Postgraduate Diploma

Neurological Physiotherapy in Multiple Sclerosis, ALS and Huntington's Disease

tech technological university

Postgraduate Diploma

Neurological Physiotherapy in Multiple Sclerosis, ALS and Huntington's Disease

» Modality: **online**
» Duration: **6 months**
» Certificate: **TECH Technological University**
» Schedule: **at your own pace**
» Exams: **online**

Website: **www.techtitute.com/in/physiotherapy/postgraduate-diploma/postgraduate-diploma-neurological-physiotherapy-multiple-sclerosis-als-huntington-disease**

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01
Introduction

Neurological Physiotherapy allows the use of rehabilitative techniques to treat the consequences of central or peripheral nervous system diseases that affect movement. This is why the high-level professional physiotherapists are essential for those affected to recover their mobility and, therefore, improve their quality of life.

" *Our program is the most comprehensive neurological physiotherapy program on the market for you to specialize in treatments for people with multiple sclerosis, ALS or Huntington's disease"*

The Postgraduate Diploma in Neurological Physiotherapy in Multiple Sclerosis, ALS and Huntington's Disease has been designed to complement the training of physiotherapy professionals who work with people with neurodegenerative diseases, so that they acquire superior training that will allow them to apply the most advanced techniques in the field of rehabilitation, specific to each of these diseases.

Accordingly, the program contains a syllabus that delves into multiple sclerosis, covering the pathophysiology of demyelination of the white matter and the appearance of plaques that will help the physiotherapist to differentiate the clinical manifestations depending on each lesion: pyramidal, cerebellar, sensory, etc. Strategies to deal with spasticity and its consequences will also be analyzed; the latest advances in training programs for readaptation to effort, balance and coordination re-education will be presented.

There is also a section to study Amyotrophic Lateral Sclerosis (ALS), in which this disease will be described by explaining the symptoms and signs of involvement of the first and second motor neuron so that the physiotherapist can identify them. Once these concepts have been focused, the symptoms in the different phases of the disease will be analyzed: weakness, fasciculations, respiratory diseases, spasticity, pain, dysphagia, dysarthria, etc.

Finally, on Huntington's disease, the anatomical areas susceptible to lesions will be detailed: basal ganglia (striatum, caudate nucleus and pale globe) as well as the affected area of the cerebral cortex. As a result, the student will gain knowledge to promote and increase the ability to use complex brain functions such as attention, memory, understanding, integration of what was learned, judgment, problem solving and organization of time.

In short, TECH has set out to create contents of the highest teaching and educational quality that will turn students into successful professionals, following the highest quality standards in teaching at an international level. Therefore, TECH presents this program with comprehensive content that will help them become elite physiotherapists.

This **Postgraduate Diploma in Neurological Physiotherapy in Multiple Sclerosis, ELA and Huntington's Disease** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical case studies presented by specialists in Neurological Physiotherapy
- The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice.
- Exercises where the self-assessment process can be carried out to improve learning.
- Algorithm-based interactive learning system for decisionmaking.
- Special emphasis on innovative methodologies in Neurological Physiotherapy
- 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

Immerse yourself in the study of this high-level Postgraduate Diploma and improve your skills in therapies for people with degenerative diseases"

This Postgraduate Diploma is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Neurological Physiotherapy, you will obtain a qualification endorsed by TECH"

This Postgraduate Diploma offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

A 100% online program that will allow you to balance your studies with your professional work while expanding your knowledge in this field.

It includes, in its teaching staff, professionals belonging to the field of physiotherapy, who pour into this training the experience of their work, in addition to recognized specialists of reference 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.

The design of this program focuses on Problem-Based Learning, by means of which the Physiotherapist must try to solve the different professional practice situations that arise throughout the academic year. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Neurological Physiotherapy in Multiple Sclerosis, ALS and Huntington.

02
Objectives

The main objective of this program is to provide theoretical and practical learning, so that the physiotherapist can master neurological rehabilitation for people with degenerative diseases in a way that is both practical and rigorous.

