

# Postgraduate Diploma

Cardiorespiratory System, Pediatrics,  
Pelvic Floor and Neurorehabilitation





## Postgraduate Diploma

### Cardiorespiratory System, Pediatrics, Pelvic Floor and Neurorehabilitation

Course Modality: **Online**

Duration: **6 months**

Accreditation: **TECH Technological University**

Official N° of Hours: **450 h.**

Website: [www.techtute.com/physiotherapy/postgraduate-diploma/postgraduate-diploma-cardiorespiratory-system-pediatrics-pelvic-floor-neurorehabilitation](http://www.techtute.com/physiotherapy/postgraduate-diploma/postgraduate-diploma-cardiorespiratory-system-pediatrics-pelvic-floor-neurorehabilitation)

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# 01

# Introduction

This program will address the most common pelvic floor disorders. Pelvic floor anatomy and pathophysiology will be reviewed, addressing the most common pathologies that are referred to the primary care service, as well as personalized and group treatments. Likewise, this program focuses on pediatric physiotherapy, since it is of vital importance to know the most common pediatric pathologies, many of which are treated in primary care in the more chronic stages. At the same time, the cardiorespiratory system and neurorehabilitation will be studied in depth. A complete program designed by professionals with extensive experience in the sector, which will allow you to achieve professional excellence.





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*A comprehensive and practical program that will allow you to learn everything you need to work as a physiotherapist in a real and direct way”*

Primary care is the most elementary health care and, at the same time, the most important area for health promotion, disease prevention and control in early stages.

Physiotherapists are part of a multidisciplinary team made up of a wide variety of professionals, so they must know how the system works in order to adapt quickly to it. It is important, in turn, to master the theoretical-practical content of their specialty in order to deliver effective and quality work.

Each of our professors has a different specialty and training, which, coupled with their experience in the sector, will make the content more varied, considering different points of view and always oriented toward students expanding their knowledge regardless of their background.

What makes this program different from the rest is the collaborative work put into the different specialties that make up the theoretical-practical content, including up-to-date studies and analyses in Primary Care.

This Postgraduate Diploma seeks to guide physiotherapists through the functions required in Primary Care, as well as to provide them with therapeutic tools and essential knowledge useful for professional work.

This **Postgraduate Diploma in Cardiorespiratory System, Pediatrics, Pelvic Floor and Neurorehabilitation** offers the advantages of a high-level scientific, teaching, and technological course. 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"*

“*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”*

Our teaching staff is made up of working professionals. In this way we ensure that we deliver the educational update we are aiming for. A multidisciplinary team of professionals trained and experienced in different environments, who will impart the theoretical knowledge in an efficient way, but above all, who will bring their practical knowledge from their own experience to the program: one of the differential qualities of this training.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Diploma. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use *telepractice*: With the help of an innovative, interactive video system and *Learning from an Expert*, students will be able to acquire the knowledge as if they were dealing with the case they are studying in real time. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

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

*Our innovative telepractice concept will give you the opportunity to learn through an immersive experience, which will provide you with a faster integration and a much more realistic view of the contents: “Learning from an expert”.*



# 02 Objectives

This comprehensive Postgraduate Diploma has been created from start to finish to become a tool for personal and professional growth for physiotherapists. Its objective is to take you through a training course that will allow students to acquire the most up-to-date knowledge and techniques for the most advanced and competitive practice in this field.







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*With a real practical objective, this program will allow you to achieve your educational goals while boosting your CV to a higher level of excellence”*



## General Objectives

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- ◆ Know how to frame the physiotherapist in Primary Care
- ◆ Accumulate the necessary knowledge for good professional practice within the Health System
- ◆ Broaden the necessary tools to face the demands faced in physiotherapy room and take a holistic approach to treatment
- ◆ Design preventive work to improve patient quality of life and promote a correct use of the Health System





## Specific Objectives

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### Module 1. Neurophysiology of Pain and Neurorehabilitation

- ♦ Understand the fundamental characteristics of the nervous system
- ♦ Unravel the concept of pain at a physiological level
- ♦ Describe the different impulses and fiber types
- ♦ Explain the different neurological pathologies treated in primary care
- ♦ Know the different specific neurological assessment protocols, including validated scales applicable in primary care
- ♦ Explain different active and passive treatments from the most prominent neurological schools to date

### Module 2. Physiotherapy in Pediatrics and Pelvic Floor

- ♦ Describe and provide guidance for the use of pelvic floor techniques in Primary Care
- ♦ Enrich students with different points of view and different disciplines within physiotherapy
- ♦ Describe the psychomotor evolutionary development of children

### Module 3. Cardiorespiratory System

- ♦ Provide knowledge and theoretical foundations of cardiopulmonary anatomy
- ♦ Study the relation with other nearby systems and their modifications
- ♦ Develop a way of assessing patients more holistically than structurally
- ♦ Assess the functionality of cardiopulmonary exercises and include them among common treatments
- ♦ Become deeply familiar with patient portfolios presenting these affectations in Primary Care, as well as the evaluation and treatment criteria
- ♦ Analyze the role played by respiratory physiotherapy during the COVID-19 pandemic



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

03

# Course Management

For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.





