

Postgraduate Certificate Electrophysical Agents of Rehabilitation in Horses





Postgraduate Certificate Electrophysical Agents of Rehabilitation in Horses

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

Website: www.techtitute.com/us/physiotherapy/postgraduate-certificate/electrophysical-agents-rehabilitation-horses

Index

01

[Introduction](#)

p. 4

02

[Objectives](#)

p. 8

03

[Course Management](#)

p. 12

04

[Structure and Content](#)

p. 16

05

[Methodology](#)

p. 20

06

[Certificate](#)

p. 28

01

Introduction

Horse injuries can be treated with different mechanisms and techniques. Electrophysical means are one of the main tools being used today due to the benefits they bring to injured equidae. If you want to know more about this new technique, do not miss the opportunity to specialize with us.





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The acquisition of electrophysical materials for the rehabilitation of horses involves a high cost, so it is essential that physiotherapists know the benefits of each one to apply the most appropriate for each pathology”

This program has been designed to help the shortage of training for physiotherapists in the field of electrophysical agents that can help in the rehabilitation of sick horses. In this way, professionals in this area

will obtain superior training that will allow them to advance in their daily practice and, thus, improve animal health.

Thus, the different types of electric currents used in physiotherapy and rehabilitation will be developed, which continue to be a basic tool in clinical practice, due to their versatility and ease of use. In addition, a review of its fundamentals and scientific basis will be made and the different types of currents will be analyzed: types of TENS, muscular electrostimulation, interferential and other types of currents that are interesting to know. Another important part is ultrasound, which also plays a decisive role in clinical protocols, as well as shock waves, which have been used for more than 15 years. However, other techniques such as percutaneous electrolysis are novel techniques that offer promising results in the treatment of chronic tendinitis.

Most of the electrophysical equipment to be analyzed in this Postgraduate Certificate is an important investment for the veterinary physiotherapist, so it is necessary to understand its scientific foundations and to know its effects and applications from a therapeutic point of view, in order to choose the most appropriate therapies according to the casuistry of our clinical practice.

This program provides students with specialized tools and skills to successfully develop their professional activity, works on key competencies such as knowledge of the reality and daily practice of the veterinary professional, and develops responsibility in the monitoring and supervision of their work, as well as communication skills within the essential teamwork.

As it is an online program, students will not be bound by fixed schedules or the need to move to another physical location, but rather, they can access the content at any time of the day, balancing their professional or personal life with their academic life.

This **Postgraduate Certificate Electrophysical Agents of Rehabilitation in Horses** contains the most complete and up-to-date educational program on the market. The most outstanding characteristics of this program are:

- ♦ Practical cases presented by experts in equine physiotherapy and rehabilitation
- ♦ 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
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Special emphasis on innovative methodologies in electrophysical rehabilitation agents in horses
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection work.
- ♦ Content that is accessible from any fixed or portable device with an Internet connection.



Do not miss the opportunity to take this Postgraduate Certificate in Electrophysical Agents of Rehabilitation in Horses. It's the perfect opportunity to advance in your career"

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This Postgraduate Certificate is the best investment you can make in selecting a refresher program to update your knowledge in Electrophysical Agents of Rehabilitation in Horses.

Its teaching staff includes professionals from the field of physiotherapy, who contribute their work experience to this 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 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 throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system developed by renowned and experienced experts in Electrophysical Agents of Rehabilitation in Horses.

This specialisation comes with the best didactic material, providing you with a contextual approach that will facilitate your learning”

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



02 Objectives

The Postgraduate Certificate in Electrophysical Agents of Rehabilitation in Horses is aimed at aiding the professional's performance with the latest advances and most innovative treatments in the sector.





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Our goal is to provide quality training so that our students become the best in their profession"



General Objectives

- Analyze the electrophysical agents used in equine physiotherapy
- Establish the physicochemical foundations on which its therapeutics are based
- Develop its indications, application methodology, contraindications and risks
- Determine which are the most appropriate for each pathology from a therapeutic and scientific point of view, based on evidence



A path to help you achieve specialized knowledge and professional growth that will put you in a more competitive position in the job market"





Specific Objectives

- ♦ Analyze the use of analgesic electrotherapy and muscle stimulation, its application, scientific basis, indications and contraindications
- ♦ Identify possible applications of percutaneous electrolysis, as well as its scientific basis, indications and contraindications
- ♦ Evaluate the clinical use of diathermy and its application in the horse
- ♦ Develop knowledge on the clinical use of therapeutic lasers
- ♦ Determine the relationship of dose to power, frequency and penetration for effective and safe laser treatment.
- ♦ Define the uses of shock waves in veterinary medicine and their application in different pathologies
- ♦ Propose different protocols for the application of electrophysical agents

03

Course Management

The program includes in its teaching staff leading experts in Equine Physiotherapy and Rehabilitation who bring to this training the experience of their work.