Our goal is to achieve academic excellence and help you achieve professional success. Don't hesitate any longer and join us"

General Objectives

- Acquire new knowledge in neuroscience applied to neurodegenerative diseases
- Promote a critical attitude that favors clinical practice based on the most recent scientific evidence and clinical reasoning
- Motivate physiotherapists to specialize in the field of neurological physiotherapy
- Provide comprehensive treatment plans

The specific training in Neurological Physiotherapy will allow to achieve great advances in people with degenerative diseases"

Specific Objectives
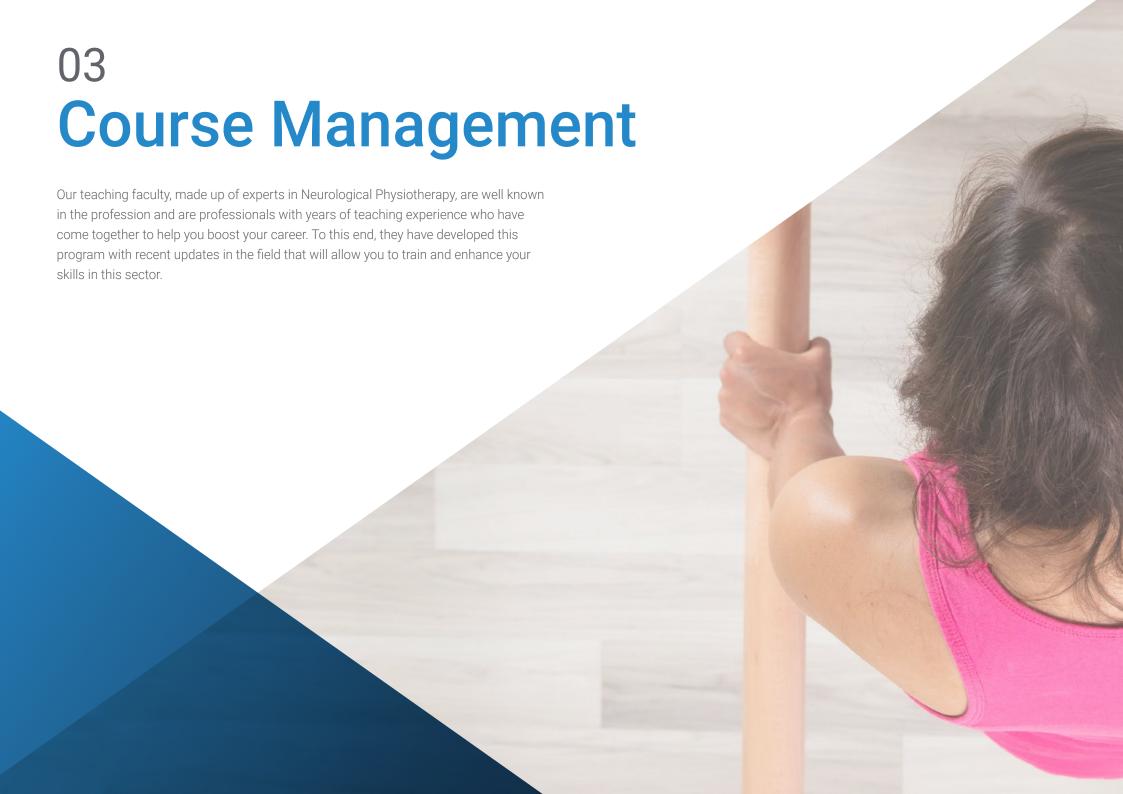
Module 1. Multiple Sclerosis

- Delve into the anatomical and functional basis of the nervous system involved in Multiple Sclerosis
- Identify the various symptoms and clinical manifestations according to the area of involvement in Multiple Sclerosis
- Acquire skills for the treatment of spasticity
- Train students in the analysis of movement, using explanatory videos
- Elaborate readaptation programs to effort, balance and coordination re-education through case studies