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*With the expertise of industry professionals who will teach you based on the reality of the sector in a contextual and realistic learning”*

## Management



### **Ms. García Sierra, Ana**

- Physiotherapist, Aragonese Health Service Alcañiz Regional Hospital
- Degree in Physiotherapy, University of Valencia-Ostravská Univerzita, Czech Republic
- Master's Degree in Orthopedic Manual Therapy Autonomous University of Madrid
- Studies in Occupational Therapy, Catholic University of Valencia
- Physiotherapist, Pilates Zentro and Physical Therapy
- Physiotherapist, Policlinic Madrid Sur

## Professors

### Mr. Barat Torres, Adrián

- ◆ Podiatry Service, Picanya Medical Center
- ◆ Graduate in Physiotherapy
- ◆ Podiatrist and Physiotherapist, Fisiosalut Alzira S.L.
- ◆ Podiatrist and Physiotherapist, Arturo Gil Physiotherapy Clinic
- ◆ Podiatry Service, Asiger Playa-NovaCanet Residential Complex

### Ms. Oltra Espí, Maite

- ◆ Graduate in Physiotherapy University of Valencia
- ◆ Physiotherapist, David Marcos Clinic, Villalonga
- ◆ Apta Vital Sport Specialist in Clinical Pilates in Physiotherapy
- ◆ I.A.O. Advanced Technician in Structural Osteopathy

### Mr. Torres Maestro, Ferran

- ◆ Physiotherapist and Fisiocity.es Founder
- ◆ Degree in Physiotherapy, University of Valencia
- ◆ Master's Degree in Physiotherapy and Disability University of Almeria
- ◆ Expert Certificate in Neurological Physiotherapy Rey Juan Carlos University
- ◆ Physiotherapist, Fisiohogar



*An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed”*

# 04

# Structure and Content

The contents of this Postgraduate Diploma have been developed by the different professors on the program with a clear purpose: to ensure our students acquire each and every one of the necessary skills to become true experts in this field. A complete and well-structured program that will take you to the highest standards of quality and success.







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*A comprehensive syllabus that will take you gradually through each and every one of the lessons that the professional sports physiotherapist needs. With an added bonus: The commitment to excellence that characterizes us”*

## Module 1. Neurophysiology of Pain and Neurorehabilitation

- 1.1. Organization of the Nervous System
- 1.2. Transmission and Fibers
  - 1.2.1. Afferent Pathway
  - 1.2.2. Efferent Pathway
- 1.3. Types of Pain
  - 1.3.1. Visceral Pain
  - 1.3.2. Somatic Pain
  - 1.3.3. Neuropathic Pain
  - 1.3.4. Features of Acute and Chronic Pain
- 1.4. Neurological Involvement
- 1.5. Assessing Neurological Involvement
- 1.6. Physiotherapy in Central Nervous System Disorders
- 1.7. Physiotherapy in Peripheral Nervous System Disorders
- 1.8. Active Therapy Treatment
- 1.9. Manual Therapy Treatment

## Module 2. Physiotherapy in Pediatrics and Pelvic Floor

- 2.1. Abdomino-Pelvic Anatomy and Physiology
- 2.2. Perineal Physiopathology
- 2.3. Treatment Techniques
- 2.4. Pelvis and Pelvic Floor Exercises
- 2.5. Specific Treatment Programs
- 2.6. Introduction to Pediatric Physiotherapy
- 2.7. Psychomotor Development Assessment
- 2.8. Physiotherapeutic Approach
- 2.9. Pediatric Respiratory Physiotherapy
- 2.10. Child Orthoses





### Module 3. Cardiorespiratory System

- 3.1. Anatomical and Physiological Basis of the Respiratory and Cardiac Systems
- 3.2. Types of Respiratory Pathologies
- 3.3. Evaluation of the Respiratory System
- 3.4. Respiratory Physiotherapy Techniques in Primary Care: Ventilation Reeducation
- 3.5. Respiratory Physiotherapy Techniques in Primary Care: Secretion Drainage
- 3.6. Respiratory Physiotherapy Techniques in Primary Care: Cardiorespiratory Training and Directed Exercises
- 3.7. Respiratory Physiotherapy Techniques in Primary Care: Aerosols and Mechanical Ventilators
- 3.8. Treating Obstructive Pathologies
- 3.9. Treating Restrictive Pathologies
- 3.10. Physiotherapy in Primary Care and COVID-19

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

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# 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

