

Postgraduate Certificate

Special Clinical Cases and Situations Associated with Large Animal Anesthesia





Postgraduate Certificate Special Clinical Cases and Situations Associated with Large Animal Anesthesia

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

Website: www.techtute.com/us/veterinary-medicine/postgraduate-certificate/special-clinical-cases-situations-associated-large-animal-anesthesia

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Certificate

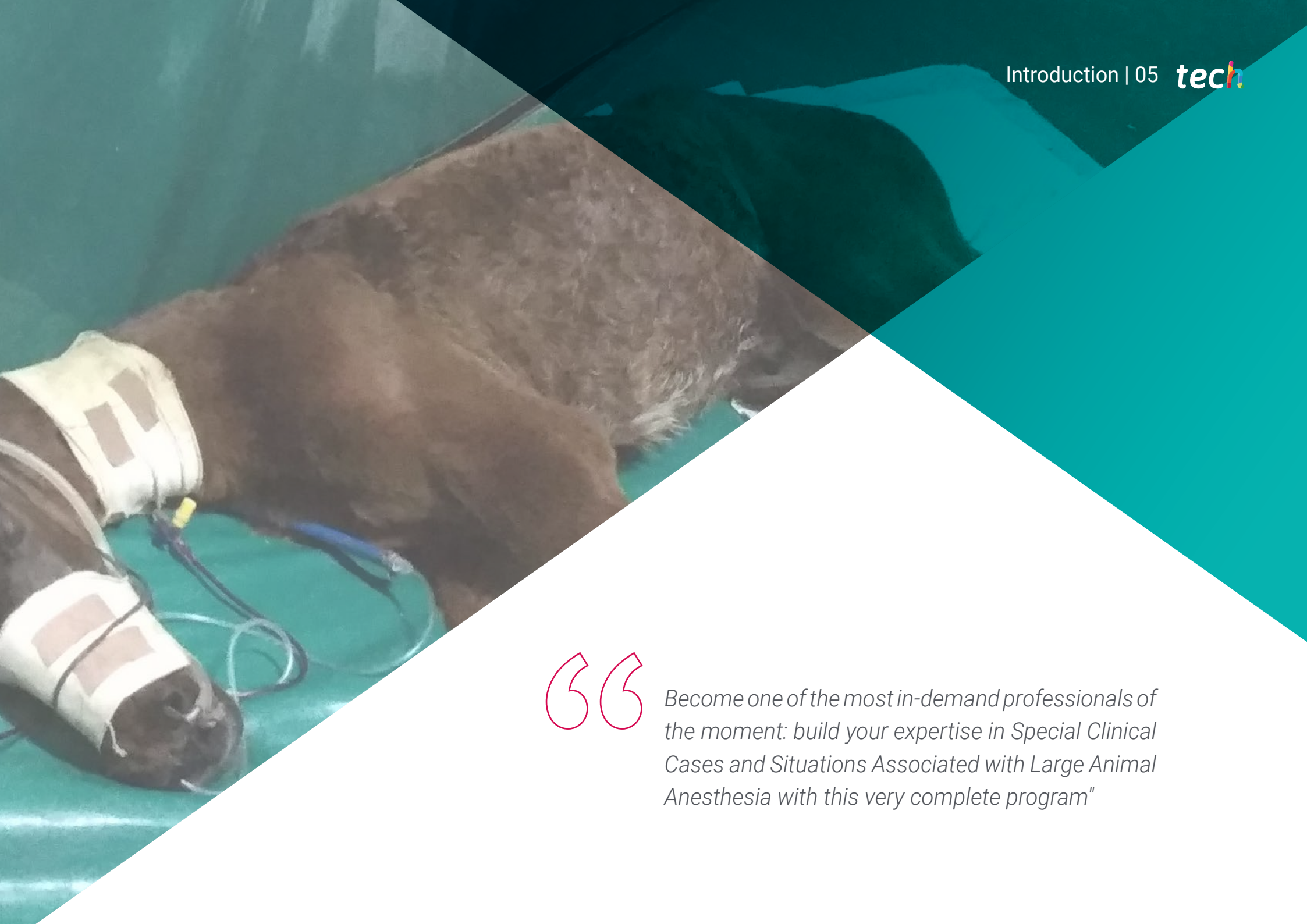
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01

