

Postgraduate Diploma

Physical Therapy Intervention
of Acquired Brain Injury
for the Rehabilitation Physician





Postgraduate Diploma

Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician

Course Modality: **Online**

Duration: **6 months.**

Certificate: **TECH Technological University**

Official N° of hours: **400 h.**

Website: www.techtute.com/medicine/postgraduate-diploma/postgraduate-diploma-physical-therapy-intervention-acquired-brain-injury-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. This, coupled with the public's awareness of the need for specialized professionals, is leading to an increase in the demand for physiotherapists who are able to understand how the nervous system works after an injury and how to get the most out of it to minimize the after-effects of the injury.





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

In 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 ACD, since each injury is different and will manifest itself in a different way in each patient.

This program is a collection of the most up-to-date scientific evidence and knowledge about the nervous system and its rehabilitation when it is injured in a supervening way. As a result, it is a master's degree capable of specializing the rehabilitation physician who has never dealt with people with ACD and, nevertheless, is interested in having his or her professional future related to this type of patient.

Likewise, the professional who is already a Rehabilitation Physician, whether or not 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 Physical Therapy Intervention of Acquired Brain Injury 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:

- ♦ Development of case studies presented by experts in Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician
- ♦ 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
- ♦ What's New on Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician?
- ♦ It contains practical exercises where the self-evaluation process can be carried out to improve learning
- ♦ With special emphasis on innovative methodologies in Physical Therapy Intervention of Acquired Brain Injury for 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 Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician program”

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This course may be the best investment you can make for two reasons: in addition to updating your knowledge, you will obtain a Postgraduate Diploma from TECH Technological University”

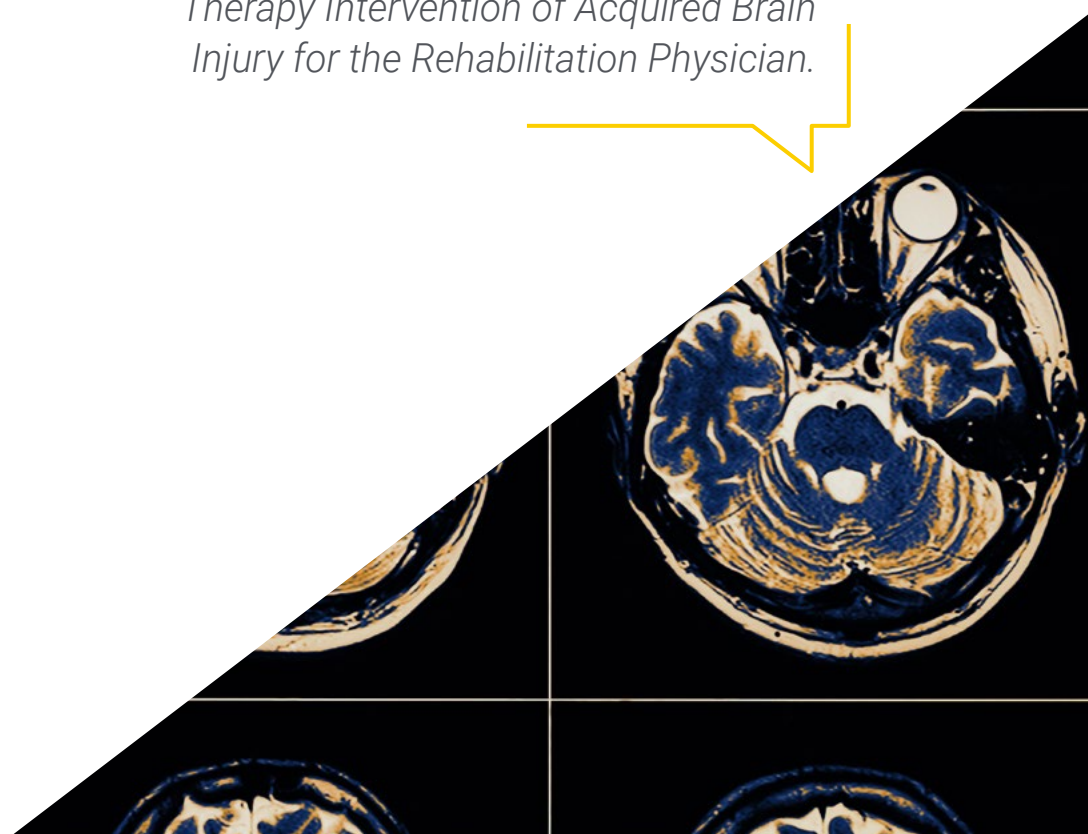
It includes in its teaching staff professionals belonging to the field of Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician, who pour into this program the experience of their work, in addition to recognized specialists belonging to leading societies and prestigious 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.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise during the course. To do so, the student will be assisted by an innovative interactive video system created by recognized experts in the field of Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician with extensive teaching experience.