They are world-renowned professionals from different countries with proven theoretical and practical professional experience.



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Our teaching team is the most complete and successful on the educational scene"

Management



Dr. Hernández Fernández, Tatiana

- ♦ PhD in Veterinary Medicine from the UCM
- ♦ Diploma in Physiotherapy at the URJC
- ♦ Degree in Veterinary Medicine from the UCM
- ♦ Professor at the Complutense University of Madrid of: Postgraduate Diploma in Equine Physiotherapy and Rehabilitation, Postgraduate Diploma in Bases of Animal Rehabilitation and Physiotherapy, Postgraduate Diploma in Physiotherapy and Rehabilitation of Small Animals, Training Diploma in Podiatry and Shoeing
- ♦ Resident in the area of Equidae at the Clinical Veterinary Hospital of the UCM
- ♦ Practical experience of more than 500 hours in hospitals, sports centers, primary care centers and human physical therapy clinics.
- ♦ More than 10 years working as a specialist in rehabilitation and physiotherapy

Professors

Ms. Álvarez González, Carlota

- ♦ Degree in Veterinary Medicine from the Alfonso X El Sabio University
- ♦ Certified in Acupuncture and Traditional Chinese Veterinary Medicine by the Chi Institute of Europe
- ♦ Veterinarian member of the clinical service of Traditional Chinese Veterinary Medicine of the Chi Institute of Europe (CHIVET)
- ♦ Veterinarian in charge of the Holistic Medicine service of the Villalba Veterinary Hospital (Veterinaria)
- ♦ Holistic Medicine Outpatient Service since 2010
- ♦ Specialist in animal physiotherapy in Fisiovetinaria
- ♦ Member of the WATCVM (World Association of Traditional Chinese Veterinary Medicine) and AVEE (Association of Equine Veterinarians)

Ms. Castellanos Alonso, María

- ♦ Degree in Veterinary Medicine from the University of Santiago de Compostela
- ♦ Postgraduate Diploma in Equine Clinic from the Autonomous University of Barcelona.
- ♦ Resident in the Equine Area of the UCM Veterinary Clinical Hospital
- ♦ Outpatient Clinical Veterinary and Equine Reproduction from 2017
- ♦ Member of the veterinary team of Compluvet S.L., performing inspection in races and anti-doping control in different racetracks nationwide since 2018
- ♦ Clinical veterinarian forming part of José Manuel Romero Guzmán's team.
- ♦ Veterinarian in National and International Conferences
- ♦ Member of AVEE (Association of Veterinary Specialists in Equidae)

Ms. Boado Lama, Ana

- ◆ Graduated from the Complutense University of Madrid.
- ◆ Internship at the Animal Health Trust, Newmarket
- ◆ Residency in Orthopedics at the University of Edinburgh, UK.
- ◆ Certificate in Equine Surgery (Orthopedics) from the Royal College of Veterinary Surgeons, UK.
- ◆ Advanced Practitioner of Equine Surgery (Orth) (RCVS)
- ◆ Diploma in Sports Medicine and Rehabilitation (American and European)
- ◆ Member of the British Veterinary Association (BEVA) and the Spanish Association of Equine
- ◆ Speaker at international and national congresses and courses
- ◆ Teacher during residency fourth and fifth year students at the University of Edinburgh and postgraduate Master's students
- ◆ Teacher in CPD courses for veterinarians in the field of equine traumatology.
- ◆ Teacher in Master's Degree in Physiotherapy at the Complutense University of Madrid
- ◆ Specialized Equine Sports Medicine and Rehabilitation Service (August 2008-present)

Dr. Cruz Madorrán, Antonio

- ◆ Professor of Equine Surgery
- ◆ Department of Orthopedics and Equine Surgery
- ◆ Equine surgeon, Justus-Liebig University, University of Giessen, Giessen, Germany
- ◆ Specialists in Equine Anesthesia and Surgery of recognized prestige.
- ◆ Diplomate of the American and European Colleges of Veterinary Surgery (ACVS, ECVS) and Veterinary Anesthesiology (ACVA, ECVA).
- ◆ Author of the book: Manual de técnicas quirúrgicas y anestésicas en la clínica equina. (Manual of Surgical Techniques and Anesthesia in the Equine Clinic) 2012



04

Structure and Content

The structure of the content has been designed by the best professionals in the Equine Physiotherapy and Rehabilitation 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.





