

# Postgraduate Diploma

## Advances in Physiotherapy in Early Pediatric Care





## Postgraduate Diploma Advances in Physiotherapy in Early Pediatric Care

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

Website: [www.techtute.com/us/physiotherapy/postgraduate-diploma/postgraduate-diploma-advances-physiotherapy-early-pediatric-care](http://www.techtute.com/us/physiotherapy/postgraduate-diploma/postgraduate-diploma-advances-physiotherapy-early-pediatric-care)

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# 01

# Introduction

Pediatric physiotherapy has always sought to reestablish damaged motor functions in children, guiding them during development through psychomotor and neuromotor stimulation. Not only does it play a fundamental role in treatment, but also in preventing health problems that can develop in early ages. Therefore, learning about the advances in this area helps professionals to improve their diagnostic and treatment techniques. This program in Advances in Physiotherapy in Early Pediatric Care delves into the anatomy, functioning and development of the nervous system, as well as plasticity, motor learning and its evaluation, among other issues of great interest to physiotherapists.





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*With a real practical objective, this Postgraduate Diploma enables students to achieve their educational goals by propelling their careers to excellence”*

During childhood, different pathologies can be triggered that affect the motor development of children. In these cases, pediatric physiotherapy seeks to treat and care for infants who present a problem in their environment. These professionals are responsible for planning the most appropriate intervention for the child's situation, always considering the entire biopsychosocial situation.

To do this, physiotherapists have numerous resources at their disposal, such as movements, strength-building exercises, respiratory techniques, and others. Based on this, it is essential to have a program that encourages professionals to continue their studies in the field. As such, the Postgraduate Diploma in Advances in Physiotherapy in Early Pediatric Care delves into the important aspects of the field, providing in-depth knowledge through a program developed by experts in the sector.

The program stands out for dealing with topics ranging from the generality of the specialty, the normal development of children and the different pathologies that may occur and require physiotherapist care. Likewise, this Postgraduate Diploma seeks to guide physiotherapists through the functions required in Early Care, as well as to provide them with therapeutic tools and essential knowledge useful for professional work.

The teaching staff have extensive experience and training, both on a national and international scale, in the field of child physiotherapy, which positions this Postgraduate Diploma above others in the market, so graduates will have an excellent reference. Both the course director and the professors will put their knowledge and professional experience at the students' disposal in a practical manner. Therefore, this course will give you fast-track knowledge on all aspects related to Physiotherapy in Early Care.

A 100% online Postgraduate Diploma that provides students with the opportunity to study 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 establish professionals in a highly demanded field.

This **Postgraduate Diploma in Advances in Physiotherapy 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
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are 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 the program



*Get up to date on all the latest developments in the field of physiotherapy by completing the most effective program on the subject available on the market"*

“*Cutting-edge training created to propel you toward greater competitiveness in the job market”*

The program’s teaching staff includes professionals from the sector who contribute their work experience to this 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.

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

*A Postgraduate Diploma created for physiotherapy professionals, which will allow you to balance your studies with other professional responsibilities and access the course from any location with total flexibility.*



# 02 Objectives

This Postgraduate Diploma has been created from start to finish to be a tool for personal and professional growth for physiotherapists by allowing them to gain deeper insight into the key medical advances in early care physiotherapy. The knowledge poured into the syllabus will provide professionals with a global perspective and comprehensive training to achieve the proposed objectives. You will develop the ability to assess children's motor skills and establish the appropriate treatment, focusing also on their family environment. To this end, TECH establishes a series of general and specific objectives to fulfill future graduates' expectations.







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*A comprehensive and practical Postgraduate Diploma that will allow you to learn everything you need to work as a physiotherapist in early care in a realistic and direct way”*



## General Objectives

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- 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



*Highly specialized objectives in a qualification created to train the best professionals in the Advances in Physiotherapy in Early Pediatric Care”*





## Specific Objectives

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### Module 1. Advances in Neuroscience Pediatrics

- ◆ 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

### Module 2. Pediatric Evaluation

- ◆ Learn how to evaluate and assess motor skills in children
- ◆ Have in-depth knowledge of the different assessment scales
- ◆ Identify the purpose of each scale
- ◆ Identify the cases where each scale can be used
- ◆ Know how to pass the scales
- ◆ Interpret the information obtained during the assessment

### Module 3. New Perspectives in Early Care

- ◆ Thoroughly understand animal therapy
- ◆ Acquire knowledge of sensory stimulation
- ◆ Expose the problem of childhood obesity and its consequences
- ◆ Learn what pre- and post-natal stimulation consists of and how to conduct a standard session
- ◆ Present options for social participation in disability
- ◆ Apply the Newborn Individualized Developmental Care and Assessment Program (NIDCAP)
- ◆ Present new technologies as therapeutic options MHELP, virtual reality, etc
- ◆ Carry out evidence-based treatments

# 03

## Structure and Content

The syllabus has been designed based on the principles of Physiotherapy in Early Care, following the guidelines proposed by the teaching team. Accordingly, the curriculum 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 promote their professional development, knowing that they can count on the support of a team of experts.





