

# Professional Master's Degree Physiotherapy in Early Care





## Professional Master's Degree Physiotherapy in Early Care

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/physiotherapy/professional-master-degree/master-physiotherapy-early-care](http://www.techtitute.com/us/physiotherapy/professional-master-degree/master-physiotherapy-early-care)

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# 01

# Introduction

The field of early physical therapy is one that seeks to promote the health and well-being of children by advising, treating and caring for those who present some general problem in their development or a movement disorder, which may be caused by a congenital or acquired disease. This field is also essential to prevent future ailments in babies who require monitoring to ensure their proper development. For this reason, the Physiotherapy in Early Care program focuses on building the professional skills needed to specialize in the field, learning how to address some of the most common pathologies in infancy and how to implement the different techniques and treatments.







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*A comprehensive and practical Professional Master's Degree that will allow you to learn everything you need to work as a physiotherapist in early care in a realistic and direct way”*

Physiotherapy in early childhood is a form of treatment and care for children who present some type of alteration in their development resulting in a motor deficiency of neuromuscular origin. In some cases, it can include respiratory rehabilitation in infants who have suffered from asthma, bronchiolitis, cystic fibrosis, and others. Furthermore, it seeks to improve the sequelae of some acute illnesses such as meningitis, cardiac deformities, respiratory infections, etc.

Based on the above, it is essential to have a program that encourages professionals to continue their studies in the field. As such, the Professional Master's Degree in Physiotherapy in Early Care delves into the most important aspects, providing in-depth knowledge through a program developed by experts in the field. 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.

Currently, programs on physiotherapy in Early Childhood Care are scarce, which is why this training offers specific knowledge on that very discipline. Focusing on the latest evidence, it includes topics on telerehabilitation, therapeutic mobile activities, family-centered work and a unit that will discuss how to conduct literature searches on which to base physiotherapeutic interventions so students can keep up to date and administer evidence-based treatments.

Moreover, childhood obesity is becoming a public health problem that worries many health professionals. In 2016, The World Health Organization estimated that about 41 million children under the age of five worldwide were already suffering from this condition. In many cases, most of these infants continue to be obese into adulthood. As a result, developing a new perspective to address this situation is critical. In this sense, the program adopts the perspective of experts in this area to allow professionals to learn about the new treatments available to improve the mobility of children suffering from overweight or obesity.

This **Professional Master's Degree in Physiotherapy in Early 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
- ♦ An 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 availability 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"*

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*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”*

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.

*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”*

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





# 02 Objectives

This comprehensive program 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 Physiotherapy in Early Care. The knowledge poured into the syllabus will provide professionals with a global perspective and comprehensive training to achieve the proposed objectives. You will develop comprehensive skills in childhood pathologies, new techniques in early stimulation and all the aspects you need to continue your professional growth. For this reason, TECH has established a series of general and specific objectives for the satisfaction of future graduates, as follows:







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*With a real practical objective, this Professional Master's Degree will allow you to achieve your educational goals by propelling professional career as a physiotherapist to excellence”*



## 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 Childhood Physiotherapy
- ◆ Gain detailed knowledge of frequent childhood pathologies
- ◆ Recognize methods, techniques and tools used in Early Care treatments

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





## Specific Objectives

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### Module 1. Early Care

- ♦ Thoroughly know the evolution of physiotherapy in pediatrics
- ♦ Become familiar with Early Childhood Care and an Early Childhood Care center, its operations, management and professionals
- ♦ Thoroughly know and manage ODAT (Diagnostic Classification of Early Care) and the International Classification of Functioning, Disability and Health (ICF)
- ♦ Learn the importance of family involvement in early intervention and how to communicate with them
- ♦ Know the guidelines to manage psychological disorders in children

### Module 2. Normal and Pathological Child Development

- ♦ Learn intrauterine infant development
- ♦ Gain in-depth knowledge of motor development in children 0-6 years old
- ♦ Outline the development of laterality and play in children
- ♦ Identify normal and pathological reflexes in children
- ♦ Have detailed knowledge of the cognitive and verbal development of children