Module 2. Amyotrophic Lateral Sclerosis

- Delve into the anatomical and functional basis of the nervous system involved in Amyotrophic Lateral Sclerosis
- Identify the various symptoms and clinical manifestations according to the area of involvement in Amyotrophic Lateral Sclerosis
- Learn to identify and address swallowing disorders, respiratory insufficiency, urinary incontinence, etc.
- Detect pain and discover the different ways to approach it
- Develop working methods and new trends in physiotherapy for patients with this disease, through case studies

Module 3. Huntington's Disease

- Delve into the anatomical and functional basis of the nervous system involved in Huntington's disease
- Identify the various symptoms and clinical manifestations according to the area of involvement in Huntington's disease
- Recognize the physiotherapeutic treatment implications of the different cognitive domains that are either injured or intact in movement impairment
- Develop working methods and new trends in physiotherapy for patients with this disease, through case studies

03
Course Management

Our teaching faculty, made up of experts in Neurological Physiotherapy, are well known in the profession and are professionals with years of teaching experience who have come together to help you boost your career. To this end, they have developed this program with recent updates in the field that will allow you to train and enhance your skills in this sector.

Learn from the best professionals and become a successful professional yourself"

Management

Mr. Pérez Redondo, José María

- Physiotherapist specialized in Neurology and Neurosurgery in acute and critical patients
- Degree in Physiotherapy from the European University of Madrid
- Diploma in Physiotherapy from the School of Physiotherapy, Podiatry and Nursing at the Complutense University of Madrid
- 5 levels of the Postgraduate Specialization Course in Osteopathic Manual Physical Therapy, organized by the Department of Human Anatomy and Embryology, Faculty of Medicine, University of Alcalá de Henares
- Course on Radiology and Imaging Techniques for Physiotherapists and Occupational Therapists, organized by Fuenlabrada Hospital
- Neurodynamic Mobilization Course for Physiotherapists, organized by Fuenlabrada Hospital
- Course on Functional Re-education in Parkinson's Disease, organized by the Federation of Health and Social and Health Sectors of Comisiones Obreras
- President of the Scientific Committee for the II National Conference on Myofascial Pain and Dry Needling

Professors

Ms. Hermida Rama, Josefa

- Physiotherapist in the Rehabilitation Department, San Carlos Clinical Hospital, Madrid
- Diploma in Physiotherapy from the Complutense University of Madrid
- Graduate in Physiotherapy from the Faculty of Nursing, Physiotherapy and Podiatry at the Complutense University of Madrid
- Associate Professor of Clinical Stays of the Faculty of Nursing, Physiotherapy and Podiatry
- Expert in Neurological Physiotherapy, Madrid. Expert in Nursing, Physiotherapy and Podology UCM
- Advanced Course Basic Study for Arm and Hand Function Recovery in Adult Neurological Patients by the Bobath Concept
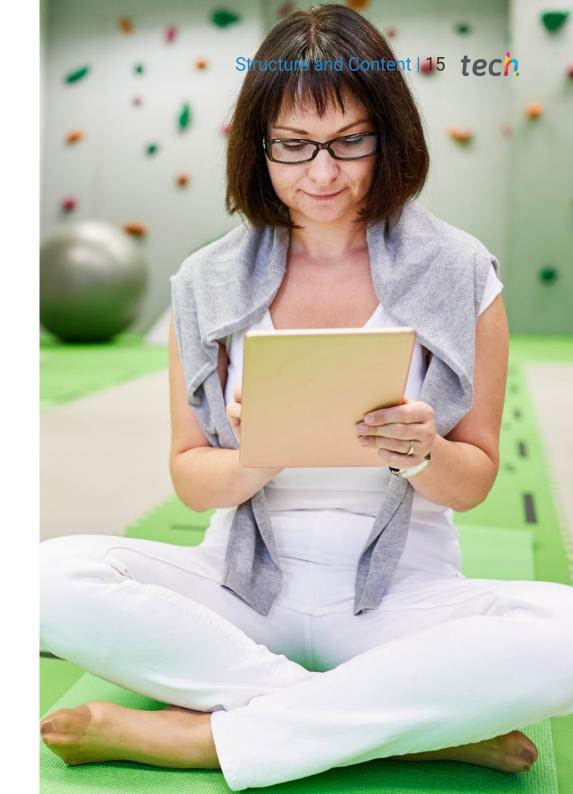
Ms. López-Hazas Jiménez, Gemma

