Postgraduate Certificate

Physiotherapy in Advances in Neuroscience in Early Pediatric Care

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Physiotherapy in Advances in Neuroscience in Early Pediatric Care

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Global University**
- Credits: **6 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/physiotherapy/postgraduate-certificate/physiotherapy-advances-neuroscience-early-pediatric-care**

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Introduction

To understand how modern science provides professionals with up-to-date theoretical frameworks, it is important to review all the knowledge that has been developed in the field of motor learning and neuroscience. Studying how children acquire the skills required to function normally in life is an interesting area for physical therapists seeking to improve their techniques and treatments. Therefore, the program in Physiotherapy in Advances in Neuroscience in Early Pediatric Care is highly scientific and in enjoys the endorsement of physiotherapists with extensive experience in the field. Throughout the program, students will learn to recognize the anatomy of the nervous system, as well as its functioning.

With a methodological design based on proven teaching techniques, this Postgraduate Certificate will take you through different teaching approaches to allow you to learn in a dynamic and effective way"

Advances in scientific research have provided pediatric physical therapists with new theoretical and practical perspectives to treat patients. This has resulted in a revision and redefinition of how humans develop and control movement from an early stage, providing a theoretical framework that is based on scientific evidence. It is now possible to better understand what is happening when a child has difficulty performing a normal task.

Based on the information outlined above, it is important to have a program that encourages physical therapists to learn more about this area of study, as this will ensure they can improve patient treatments by making them more effective through a better understanding of their environment. The Postgraduate Certificate in Physiotherapy in Advances in Neuroscience in Early Pediatric Care has been developed by experts in the field to delve into its most important aspects and provide students with the most up-to-date knowledge.

This program will describe the anatomy, functioning and development of the nervous system, as well as plasticity, motor learning and its assessment. The involvement of physiotherapists in the pathology of the nervous system, diagnostic imaging and current evidence on the different methods and techniques will be addressed. Finally, telerehabilitation will be discussed from the perspective of the Covid-19 pandemic situation, what is currently understood as telerehabilitation, as well as the advantages and disadvantages and the patients that qualify for it.

The extensive experience of the teaching staff and their training in the field of child physiotherapy, both nationally and internationally, positions this program above others on the market, so graduates will have an excellent reference. Both the course manager and the professors on the program will put their knowledge and professional experience at the disposal of students in a practical manner. Therefore, this course will give you fast-track knowledge on all aspects related to Physiotherapy in area of Neuroscience.

A 100% online Postgraduate Certificate that provides students with the ease of being able to study it comfortably, wherever and whenever suits them best. All you need is a device with Internet access to take your career one step further. A modality in keeping with the current times and all the guarantees to position Physiotherapists in a highly demanded field.

This **Postgraduate Certificate** in **Physiotherapy in Advances in Neuroscience in Early Pediatric Care** offers the advantages of a high-level scientific, teaching, and technological program. These are some of its most notable features:

- The latest technology in online teaching software
- Intensely visual teaching system, supported by graphic and schematic contents, easy to assimilate and understand
- Practical cases presented by practicing experts
- State-of-the-art interactive video systems
- Teaching supported by telepractice
- Continuous updating and recycling systems
- Autonomous learning: full compatibility with other occupations
- Practical exercises for self-evaluation and learning verification
- Support groups and educational synergies: questions to the expert, debate and knowledge forums
- Communication with the teacher and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection
- Supplementary documentation databases are permanently available, even after students complete the program

This Postgraduate Certificate differs from others in its theoretical and practical content and the extensive professional experience of its faculty”

An effective and reliable Postgraduate Certificate that will take you through an interesting learning process, so you acquire all the knowledge of an expert in the field"

With an innovative concept of telepractice, the program offers the opportunity to learn through an immersive learning experience that adapts to student needs.

A unique opportunity to specialize and stand out in a highly in-demand sector for professionals.