Increase your decision-making confidence by updating your knowledge with this University Expert course.

Take the opportunity to learn about the latest advances in Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician.



02 Objectives

The Postgraduate Diploma in Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician is aimed at facilitating 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

- 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

Module 1. 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 2. Assessment of a Patient with ABI

- ♦ Interpret the radiological findings in a CAT scan
- ♦ Interpret the radiological findings in MRI
- ♦ Learn examination techniques for the differential diagnosis of the different neurological signs and symptoms
- ♦ Know the pathological reflexes and identify them
- ♦ Conduct a review of assessment scales and tests
- ♦ Learn to write physiotherapy reports
- ♦ Learn to interpret medical reports or reports from other specialists in order to extract the relevant information

Module 3. Multidisciplinary Intervention in ABI

- ♦ Review the most useful orthoses and support products for patients with ABI
- ♦ Learn to identify communication disorders in order to refer them to the competent professional and contemplate them in the patient's overall condition
- ♦ Learn to identify swallowing disorders in order to refer them to the competent professional and contemplate them in the overall condition of the patient
- ♦ Learn to identify behavioral disorders secondary to ABI in order to refer them to the competent professional and contemplate them in the overall condition of the patient
- ♦ Take into account the emotional state of the patient and the family and how it affects the approach and rehabilitation



Learn from leading professionals, the latest advances in procedures in the field of physiotherapy intervention for acquired brain injury"

03

Course Management

The program includes in its teaching staff leading specialists in physiotherapeutic intervention for acquired brain injury, who pour into this program 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.





“

Learn from leading professionals, the latest advances in procedures in the field of physiotherapy intervention for acquired brain injury”

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. 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. Mariño Estelrich, Ignacio

- ♦ Physiotherapist in Sant Joan de Deú de Martorell Hospital (Barcelona)
- ♦ Degree in Physiotherapy
- ♦ Master's Degree in Neurophysiotherapy
- ♦ Master's Degree in Management, Administration and Entrepreneurship of Health Care Centers and Social Services

Ms. Bacardit Riu, Laura

- ♦ Physiotherapist. MIT
- ♦ Diploma in Physiotherapy
- ♦ Master's Degree in Neurorehabilitation in the Guttmann Institute (UAB)
- ♦ Specialist in Neurosciences, Aquatic Therapu and Therapeutic Exercise

Ms. Ferreiro Pardo, Tatiana

- ♦ Physiotherapist in the Teresa Herrera Mother and Child Hospital in A Coruña
- ♦ Degree in Physiotherapy
- ♦ Master's Degree in Neuroscience with a major in Medical Neurobiology
- ♦ Specialist in the evaluation and treatment of adult neurological patients
- ♦ Specialist in the treatment and evaluation of pediatric patients with neurological alterations and collaboration with the virtual reality development programs for physical rehabilitation

Mr. Abeledo, Juan Luis

- ♦ Physiotherapist. Upacesur Foundation
- ♦ Diploma in Physiotherapy
- ♦ Specialist in Hydrotherapy by the UCLM

Dr. Gómez Soriano, Julio

- ♦ Head of the Research Group in Physiotherapy Toledo (GIFTO) University School of Nursing and Physiotherapy of Toledo University of Castilla La Mancha (UCLM)
- ♦ Sensory-Motor function National Hospital of Paraplegics Toledo
- ♦ Diploma in Physiotherapy
- ♦ Degree in Physical Activity and Sports Sciences from UCLM.
- ♦ Master's Degree in Neurological Pathology and PhD from Rey Juan Carlos University

Dr. Pérez Nombela, Soraya

- ♦ Research Group in Physiotherapy Toledo (GIFTO) University of Castilla La Mancha,
- ♦ Diploma in Physiotherapy
- ♦ Master's Degree in Neurological Pathology
- ♦ Specialist in Human Gait Biomechanics, Neurorehabilitation, Robotics and Spinal Cord Injury