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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. Electrophysical Agents in Equine Physiotherapy

- 1.1. Electrotherapy
 - 1.1.1. Physiological Basis of Electrostimulation
 - 1.1.2. Electrotherapy Parameters
 - 1.1.3. Electrotherapy Classification
 - 1.1.4. Equipment
 - 1.1.5. Precautions
 - 1.1.6. General Contraindications to Electrotherapy
- 1.2. Analgesic Electrotherapy
 - 1.2.1. Therapeutic Effects of Electricity
 - 1.2.2. TENS
 - 1.2.2.1. Endorphin TENS
 - 1.2.2.2. Conventional TENS
 - 1.2.2.3. Burst type TENS
 - 1.2.2.4. Modulated TENS
 - 1.2.2.5. Invasive TENS
 - 1.2.3. Other Types of Analgesic Electrotherapy
 - 1.2.4. Precautions and Contraindications
- 1.3. Muscle Electrostimulation
 - 1.3.1. Preliminary Considerations
 - 1.3.2. Electrostimulation Parameters
 - 1.3.3. Effects of Electrostimulation on Musculature
 - 1.3.4. Stimulation in Denervated Muscle
 - 1.3.5. Horse Application
 - 1.3.6. Precautions and Contraindications
- 1.4. Interferential Currents and Other Currents of Clinical Interest
 - 1.4.1. Interferential Currents
 - 1.4.2. Diadynamic Currents
 - 1.4.3. Russian Currents
 - 1.4.4. Other Currents That the Equine Physiotherapist Should Know About





- 1.5. Microcurrents, Iontophoresis and Magnetotherapy
 - 1.5.1. Microcurrents
 - 1.5.2. Iontophoresis
 - 1.5.3. Magnetotherapy
- 1.6. Percutaneous Electrolysis
 - 1.6.1. Physiological Fundamentals and Scientific Basis
 - 1.6.2. Procedure and Methodology
 - 1.6.3. Applications in Equine Sports Medicine
 - 1.6.4. Precautions and Contraindications
- 1.7. Diathermy
 - 1.7.1. Therapeutic Effects of Heat
 - 1.7.2. Types of Diathermy
 - 1.7.3. Radiofrequency Diathermy or Tecartherapy
 - 1.7.4. Indications and Horse Application
 - 1.7.5. Precautions and Contraindications
- 1.8. Ultrasound
 - 1.8.1. Definition, Physiological Basis and Therapeutic Effects
 - 1.8.2. Ultrasound Types and Parameter Selection
 - 1.8.3. Indications and Horse Application
 - 1.8.4. Precautions and Contraindications
- 1.9. Laser
 - 1.9.1. Concept of Photobiomodulation, Physical and Biological Basis
 - 1.9.2. Laser Types
 - 1.9.3. Physiological Effects
 - 1.9.4. Indications and Horse Application
 - 1.9.5. Precautions and Contraindications
- 1.10. Shock Waves
 - 1.10.1. Definition, Physiological Fundamentals and Scientific Basis
 - 1.10.2. Indications and Horse Application
 - 1.10.3. Precautions and Contraindications

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.