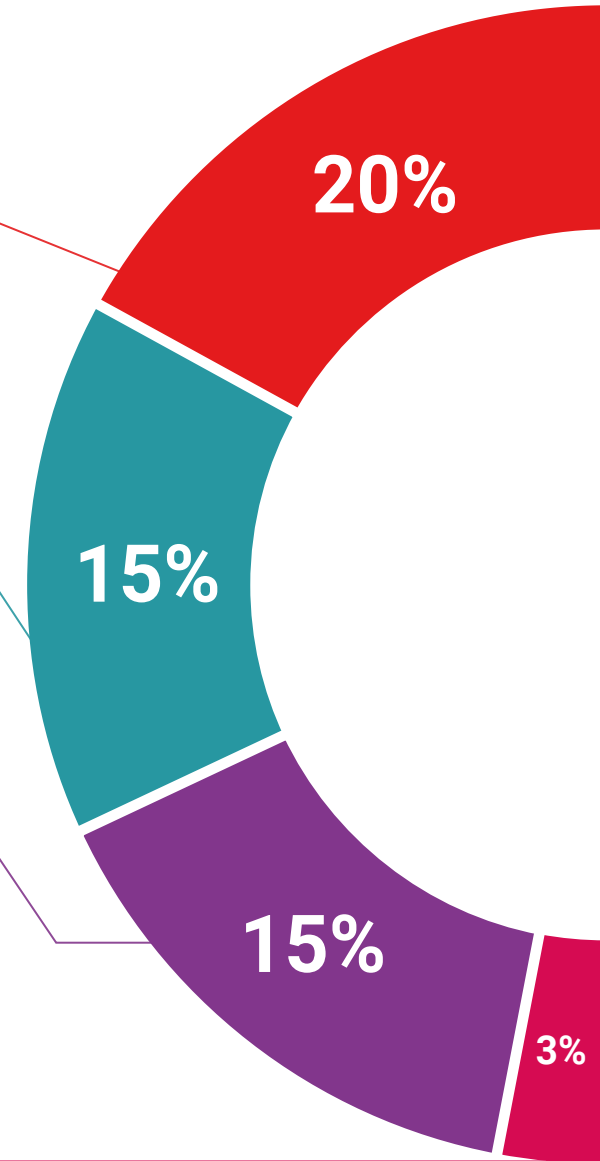
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

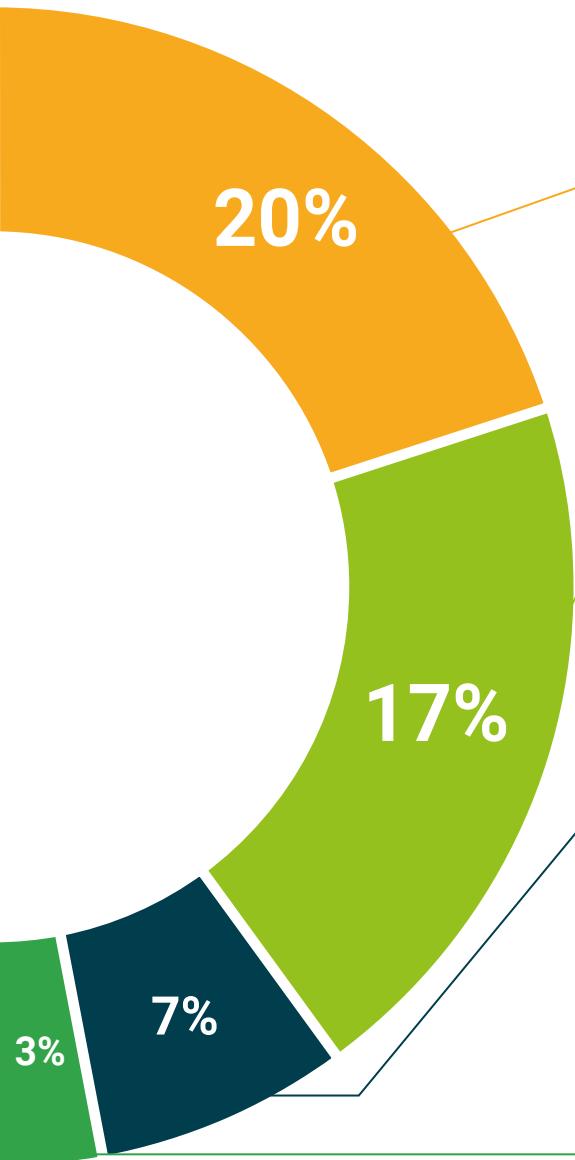
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### 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.



06

# Certificate

The Postgraduate Diploma in Cardiorespiratory System, Pediatrics, Pelvic Floor and Neurorehabilitation 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 Certificate in Cardiorespiratory System, Pediatrics, Pelvic Floor and Neurorehabilitation** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Cardiorespiratory System, Pediatrics, Pelvic Floor and Neurorehabilitation**

Official N° of Hours: **450 h.**



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

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online training

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university

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