

# Postgraduate Diploma

Physiotherapeutic Approach to  
Acquired Brain Injury in Geriatrics  
for the Rehabilitation Physician



## Postgraduate Diploma Physiotherapeutic Approach of Acquired Brain Injury in Geriatrics for the Rehabilitation Physician

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

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-physiotherapeutic-approach-acquired-brain-injury-geriatrics-rehabilitation-physician](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-physiotherapeutic-approach-acquired-brain-injury-geriatrics-rehabilitation-physician)

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01

# Introduction

The increase in the incidence of Acquired Brain Injury (ABI), especially stroke, and its survival, make neurorehabilitation and, therefore, physiotherapy, an indispensable element, since stroke is currently a leading cause of disability. Acquiring the mastery of new techniques and knowledge in this area is fundamental for the Rehabilitation Physician.







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*This program will provide you with a sense of security in medical practice, which will help you grow personally and professionally”*

The public's awareness of the need for specialized professionals is leading to an increase in the demand for rehabilitation physicians who are able to understand the functioning of the nervous system after an injury, and to get the most out of it in order to minimize the after-effects of the injury.

In addition, we are living in an era of great advances in the field of neuroscience, as well as Physiotherapy as a science, which forces us to have to update our knowledge both about the functioning of the nervous system, as well as how to evaluate and therapeutically approach a person with ABI, since each injury is different and will manifest itself in a different way in each patient.

This specialization aims to be a collection of the most up-to-date evidence and scientific knowledge of the nervous system and its rehabilitation when it is injured in a supervening way. Thanks to this, it is presented as a Postgraduate Diploma capable of specializing the Rehabilitation Physician, who has never dealt with people with ABI and, nevertheless, is interested in having a professional future with this type of patient.

Likewise, the professional who is already a Rehabilitation Physician, whether or not they are dealing with ACD, will find a space to update their knowledge and become highly specialized in this group of patients.

On the other hand, by understanding so much information about neuroscience and functionality, it can be a useful tool for the Rehabilitation Physician who needs to know the ins and outs of the nervous system to better understand and address the injury or therapeutic need in a general way.

The **Postgraduate Diploma in Physiotherapeutic Approach of Acquired Brain Injury in Geriatrics for the Rehabilitation Physician** contains the most complete and up to date scientific program on the market. The most important features of the program include:

- ♦ Practical case studies presented by experts
- ♦ 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
- ♦ New Developments in the Approach to Complications in Acquired Brain Injury for the Rehabilitation Physician
- ♦ It contains practical exercises where the self-evaluation process can be carried out to improve learning
- ♦ Special emphasis on innovative methodologies in the Approach to Complications in Acquired Brain Injury in the Rehabilitation Physician
- ♦ All of this will be complemented by 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



*Update your knowledge through the Postgraduate Diploma in Physiotherapeutic Approach of Acquired Brain Injury in Geriatrics for the Rehabilitation Physician".*

“

*This education is the best investment you can make for two reasons: in addition to updating your knowledge in Physiotherapeutic Approach of Acquired Brain Injury in Geriatrics for the Rehabilitation Physician, you will obtain a Postgraduate Diploma from TECH Technological University"*

*Increase your confidence in decision-making by updating your knowledge through this specialisation.*

*Take the opportunity to learn about the latest advances in Physiotherapeutic Approach to Acquired Brain Injury in Geriatrics for the Rehabilitation Physician.*

It includes in its teaching staff professionals belonging to the field of Physiotherapeutic Approach to Acquired Brain Injury in Geriatrics for the Rehabilitation Physician who pour into this education the experience of their work, in addition to recognized specialists belonging to 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 program to train in real situations.

The program design is based on Problem-Based Learning, through which teachers must try to solve the different professional practice situations that arise throughout the course. For this reason, the student will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Approach to Complications in Acquired Brain Injury in the Rehabilitation Physician with extensive teaching experience.



# 02 Objectives

The Postgraduate Diploma in Physiotherapeutic Approach to Acquired Brain Injury in Geriatrics for the Rehabilitation Physician is aimed to facilitate the performance of the Rehabilitation Physician in their daily practice.