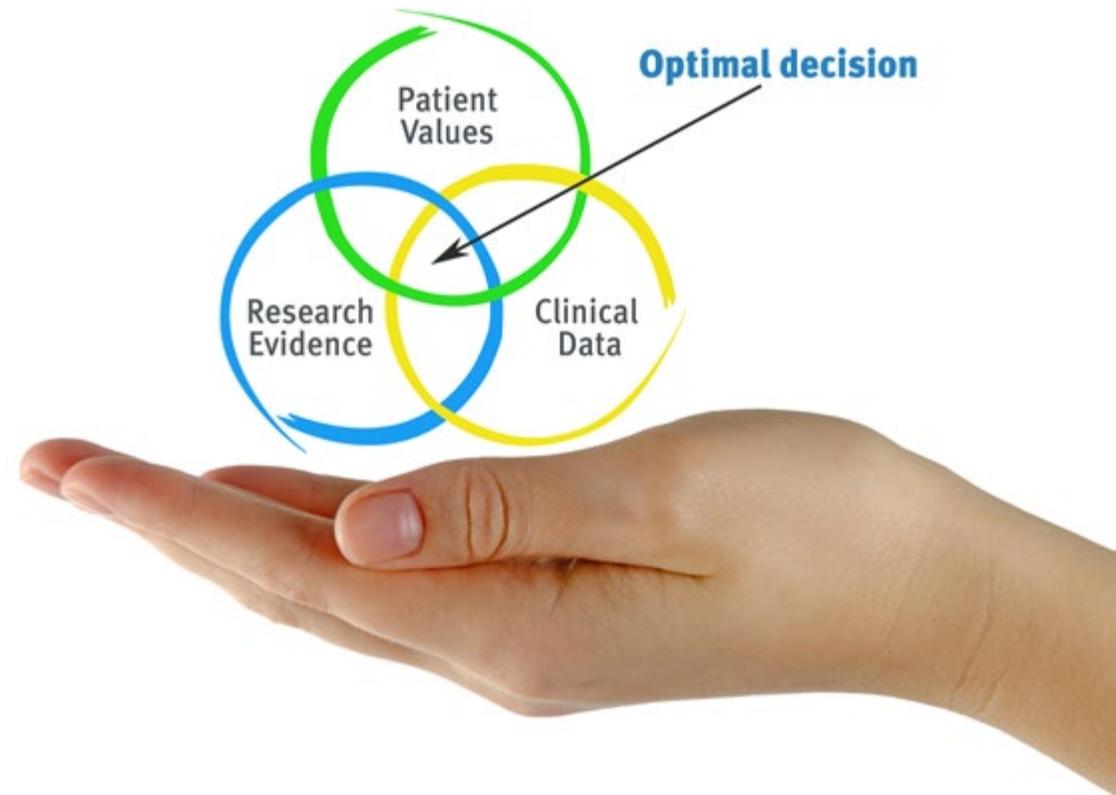
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Physiotherapists/kinesiologists 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, trying to recreate the real conditions of professional physiotherapy 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. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist 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. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more 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.



The physiotherapist/kinesiologist will learn through real cases and by solving 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 we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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 our 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 really 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.



Physiotherapy Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. 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 them as many times as you want.



Interactive Summaries

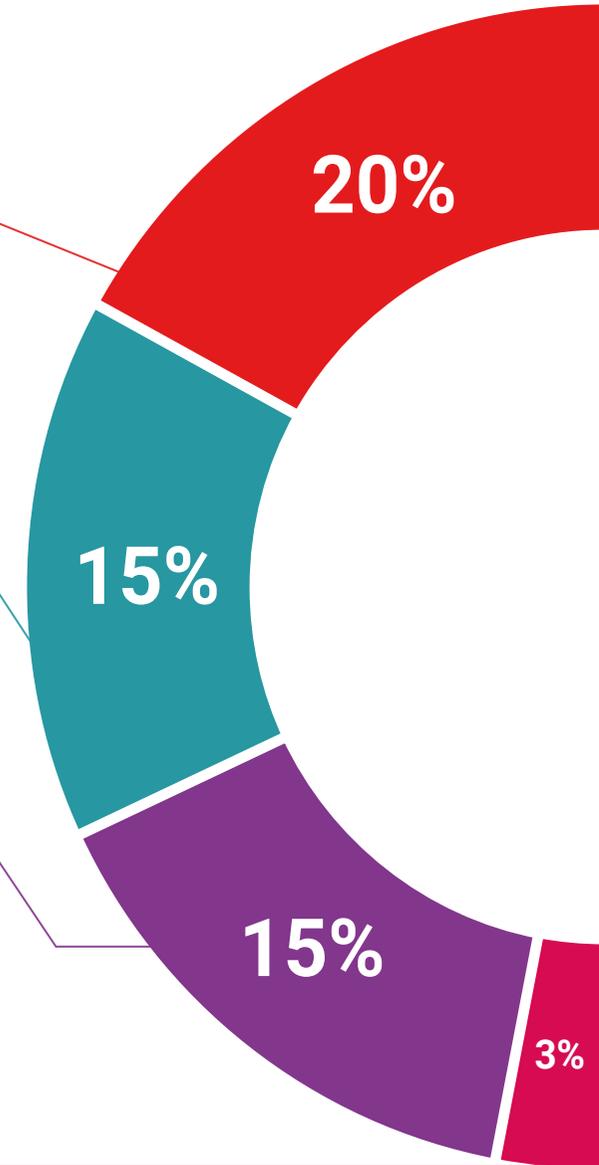
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