Dr Ferrand Ferri, Patricia

- ♦ Specialist in Physical Medicine and Rehabilitation at the Hospital Universitario Virgen del Rocío
- ♦ Degree in Medicine and Surgery
- ♦ Postgraduate Diploma in Child Rehabilitation
- ♦ Area of Work: Children's Rehabilitation. Instrumented Gait Analysis

Mr. Del Barco Gavala, Alberto

- ♦ Degree in Psychology from the University of Granada
- ♦ Master's Degree in Clinical Neuropsychology from the Pablo Olavide University
- ♦ Master's Degree in Neurosciences and Behavioral Biology from the Pablo de Olavide University
- ♦ International Master's Degree Neuroscience and Biology of Behavior from the Autonomous University of Barcelona
- ♦ Specialist in Neuropsychology

Ms. Aguirre Moreno, Arantazu

- ♦ Occupational Therapist at Clinica Galey and Bionika Salud
- ♦ Occupational Therapist at Bionika Salud

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. Ruiz García, Pablo

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

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

- ♦ Physiotherapist at Beato Fray Leopoldo Residence. Rehabilitation Coordinator

Mr. Díez, Óscar

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

Ms. 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. Lafuente, Ignacio

- ♦ Self-Employed Physiotherapist

Dr. Vázquez Sánchez, Fernando

- ♦ Neurologist. Burgos University Hospital

Mr. Entrena, Álvaro

- ♦ Uner Rehabilitation Clinic
- ♦ Physiotherapist

Mr. Lucena Calderón, Antonio

- ♦ Medical Park Rehabilitation Clinic (Bad Feilnbach)
- ♦ Occupational Therapist

Ms. Alba Soto, Alicia

- ♦ Neurological Physiotherapist FISUN Physiotherapy Center

Ms. Arjona Vega, Maria Del Rocío

- ♦ Speech Therapist in San Juan de Dios Hospital, Seville

Ms. Moral Saiz, Beatriz

- ♦ La Salle Functional Rehabilitation Institute
- ♦ Physiotherapist. MSc

Ms. Piñel Cabas, Inmaculada

- ♦ Occupational Neurotherapist
- ♦ Neurointegra

Ms. Campos, Julia

- ♦ Neurophysiotherapist in Neurodem Clinic

Mr. Lozano Lozano, Mario

- ♦ Teacher Researcher
- ♦ Department of Physiotherapy, Faculty of Health Sciences
- ♦ University of Granada

Ms. Salgueiro, Carina

- ♦ Degree in Physiotherapy with specialty in the Bobath Concept in Adults and Onset in Childhood

Ms. Hurtado de Mendoza Fernández, Alba

- ♦ Diploma in Occupational Therapy
- ♦ Master's Degree in Neuroscience
- ♦ Specialty in Cognitive Neuroscience
- ♦ Advanced training in Neurorehabilitation

Ms. Agúndez Leroux, Sandra

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

Ms. Abelleira, Estefanía

- ♦ Neurophysiotherapist
- ♦ Master's Degree in Neurophysiotherapy
- ♦ Basal Stimulation Training
- ♦ Bobath Training
- ♦ Perfetti Training
- ♦ Neurodynamics Training
- ♦ Studies in Social and Cultural Anthropology

Mr. Francisco García, Antonio

- ♦ Home Physiotherapist in Motril
- ♦ Diploma in Physiotherapy from the University of Granada
- ♦ Master's Degree in Neurophysiotherapy from the Pablo Olavide University

Mr. Crespillo, Víctor

- ♦ Psychologist
- ♦ Domus vi sad Sevilla

Dr. Lerma Lara, Sergio

- ♦ Professor and Researcher at La Salle University Center
- ♦ Dean of the Faculty of Health Sciences. La Salle Higher Center for University Studies. UAM
- ♦ Researcher in the Biomedical Research Foundation of the Niño Jesús Children's University Hospital
- ♦ Diploma in Physiotherapy
- ♦ PhD in Physiotherapy



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

The structure of the contents has been designed by a team of professionals from the best educational centers, universities, and companies in the national territory, aware of the relevance of current specialization in order to intervene in the training and support of students, and committed to quality teaching through New Educational Technologies.