Introduction

One of the most rewarding tasks, and at the same time the greatest professional challenge that an anesthesiologist faces on a daily basis, is the synthesis and analysis of very complex technical, pharmacological, pathophysiological and clinical knowledge. All this in order to guarantee the best care for each individual patient, in complex and very diverse clinical circumstances. Therefore, in this program, the objective will be to cover very technical aspects of the anesthetic management of different patients in diverse clinical and pathological circumstances. The latest published studies on the clinical management of complex and diverse pathophysiological conditions, which are nevertheless part of daily clinical practice for large animal anesthesiologists, will be reviewed.





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Become one of the most in-demand professionals of the moment: build your expertise in Special Clinical Cases and Situations Associated with Large Animal Anesthesia with this very complete program"

In the last 20 years, Veterinary Anesthesia for Large Animals has experienced significant advances thanks to the introduction of new techniques and drugs, as well as the development of monitors and specialized anesthetic machines.

The introduction of novel surgical techniques has resulted in the need to develop new anesthetic protocols. There is a growing concern about the impact of anesthesia and analgesia on animal welfare and the final outcome of surgical procedures.

The Postgraduate Certificate in Special Clinical Cases and Situations Associated with Large Animal Anesthesia is designed in response to the need for clinical veterinarians with greater expertise on the protocols and techniques relevant to this area.

The teaching team of this program is made up of professionals specialized in Large Animal Anesthesia, with a wide experience in teaching, both in undergraduate and graduate programs, most of them being university professors and graduates. These professors are practicing anesthesiologists at leading veterinary centers and directors or participants in various research projects, so that in addition to teaching and clinical work they also carry out research activities.

The topics covered in the Postgraduate Certificate in Special Clinical Cases and Situations Associated with Large Animal Anesthesia have been selected with the aim of offering a complete course in anesthesia, so that the student develops specialized knowledge to safely address any situation requiring general or locoregional anesthesia and analgesia in ruminants, swine, camelids and equids

At present, one of the issues that affects continuous postgraduate development is the reconciliation of work and personal life. Current professional demands make it difficult to achieve quality, specialized education in person, so the online format will allow students to who are with their daily professional practice, without losing their connection to development and specialization.

This **Postgraduate Certificate in Special Cases and Clinical Situations Associated with in Large Animal Anaesthesia** 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
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ♦ Case studies 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 forums
- ♦ Communication with the teacher and work for individual reflection
- ♦ Content that is accessible from any fixed or portable device with an internet connection
- ♦ Supplementary documentation databases which are permanently available, even after the program



With the experience of expert professionals who will bring their expertise in this area to the program, making this course a unique opportunity for professional growth"

“*Achieve a comprehensive and relevant qualification in Special Cases and Clinical Situations Associated with in Large Animals with this highly effective Postgraduate Certificate and open up new pathways for professional progress”*