The program's teaching staff includes professionals from the sector who contribute their work 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 purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Objectives

This Postgraduate Certificate has been created from start to finish to be a tool for personal and professional growth for physiotherapists by gaining deeper insight into the key medical advances in Neuroscience in Early Pediatric Care. The knowledge poured into the syllabus will provide professionals with a global perspective and comprehensive training to achieve the proposed objectives. You will fully develop skills in identifying the anatomy of the nervous system and its involvement in motor learning, as well as interpreting the results of image testing. To this end, TECH establishes a series of general and specific objectives to fulfill future graduates' expectations.

Become the best professional by updating your knowledge in Neuroscience applied to physiotherapy"

General Objectives

- Facilitate specializing in Physiotherapy in Early Care
- Reinforce the importance of the role of the family
- Acquire extensive knowledge of normal and pathological development in children
- Describe the assessment and evaluation methods used in Early Care Physiotherapy
- Gain detailed knowledge of frequent childhood pathologies
- Recognize methods, techniques and tools used in Early Care treatments

Specific Objectives

- Recognize the anatomy of the nervous system
- Know the functioning of the nervous system
- Know how to assess the nervous system
- Gain an in-depth understanding of motor learning
- Identify methods based on scientific evidence
- Interpret imaging test results
- Identify the cases where telerehabilitation is feasible

Knowledge in Neuroscience helps physiotherapists better understand the function of the nervous system and its involvement in motor learning"

03

Structure and Content

The syllabus has been designed based on the principles of Physiotherapy in Advances in Neuroscience in Early Pediatric Care, which will allow students to identify and become familiar with how the nervous system functions. As such, the syllabus consists of modules that offer a broad perspective of the treatments and pathologies suffered by infants. From module 1, students will see their knowledge broadened, which will enable them to develop professionally, knowing that they can count on the support of a team of experts.

Identify and recognize key brain structures in children's motor learning while completing an excellent academic program"

Module 1. Advances in Neuroscience Pediatrics

1.1. Central Nervous System (CNS) Anatomy
- 1.1.1. Neuroanatomy
- 1.1.2. Fundamental CNS Structures

1.2. CNS Functioning
- 1.2.1. CNS Neurophysiology
- 1.2.2. Neuronal Synapses

1.3. CNS Development
- 1.3.1. Stages of CNS Development
- 1.3.2. Critical and Developmentally Sensitive Periods

1.4. Brain Plasticity
- 1.4.1. Neuronal Plasticity
- 1.4.2. CNS Characteristics that Promote Plasticity
- 1.4.3. Structural and Functional CNS Changes
- 1.4.4. Potentiation and Long-Term Depression

1.5. CNS Evaluation

1.6. Motor Learning

1.7. Physiotherapist Involvement in CNS Pathology

1.8. Evidence for Methods and Techniques in Neurorehabilitation

1.9. Diagnostic Imaging

1.10. Telerehabilitation
- 1.10.1. What Is Currently Understood by Telerehabilitation?
- 1.10.2. Which Cases Can Benefit from Teleintervention?
- 1.10.3. Advantages and Disadvantages

This academic program will provide didactic guidance so students develop their skills through high impact learning"