“

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

Module 1. ABI

1.1 Defining ABI

- 1.1.1. ABI in Adults
- 1.1.2. ABI in Childhood
- 1.1.3. ABI in Elderly People

1.2. Functional Alterations

- 1.2.1. Tone Alterations
- 1.2.2. Hemineglect
- 1.2.3. Pusher Syndrome
- 1.2.4. Cerebellar Syndrome vs. Basal Ganglia Injury
- 1.2.5. Alien Hand Syndrome
- 1.2.6. Apraxia

Module 2. Assessment of a Patient with ABI

2.1. Pain

- 2.1.1. Comprehensive Pain Assessment
- 2.1.2. Painful Shoulder
- 2.1.3. Neuropathic Pain

2.2. Respiratory System

- 2.2.1. Associated Respiratory Complications
- 2.2.2. Respiratory Physiotherapy

2.3. Epilepsy

- 2.3.1. Injury Prevention
- 2.3.2. Injury Recovery

2.4. Musculoskeletal Complications

- 2.4.1. Comprehensive Assessment
- 2.4.2. Physiotherapy Applied to These Complications
- 2.4.3. Monitoring Injuries

2.5. Complications of Spinal Cord Injury

- 2.5.1. Characteristics of Such Complications
- 2.5.2. Physiotherapy Approach



Module 3. Multidisciplinary Intervention in ABI

- 3.1. Physiotherapy
 - 3.1.1. Ease of Movement
 - 3.1.2. Neurodynamics
 - 3.1.3. Mirror Therapy
 - 3.1.4. Approach in Context
 - 3.1.5. Approach Oriented to the Task
 - 3.1.6. Intensive Treatment
 - 3.1.7. Constraint Induced Movement Therapy
 - 3.1.8. Dry Needling for Spasticity
 - 3.1.9. Therapeutic Exercise
 - 3.1.10. Hydrotherapy
 - 3.1.11. Electrotherapy
 - 3.1.12. Robotics and Virtual Reality
- 3.2. Equipment
 - 3.2.1. Work Models
 - 3.2.2. Medicine
 - 3.2.2.1. Pharmacology
 - 3.2.2.2. Botulinum toxin
 - 3.2.3. Speech Therapy
 - 3.2.3.1. Communication Disorders
 - 3.2.3.2. Swallowing Disorders
 - 3.2.4. Occupational Therapy
 - 3.2.4.1. Autonomy
 - 3.2.4.2. Occupation
 - 3.2.5. Cognitive Deficit Implications on Movement
 - 3.2.6. Neuropsychology
 - 3.2.6.1. Cognitive Domains
 - 3.2.6.2. Behavioral Disorders
 - 2.6.3. Psychological Care for Patients and Their Family

- 3.3. Orthopedics
 - 3.3.1. Orthotics and Support Products
 - 3.3.2. Low-Cost Material
- 3.4. Acute, Subacute and Chronic Phases in ABI
 - 3.4.1. Acute Phase
 - 3.4.2. Subacute Phase
 - 3.4.3. Chronic Phase of ABI



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.



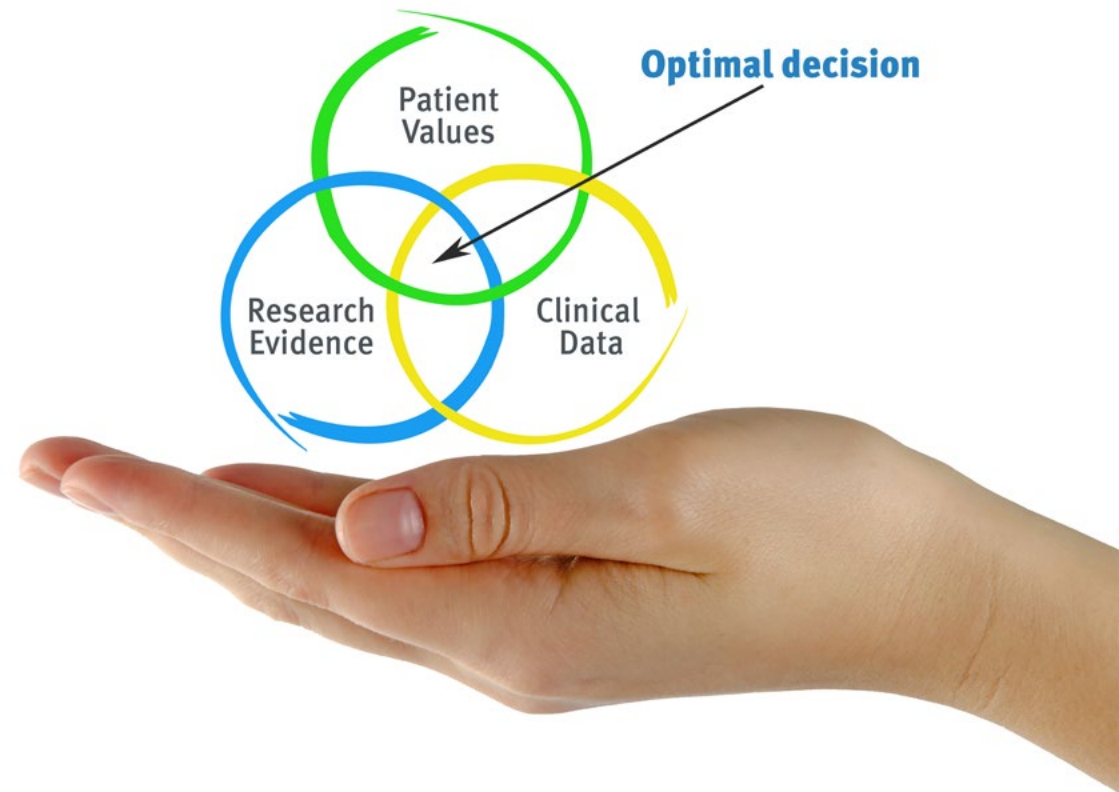
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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, in an attempt to recreate the real conditions in professional nursing 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. Nurses 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 nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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 case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.