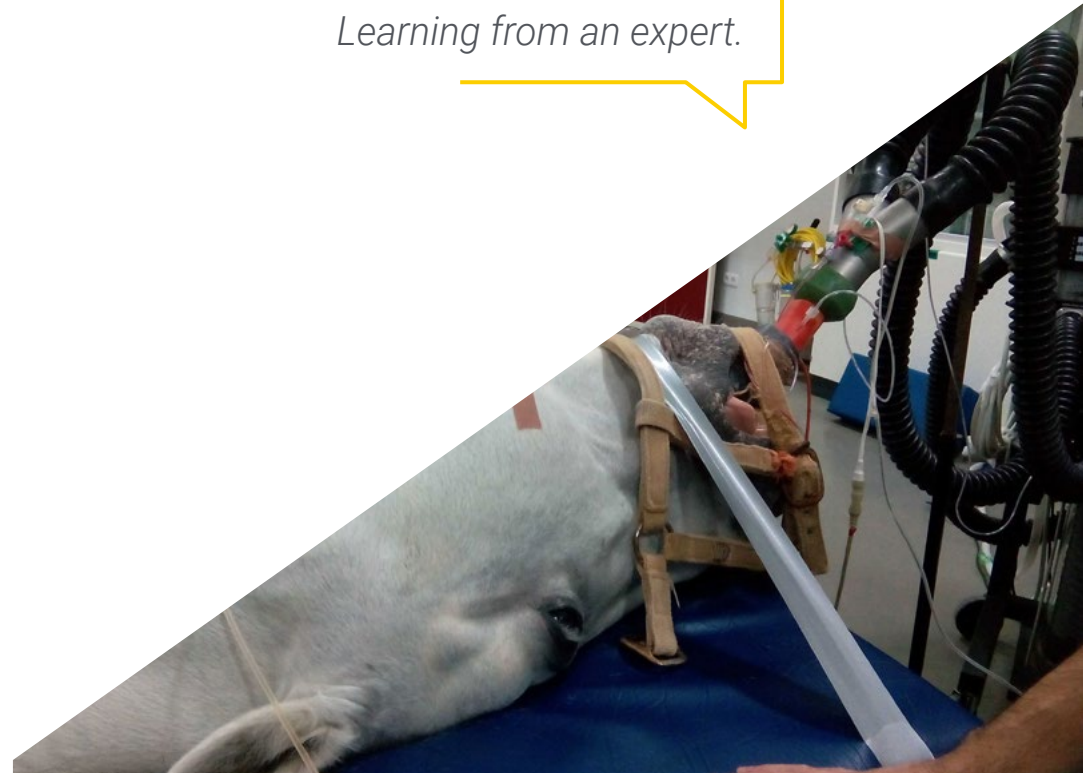
The teaching team is made up of professionals from different fields within this specialism. In this way, TECH ensures delivers educational results in line with its objectives. A multidisciplinary team of professionals, trained and experienced in different environments, who will develop the theoretical knowledge in an efficient way, but above all, they will bring their practical knowledge from their own experience to the program: one of the differential qualities of this training.

This mastery of the subject is complemented by the effectiveness of the methodology used in the design of this program in Special Clinical Cases and Situations Associated with Large Animal Anesthesia Developed by a multidisciplinary team of e-Learning experts, it integrates the latest advances in educational technology. In this way, the student will be able to study with a range of comfortable and versatile multimedia tools that will give him the operability he needs in his development.

The design of this program is based on Problem-Based Learning: an approach that views learning as a highly practical process. To achieve this remotely, we TECH will use telepractice: with the help of an innovative, interactive video system, and Learning from an Expert, students will be able to acquire the knowledge as if they were facing the case they are learning in real time. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

With a methodological design based on proven teaching techniques, this program will take you through different teaching approaches to allow you to learn in a dynamic and effective way.

*Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents:
Learning from an expert.*



02 Objectives

The objective of this Postgraduate Certificate is to train highly qualified professionals. An objective that is complemented, moreover, in a global manner, by promoting human development that lays the foundations for a better society. The aim is focused on helping professionals reach a much greater level of expertise and control. A goal that can be achieved in just a few months with a high intensity and precision program.



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If your objective is to broaden your skills set to include new paths of success and development: this is the program for you: a program that aspires to excellence"



General Objectives

- ◆ Know the main characteristics of the most frequent standing procedures performed under sedation
- ◆ Detail the most pertinent points on anesthetic management of the most common diagnostic and therapeutic procedures
- ◆ Generate specialized knowledge for the correct anesthetic management of animals intended for human consumption
- ◆ Become an expert on the legislation related animals for human consumption as well as experimental animals
- ◆ Detail the main logistical, pharmacological and clinical requirements for the correct anesthetic management of wild animals
- ◆ To specify the most characteristic special anesthetic management considerations for the most frequent diagnostic and therapeutic procedures in foals
- ◆ Perform euthanasia protocols that respect the physical and mental well-being of the horse