- Physiotherapist Specializing in Neurology
- Neurological Physiotherapist at the Multiple Sclerosis Association of Fuenlabreña
- Neurological Physiotherapist at the AMAS Social Foundation
- Internship tutor for students of the Degree in Physiotherapy at the CEU San Pablo University
- Degree in Physiotherapy at the University San Rafael Nebrija
- Master's Degree in Motor Neurocontrol by Rey Juan Carlos Univeristy
- Expert in Neurological Physiotherapy by the Complutense University of Madrid
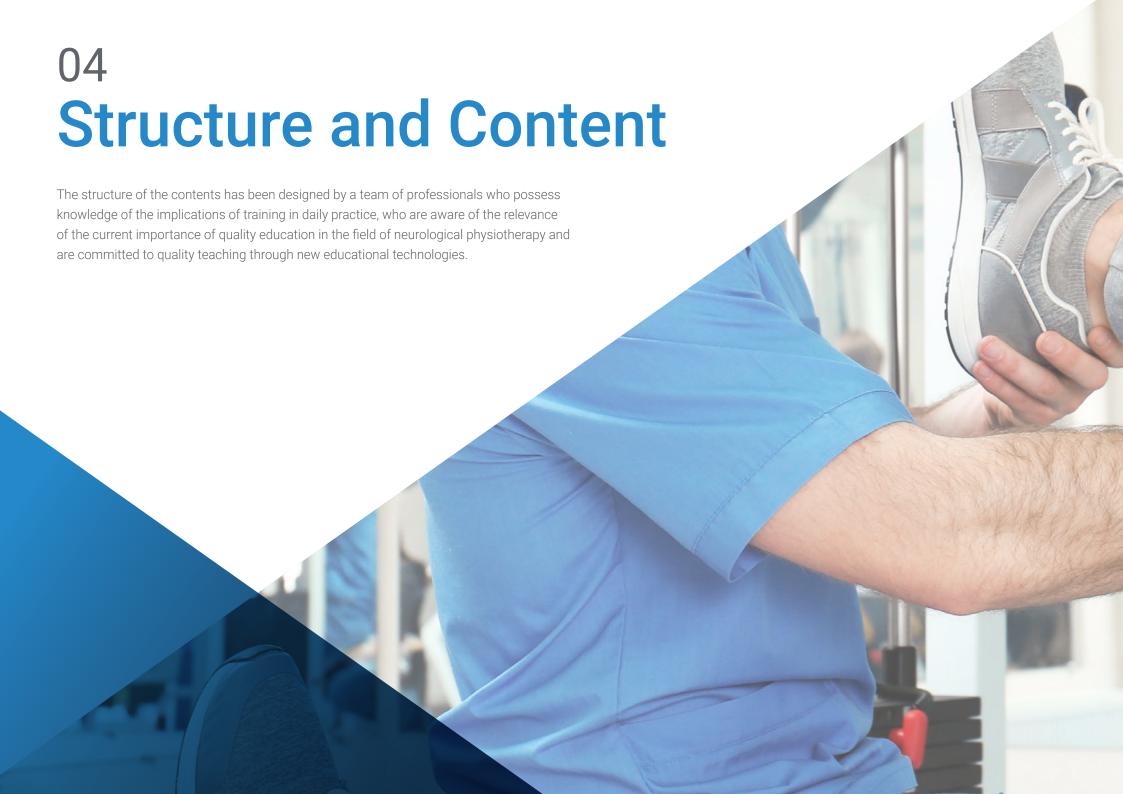- Official Master's Degree in Nervous System Sciences: Neurorehabilitation
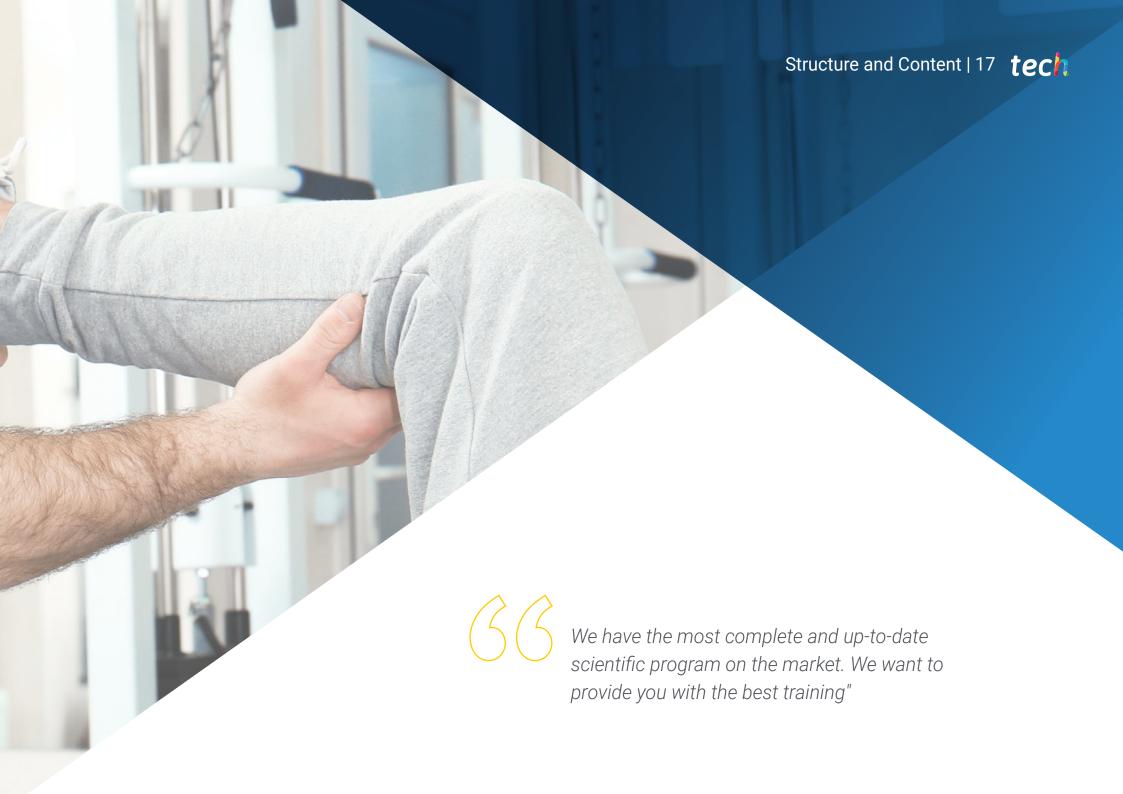
Ms. González Villarejo, Lara

