

Postgraduate Diploma

Electrotherapy in Individual Practice





Postgraduate Diploma Electrotherapy in Individual Practice

Course Modality: Online

Duration: 6 months

Certificate: TECH - Technological University

Official N° of hours: 450 h.

Website: www.techitute.com/medicine/postgraduate-diploma/postgraduate-diploma-electrotherapy-individual-practice

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

The use of electrotherapy offers an irreplaceable therapeutic support in many pathologies. This training program offers the professional, in a single process, the specialized learning of applications in analgesia, neuronal stimulation and muscular work. With the most updated knowledge and techniques, with innovation and new therapeutic proposals, through a flexible but intensive approach that will allow the student to progress quickly and easily.





“

Focused on practice, this Postgraduate Diploma will allow you to work with the most appropriate techniques in each case in an effective and safe manner"

The field of application of electrotherapy is very wide, so it is necessary to have an extensive knowledge of both the physiological functioning of the subject and the most appropriate agent in each case.

This knowledge ranges from muscle contraction mechanisms to somatosensory transmission mechanisms, which makes it essential for the rehabilitation physician to know both the pathophysiological mechanisms of the subject and the physicochemical basis of electrotherapy.

The objective of the program is to present in an updated way the applications of electrotherapy in neuromusculoskeletal or neurological pathologies, always based on scientific evidence when selecting the most appropriate type of current in each case.

To this end, the neurophysiological bases of each type of current are always presented at the beginning of each module, so that learning is complete. Each module is complemented by practical applications of each type of current, so that the integration of the knowledge of the pathology and its treatment is complete.

The **Postgraduate Diploma in Electrotherapy in Individual Practice** contains the most complete and up to date scientific program on the market. The most important features of the program include:

- ♦ More than 75 practical cases presented by experts in electrotherapy
- ♦ The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional.
- ♦ New developments on the role of the rehabilitation physician in the application of electrotherapy
- ♦ Practical exercises where self-assessment can be used to improve learning.
- ♦ Algorithm based interactive learning system for decision making in the situations that are presented to the student.
- ♦ Its special emphasis on research methodologies on electrotherapy applied to Rehabilitation Medicine
- ♦ 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



The most comprehensive development in the neurophysiological bases that justify the operation of electrotherapy with an approach tailored to individual practice"

“

This complete Postgraduate Diploma will allow you to learn about simulated environments and cases, providing you with an integrated, more efficient vision of real situations"