04

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

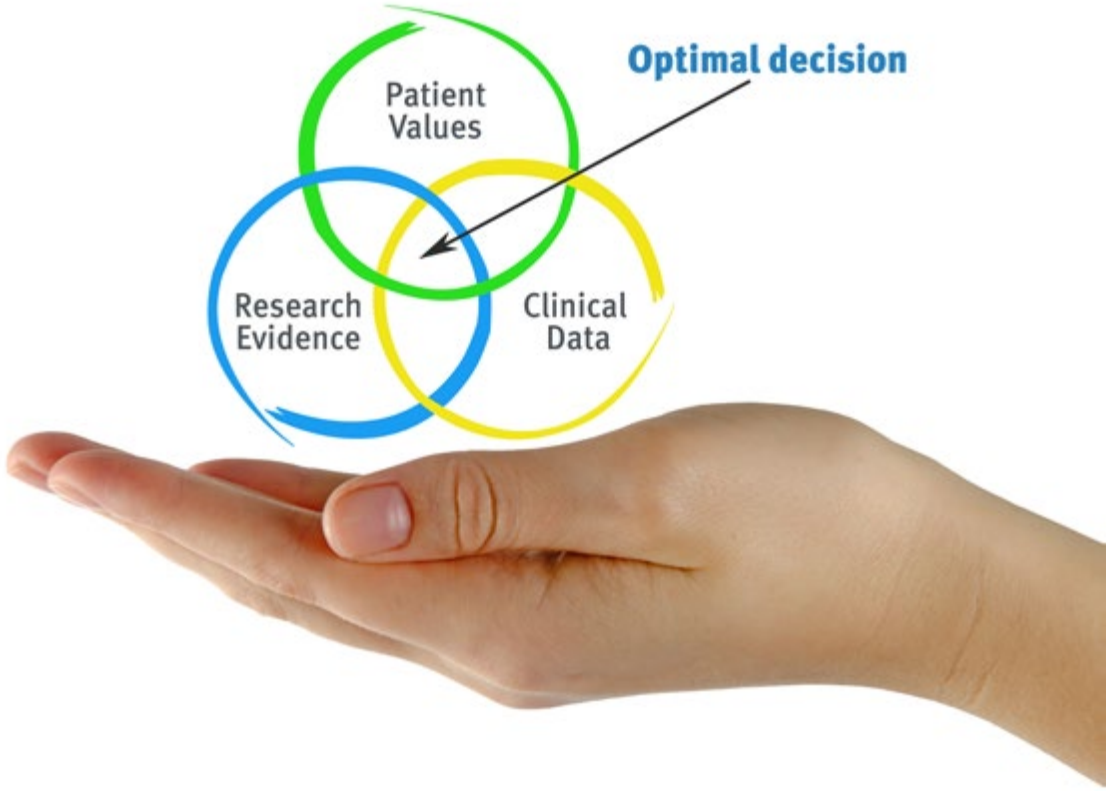
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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:

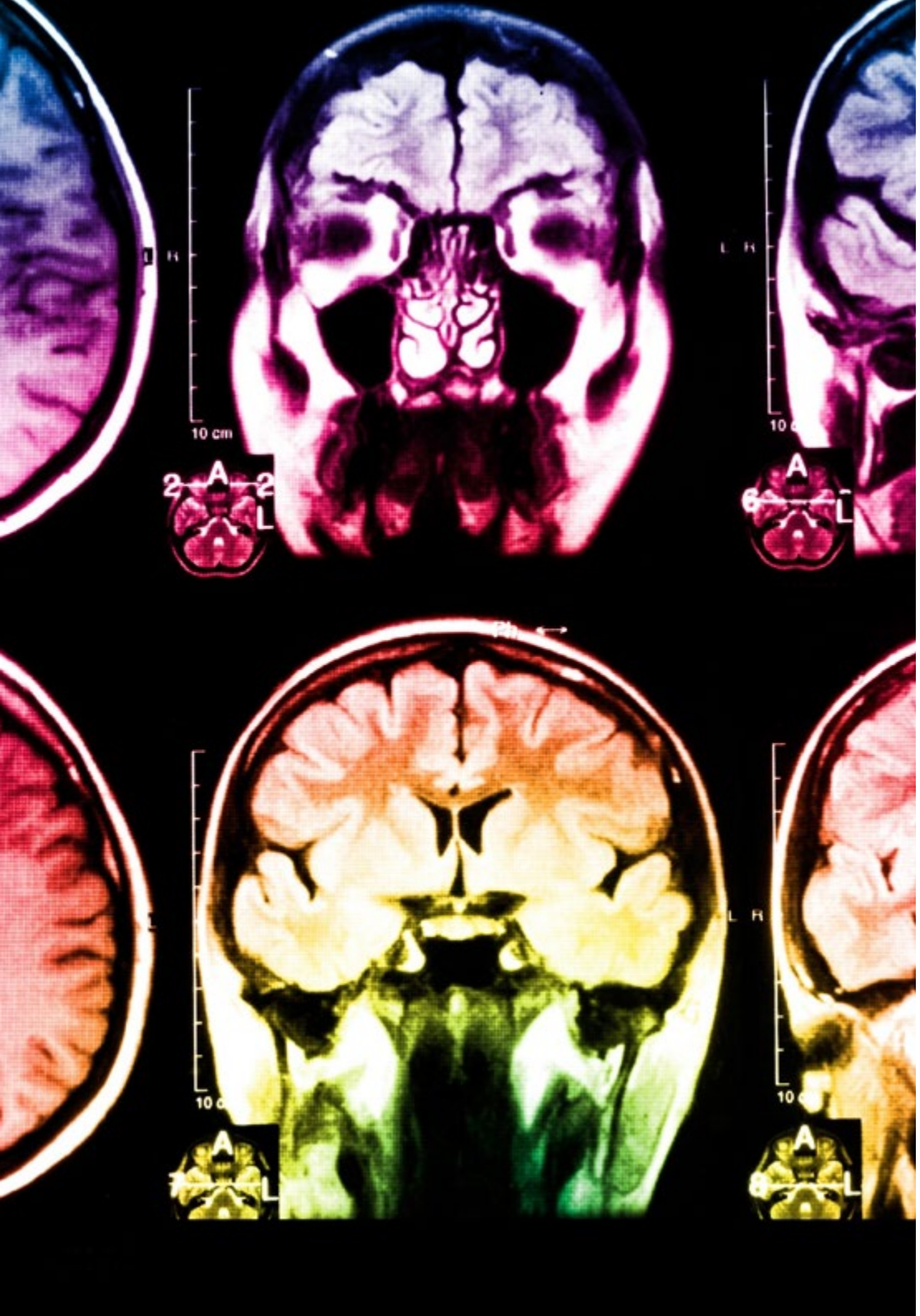
1. Physiotherapists/kinesiologists who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the physiotherapist/kinesiologist to better integrate 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.



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we trained more than 65,000 physiotherapists/kinesiologists with unprecedented success in all clinical specialties, regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Physiotherapy Techniques and Procedures on Video

TECH brings students closer to the latest techniques, the latest educational advances and to the forefront of current Physiotherapy techniques and procedures. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.

