

Postgraduate Diploma

Pediatric Respiratory Physiotherapy and Assessment



Postgraduate Diploma Pediatric Respiratory Physiotherapy and Assessment

- » 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-pediatric-respiratory-physiotherapy-assessment

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01

Introduction

Pediatric respiratory physiotherapy is part of physiotherapy, but focusing on the pathophysiology of the respiratory system in children and infants, both medical and surgical, requiring a demanding knowledge of the respiratory system and the existing techniques for treatment, healing and stabilization of the latter.

With this intensive program you will specialize in pediatric respiratory physiotherapy, under the guidance of experts with extensive experience in the sector.





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A complete and practical Postgraduate Diploma that will allow you to learn in a real and direct way everything you need to work as a physiotherapist"

The disciplinary consideration of respiratory physiotherapy with a scientific-technical basis began in the late twentieth century, thanks to technological advances that allow measuring respiratory work and techniques, and is currently becoming necessary and essential in different hospital units. Therefore, it is essential that physical therapists update their knowledge in respiratory physiotherapy and acquire new techniques and tools to apply in their daily practice.

Physiotherapy is considered one of the therapeutic pillars in the management of patients with pulmonary diseases, whether obstructive or restrictive, chronic or acute.

The increase in the incidence of respiratory pathologies that we are going to see during this Postgraduate Diploma, both in children and adults, considerably affects the quality of life of the patients who suffer from them, as well as our health system, with a high social and economic cost due to hospitalization days, sick leave and early death.

The Postgraduate Diploma has a teaching staff specialized in respiratory physiotherapy, who contribute both their practical experience in their day-to-day work in private practice, as well as their lengthy experience in teaching at national and international level. In addition, it has the advantage of being a 100% online specialization, so the student can decide from where to study and at what time to do it, this way, they can flexibly self-direct their study hours.

This online Postgraduate Diploma offers you the benefits of a scientific, teaching and technological high-level course. These are some of its most notable features:

- ♦ Latest technology in online teaching software.
- ♦ Highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand.
- ♦ Practical cases presented by practising experts.
- ♦ State-of-the-art interactive video systems.
- ♦ Teaching supported by telepractice.
- ♦ Continuous updating and recycling systems.
- ♦ Self-regulating 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 course.



Get up to date in all the latest developments in the field of physiotherapy by completing the most effective Postgraduate Diploma in this field available on the market"

“*An effective and reliable Postgraduate Diploma that will take you through an interesting and efficient learning process so that 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 specialization and experienced in different environments, who will cover the theoretical knowledge in an efficient way, but, above all, will put the practical knowledge derived from their own experience at the service of the course: one of the differential qualities of this program.

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. In this way, you will be able to study with a range of easy-to-use and versatile multimedia tools that will give you the necessary skills you need for your specialization.

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, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent 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”

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



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 specialization course that will allow you 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 Postgraduate Diploma will allow you to achieve your Educational goals by boosting your CV to excellence"



General Objective

- ♦ Promote specialization in respiratory physiotherapy.
- ♦ Update knowledge and manage physiotherapy in different patients with respiratory pathologies.
- ♦ Possess knowledge of the pathophysiology and advanced exploration of the respiratory system.
- ♦ Execute, direct and coordinate the respiratory physiotherapy intervention plan for each patient.





Specific Objectives

Module 1.

- ♦ Understand the respiratory physiology of the child in depth.
- ♦ Manage the physiotherapeutic assessment in the pediatric patient.
- ♦ Apply the non-instrumental techniques of infant respiratory physiotherapy.
- ♦ Manage respiratory training activities at home.

Module 2.

- ♦ Be up-to-date in different respiratory pathologies in children.
- ♦ Gain a deeper knowledge of pediatric respiratory emergencies.
- ♦ Apply the instrumental techniques of infant respiratory physiotherapy.
- ♦ Delve into the treatment of physical therapy in pediatric palliative care.

Module 3.

- ♦ Delve into ventilatory biomechanics.
- ♦ Apply different techniques for exploration.
- ♦ Apply different complementary tests for a correct assessment.