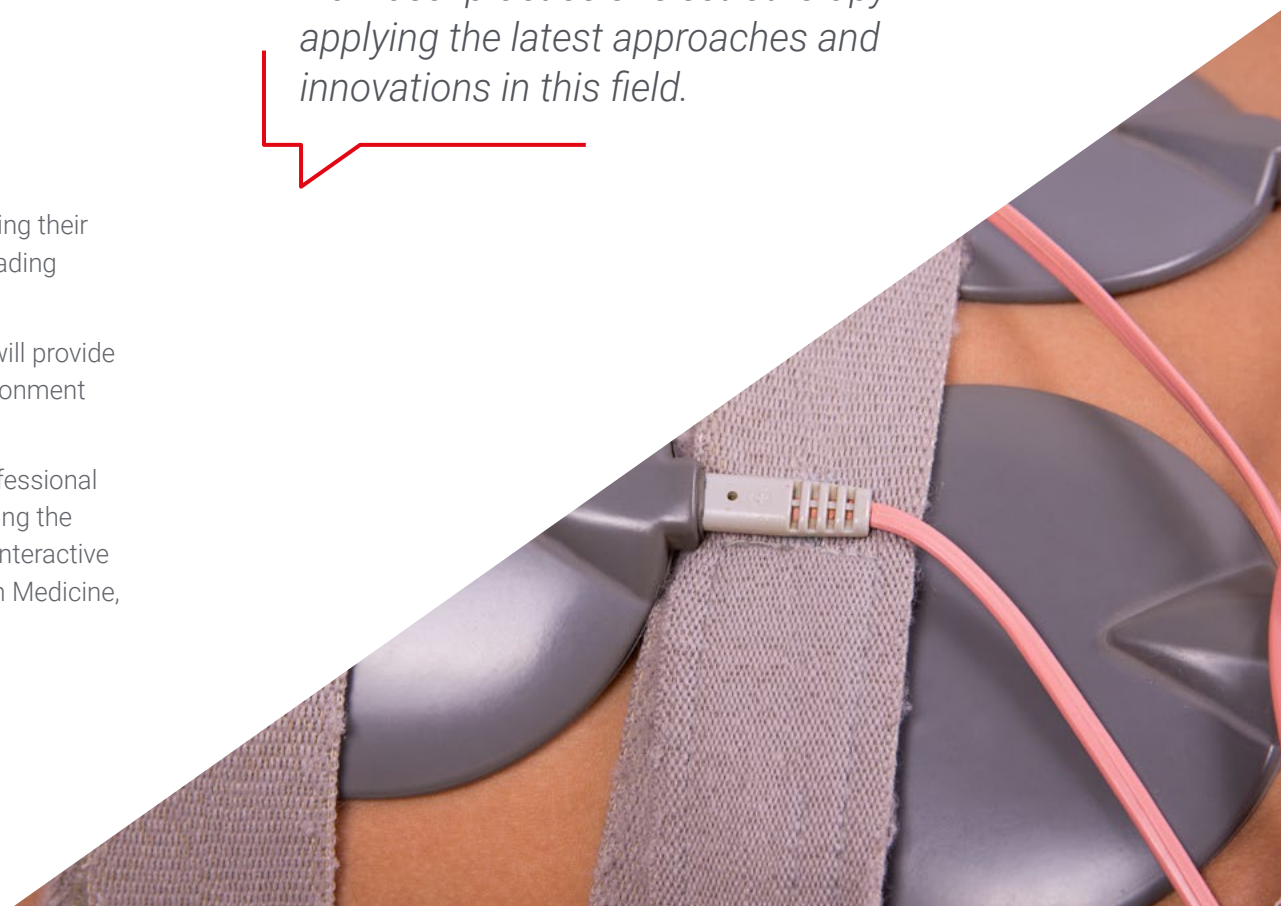
The best online training on the market in the various applications of Electrotherapy in Individual Practice in various pathologies.

Learn to plan and develop the individual practice of electrotherapy applying the latest approaches and innovations in this field.

The teaching staff includes professionals from the field of medicine, who bring their experience to this training 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 professional must try to solve the different professional practice situations that arise during the academic year. For this, the professional will have the help of an innovative interactive video system made by recognized experts in Electrotherapy in Rehabilitation Medicine, with great experience.



02

Objectives

The Postgraduate Diploma in Electrotherapy in Individual Practice will allow professionals to advance in their clinical practice, incorporating the most current and relevant knowledge and techniques available in the sector, in relation to individual intervention through electrotherapy. Through an approach focused on efficiency, it will allow you to take your knowledge to the highest level of updating, enabling you to act as a specialist in this field.



“

Learn how to approach the individualized approach of the patient in muscular and neurological recovery and to achieve the best possible therapeutic results”



General Objectives

- ♦ Update the knowledge of the Rehabilitation Medicine professional in the field of Electrotherapy
- ♦ Promote work strategies based on a comprehensive approach to the patient as a standard model for achieving excellent care
- ♦ Encourage the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific training
- ♦ Encourage professional stimulation through continuing education and research



A comprehensive study of appropriate applications, their safe approach and contraindications"





Specific Objectives

Module 1. High Frequency Electrotherapy

- Update knowledge on the physical fundamentals of high frequency
- Know the physiological and therapeutic effects of high frequency
- Identify the fundamentals and applications of shortwaves
- Analyze the fundamentals and applications of microwaves
- Identify the fundamentals and applications of tertiary therapy