### Module 3. Pathologies in Childhood

- ♦ Understand the main pathologies in pediatric patients (the cause, incidence and development of disease)
- ♦ Lay out the factors (prenatal, perinatal and postnatal) that may pose a risk to normal infant development
- ♦ Identify characteristic clinical signs and warning signs
- ♦ Address key elements in therapeutic intervention



#### **Module 4. Childhood Cerebral Palsy (CCP) and Syndromes**

- ♦ Deeply understand what cerebral palsy is, its causes and incidence
- ♦ Know how to classify the type and level of cerebral palsy
- ♦ Specialize in spasticity and its main medical treatments
- ♦ Recognize ataxia, athetosis and hypotonia
- ♦ Explain the diversity of associated problems presented by patients with CCP
- ♦ Recognize epileptic seizures and the most common types of musculoskeletal disorders
- ♦ Gain a deep understanding of what Down syndrome is and how it affects children with cerebral palsy
- ♦ Recognize other syndromes such as Prader-Willi syndrome, Rett syndrome, etc.

#### **Module 5. 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 6. 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 7. Effective Evaluation and Intervention in Autism**

- ♦ Identify characteristics, epidemiology and risk factors associated with children presenting Autism Spectrum Disorder (ASD)
- ♦ Apply the main questionnaires for ASD screening
- ♦ Identify the main tests for ASD diagnosis
- ♦ Recognize the main interventions used to teach new skills in different developmental areas and to manage behavioral problems in children with ASD
- ♦ Address the implications and contributions of motor assessment and physical exercise in children with ASD

#### **Module 8. Respiratory Physiotherapy in Pediatrics**

- ♦ Adequately assess pediatric patients with respiratory pathology
- ♦ Recognize respiratory pathology and administer appropriate treatment
- ♦ Recognize the factors that may interfere with respiratory physiotherapy treatment
- ♦ Know the respiratory system in depth
- ♦ Learn how to correctly manage patients with respiratory pathology



### Module 9. Physiotherapy in Early Care

- ◆ Grasp the importance of natural environments and the new currents of intervention
- ◆ Master play in its different stages as an effective treatment tool
- ◆ Thoroughly know the most used techniques with the highest level of scientific evidence in the treatment of balance difficulties, standing, postural control, mobility, etc.
- ◆ Elaborate a standard session from the perspective of psychomotor skills
- ◆ Acquire knowledge of physiotherapy in the aquatic environment
- ◆ Identify the main technical and orthopedic aids for posture and mobility in childhood
- ◆ Delve deeper into the context of prematurity and the importance of accompaniment
- ◆ Present other specific and relevant methods for Physiotherapy in Early Care

### Module 10. 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 Skills

The structure of this Professional Master's Degree has been designed in such the professionals it caters for will be able to identify and treat the pathologies that affect motor development of infants, thanks to a unique methodology and the support of the experts who developed it. TECH guarantees students quality content that meets their expectations, giving them the opportunity to excel in their field. You will be able to perform the various functions related to this program, together with the most innovative proposals in this field of action, guiding you towards excellence. A series of aspects demanded by professionals in the field and in today's world.







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*Acquire expert skills in Physiotherapy in Early Care with the experience of a Professional Master's Degree where knowledge is converted into practice through a highly interactive specialization program”*



## General Skills

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- ♦ Apply the knowledge acquired in this program in daily Early Care practice
- ♦ Develop care models based on the most up-to-date evidence to improve patient quality of life
- ♦ Employ tools and techniques used in Early Care Physiotherapy
- ♦ Integrate therapeutic exercise in health promotion, both in healthy and sick populations

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*An effective and reliable Professional Master's Degree that will take you through an interesting learning process so that you acquire all the knowledge of an expert in the field”*





## Specific Skills

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- Learn what pre- and post-natal stimulation consists of and how to conduct a standard session
- Elaborate a standard session from the perspective of psychomotor skills
- Know the respiratory system in depth
- Apply the main questionnaires for ASD screening
- Identify the cases where each scale can be used
- Gain in-depth knowledge of motor development in children 0-6 years old
- Thoroughly know and manage ODAT (Diagnostic Classification of Early Care) and the International Classification of Functioning, Disability and Health (ICF)



# 04

## 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 on this Professional Master's Degree. Thus, the curriculum includes modules that offer a broad perspective of the pathologies suffered by infants and their treatments, incorporating all the fields of medicine involved to create a multidisciplinary team. 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.