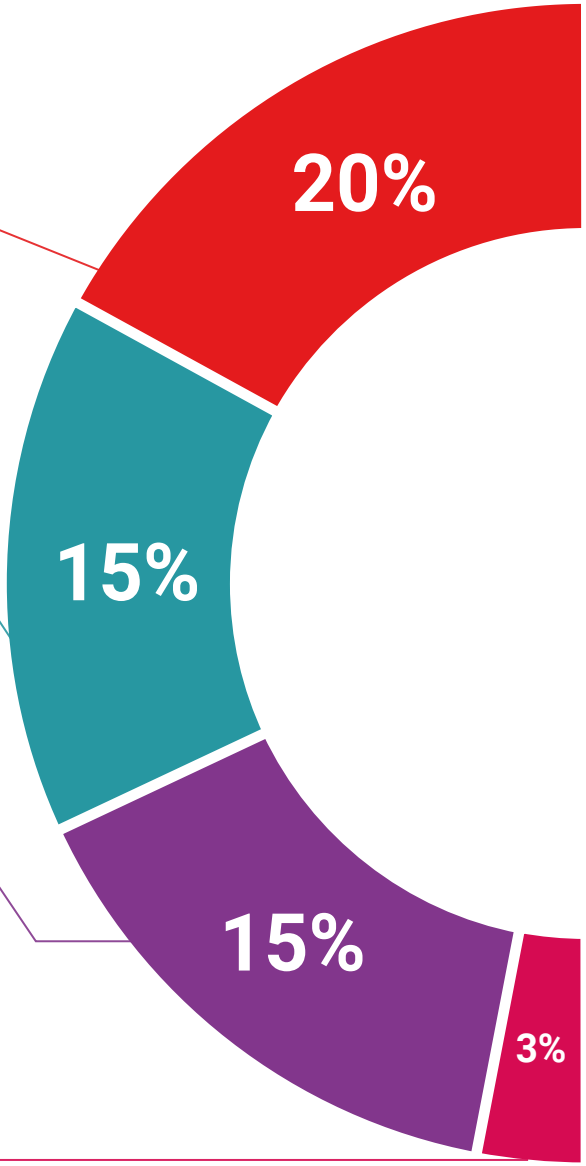
Interactive Summaries

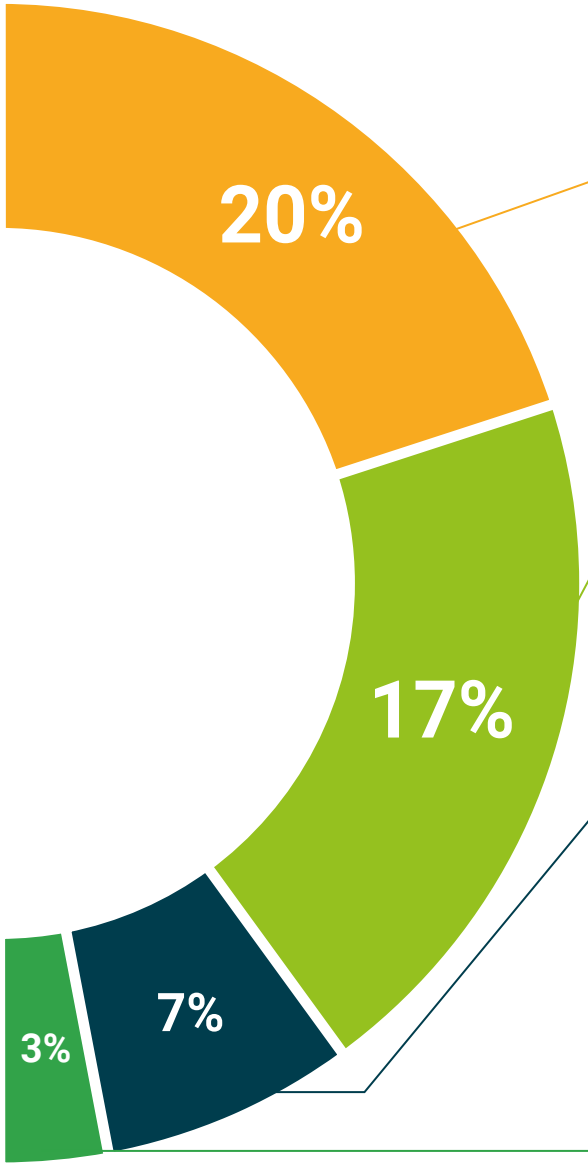
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

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





Expert-Led Case Studies and Case Analysis

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

Testing & Retesting

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

Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Quick Action Guides

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

05

Certificate

The Postgraduate Certificate in Physiotherapy in Advances in Neuroscience in Early Pediatric Care guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

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

This program will allow you to obtain your **Postgraduate Certificate in Physiotherapy in Advances in Neuroscience in Early Pediatric Care** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (***official bulletin***). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Physiotherapy in Advances in Neuroscience in Early Pediatric Care**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**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Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Physiotherapy in Advances in Neuroscience in Early Pediatric Care

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

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 diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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