Highly specialized objectives in an education created to train the best professionals in Respiratory Physiotherapy"

03

Course Management

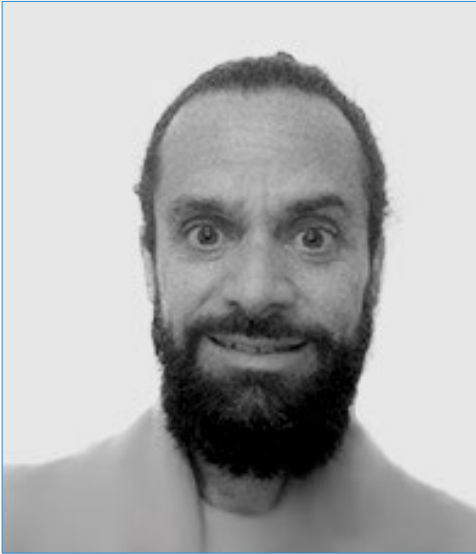
For our course to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.



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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



Dr. García Coronado, Luis Pablo

- Physiotherapist at La Paz University Hospital
- Supervisor of the Physiotherapy Department at La Paz University Hospital.
- Specialist in sports Physiotherapy, Re-training, electrotherapy, Pilates and Therapeutic exercise.
- Director at Fisioespaña C. B.
- Director at Fisioganas S.L.
- Director at Pilates Wellness & Beauty S.L.

Professors

Dr. Macías Gaspar María José

- ♦ Physiotherapist at Beata Maria Ana Hospital since 2021. Physiotherapy in hospitalized patients, neurological patients and patients with surgeries and traumatic injuries. Internship tutor for students of the European University.
- ♦ Physiotherapist at La Paz University Hospital since 2018. Physiotherapy in Pediatrics: On the ward, in rooms, in neonates and ICU, Physiotherapy in patients hospitalized in ICU, AER, patients with surgeries and traumatic injuries, and patients with traumatologic injuries.
- ♦ Diploma in Physiotherapy with specialization in Pediatric Physical Therapy and Manual Therapy in Traumatology and Orthopedics.
- ♦ Master's Degree in Pediatric Physiotherapy at CEU San Pablo in Madrid
- ♦ Master's Degree in Osteopathy at the D. François Ricard School of Osteopathy in Madrid
- ♦ Teaching, assistance and management functions. Clinical reasoning adapted to each individual.
- ♦ Expert in Respiratory and Cardiac Physiotherapy.

Dr. Simó Segovia, Rocío

- ♦ Physiotherapist at the La Paz hospital, passing through all areas of specialization (trauma and neurology, hydrotherapy, electrotherapy) and during the last 5 years preferential dedication to pediatrics in all fields.
- ♦ Treatment of patients at home and in private clinics.
- ♦ Diploma in Physiotherapy from the Alfonso X El Sabio University (1998-2001)
- ♦ Course on shoulder dystocia and neonatal brachial palsy.
- ♦ Course on respiratory physiotherapy with mechanically ventilated patients.

04

Structure and Content

The contents of this Postgraduate Diploma have been developed by the different teachers of this course, with a clear purpose: to ensure that our students acquire each and every one of the skills required 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 very complete syllabus that will take you gradually through each and every one of the learning processes that the Respiratory Physiotherapy professional needs. With an added bonus: the commitment to excellence that characterizes us"

Module 1. Pediatric Respiratory Physiotherapy I

- 1.1. Introduction to Respiratory Physiotherapy in Pediatrics
 - 1.1.1. Anatomy and Development of the Infant Respiratory System.
 - 1.1.2. Respiratory Physiology in the Child: Specific Characteristics.
 - 1.1.3. Objectives, Indications and Contraindications in Respiratory Physiotherapy.
- 1.2. Bronchiolitis
 - 1.2.1. Etiology and Risk Factors.
 - 1.2.2. Pathophysiology.
 - 1.2.3. Medical Treatment.
- 1.3. Assessment in Respiratory Physiotherapy of the Pediatric Patient (1)
 - 1.3.1. Anamnesis
 - 1.3.2. Visual Examination.
 - 1.3.3. Auscultation: Normal and Pathological Sounds.
- 1.4. Assessment in Respiratory Physiotherapy of the Pediatric Patient (2)
 - 1.4.2. Clinical Scales.
 - 1.4.3. Oxygen Saturation and Alarm Signs.
- 1.5. Non-Instrumental Techniques in Children's Respiratory Physiotherapy (1)
 - 1.5.1. Nasal Wash.
 - 1.5.2. ELPR.
 - 1.5.3. ELTGOL.
- 1.6. Non-Instrumental Techniques in Children's Respiratory Physiotherapy (2)
 - 1.6.1. Provoked Cough.
 - 1.6.2. TEF.
 - 1.6.3. DRR.
- 1.7. Aerosol Therapy in Pediatrics
 - 1.7.1. Inhalation Techniques
 - 1.7.2. Main Drugs Used.
- 1.8. Respiratory Physiotherapy in Bronchiolitis
 - 1.8.1. Indication of Treatment and Scheduling of Sessions.
 - 1.8.2. Treatment Session Protocol.
- 1.9. Hygiene Recommendations for Parents
 - 1.9.1. Nasal Washes.
 - 1.9.2. Humidifiers and Other Devices.
 - 1.9.3. General Recommendations.