The nurse 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 have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical 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 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 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.



Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, 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 them as many times as you want.



Interactive Summaries

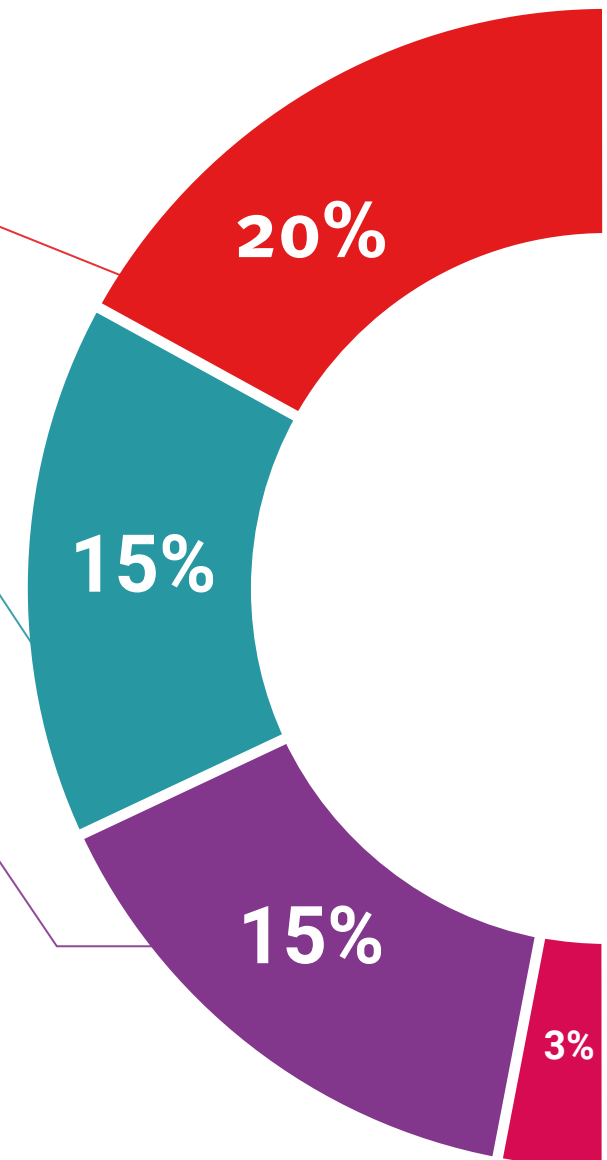
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06 Certificate

The Postgraduate Diploma in Physical Therapy Intervention of Acquired Brain Injury 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.



“

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

This **Postgraduate Diploma in Physical Therapy Intervention of Acquired Brain Injury 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 Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician**

Official N° of hours: 400 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.

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

tech technological
university

Postgraduate Diploma

Physical Therapy
Intervention of Acquired
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Course Modality: **Online**

Duration: **6 months**

Certificate: **TECH Technological University**

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Physical Therapy Intervention of Acquired Brain Injury for the Rehabilitation Physician

