

# Postgraduate Certificate

## VCT Design, Management and Commissioning





## Postgraduate Certificate VCT Design, Management and Commissioning

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

Website: [www.techtute.com/us/veterinary-medicine/postgraduate-certificate/vct-design-management-commissioning](http://www.techtute.com/us/veterinary-medicine/postgraduate-certificate/vct-design-management-commissioning)

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# 01

# Introduction

Within the scope of Veterinary Clinical Trials, their Design, Management and Start-up are fundamental stages for the correct development of the process and to obtain maximum performance. In order to be able to carry out these functions, specific and in-depth knowledge in the field is necessary, which makes the figure of the specialists who possess it highly sought after in the labor market. This is the reason why TECH has designed a program that seeks to provide students with skills and competencies in a subject that addresses topics such as Technical Documentation, Methodological Procedures and Writing Results, among others. All this, in a comfortable 100% online modality that gives total freedom of organization to the student.





*Acquire improved skills and new knowledge in the Design, Management and Implementation of Veterinary Clinical Trials"*

The Design, Methodology, Management or Start-up of a Veterinary Clinical Trial are some of the most significant elements of this process, due to their relevance in the final results of the research. This means that specialists must acquire specialized and precise knowledge about each and every one of these stages in order to get the most out of them.

This is the reason why TECH has designed a Postgraduate Certificate in VCT Design, Management and Commissioning, to provide the students with the necessary skills and competencies with which to approach the field of Clinical Trials with total efficiency and with the best possible results. For this purpose, the syllabus covers aspects such as the Identification of Sources of Information, the Preparation of Protocols, the Evaluation of Effectiveness or Final Reports, among other relevant topics.

All this, through complete teaching materials, up-to-date information and the latest teaching technologies. In addition, in a 100% online mode that gives total freedom of organization and schedules to the student, who can access all the content from the first day and with any device with Internet connection.

This **Postgraduate Certificate in VCT Design, Management and Commissioning** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ The development of case studies presented by experts in VCT Design, Management and Commissioning
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Its special emphasis on innovative methodologies
- ◆ 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



*All content is available on the Virtual Campus from day one and can be downloaded to any device with an Internet connection"*

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*A program designed for you to achieve excellence and get the most out of your work in the field of Veterinary Clinical Trials”*

*Delve into topics such as Laboratory Certification or Writing Results, without leaving home.*

*Hone your skills in Quality and Efficacy Assessment in a Veterinary Clinical Trial.*

The program’s teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading 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 education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.



# 02 Objectives

The objective of this Postgraduate Certificate in VCT Design, Management and Commissioning is to provide students with the specific and necessary skills and knowledge to be able to tackle all types of projects in the field of Veterinary Clinical Trials. All this, through the most complete, up-to-date and accurate content in the educational market.







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*Enroll now and achieve your most demanding goals in the veterinary field”*



## General Objectives

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- ◆ Generate specialized knowledge in the design and interpretation of a clinical trial
- ◆ Examine the key features of Clinical Trials
- ◆ Analyze key analytical concepts in Clinical Trials
- ◆ Justify decisions made to solve problems
- ◆ Evaluate behavioral aspects and standardized procedures of Clinical Trials
- ◆ Review legislation on analytical, toxico-pharmacological and clinical standards and protocols for veterinary drug testing
- ◆ Assess the regulatory environment in relation to Clinical Trials
- ◆ Develop standards for veterinary Clinical Trials
- ◆ Generate specialized knowledge to carry out clinical research
- ◆ Establish the correct methodology for conducting Veterinary Clinical Trials
- ◆ Develop advanced knowledge for the development of a protocol for the conduct of a clinical trial with veterinary drugs
- ◆ Analyze the structure of the different regulatory agencies and organizations and their attributions
- ◆ Correctly manage the documentation generated in the framework of the application, follow-up and completion of a veterinary clinical trial





## Specific Objectives

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- ◆ Establish the correct lines and procedures to develop clinical research to evaluate the efficacy and safety of Veterinary Medication
- ◆ Determine research environments and competent personnel
- ◆ Examine the practices of Clinical Trials
- ◆ Develop necessary Technical documentation
- ◆ Analyze relations with regulatory agencies
- ◆ Analyze the structure of the safety and efficacy section of a regulatory dossier
- ◆ Follow international guidelines on the conduct of veterinary safety studies (Target Animal Safety)
- ◆ Establish the importance of quality in data generation and the use of auditing as a method of quality assurance
- ◆ Determine how to select the right laboratory for the analysis of biological samples of trial frameworks
- ◆ Generate specialized knowledge to assign, organize and prioritize the tasks, roles and responsibilities of trial participants
- ◆ Perform adequate document management for subsequent submission to the corresponding regulatory agencies for evaluation
- ◆ Analyze and correctly present the results of a clinical trial in scientific articles following international standards

03

# Course Management

The leadership and the teachers of this Postgraduate Certificate in VCT Design, Management and Commissioning are formed by outstanding professionals who are part of TECH's team of experts. They have created comprehensive and up-to-date content that exceeds the highest expectations, resulting in a unique opportunity for the student.



