1. U
    - 1.5.3.2. H
  - 1.5.4. Rotation Flaps
  - 1.5.5. Transposition Flaps
    - 1.5.5.1. Interpolation Flaps
- 1.6. Other Flaps. Grafts
  - 1.6.1. Pedicle Flaps
    - 1.6.1.1. What They Are and Why Do They Work?
    - 1.6.1.2. Most Common Pedicle Flaps
  - 1.6.2. Muscle and Myocutaneous Flaps
  - 1.6.3. Grafts
    - 1.6.3.1. Indications
    - 1.6.3.2. Types
    - 1.6.3.3. Bedding Requirements
    - 1.6.3.4. Collection and Preparation Technique
    - 1.6.3.5. Postoperative Care
- 1.7. Common Head Injuries
  - 1.7.1. Eyelids
    - 1.7.1.1. Techniques for Eyelid Reconstruction
    - 1.7.1.2. Advance Flaps
      - 1.7.1.2.1. Rotation.
      - 1.7.1.2.2. Transposition
    - 1.7.1.3. Superficial Temporalis Axial Flap
  - 1.7.2. Nose
    - 1.7.2.1. Rotation Flaps
    - 1.7.2.2. Lip to Nose Plasty



- 1.7.3. Lips
  - 1.7.3.1. Direct Closure
  - 1.7.3.2. Advance Flaps
  - 1.7.3.3. Rotation Flaps. Lip to Eye
- 1.7.4. Ears
- 1.8. Neck and Torso Techniques
  - 1.8.1. Advance Flaps
  - 1.8.2. Myocutaneous Flap of the Latissimus Dorsi
  - 1.8.3. Axillary Crease and Inguinal Crease
  - 1.8.4. Cranial Epigastric Axial Flap
  - 1.8.5. Episioplasty
- 1.9. Techniques for Wounds and Defects in the Extremities (I)
  - 1.9.1. Problems Related to Compression and Tension
    - 1.9.1.1. Alternative Closure Methods
  - 1.9.2. Thoracodorsal Axial Flap
  - 1.9.3. Lateral Thoracic Axial Flap
  - 1.9.4. Superficial Brachial Axial Flap
  - 1.9.5. Caudal Epigastric Axial Flap
- 1.10. Techniques for Wounds and Defects in the Extremities (II)
  - 1.10.1. Problems Related to Compression and Tension
  - 1.10.2. Axial Flap of the Deep Iliac Circumflex (Dorsal and Ventral Branches).
    - 1.10.2.1. Genicular Axial Flap
    - 1.10.2.2. Reverse Saphenous Flap
    - 1.10.2.3. Pads and Interdigital Pads



*This program will allow you to advance in your career comfortably"*



# 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

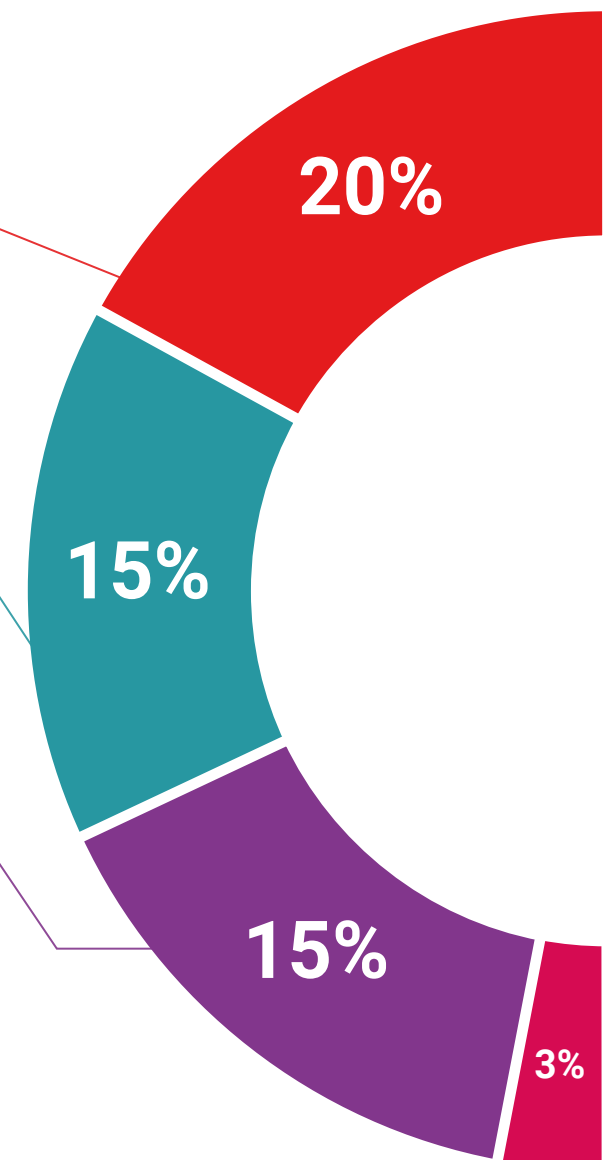
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

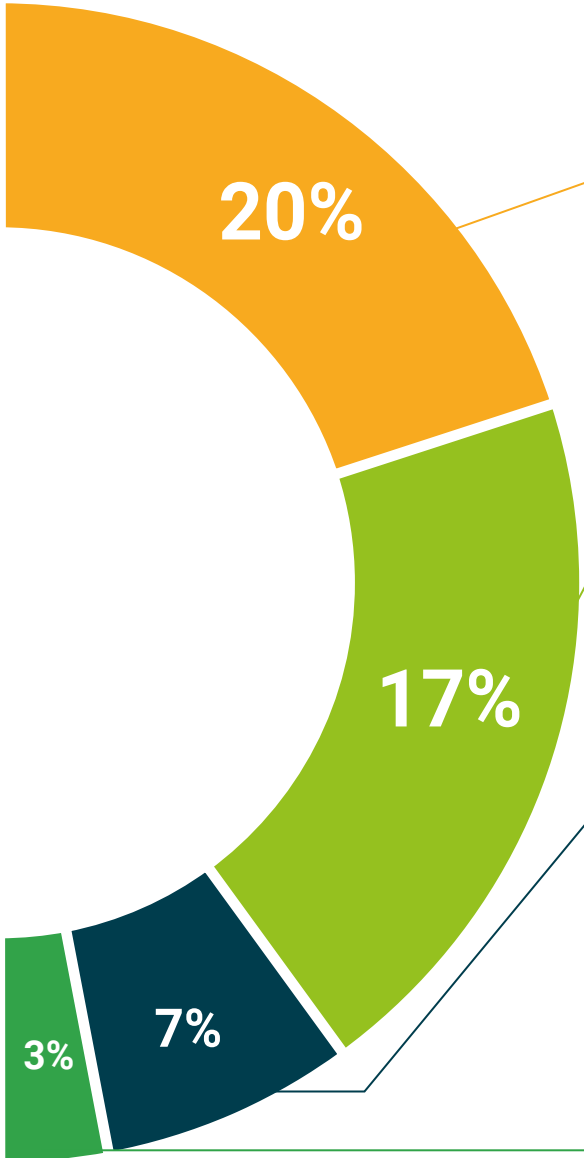


#### Additional Reading

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 Wound Management and Reconstructive Surgery 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 degree  
without travel or laborious paperwork”*

This program will allow you to obtain your **Postgraduate Certificate in Wound Management and Reconstructive Surgery 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 program.

Title: **Postgraduate Certificate in Wound Management and Reconstructive Surgery in Small Animals**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.



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



**Postgraduate Certificate**  
Wound Management and  
Reconstructive Surgery  
in Small Animals

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