- 1.10. Breathing Training Activities at Home
 - 1.10.1. Materials for the Exercises.
 - 1.10.2. Respiratory Exercises.
 - 1.10.3. Physical Activity Recommendations.

Module 2. Pediatric Respiratory Physiotherapy II

- 2.1. Bronchitis in Pediatric Patients
 - 2.1.1. Etiology.
 - 2.1.2. Clinical Presentation.
 - 2.1.3. Medical Treatment.
- 2.2. Pneumonia in Pediatric Patients
 - 2.2.1. Etiology.
 - 2.2.2. Clinical Presentation.
 - 2.2.3. Medical Treatment.
- 2.3. Assessment in Respiratory Physiotherapy of the Pediatric Patient (3)
 - 2.3.1. Spirometry.
 - 2.3.2. Stress Tests.
 - 2.3.3. Peak Flow.
- 2.4. Assessment in Respiratory Physiotherapy in Pediatric Patients with Brain Damage
 - 2.4.1. Assessment of the Respiratory System.
 - 2.4.2. Assessment of Other Systems that May Affect the Respiratory System.
- 2.5. Non-Instrumental Techniques in Children's Respiratory Physiotherapy (3)
 - 2.5.1. EDIC.
 - 2.5.2. Autogenous Drainage.
 - 2.5.3. Cough Assistance.
- 2.6. Non-Instrumental Techniques in Children's Respiratory Physiotherapy (1) Adaptation in Patients with Brain Damage
 - 2.6.1. ELPR.
 - 2.6.2. Nasal Wash.
 - 2.6.3. Provoked Cough.
- 2.7. -Instrumental Techniques in Children's Respiratory Physiotherapy (1)
 - 2.7.1. Cough Assist.
 - 2.7.2. High-Frequency Oscillation Vest®.

- 2.8. Instrumental Techniques in Children's Respiratory Physiotherapy (2)
 - 2.8.1. Ambu.
 - 2.8.2. Secretion Aspirator.
- 2.9. Respiratory Physiotherapy in Pediatric Palliative Care
 - 2.9.1. What Is Palliative Care?
 - 2.9.2. Typical Respiratory Pathologies of These Patients.
 - 2.9.3. Physiotherapy Treatment in Pediatric Palliative Care.
- 2.10. Respiratory Emergencies in Pediatrics
 - 2.10.1. Resuscitation in Pediatrics.

Module 3. Respiratory Physiotherapy Evaluation

- 3.1. Anatomy Recap.
 - 3.1.1. At Bone Level
 - 3.1.2. At Muscle Level
 - 3.1.3. Ventilatory System
- 3.2. Ventilation-Perfusion Ratio
 - 3.3. Ventilatory Biomechanics
 - 3.3.1. Ventilatory Mechanics in Inspiration
 - 3.3.2. Ventilatory Mechanics in Exhalation
- 3.4. Exploration
 - 3.4.1. Medical history
 - 3.4.2. Physical Inspection: Static and Dynamic Exam
- 3.5. Respiratory Frequency
 - 3.5.1. Types of Respiratory Frequency
 - 3.5.2. One-dimensional Scales
- 3.6. Respiratory rhythm
- 3.7. Auscultation
 - 3.7.1. Normal Noises
 - 3.7.2. Abnormal and Adventitious Noises
 - 3.7.3. Percussion and Palpation

- 3.8. Pain, Coughing and Expectoration
- 3.9. Radiology
- 3.10. Complementary Tests
 - 3.10.1. Walking Tests
 - 3.10.2. Strength Tests
 - 3.10.3. Pulse Oximetry
 - 3.10.4. Body Plethysmography
 - 3.10.5. Arterial Blood Gases
 - 3.10.6. Spirometry



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

05

Methodology

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: **Re-learning**.