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*A very complete syllabus that will gradually take you through each and every one of the learning processes that Physiotherapy in Early Care professionals need”*

## Module 1. Early Care

- 1.1. The Evolution of Physiotherapy Pediatrics
- 1.2. The Evolution of Child Development Theories
  - 1.2.1. The Main Theories of Motor Control
    - 1.2.1.1. Motor Programming Theory
    - 1.2.1.2. Systems Theory
    - 1.2.1.3. Action Theory
  - 1.2.2. Motor Learning
  - 1.2.3. The Main ICF Intervention Methods and Influence
  - 1.2.4. FBE
- 1.3. Early Childhood Care
  - 1.3.1. Early Childhood Care in Spain
  - 1.3.2. Legal Framework
  - 1.3.3. Libro Blanco de la Atención Temprana (The White Book on Early Care)
- 1.4. Early Care Centers
- 1.5. Early Care in Schooling
  - 1.5.1. Early Care in the First Cycle of Early Childhood Education
  - 1.5.2. Early Care in Second Cycle of Early Childhood Education
- 1.6. ICF
- 1.7. ODAT
  - 1.7.1. Introduction to ODAT: What It Is and What It Is for
  - 1.7.2. Distribution by Axes and Content
- 1.8. The Family and Its Involvement
- 1.9. Communication with the Family
- 1.10. Psychological Management in Children



## Module 2. Normal and Pathological Child Development

- 2.1. Intrauterine Development
- 2.2. The Term Infant and Its Development
  - 2.2.1. Neonate Classification
  - 2.2.2. Morphological Characteristics
  - 2.2.3. Normal Reactions
- 2.3. Child Development from 0 to 12 Months Old
  - 2.3.1. Normal Child Development from 0 to 12 Months Old
  - 2.3.2. Child Attitude and Motor Activity from 0 to 12 Months Old
  - 2.3.3. Child Stimulus Response from 0 to 12 Months Old
  - 2.3.4. Child Manipulation from 0 to 12 Months Old
  - 2.3.5. Child Warning Signs from 0 to 12 Months Old
  - 2.3.6. Pathological Child Development from 0 to 12 Months Old
  - 2.3.7. Child Pathologies from 0 to 12 Months Old
- 2.4. Child Development from 12 Months to 3 Years Old
  - 2.4.1. Normal Child Development from 12 Months to 3 Years Old
  - 2.4.2. Child Attitude and Motor Activity from 12 Months to 3 Years Old
  - 2.4.3. Child Stimuli Response from 12 Months to 3 Years Old
  - 2.4.4. Child Manipulation from 12 Months to 3 Years Old
  - 2.4.5. Child Warning Signs from 12 Months to 3 Years Old
  - 2.4.6. Pathological Child Development from 12 Months to 3 Years Old
  - 2.4.7. Child Pathologies from 12 Months to 3 Years Old
- 2.5. Child Development from 3 to 6 Years Old
  - 2.5.1. Normal Child Development from 3 to 6 Years Old
  - 2.5.2. Child Attitude and Motor Activity from 3 to 6 Years Old
  - 2.5.3. Child Stimulus Response from 3 to 6 Years Old
  - 2.5.4. Child Manipulation from 3 to 6 Years Old
  - 2.5.5. Child Warning Signs from 3 to 6 Years Old
  - 2.5.6. Pathological Child Development from 3 to 6 Years Old
  - 2.5.7. Child Pathologies from 3 to 6 Years Old