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*A comprehensive syllabus that will gradually take you through each and every one of the advances in Physiotherapy in Early Pediatric Care that professionals need to learn. With an added bonus: the commitment to excellence that characterizes us”*

## 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

## Module 2. Pediatric Evaluation

- 2.1. Motor Assessment
- 2.2. Gait Assessment
  - 2.2.1. Observation
  - 2.2.2. Warning Signs
  - 2.2.3. Scales
- 2.3. Muscle Tone Assessment
  - 2.3.1. Observation
  - 2.3.2. Warning Signs
  - 2.3.3. Scales
- 2.4. Upper Limb Activity Assessment
  - 2.4.1. Observation
  - 2.4.2. Warning Signs
  - 2.4.3. Scales
- 2.5. Musculoskeletal and Hip Assessment
- 2.6. Fine and Gross Motor Skills Assessment
- 2.7. Gross Motor Function Measure
- 2.8. General Motor Skills Screening: MABC-2 in Children 3 to 6 Years Old
- 2.9. Motor Development Scales: Bayley Scales of Infant and Toddler Development-3 y  
Peabody Developmental Motor Scales-2
- 2.10. Questionnaires: ASEBA and Strengths and Difficulties Questionnaire



### Module 3. New Perspectives in Early Care

- 3.1. Animal-Assisted Therapies
  - 3.1.1. Conceptualization of Animal-Assisted Therapies
  - 3.1.2. Use in Early Care
- 3.2. Sensory Stimulation
  - 3.2.1. The Sensory Stimulation Room
  - 3.2.2. Physiotherapy Use in Early Care
  - 3.2.3. Differences between Sensory Stimulation and Sensory Integration
- 3.3. Childhood Obesity
- 3.4. Pre- and Postnatal Stimulation
- 3.5. Social Participation
  - 3.5.1. The Importance of Social Participation in Disability
  - 3.5.2. The Role of Physiotherapy in Social Participation
- 3.6. Inclusive Spaces and Playgrounds
  - 3.6.1. The Objectives behind Inclusive Spaces and/or Inclusive Playgrounds
  - 3.6.2. The Role of Physiotherapy in Creating Such Spaces and/or Playgrounds
- 3.7. Newborn Individualized Developmental Care and Assessment Program (NIDCAP)
- 3.8. Therapeutic Web and Mobile MHELP Applications
- 3.9. New Technologies (Virtual and Immersive Reality)
- 3.10. Evidence-Based Intervention
  - 3.10.1. Databases and Search Engines
  - 3.10.2. Search Keywords
  - 3.10.3. Scientific Journals
  - 3.10.4. Scientific Articles
  - 3.10.5. Evidence-Based Practice



*A comprehensive teaching program, structured in well-developed units, oriented toward a high impact learning and training experience”*

# 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.







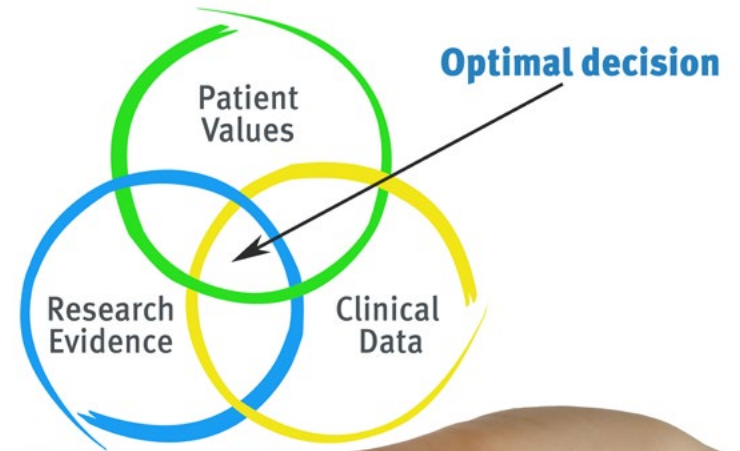
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## 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. 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.