Specific Objectives

- ♦ Gain specialized knowledge on the most frequent surgical and imaging procedures
- ♦ Establish the most appropriate protocols for the procedure to be performed
- ♦ Detail the main differences in foal anesthesia in comparison to adults
- ♦ Know the risk factors and complications in colic anesthesia in order to adapt the anesthetic protocol
- ♦ Detail the physiological factors to be taken into account for anesthesia in geriatric horses
- ♦ Deepen your knowledge of anesthetic management of the main diagnostic and therapeutic procedures in large and small ruminants
- ♦ Detail the anesthetic management of ruminant adnexal organs such as horns, hooves or tails
- ♦ Master the features of anesthesia in swine transplantation models, as well as for laparoscopy in experimental swine
- ♦ Establish basic characteristics of field anesthesia in pigs and castration of piglets
- ♦ Determine the basic principles of field anesthesia in camelids
- ♦ Define the main behavioral, physiological and anatomical characteristics of donkeys and mules
- ♦ Deepen your knowledge of the pharmacology of anesthetic and analgesic agents in donkeys and mules
- ♦ Broaden your knowledge of the logistics and pharmacological methods most appropriate for the capture and handling of wild species
- ♦ Master sedation and field anesthesia protocols for wild ruminants
- ♦ Determine sedation and field anesthesia protocols for wild swine
- ♦ Detail sedation and field anesthesia protocols for wild camelids
- ♦ Expand your knowledge related to monitoring alternatives in these non-domestic species



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

03

Course Management

In line with the program's concept of total quality, a highly qualified teaching staff, chosen for their proven experience, is at your disposal. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.





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We have the best teaching team, with years of experience, who are determined to transmit all their knowledge about this sector”

Management



Dr. Villalba Orero, María

- ♦ Scientific Advisor on cardiovascular and pulmonary ultrasound at the National Center for Cardiovascular Research
- ♦ Doctor of Veterinary Medicine, Complutense University Madrid
- ♦ Degree in Veterinary Medicine from Complutense University Madrid
- ♦ Master's Degree in Veterinary Sciences from the Complutense University Madrid
- ♦ Master's Degree in Veterinary Cardiology
- ♦ European Certificate in Veterinary Cardiology (ESVPS)
- ♦ Scientific publications in the area of equine cardiology and anesthesia, as well as in the area of cardiovascular diseases in humans

Professors

Dr. Montefiori, Filippo

- ♦ Veterinary Anesthesiologist in the outpatient service at the Anesthesia and Veterinary Surgery in Madrid
- ♦ Degree in Veterinary Medicine from the University of Italy
- ♦ Lecturer in Small and Large Animal Anesthesia and Analgesia at the Veterinary School of the University of Edinburgh (UK)
- ♦ Collaborator in practical teaching at the Faculty of Veterinary Medicine of Complutense University Madrid
- ♦ Honorary collaborator at the Faculty of Veterinary Medicine at Complutense University, Madrid

Dr. Santiago Llorente, Isabel

- ♦ Doctorate in Veterinary from Complutense University Madrid
- ♦ Degree in Veterinary Medicine from Complutense University Madrid
- ♦ Professor at the University of Lisbon (Portugal) in the Department of Medical Clinical Pathology II from 2019 to present
- ♦ Her professional career is focused on equine clinical practice and research, currently as a contract veterinarian in the large animal area of the Hospital Clínico Veterinario Complutense, Complutense University Madrid
- ♦ Head of Equine Internal Medicine and member of the Anesthesia Service at the Hospital Clínico Veterinario Complutense, Complutense University Madrid

Dr. Pérez, Rocío Jiménez - Arellano

- ♦ Complutense Clinical Veterinary Hospital- Rotatory Intern in Equine Clinic
- ♦ Degree in Veterinary Medicine, Complutense University Madrid
- ♦ Equine Neonatology Training Day
- ♦ Training Days at the Complutense Equine Clinic: locoregional anesthesia in the horse

Dr. Villalba, Marta

- ♦ Collaboration as an ambassador of the Complutense Clinical Veterinary Hospital (HCVC)
- ♦ Degree in Veterinary Medicine, Complutense University Madrid
- ♦ Delivery of Training Days at the Complutense Equine Clinic: equine ophthalmology, diagnostic imaging of the cervical spine and locoregional anesthesia and standing procedures in horses