- 2.6. Child Play Development
  - 2.6.1. Child Play Development from 0 to 6 Months Old
  - 2.6.2. Child Play Development from 6 to 12 Months Old
  - 2.6.3. Child Play Development from 1 to 2 Years Old
  - 2.6.4. Child Play Development from 2 to 3 Years Old
  - 2.6.5. Child Development from 3 to 4 Years Old
  - 2.6.6. Child Play Development from 4 to 5 Years Old
  - 2.6.7. Child Play Development from 5 to 6 Years Old
- 2.7. Laterality Development
- 2.8. Normal and Pathological Reflexes
  - 2.8.1. Neurological Assessment: Structure and Content
  - 2.8.2. Primitive Reflexes: Definition, Function and Explanation
  - 2.8.3. Postural Ontogenesis
- 2.9. Relationship between Motor Skills and Other Developmental Areas
- 2.10. Cognitive and Verbal Development in Children

## Module 3. Pathologies in Childhood

- 3.1. Critical Periods in Child Development and Cause of Childhood Pathology
- 3.2. Neuromuscular Diseases
  - 3.2.1. Etiology and Incidence
  - 3.2.2. Types
  - 3.2.3. Treatment
  - 3.2.4. Physiotherapy Treatment
- 3.3. Spinal Muscular Atrophy (SMA)
  - 3.3.1. Etiology and Incidence
  - 3.3.2. Types
  - 3.3.3. Treatment
  - 3.3.4. Physiotherapy Treatment
  - 3.3.5. Genetic Therapy



- 3.4. Congenital Muscular Torticollis and Plagiocephaly
  - 3.4.1. Etiology and Incidence
  - 3.4.2. Clinical Manifestations
  - 3.4.3. Treatment
  - 3.4.4. Physiotherapy Treatment
- 3.5. Spina Bifida and Obstetric Brachial Palsy
  - 3.5.1. Etiology and Incidence
  - 3.5.2. Clinical Manifestations
  - 3.5.3. Treatment
  - 3.5.4. Physiotherapy Treatment
- 3.6. Preterm Infants
- 3.7. Achondroplasia
  - 3.7.1. Etiology and Incidence
  - 3.7.2. Clinical Manifestations
  - 3.7.3. Treatment
  - 3.7.4. Physiotherapy Treatment
- 3.8. Arthrogyrosis
  - 3.8.1. Etiology and Incidence
  - 3.8.2. Clinical Manifestations
  - 3.8.3. Treatment
  - 3.8.4. Physiotherapy Treatment
- 3.9. Hearing and Visual Impairment
- 3.10. Congenital Heart Pathologies
  - 3.10.1. Etiology and Incidence
  - 3.10.2. Clinical Manifestations
  - 3.10.3. Treatment
  - 3.10.4. Physiotherapy Treatment

## Module 4. Childhood Cerebral Palsy (CCP) and Syndromes

- 4.1. CCP
  - 4.1.1. Etiology and Incidence
- 4.2. CCP Classification
  - 4.2.1. Classification According to Muscle Tone and Posture
    - 4.2.1.1. Spastic CCP
    - 4.2.1.2. Dyskinesia or Atetoid CCP
    - 4.2.1.3. Spastic CCP
    - 4.2.1.4. Mixed CCP
  - 4.2.2. Classification by Topographical Criteria
    - 4.2.2.1. Hemiplegia
    - 4.2.2.2. Paraplegia
    - 4.2.2.3. Monoplegia
    - 4.2.2.4. Diplegia
    - 4.2.2.5. Tetraplegia
  - 4.2.3. *Gross Motor Classification System*
- 4.3. Spasticity and Medical Treatments
  - 4.3.1. Causes of Spasticity
  - 4.3.2. Difference between Spasticity and Hypertonia
  - 4.3.3. Consequences of Spasticity
  - 4.3.4. Spasticity Rating Scales
  - 4.3.5. Medical-Pharmacological Treatment of Spasticity
  - 4.3.6. Physiotherapeutic Approach to Spasticity
- 4.4. Atetosis, Ataxia and Hypotonia
- 4.5. Associated Problems in CCP
- 4.6. Musculoskeletal Alterations
- 4.7. Epileptic Seizures