This teaching system is used 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 Re-learning, 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

In a given clinical situation, what would you do? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Physiotherapists/kinesiologists learn better, faster, and more sustainably over time.

With TECH you can 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 potential 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.



Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing 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 Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking 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. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 to success

In our program, learning is not a linear process, but rather a spiral (we 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.



In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Physiotherapy Techniques and Procedures on Video

We introduce you to the latest techniques, the latest educational advances, and the forefront of physiotherapy and kinesiology procedures and techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



Interactive Summaries

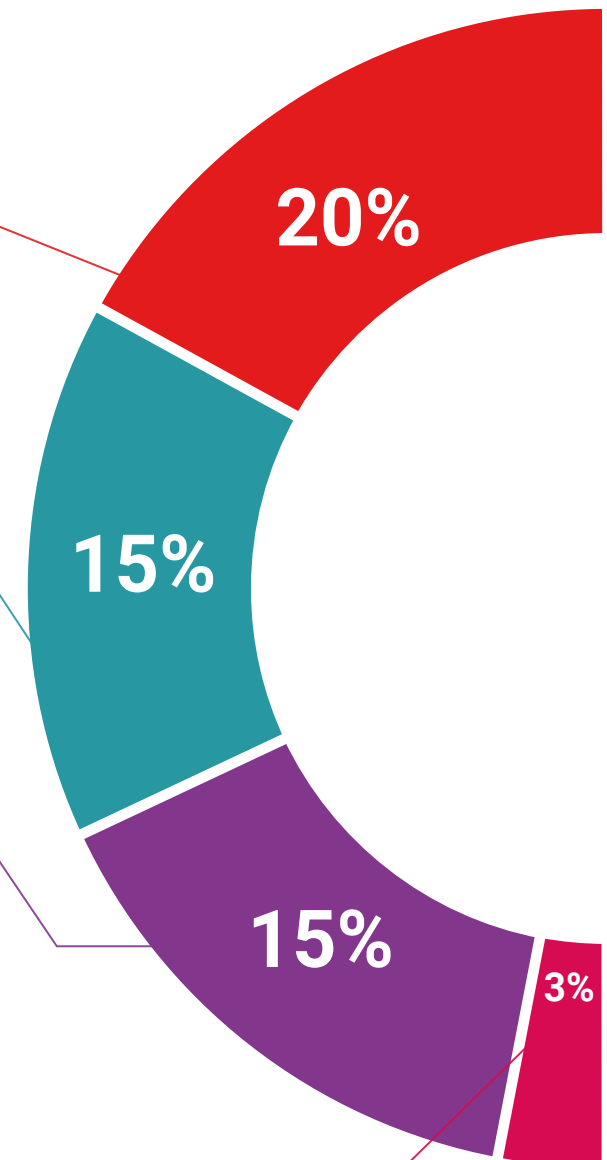
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