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*Our goal is yours: to provide you with the best online update program in this area of the teaching market. A one-of-a-kind Postgraduate Diploma that will propel you to the forefront of your industry”.*



## General Objectives

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- Enable specialization of the physiotherapist in the field of neurological rehabilitation
- Update Physiotherapist knowledge in neuroscience applied to clinical practice
- Enhance clinical practice that is based on scientific evidence and clinical reasoning
- Facilitate the integral care of the neurological patient in all their complexity





## Specific Objectives

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### Module 1. Neuroanatomy and Neurophysiology

- ♦ Describe the structural anatomical bases of the nervous system
- ♦ Describe the functional anatomical bases of the nervous system
- ♦ Revise the different theories of motor control
- ♦ Update knowledge in neuroscience applicable to neurological injuries

### Module 2. ABI

- ♦ Recognize what is and what is not ABI
- ♦ Identify different symptoms and syndromes according to the area affected by the ABI
- ♦ Learn to identify hemineglect and understand its implications for the patient and for the therapeutic approach
- ♦ Learn to recognize the pusher syndrome and gain up-to-date knowledge about it in view of its implications in the therapeutic approach
- ♦ Understand the difference between cerebellar versus basal ganglia symptomatology
- ♦ Distinguish spasticity from other tone disturbances
- ♦ Recognize apraxia and its implications for the patient and for the therapeutic approach
- ♦ Learn to identify alien hand syndrome

### Module 3. ABI in Geriatrics

- ♦ Know the discharge options in order to make the best decision for the patient regarding their residence and rehabilitation
- ♦ Learn to appropriately adjust the environment to make it as functional as possible
- ♦ Know the role of the family and legal guardians
- ♦ Carry out a review of the most used technical supports for geriatric patients with ABI



*Take the opportunity and take the step to get up-to-date on the latest developments in Physiotherapeutic Approach to Acquired Brain Injury in Geriatrics for the Rehabilitation Physician"*

# 03

## Course Management

The program includes in its teaching staff leading specialists in Physiotherapeutic Approach of Acquired Brain Injury in Geriatrics for the Rehabilitation Physician, who pour into this education the experience of their work. In addition, other specialists of recognized prestige participate in its design and elaboration, completing the program in an interdisciplinary manner.







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*Learn from leading professionals the latest advances in Physiotherapeutic Approach to Acquired Brain Injury in Geriatrics for the Rehabilitation Physician"*

## Management



### Ms. De Andrés Garrido, Berta

- Neurophysiotherapist at the Neurological Rehabilitation Center in Neurointegra
- Diploma in Physiotherapy
- Master's Degree in Neurological Physiotherapy of Adults and Children
- Master's Degree in Neurological Physiotherapy

## Professors

### Mr. Sarrias Arrabal, Esteban

- ♦ Department of Psychology at the University of Seville

### Dr. Rodríguez Sánchez, Augusto Rembrandt

- ♦ Professor en Cardenal Spínola University Center of Studies CEU
- ♦ Degree in Physical Activity and Sports Science
- ♦ PhD from the University of Seville

### Mr. Rubiño Díaz, José Ángel

- ♦ Collaborating Researcher in the University of the Balearic Islands
- ♦ General Health Psychologist
- ♦ PhD in Neuroscience. University of the Balearic Islands
- ♦ Advanced Studies Certificate in Psychobiology
- ♦ Master's Degree in Neuroscience

### Ms. Amor Hernández, Paloma

- ♦ Psychologist
- ♦ Currently studying a PhD in Health Psychology from the National University of Remote Education

**Mr. Ruiz García, Pablo**

- ♦ Physiotherapist in ADACEA Alicante
- ♦ Degree in Physiotherapy
- ♦ Master's Degree in Neurorehabilitation

**Pérez Rodríguez, Mónica**

- ♦ Neuropsychologist in Neurointegra
- ♦ Psychologist
- ♦ Master's Degree in Advanced Studies of the Brain and Behavior
- ♦ Master's Degree in General Health Psychology
- ♦ Specialist in Neuropsychology

**Mr. Arévalo Mora, Óscar**

- ♦ Physiotherapist at Beato Fray Leopoldo Residence (Granada)
- ♦ Physiotherapist in María Zayas Residency (Granada)

**Ms. Fernández Muñoz, María**

- ♦ Physiotherapist at Las Sabinas Residence (JCCM)

**Ms. Gallego, Belén**

- ♦ Occupational Therapist

**Ms. Mena, Alba**

- ♦ Social Worker

**Mr. Gálvez Garrido, Álvaro**

- ♦ Occupational Therapist Beato Fray Leopoldo Residence

**Ms. Aguado Caro, Patricia**

- ♦ Carries out her work at the Neurological Rehabilitation Center at Neurointegra
- ♦ Neuropsychologist

**Ms. Narbona González, Natividad**

- ♦ Carries out her work at the Neurological Rehabilitation Center at Neurointegra
- ♦ Neuropsychologist