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*The teacher's team will be at your complete disposal during the whole program, to solve any doubts or queries"*

## Management



### Dr. Martín Palomino, Pedro

- ♦ Manager of ALJIBE Veterinary Laboratory
- ♦ Senior program researcher at the Castilla-La Mancha Research Center Spain
- ♦ PhD in Veterinary Medicine from the University of Extremadura
- ♦ Diploma in Public Health from the National School of Health (ENS) at the Carlos III Health Institute (ISCIII)
- ♦ Master's Degree in Swine Technology from the Faculty of Veterinary Medicine of Murcia at the University of Murcia
- ♦ Professor of Infectious Diseases, Zoonoses and Public Health at the Alfonso X el Sabio University



### Dr. Fernández García, José Luis

- ♦ Veterinary Doctor
- ♦ PhD in Veterinary Medicine from the University of Extremadura
- ♦ Graduate in Veterinary with Degree from the University of Extremadura
- ♦ Master's Degree in Biotechnology from the CNB Severo Ochoa
- ♦ Adjunct Veterinarian, University of Extremadura

## Professors

### Dr. Sánchez Sánchez de Rojas, Leyre

- ◆ Acting Officer in the area of efficiency of Pharmacological Veterinary Medicines in the Spanish Agency of Medicines and Health Products
- ◆ Coordinator and Manager of Clinical Trials of the Neurosurgery Service at the San Carlos Clinical Hospital
- ◆ Doctor in Biomedical Research from the Complutense University of Madrid
- ◆ Degree in Veterinary Medicine from Alfonso X El Sabio University
- ◆ Official Master's Degree in Veterinary Science Research from the Complutense University of Madrid
- ◆ Master's Degree in Integral Management of Veterinary Clinical Trials by Universidad Europea

### Dr. Bravo Acedo, Sara

- ◆ Veterinarian at Tragsatec
- ◆ Veterinary Clinical Trials Specialist
- ◆ Scientific and Research Staff in Food Science and Technology at the University of Extremadura
- ◆ Degree in Veterinary Medicine from the University of Extremadura
- ◆ Master's Degree in Meat Science and Technology, University of Extremadura, Spain
- ◆ Master's Degree in Health Sciences from the University of Extremadura, Spain
- ◆ Master's Degree in High School Teacher Training from the University of Extremadura
- ◆ Advanced Technician in Dietetics, Alfonso X el Sabio University

### Mr. Pacheco Bermejo, Cristian

- ◆ Clinical Trials Nurse Specialist
- ◆ Nurse at Fresenius Medical Care Clinic Cáceres, Spain
- ◆ Emergency Department Nurse at the University Hospital San Pedro de Alcántara Cáceres, Spain
- ◆ Nurse of the Surgical Block of the University Hospital of Cáceres
- ◆ Nurse at Coria City Hospital
- ◆ Nurse at the Dr. José Vicente Martín Health Center Cáceres
- ◆ Graduate in Nursing from the University of Extremadura



*Take the step to get up to speed on the latest developments in VCT Design, Management and Commissioning"*

# 04

# Structure and Content

The structure and content of this program have been designed by outstanding professionals who make up TECH's team of experts. The teaching materials have been based on their specialized knowledge and on the most efficient pedagogical methodology, Relearning, which guarantees the progressive and optimal assimilation of the contents by the students.





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*Thanks to the Relearning methodology, you will be able to combine your studies with your other day-to-day activities, exceeding your most demanding expectations"*