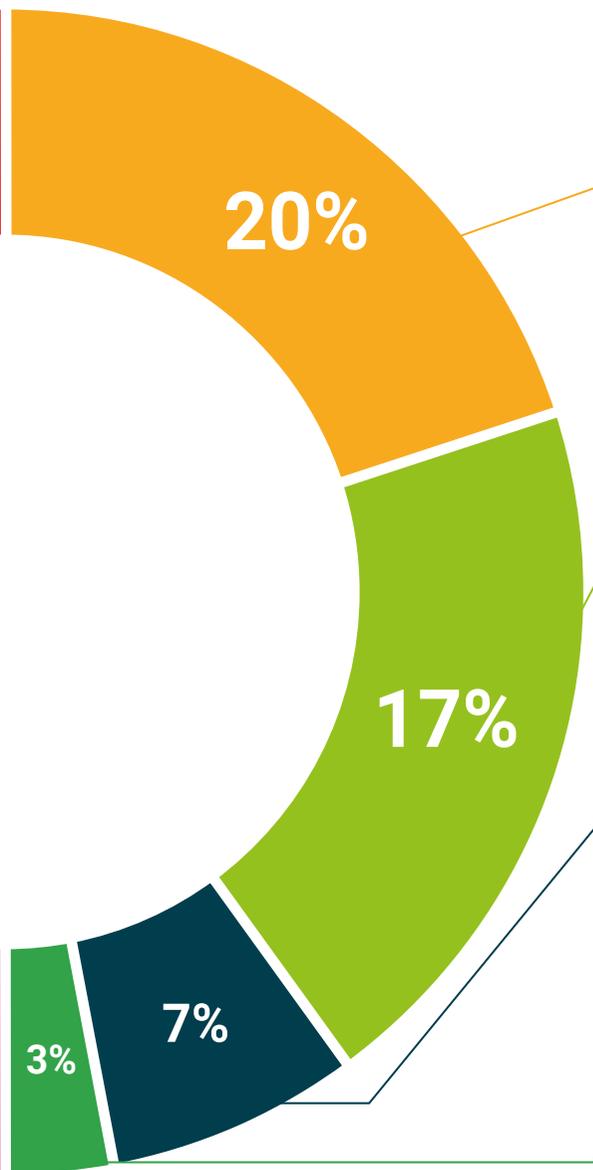
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



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 on the usefulness of learning by observing experts. The system known as 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 Electrophysical Agents of Rehabilitation in Horses guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

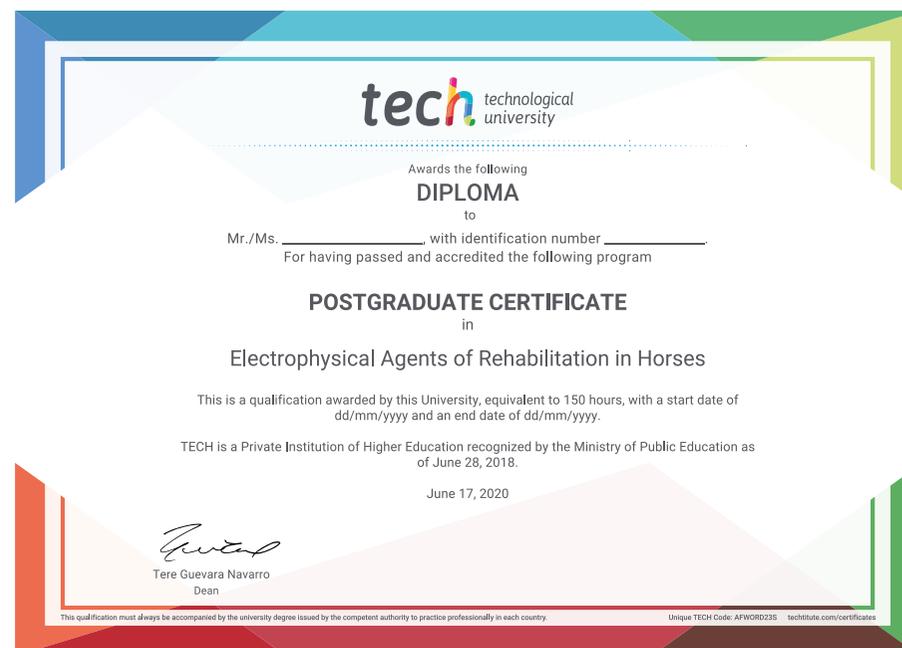
This **Postgraduate Certificate Electrophysical Agents of Rehabilitation in Horses** contains the most complete and up-to-date scientific program on the market.

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 Electrophysical Agents of Rehabilitation in Horses**

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.

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



Postgraduate Certificate
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- » Modality: **online**
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Postgraduate Certificate

Electrophysical Agents of Rehabilitation in Horses