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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. 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

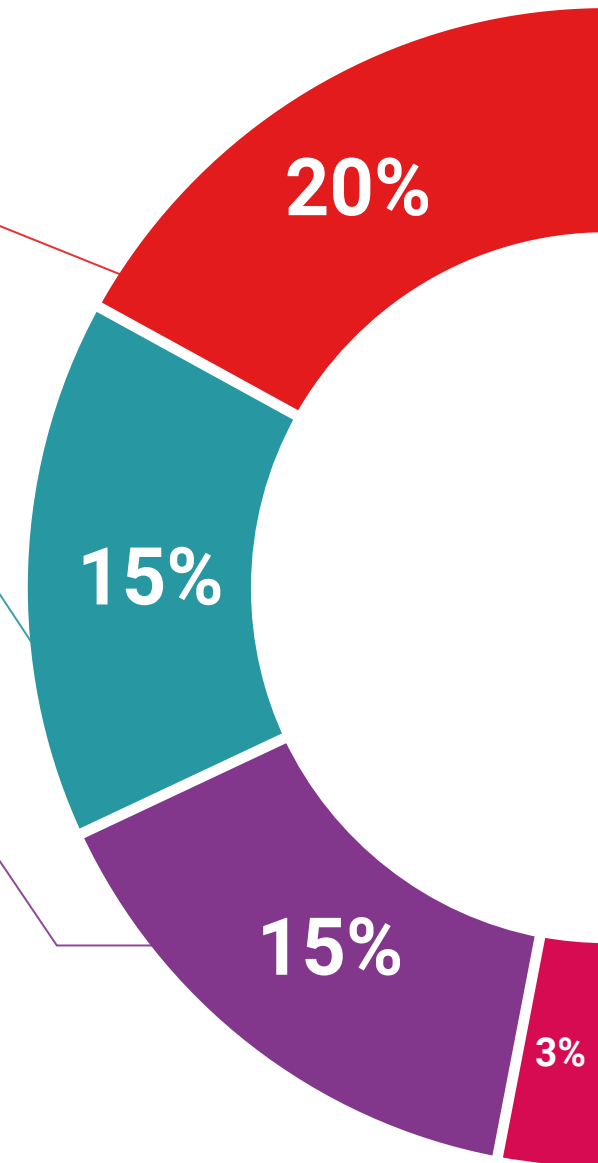
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

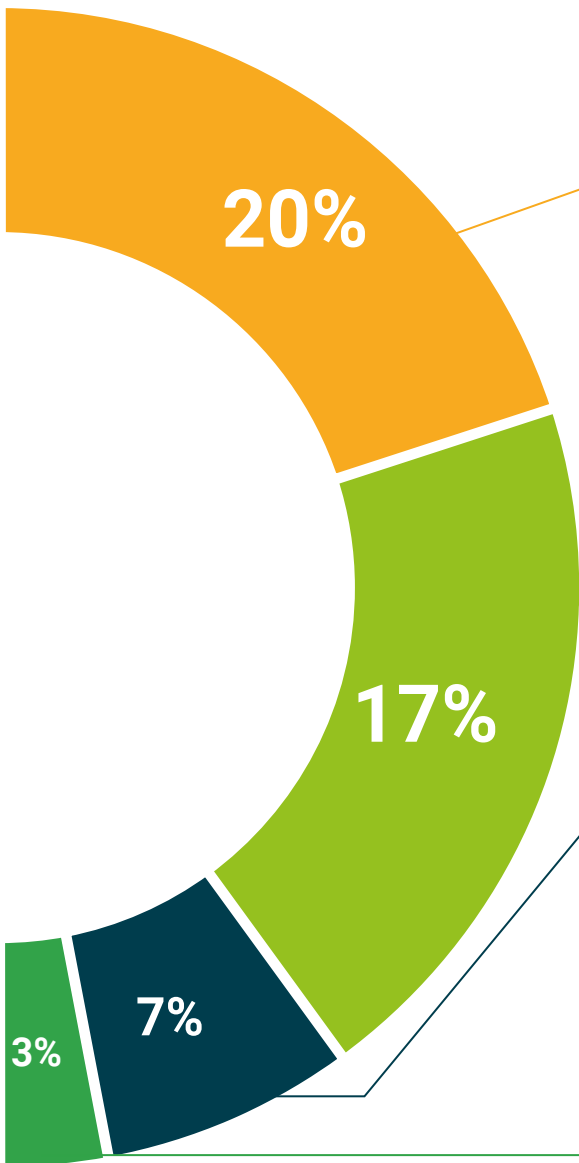
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### 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 Diploma in Advances in Physiotherapy in Early Pediatric Care 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”*

This **Postgraduate Diploma in Advances in Physiotherapy in Early Pediatric Care** 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 from career evaluation committees.

Title: **Postgraduate Diploma in Advances in Physiotherapy in Early Pediatric Care**

Official Number 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.

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



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