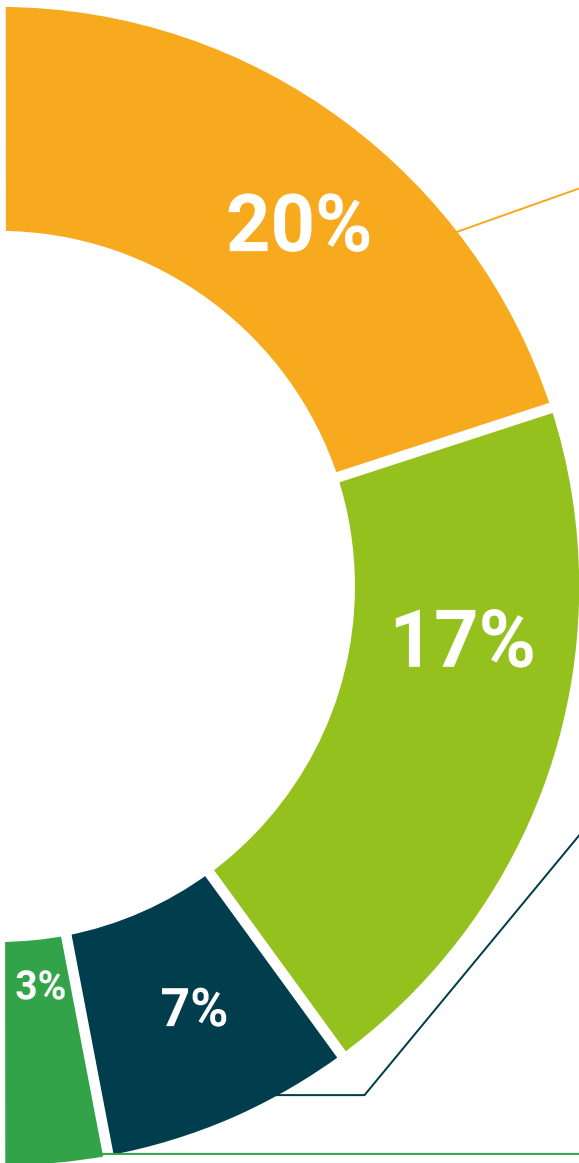
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your 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 our future difficult decisions.



Quick Action Guides

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.



06 Certificate

The Postgraduate Diploma in Pediatric Respiratory Physiotherapy and Assessment guarantees you, in addition to the most accurate and up-to-date specialization, access to a Postgraduate Diploma issued by **TECH - Technological University**.



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Successfully complete this specialisation and receive your diploma without travel or laborious paperwork"

This **Postgraduate Diploma in Pediatric Respiratory Physiotherapy and Assessment** contains the most complete and up-to-date scientific program on the market.

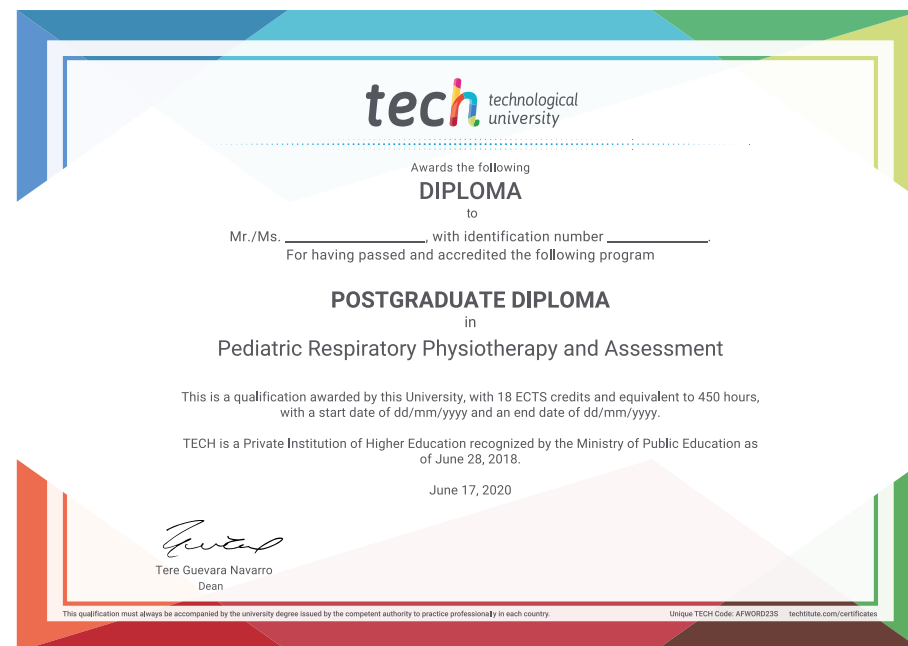
After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma issued by TECH - Technological University** via tracked delivery.

This diploma contributes to the academic development of the professional and adds a high university curricular value to their training. It is 100% valid in all competitive examinations, labour exchanges and professional career evaluation committees.

Title: **Postgraduate Diploma in Pediatric Respiratory Physiotherapy and Assessment**

ECTS: **18**

Official Number of Hours: **450**



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

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



Postgraduate Diploma
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Postgraduate Diploma

Pediatric Respiratory Physiotherapy and Assessment