Dr. Valero, Marta

- ♦ Veterinarian in the Department of Medicine and Large Animal Surgery at the University Clinical Hospital of the University of Extremadura
- ♦ Graduate in Veterinary Medicine from the University of Murcia
- ♦ Master's Degree in Medicine and Large Animal Surgery from the University of Extremadura
- ♦ Collaborator in practical teaching on the Large Animal Clinic course at the University of Extremadura

Dr. Jiménez, Alberto

- ♦ Veterinary Intern at the Large Animal Department of the Veterinary Clinic Hospital of the University of Extremadura
- ♦ Degree in Veterinary Medicine, Complutense University Madrid
- ♦ Instruction and supervision of students belonging to the Department of Large Animal Surgery and students of the Clinical Rotation of the Faculty of Veterinary Medicine of the University of Extremadura

Dr. Troya, Lucas

- ♦ Internal Medical and Anesthesia Service, Equine Unit, Clínic Veterinari Hospital
- ♦ Degree in Veterinary Medicine from Complutense University Madrid
- ♦ Postgraduate Diploma in Equine Clinic in the Autonomous University of Barcelona
- ♦ Master's Degree in Clinic at Complutense University Madrid
- ♦ Associate Professor, Department of Animal Medicine and Surgery, Autonomous University of Barcelona, teaching equine internal medicine
- ♦ Professor at the Institute for Applied Studies (IDEA-Madrid)
- ♦ Associate Professor, Department of Animal Medicine and Surgery, Autonomous University of Barcelona
- ♦ Training placements in various national and European centers
- ♦ Member of the Spanish Association of Equine Veterinarians (AVEE)