Module 2. Electromagnetic Fields

- Updating of knowledge on the physical principles of lasers
- Learning about the physiological and therapeutic effects of lasers
- Identify the physiological and therapeutic effects of infrared
- Know the main parameters of magnetic fields, as well as the types of emitters and their application

Module 3. Ultrasound Therapy

- Identify the physical principles of ultrasound therapy, as well as the physiological effects
- Analyze the parameters and methodologies of ultrasound therapy
- Study the applications of ultrasound therapy in tendon and muscle pathologies
- Analyze the use of ultrasound therapy in peripheral nerve disorders

03

Course Management

The professors of this program are specialists with long experience in the application of the different systems and techniques of electrotherapy, professionals chosen for their wide prestige in the profession. All of them have an excellent background in rehabilitation medicine and are professionals with years of teaching experience and offer the student the most complete, direct and real vision of the work with electrotherapy in rehabilitation medicine.





“

An opportunity to learn with the most real vision of this type of therapeutic intervention advancing unstoppably towards the highest professional competitiveness”

Management



Dr. del Villar Belzunce, Ignacio

- ♦ Head of the Rehabilitation and Physical Medicine Department of the Rey Juan Carlos I Hospital in Móstoles. Madrid
- ♦ Specialist in Physical Medicine and Rehabilitation, University Hospital La Paz, Madrid
- ♦ Head of the Rehabilitation and Physical Medicine Associate Department of the Rey Juan Carlos I Hospital in Móstoles
- ♦ Specialist Physician in the Rehabilitation and Physical Medicine Service of the Rey Juan Carlos I Hospital in Móstoles
- ♦ Professor of ultrasound Quierón Salud guided interventional techniques in the locomotor system
- ♦ Degree in Medicine and Surgery from the University of Zaragoza
- ♦ Specialist in Physical Medicine and Rehabilitation, University Hospital La Paz, Madrid

Professors

Dr. Pulido Poma, Rosa Mercedes

- ♦ Physician specializing in Physical Medicine and Rehabilitation in the Rehabilitation Service of the Hospital Universitario Rey Juan Carlos Móstoles, Madrid
- ♦ Physician specializing in Physical Medicine and Rehabilitation At Santa Rosa Hospital, Lima, Peru
- ♦ Physician specializing in Physical Medicine and Rehabilitation Alberto L. Barton Hospital Callao, Peru
- ♦ Surgeon, San Fernando School of Medicine - Universidad Nacional Mayor de San Marcos, Lima, Peru
- ♦ Surgeon, San Fernando School of Medicine - Universidad Nacional Mayor de San Marcos, Lima, Peru

Dr. López Hermoza, Jenny Gladys

- ♦ Assistant Physician, Rehabilitation Service, Hospital Rey Juan Carlos
- ♦ Resident Physician of Physical Medicine and Rehabilitation, Fundación Jiménez Díaz University Hospital, Madrid
- ♦ Surgeon from Mayor de San Marcos National University Lima-Peru, with homologation to Medical Degree in Spain
- ♦ Specialist in Family and Community Medicine at the ADM Sureste of Madrid
- ♦ Doctorate Courses s Degree in Biomedical Sciences at the Complutense University of Madrid. Presentation of work as research proficiency: "Anemia as a prevalent factor in Heart Failure", with the qualification of outstanding in obtaining the diploma of advanced studies (DEA)

Dr. Ortiz de Urbina, Marta Galván

- ♦ Department of Physical Medicine and Rehabilitation, University Hospital Rey Juan Carlos, Madrid
- ♦ Department of Physical Medicine and Rehabilitation, Fundación Jiménez Díaz, Madrid
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Master's Degree in Medical Assessment of Disability and Bodily Injury for Social Protection
- ♦ Master's Degree in Clinical Phoniatics
- ♦ Course of Musculoskeletal Ultrasound. Expert in Ultrasound Diagnosis of Locomotor System Injuries