- Physiotherapist at Crene
- Professor at the Francisco de Vitoria University
- Graduated in Physiotherapy at the UAH

A unique, key, and decisive training experience to boost your professional development"

04

Structure and Content

The structure of the contents has been designed by a team of professionals who possess knowledge of the implications of training in daily practice, who are aware of the relevance of the current importance of quality education in the field of neurological physiotherapy and are committed to quality teaching through new educational technologies.

"We have the most complete and up-to-date scientific program on the market. We want to provide you with the best training"

Module 1. Multiple Sclerosis

Module 2. Amyotrophic Lateral Sclerosis

2.1.   Introduction
    2.1.1.   Anatomy
    2.1.2.   Physiology
    2.1.3.   Classification
2.2.   Epidemiology
2.3.   Etiology
    2.3.1.   Transmission Mode
    2.3.2.   Frequency
    2.3.3.   Starting Age
2.4.   Evolution
2.5.   Prognostic Factors
2.6.   Evaluation/Diagnosis
    2.6.1.   Clinical Manifestations
    2.6.2.   Diagnostic Imaging
    2.6.3.   Neurological Examination
    2.6.4.   Neurological Assessment Scales
2.7.   Treatment
    2.7.1.   Medical/Surgical Treatments
    2.7.2.   Physiotherapy
    2.7.3.   Occupational Therapy, Speech Therapy and Neuropsychology
2.8.   Orthopedics
    2.8.1.   Support Products
    2.8.2.   Orthoses
2.9.   Readaptation
    2.9.1.   Social Aspects/Support
    2.9.2.   Comprehensive Care for Patients, Families and Caregivers
2.10.   Early Prevention and Detection