- 4.8. Down Syndrome
  - 4.8.1. Etiology and Incidence
  - 4.8.2. Clinical Manifestations
  - 4.8.3. Treatment
- 4.9. Prader-Willi, Angelman and Turner Syndromes
  - 4.9.1. Etiology and Incidence
  - 4.9.2. Clinical Manifestations
  - 4.9.3. Treatment
- 4.10. Other Syndromes
  - 4.10.1. Etiology and Incidence
  - 4.10.2. Clinical Manifestations
  - 4.10.3. Treatment

## Module 5. Advances in Neuroscience Pediatrics

- 5.1. Central Nervous System (CNS) Anatomy
  - 5.1.1. Neuroanatomy
  - 5.1.2. Fundamental CNS Structures
- 5.2. CNS Functioning
  - 5.2.1. CNS Neurophysiology
  - 5.2.2. Neuronal Synapses
- 5.3. CNS Development
  - 5.3.1. Stages of CNS Development
  - 5.3.2. Critical and Developmentally Sensitive Periods
- 5.4. Brain Plasticity
  - 5.4.1. Neuronal Plasticity
  - 5.4.2. CNS Characteristics that Promote Plasticity
  - 5.4.3. Structural and Functional CNS Changes
  - 5.4.4. Potentiation and Long-Term Depression
- 5.5. CNS Evaluation
- 5.6. Motor Learning

- 5.7. Physiotherapist Involvement in CNS Pathology
- 5.8. Evidence for Methods and Techniques in Neurorehabilitation
- 5.9. Diagnostic Imaging
- 5.10. Telerehabilitation
  - 5.10.1. What Is Currently Understood by Telerehabilitation?
  - 5.10.2. Which Cases Can Benefit from Teleintervention?
  - 5.10.3. Advantages and Disadvantages

## Module 6. Pediatric Evaluation

- 6.1. Motor Assessment
- 6.2. Gait Assessment
  - 6.2.1. Observation
  - 6.2.2. Warning Signs
  - 6.2.3. Scales
- 6.3. Muscle Tone Assessment
  - 6.3.1. Observation
  - 6.3.2. Warning Signs
  - 6.3.3. Scales
- 6.4. Upper Limb Activity Assessment
  - 6.4.1. Observation
  - 6.4.2. Warning Signs
  - 6.4.3. Scales
- 6.5. Musculoskeletal and Hip Assessment
- 6.6. Fine and Gross Motor Skills Assessment
- 6.7. *Gross Motor Function Measure*
- 6.8. General Motor Skills Screening: MABC-2 in Children 3 to 6 Years Old
- 6.9. Motor Development Scales: *Bayley Scales of Infant and Toddler Development-3 y Peabody Developmental Motor Scales-2*
- 6.10. Questionnaires: ASEBA and *Strengths and Difficulties Questionnaire*

## Module 7. Effective Evaluation and Intervention in Autism

- 7.1. Autism Spectrum Disorder (ASD)
  - 7.1.1. Clinical Manifestations
  - 7.1.2. DSM-5 Diagnostic Criteria
- 7.2. ASD Risk Factors
  - 7.2.1. Pre-, Peri- and Postnatal Risk Factors
  - 7.2.2. ASD Prevalence
- 7.3. Early ASD Detection
  - 7.3.1. Developmental Milestones
  - 7.3.2. Characteristics and Importance of Early Detection
  - 7.3.3. Early Detection Tests
  - 7.3.4. Presentation of M-CHAT R/F, SCQ
- 7.4. ASD Diagnosis
  - 7.4.1. ASD Diagnosis Features
  - 7.4.2. Diagnostic Tests Features
  - 7.4.3. The Main ASD Diagnostic Tests
  - 7.4.4. Presentation of ADOS-2, ADIR
- 7.5. Evidence-Based Interventions in ASD
  - 7.5.1. General Overview of Evidence-Based Interventions
  - 7.5.2. Presentation of the Main Evidence-Based Interventions
- 7.6. Applied Behavior Analysis (ABA)
  - 7.6.1. ABA Principles
  - 7.6.2. New Skills Teaching
  - 7.6.3. Behavioral Problems Management
- 7.7. Motor Disorders Associated with ASD
  - 7.7.1. Signs Associated with ASD
  - 7.7.2. Motor Signs in ASD
- 7.8. Motor Assessment
  - 7.8.1. Motor Assessment Features
  - 7.8.2. Motor Signs Tests