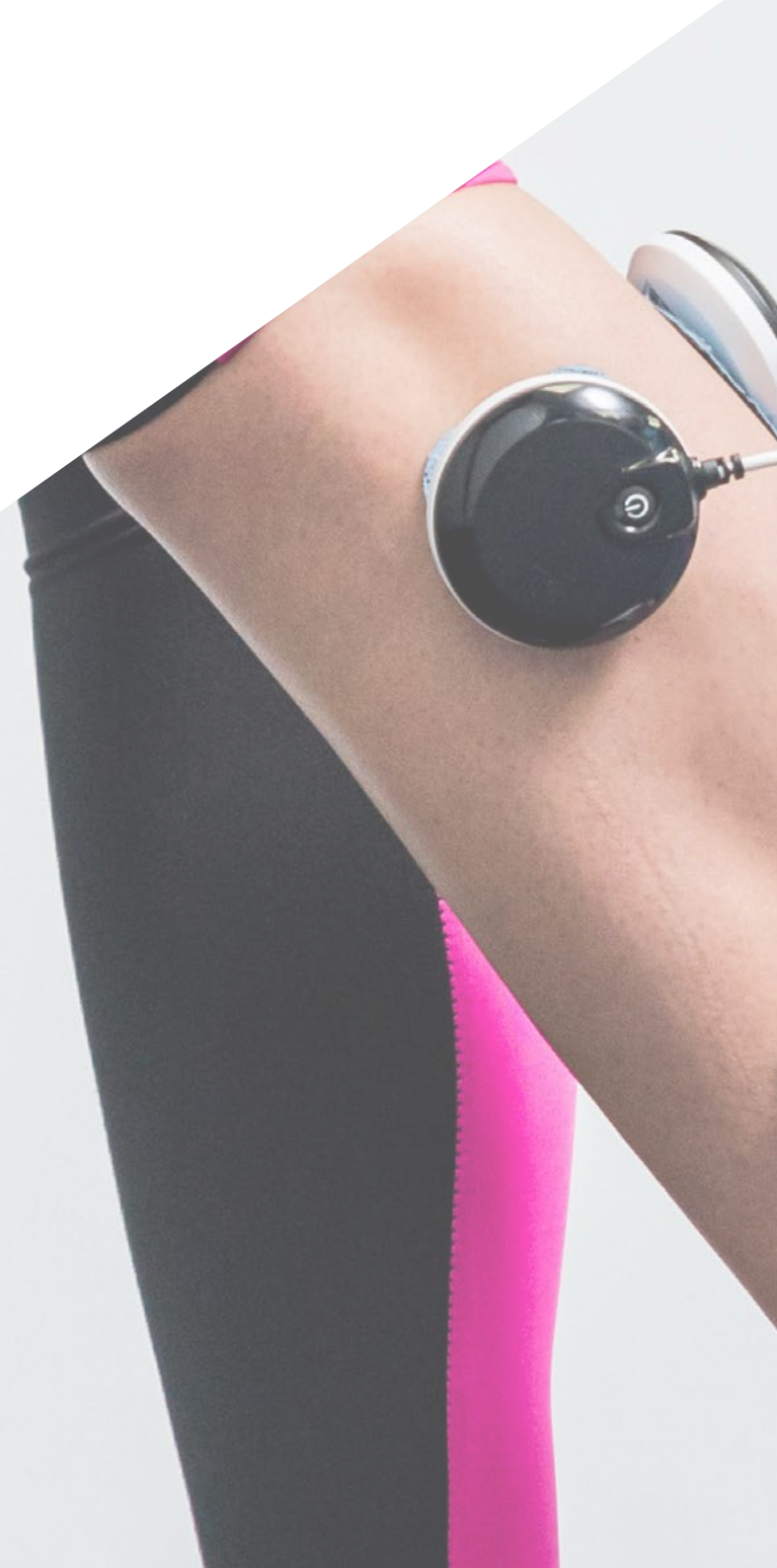
Dr. Castaño Pérez, Iker

- ♦ Specialist in the Rey Juan Carlos University Hospital
- ♦ Experience in M.I.R. Physical Medicine and Rehabilitation. At San Carlos Clinical Hospital
- ♦ Rehabilitation Service Niño Jesús Pediatric University Hospital
- ♦ Degree in Medicine at University de Navarra, Spain
- ♦ Course of Musculoskeletal Ultrasound. Expert in Ultrasound Diagnosis of Locomotor System Injuries. San Carlos Clinical Hospital
- ♦ Clinical Collaborator at Teachers Complutense University of Madrid