Module 3. Huntington's Disease

3.1.   Introduction
    3.1.1.   Anatomy
    3.1.2.   Physiology
    3.1.3.   Classification
3.2.   Epidemiology
3.3.   Etiology
    3.3.1.   Transmission Mode
    3.3.2.   Frequency
    3.3.3.   Starting Age
3.4.   Evolution
3.5.   Prognostic Factors
3.6.   Evaluation/Diagnosis
    3.6.1.   Clinical Manifestations
    3.6.2.   Diagnostic Imaging
    3.6.3.   Neurological Examination
    3.6.4.   Neurological Assessment Scales
3.7.   Treatment
    3.7.1.   Medical/Surgical Treatments
    3.7.2.   Physiotherapy
    3.7.3.   Occupational Therapy, Speech Therapy and Neuropsychology.
3.8.   Orthopedics
    3.8.1.   Support Products
    3.8.2.   Orthoses
3.9.   Readaptation
    3.9.1.   Social Aspects/Support
    3.9.2.   Comprehensive Care for Patients, Families and Caregivers
3.10.   Early Prevention and Detection

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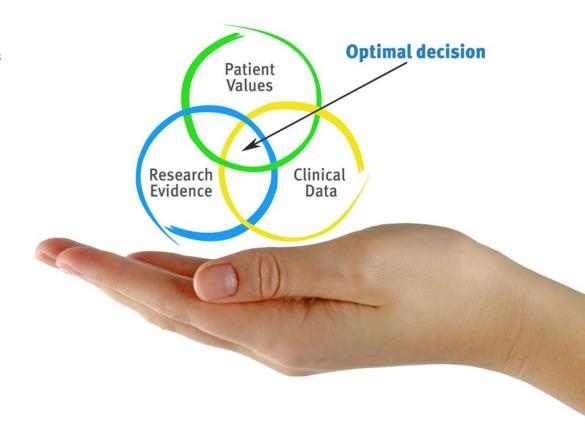
" *Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

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.

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

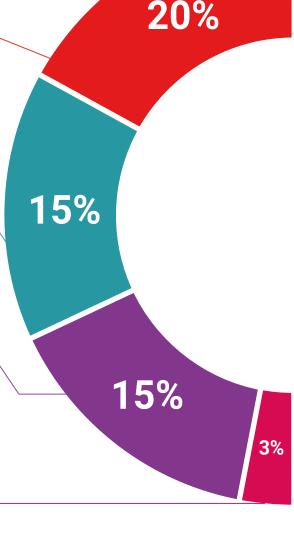### Physiotherapy Techniques and Procedures on Video

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.

20%

15%

15%

3%

20%

17%

7%

3%

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 Diploma in Neurological Physiotherapy in Multiple Sclerosis, ELA and Huntington's Disease guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Neurological Physiotherapy in Multiple Sclerosis, ELA and Huntington's Disease** 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** issued by **TECH Technological University** via tracked delivery*.

The certificate 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 Neurological Physiotherapy in Multiple Sclerosis, ALS and Huntington's Disease**

Official Nº of hours: **450 h.**

tech technological university

Awards the following
CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE DIPLOMA
in
Neurological Physiotherapy in Multiple Sclerosis, ALS and Huntington's Disease

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFWORD23S   techtitute.com/certificates

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

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Postgraduate Diploma

Neurological Physiotherapy in Multiple Sclerosis, ALS and Huntington's Disease

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» Duration: **6 months**
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» Schedule: **at your own pace**
» Exams: **online**

Postgraduate Diploma

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