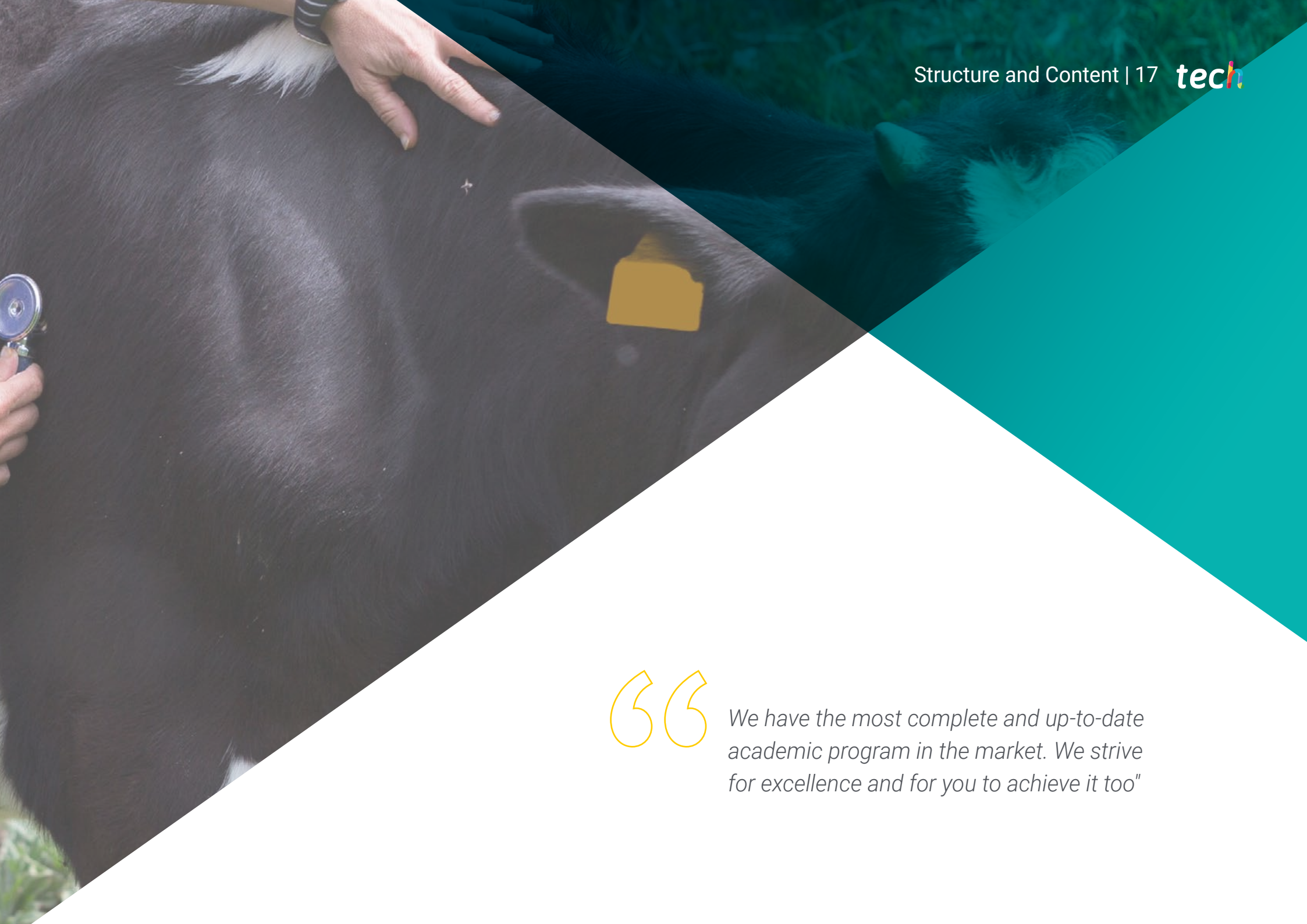
04

Structure and Content

The contents of this Postgraduate Certificate have been developed by different experts involved in the program, with a clear purpose: to ensure that students acquire each and every one of the necessary skills to become true experts in this field.

A very complete and well-structured program that will lead the student to the highest standards of quality and success.





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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. Special Clinical Cases and Situations in Large Animals

- 1.1. Special Standing Cases for Equines
 - 1.1.1. Diagnostic Procedures (TC, IRM)
 - 1.1.2. Laryngeal Surgery
 - 1.1.3. Laparoscopy
 - 1.1.4. Dental Procedures
 - 1.1.5. Ophthalmologic Procedures
 - 1.1.6. Perineal Surgeries
 - 1.1.7. Obstetric Maneuvers
- 1.2. Special Cases of Anesthesia in Equines I
 - 1.2.1. Geriatric Patient
 - 1.2.2. Approach Acute Abdominal Syndrome
 - 1.2.3. Cesarean Section
- 1.3. Special Cases of Anesthesia in Equines II
 - 1.3.1. Elective Anesthetic Management in Foals
 - 1.3.2. Urgent Anesthetic Management in Foals
- 1.4. Special Cases of Anesthesia in Equines III
 - 1.4.1. Anesthetic Management of Respiratory Surgery
 - 1.4.2. Anesthetic Management of Diagnostic and Therapeutic Procedures for Pathologies of the Nervous System
- 1.5. Anesthesia in Special Cases in Ruminants
 - 1.5.1. Anesthetic Considerations and Perioperative Management in Orthopedic Procedures in Ruminants
 - 1.5.2. Anesthetic Considerations and Perioperative Management for Wounds, Bruises and Abscesses in Ruminants
 - 1.5.3. Anesthetic Considerations and Perioperative Management Laparotomy in Ruminants
 - 1.5.4. Anesthetic Considerations and Perioperative Management in Obstetric and Procedures in Ruminants
 - 1.5.5. Anesthetic Considerations and Perioperative Management of Procedures for Distal Extremities, Hooves and Horns in Ruminants
 - 1.5.6. Anesthetic Considerations and Perioperative Management of Specific Procedures for Udders and Teats in Ruminants
 - 1.5.7. Anesthetic Considerations and Perioperative Management of Procedures for Eyes and Adjacent Areas in Ruminants
 - 1.5.8. Anesthetic Considerations and Perioperative Management of Surgical Procedures for Umbilical Hernia Resolution in Ruminants
 - 1.5.9. Anesthetic Considerations and Perioperative Management for Perianal and Tail Areas in Ruminants
- 1.6. Anesthesia and Analgesia in Donkeys and Mules
 - 1.6.1. Anatomical, Physiological and Behavioral Variations
 - 1.6.2. Reference Values Required for Anesthesia
 - 1.6.3. Variations in Responses to Common Drugs Used in Anesthesia
 - 1.6.4. Premedication and Sedation for Foot Procedures in Donkeys and Mules
 - 1.6.5. Induction and Maintenance of Anesthesia: Injectable and Inhalation Techniques
 - 1.6.6. Anesthetic Monitoring
 - 1.6.7. Recovery from Anesthesia
 - 1.6.8. Preoperative, Intraoperative and Postoperative Analgesia
 - 1.6.9. Local Anesthetic Techniques in Donkeys and Mules
- 1.7. Anesthesia in Special Cases for Swine and Camelids
 - 1.7.1. Intraoperative and Perioperative Anesthetic Management in Field Anesthesia in Swine
 - 1.7.2. Castration in Piglets Analgesic and Anesthetic Considerations
 - 1.7.3. The Vietnamese Pig Intraoperative and Perioperative Anesthetic Management and Most Frequent Complications
 - 1.7.4. Anesthetic Considerations and Perioperative Management of the Pig as a Model for Transplantation and Cardiovascular Models
 - 1.7.5. Anesthetic Considerations and Perioperative Management of the Pig as a Model for Laparoscopy
 - 1.7.6. Intraoperative and Perioperative Anesthetic Management in Field Anesthesia for Camelids
 - 1.7.7. Castration for the Alpaca Analgesic and Anesthetic Considerations
- 1.8. Anesthesia Therapy in Wild Ruminants, Swine and Camelids
 - 1.8.1. Considerations for Chemical Immobilization and Anesthesia for the Bovidae and Antilocapridae Family
 - 1.8.2. Considerations for Chemical Immobilization and Anesthesia in the Capridae Subfamily