**Ms. Monís Rufino, Estela**

- ♦ Neurophysiotherapist
- ♦ Neurointegra

**Mr. Montero Leyva, José Luis**

- ♦ Physiotherapy at Beato Fray Leopoldo Residence. Rehabilitation Coordinator

**Mr. Díez, Óscar**

- ♦ Clinical Manager in Neurem Functional Recovery SCP
- ♦ Physiotherapist



*Our teaching team will provide you with all their knowledge so that you are up to date with the latest information on the subject"*

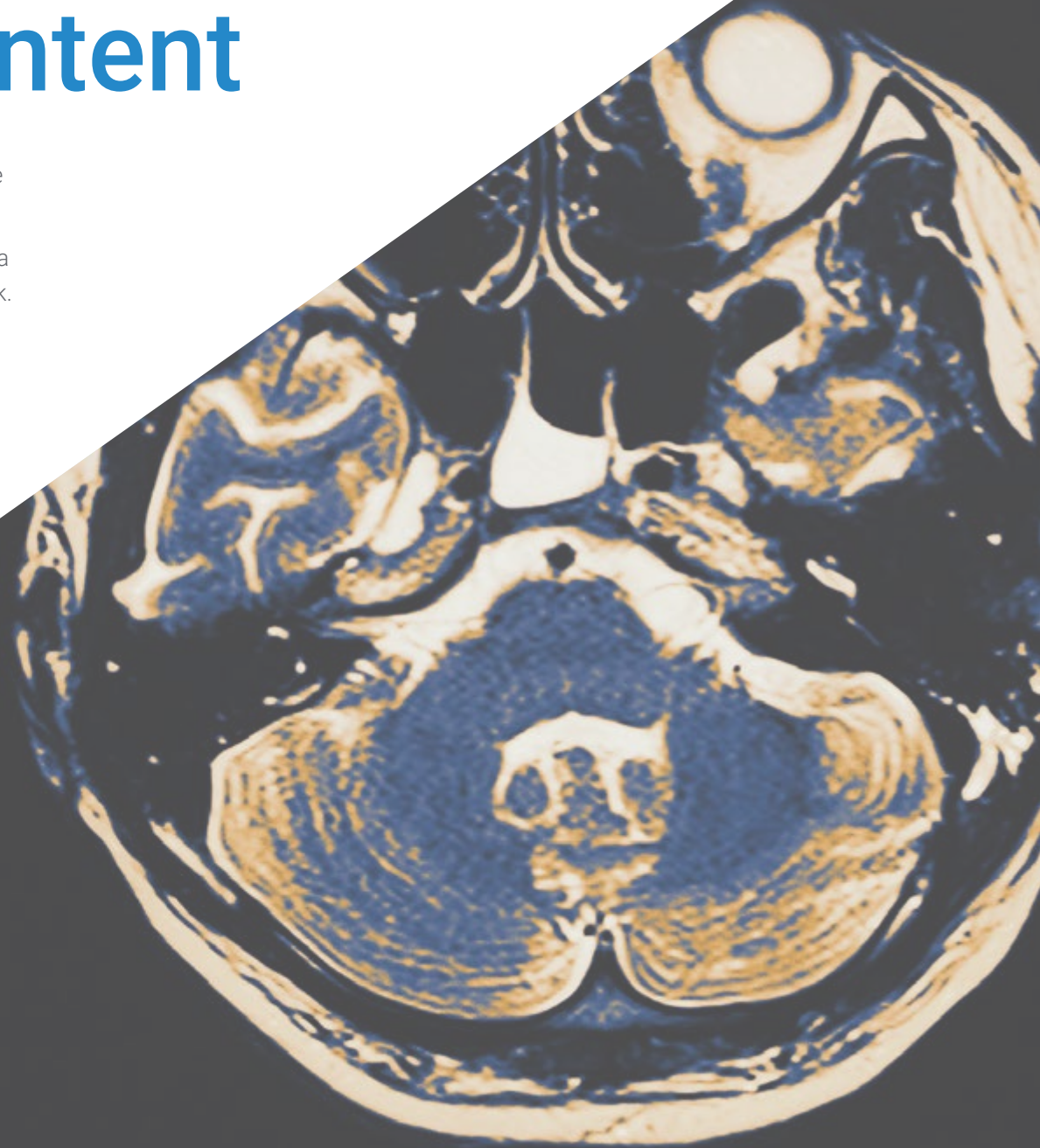
# 04

## Structure and Content

A tailor-made program that is taught in a 100% online format, so you can choose the time and place that best suits your availability, schedule and interests.

Throughout this program, you will go through a complete and well-structured agenda that will allow you to know each and every one of the essential aspects for your work.

A stimulating experience that will lay the foundation for your success.