## Module 1. The Veterinary Clinical Trial I. Design and Methodology

- 1.1. Veterinary Clinical Trials
  - 1.1.1. Veterinary Clinical Trial Research
  - 1.1.2. Conditions for Conducting a Veterinary Clinical Trial Investigation
  - 1.1.3. Types of Veterinary Clinical Trials
    - 1.1.3.1. Types of Trials According to the Study Design
    - 1.1.3.2. Parallelisms
    - 1.1.3.3. Crusader
    - 1.1.3.4. In Pairs
    - 1.1.3.5. Sequentials
    - 1.1.3.6. Confidentiality
    - 1.1.3.7. Data Collection Notebooks
- 1.2. Identifying Sources of Information for a Veterinary Clinical Trial
  - 1.2.1. How To Find Information We Are Interested In
    - 1.2.1.1. Choice of Source
    - 1.2.1.2. Resources and Access Modes
    - 1.2.1.3. How to Search for the Best Evidence on a Topic
- 1.3. Elaboration of a Protocol for the Conduct of a Clinical Trial with Veterinary Medication
  - 1.3.1. General Information
  - 1.3.2. Justification and Objectives
  - 1.3.3. Test Outline
- 1.4. Design of the Veterinary Clinical Trials
  - 1.4.1. Selection of Individuals
  - 1.4.2. Inclusion/Exclusion Criteria
  - 1.4.3. Treatment
  - 1.4.4. Destination of Study Animals, Products Derived from Study Animals and Products under Clinical Investigation and Control Products.
  - 1.4.5. Adverse Events (AEs)
- 1.5. Methodology in Veterinary Clinical Trial Research
  - 1.5.1. Hypotheses
  - 1.5.2. Randomization
  - 1.5.3. City
  - 1.5.4. Sampling
  - 1.5.5. Uncontrolled Trials
  - 1.5.6. Controlled Trials
    - 1.5.5.1. Open
    - 1.5.5.2. Blind
    - 1.5.5.3. Double-Blind
    - 1.5.5.4. Triple-Blind
    - 1.5.5.5. Pilot
- 1.6. Methodological Procedures in a Veterinary Clinical Trial (VCT)
  - 1.6.1. Discrimination Between CD in Humans and Animals
  - 1.6.2. Differences
  - 1.6.3. Implementation
  - 1.6.4. External and Internal Validity
  - 1.6.5. Variables
  - 1.6.6. Consent
  - 1.6.7. Reproducibility
  - 1.6.8. Risk
- 1.7. Assessment of the Efficiency of the Veterinary Clinical Trial.
  - 1.7.1. Statistics
  - 1.7.2. Records Management
  - 1.7.3. Annexes Attached to Protocol
  - 1.7.4. Changes in Protocol
  - 1.7.5. References
- 1.8. Research Quality in a Veterinary Clinical Trial
  - 1.8.1. Legal Aspects
  - 1.8.2. Scientific Aspects
  - 1.8.3. Risk-Benefit Assessment
- 1.9. Ethical Principles in a Veterinary Clinical Trial
  - 1.9.1. Historical Background
  - 1.9.2. Ethical Codes
  - 1.9.3. Application of Ethical Principles

## Module 2. The Veterinary Clinical Trial II. Management, Start-ups and Commissioning

- 2.1. Clinical Trial Management Preclinical Development
  - 2.1.1. Preclinical Development
    - 2.1.1.1. Animal Experimentation Committees
  - 2.1.2. Exploratory Clinical Trial
  - 2.1.3. Regulatory Clinical Trial
- 2.2. Clinical Trial Authorization Process
  - 2.2.1. Application for a Veterinary Research Product
  - 2.2.2. Request for a Veterinary Clinical Trial
- 2.3. Documents at the Beginning of the Clinical Trial
  - 2.3.1. Contract Management
  - 2.3.2. Clinical Trial Protocol
  - 2.3.3. Informed Consent
- 2.4. Clinical Trial Initiation and Start-Up
  - 2.4.1. Initial Visit and Center Opening
  - 2.4.2. Data Collection Notebooks (DCNs)
  - 2.4.3. Electronic Data Capture (EDC)
- 2.5. Clinical Trial Documentation Archive
  - 2.5.1. Medication Shipment and Management
  - 2.5.2. Documentation Custody
- 2.6. Final Report
  - 2.6.1. Center Closures
  - 2.6.2. Clinical Trial Documentation Audit
  - 2.6.3. Audit of Data Management Activities

- 2.7. Laboratory Certification
  - 2.7.1. Laboratory Certification: GMP
  - 2.7.2. Laboratory Certification: GLP
  - 2.7.3. Laboratory Certification: ISO
- 2.8. Regulatory Dossier Structure
  - 2.8.1. Document Management
  - 2.8.2. Validation of the Internal Structure
  - 2.8.3. Electronic Communication with Regulatory Agencies
- 2.9. Results Writing
  - 2.9.1. Publication of Clinical Trials in Scientific Journals
- 2.10. CONSORT Recommendations



*Opt for a unique program, with which you will be able to keep up-to-date with the latest innovations in the field of Veterinary Clinical Trials"*

# 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 VCT Design, Management and Commissioning guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in VCT Design, Management and Commissioning** 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 VCT Design, Management and Commissioning**

Modality: **online**

Duration: **12 weeks**

Accreditation: **12 ECTS**



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



**Postgraduate Certificate**  
VCT Design, Management  
and Commissioning

- » Modality: online
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- » Exams: online

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