- 1.8.3. Considerations for Chemical Immobilization and Anesthesia in the Cervidae, Tragulidae and Mochidae Families
- 1.8.4. Considerations for Chemical Immobilization and Anesthesia in the Suidae and Tayassuidae Family
- 1.8.5. Considerations for Chemical Immobilization and Anesthesia in the Camelidae Family
- 1.9. Special Considerations: Food Animals/Experimental Animals (Ruminants and Swine)
 - 1.9.1. Legislation Applicable to the Anesthesia of Animals Intended for Human Consumption
 - 1.9.2. Anesthetic and Analgesic Considerations for Animals Intended for Human Consumption
 - 1.9.3. Legislation Applicable to the Anesthesia of Animals for Experimentation
 - 1.9.4. Anesthetic and Analgesic Considerations in Ruminants and Swine
- 1.10. Euthanasia
 - 1.10.1. General Considerations
 - 10.10.1.1. Geriatric Horse
 - 1.10.2. Mechanisms of action for Hypothermia
 - 1.10.3. Chemical Euthanasia Methods
 - 1.10.4. Physical Euthanasia Methods
 - 1.10.5. Euthanasia Protocol
 - 1.10.6. Confirmation of Death



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. Gervas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the actual conditions in a veterinarian's professional practice.

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

The effectiveness of the method is justified by four fundamental achievements:

1. Veterinarians who follow this method not only manage to assimilate concepts, but also develop their mental capacity through exercises to evaluate real situations and knowledge application
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. The feeling that the effort invested is effective becomes a very important motivation for veterinarians, which translates into a greater interest in learning and an increase in the time dedicated to working on the course.



Relearning Methodology

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

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



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

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

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

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

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

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



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



Study Material

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

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



Latest Techniques and Procedures on Video

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



Interactive Summaries

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

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



Additional Reading

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





Expert-Led Case Studies and Case Analysis

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



Testing & Retesting

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



Classes

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

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



Quick Action Guides

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



06 Certificate

The Postgraduate Certificate in Special Clinical Cases and Situations Associated with Large Animal Anesthesia guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





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

This **Postgraduate Certificate in Special Clinical Cases and Situations Associated with Large Animal Anesthesia** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery*.

The diploma 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 Special Clinical Cases and Situations Associated with Large Animal Anesthesia**

Official N° of Hours: **150 h.**



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

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



Postgraduate Certificate Special Clinical Cases and Situations Associated with Large Animal Anesthesia

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

Postgraduate Certificate

Special Clinical Cases and Situations Associated with Large Animal Anesthesia