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*A complete syllabus that will lead you to acquire the essential knowledge in this complex area of professional development"*

## Module 1. Neuroanatomy and Neurophysiology

- 1.1. Anatomy
  - 1.1.1. Introduction to Structural Anatomy
  - 1.1.2. Introduction to Functional Anatomy
  - 1.1.3. Spinal Cord
  - 1.1.4. Brainstem
  - 1.1.5. Frontal Lobes
  - 1.1.6. Parietal Lobe
  - 1.1.7. Temporal Lobe
  - 1.1.8. Occipital Lobe
  - 1.1.9. Cerebellum
  - 1.1.10. Basal Ganglia
- 1.2. Physiology
  - 1.2.1. Neuroplasticity.
  - 1.2.2. Muscle Tone
- 1.3. Motor Control
  - 1.3.1. Motor Behavior
  - 1.3.2. Motor Control

## Module 2. ABI

- 2.1 Defining ABI
  - 2.1.1. ABI in Adults
  - 2.1.2. ABI in Childhood
  - 2.1.3. ABI in Elderly People
- 2.2. Functional Alterations
  - 2.2.1. Tone Alterations
  - 2.2.2. Hemineglect
  - 2.2.3. Pusher Syndrome
  - 2.2.4. Cerebellar Syndrome vs. Basal Ganglia Injury
  - 2.2.5. Alien Hand Syndrome
  - 2.2.6. Apraxia





### Module 3. ABI in Geriatrics

- 3.1. Distinguishing Features of ABI in Geriatrics
  - 3.1.1. Pluripathology
    - 3.1.1.1. Advantages and Disadvantages Associated with Age
  - 3.1.2. Physiotherapeutic Treatments
    - 3.1.2.1. The Importance of Setting Team Objectives
- 3.2. Institutionalization vs. Habitual Residence
  - 3.2.1. Adaptation to Surroundings
  - 3.2.2. The Role of the Family
  - 3.2.3. Legal Guardians
  - 3.2.4. Technical Aids

“*A unique, key, and decisive training experience to boost your professional development*”



# 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. 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.

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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. 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 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 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 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 Physiotherapeutic Approach to Acquired Brain Injury in Geriatrics for the Rehabilitation Physician guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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”*

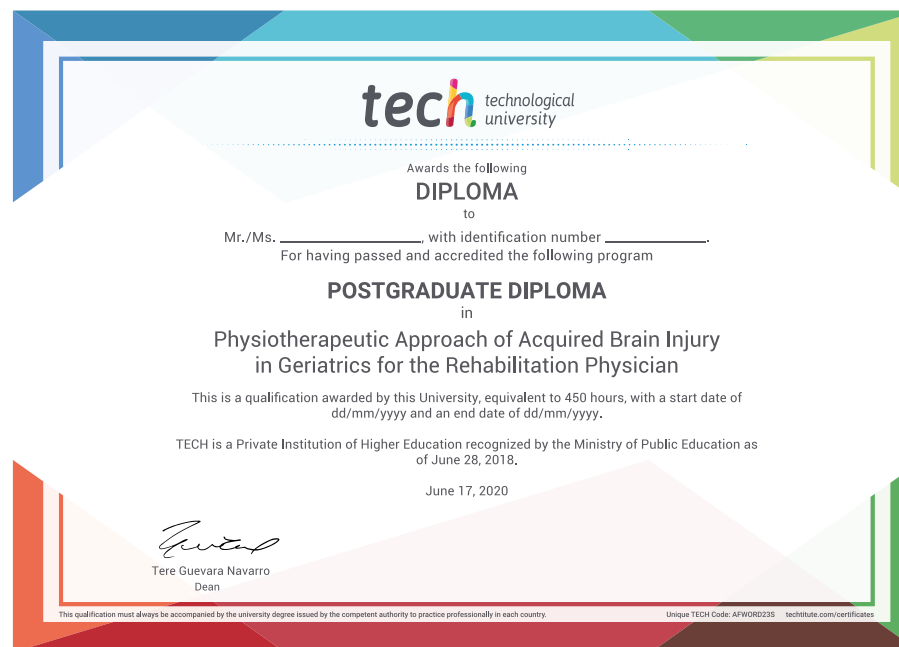
The **Postgraduate Diploma in Physiotherapeutic Approach of Acquired Brain Injury in Geriatrics for the Rehabilitation Physician** contains the most complete and up-to-date scientific program on the market.

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

The 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 Physiotherapeutic Approach of Acquired Brain Injury in Geriatrics for the Rehabilitation Physician**

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 online training  
development languages  
virtual classroom



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