- 7.9. Physical Exercise and ASD
  - 7.9.1. Physical Activity in ASD
  - 7.9.2. Physical Exercise in ASD
  - 7.9.3. Sport and Recreational Activities in ASD
- 7.10. Sample Session and Intervention Program
  - 7.10.1. Session Parameters
  - 7.10.2. Materials and Conditions for Adequate Sessions
  - 7.10.3. Typical Physical Therapy Session in ASD
  - 7.10.4. Physiotherapy Session Planning in ASD

## Module 8. Respiratory Physiotherapy in Pediatrics

- 8.1. Evidence-Based Respiratory Physiotherapy
- 8.2. Bronchiolitis
- 8.3. Pneumonia
- 8.4. Atelectasis
- 8.5. Asthma
- 8.6. ORL
- 8.7. Respiratory Physiotherapy Assessment in Pediatrics
- 8.8. Techniques in Respiratory Physiotherapy
- 8.9. Respiratory Physiotherapy in Children Suffering from Neurological Disorders
- 8.10. Common Medication

## Module 9. Physiotherapy in Early Care

- 9.1. Family-Centered Care
  - 9.1.1. Benefits of Family-Centered Care in Early Childhood Care
  - 9.1.2. Current Family-Centered Models
- 9.2. Play as a Therapeutic Method
  - 9.2.1. Game and Toy Proposals for 0-6 Month-Olds
  - 9.2.2. Game and Toy Proposals for 6-12 Month-Olds
  - 9.2.3. Game and Toy Proposals for 1-2 Year-Olds
  - 9.2.4. Game and Toy Proposals for 2-3 Year-Olds
  - 9.2.5. Game and Toy Proposals for 3-4 Year-Olds
  - 9.2.6. Game and Toy Proposals for 4-5 Year-Olds
  - 9.2.7. Game and Toy Proposals for 5-6 Year-Olds

- 9.3. Balance
  - 9.3.1. The Evolutionary Development of Balance
  - 9.3.2. Balance-Related Disorders
  - 9.3.3. Tools to Work on Balance
- 9.4. Aquatic Therapy
  - 9.4.1. Properties of Water
  - 9.4.2. Physiological Effects Caused by Immersion
  - 9.4.3. Aquatic Therapy Contraindications
  - 9.4.4. Evidence for Aquatic Therapy in Children with Disabilities
  - 9.4.5. Aquatic Therapy Methods: Halliwick, Water Specific Therapy (WST) and Bad Ragaz Ring Method
- 9.5. Orthopedic and Mobility Aids
  - 9.5.1. Lower Limb Orthoses
  - 9.5.2. Upper Limb Orthoses
  - 9.5.3. Mobility Aids
  - 9.5.4. Actions Performed by Physiotherapists
- 9.6. Sitting and Pelvic Seating
- 9.7. Psychomotor Skills
  - 9.7.1. Theoretical Framework of Psychomotor Skills
  - 9.7.2. Practical Application of Physiotherapy Sessions in Early Care
- 9.8. Physiotherapy in Premature Infants
- 9.9. Standing Programs
  - 9.9.1. The Evolutionary Development of the Hip
  - 9.9.2. Tools to Promote Standing
  - 9.9.3. Standing Programs
- 9.10. Other Therapies
  - 9.10.1. Bobath
  - 9.10.2. Vojta
  - 9.10.3. Shantala Massage
  - 9.10.4. Le Metayer