04

Structure and Content

This program is designed to convert the student's work and dedication to learning into real, measurable achievements that maintain stimulation and motivation throughout the process. Throughout the modules that make up the program, students will study each and every one of the aspects that the rehabilitation physician must master to ensure their competence in this type of intervention, namely the physical principles of the laser, its practical application, as well as the physical, physiological and therapeutic fundamentals of the different types of waves. All of the above will guarantee the labor success of future graduates.





“

A comprehensive and highly topical agenda structured as a high training process, of exceptional quality”

Module 1. High Frequency Electrotherapy

- 1.1. Physical Fundamentals of High Frequency
- 1.2. Physiological Effects of High Frequency
- 1.3. Therapeutic Effects of High Frequency
- 1.4. Shortwave: Fundamentals and Applications
- 1.5. Shortwave: Indications and Contraindications
- 1.6. Microwaves: Fundamentals and Applications
- 1.7. Microwaves: Indications and Contraindications
- 1.8. Tecartherapy: Fundamentals
- 1.9. Tecartherapy: Applications
- 1.10. Tecartherapy: Indications and Contraindications

Module 2. Electromagnetic Fields

- 2.1. Laser: Physical Principles
- 2.2. Physiological and Therapeutic Effects of Laser
- 2.3. Practical Applications and Contraindications
- 2.4. Infrared Radiation: Physical Principles
- 2.5. Physiological and Therapeutic Effects of Infrared
- 2.6. Practical Applications and Contraindications
- 2.7. Magnetotherapy: Physical Principles, Main Parameters of Magnetic Fields, Types of Emitters and Their Application
- 2.8. Physiological and Therapeutic Effects Magnetotherapy
- 2.9. Clinical Applications and Contraindications
- 2.10. High Intensity Inductive Therapy





Module 3. Ultrasound Therapy

- 3.1. Physical Principles of Ultrasound Therapy
- 3.2. Physiological Effects of Ultrasound Therapy
- 3.3. Parameters and Methodologies of Ultrasound Therapy
- 3.4. Shoulder and Elbow Ultrasound Therapy (US)
- 3.5. Hands and Wrist Ultrasound Therapy (US)
- 3.6. Hip and Knee Ultrasound Therapy (US)
- 3.7. Ankle and Foot Ultrasound Therapy (US)
- 3.8. Ultrasound Therapy (US) in Lumbar Region
- 3.9. Ultrasonophoresis
- 3.10. High Frequency Ultrasound Therapy. OPAF Practical Applications and Contraindications



Get trained with a program that will allow you to learn the physical principles of magnetotherapy"

05

Methodology

This training program provides you with 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.



“

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. 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, trying to recreate the real conditions in the physician's professional practice.

“

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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
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. 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 Harvard 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.

Professionals 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 250.000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (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.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical 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 multimedia content presentation training Exclusive 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 your goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.



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 Diploma in Electrotherapy in Individual Practice guarantees you, in addition to the most accurate and up to date training, access to a Postgraduate Diploma issued by TECH Technological University.





“

Successfully complete this training program and receive your diploma without travel or laborious paperwork”

The **Postgraduate Diploma in Electrotherapy in Individual Practice** 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 Diploma from **TECH Technological University** via tracked delivery*.

The diploma issued by TECH Technological University will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma in Electrotherapy in Individual Practice

Official N° of hours: **450 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 future
confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present quality
online training
development language
virtual classroom



Postgraduate Diploma
Electrotherapy in
Individual Practice

Course Modality: **Online**
Duration: **6 months**
Certificate: **TECH Technological University**
Official N° of hours: **450 h.**

Postgraduate Diploma

Electrotherapy in Individual Practice