## Module 10. New Perspectives in Early Care

- 10.1. Animal-Assisted Therapies
  - 10.1.1. Conceptualization of Animal-Assisted Therapies
  - 10.1.2. Use in Early Care
- 10.2. Sensory Stimulation
  - 10.2.1. The Sensory Stimulation Room
  - 10.2.2. Physiotherapy Use in Early Care
  - 10.2.3. Differences between Sensory Stimulation and Sensory Integration
- 10.3. Childhood Obesity
- 10.4. Pre- and Postnatal Stimulation
- 10.5. Social Participation
  - 10.5.1. The Importance of Social Participation in Disability
  - 10.5.2. The Role of Physiotherapy in Social Participation
- 10.6. Inclusive Spaces and Playgrounds
  - 10.6.1. The Objectives behind Inclusive Spaces and/or Inclusive Playgrounds
  - 10.6.2. The Role of Physiotherapy in Creating Such Spaces and/or Playgrounds
- 10.7. Newborn Individualized Developmental Care and Assessment Program (NIDCAP)
- 10.8. Therapeutic Web and Mobile MHELP Applications
- 10.9. New Technologies (Virtual and Immersive Reality)
- 10.10. Evidence-Based Intervention
  - 10.10.1. Databases and Search Engines
  - 10.10.2. Search Keywords
  - 10.10.3. Scientific Journals
  - 10.10.4. Scientific Articles
  - 10.10.5. Evidence-Based Practice



*A very complete educational program, oriented toward high professional impact learning*



# 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.





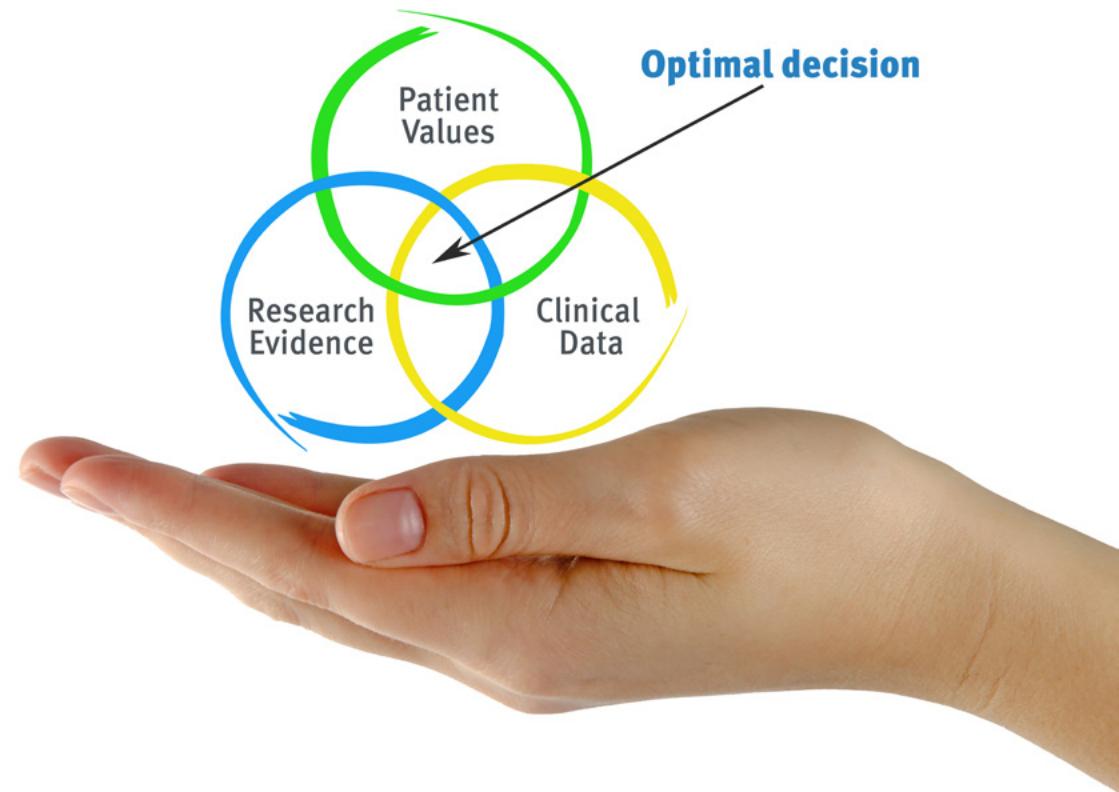
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH 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.

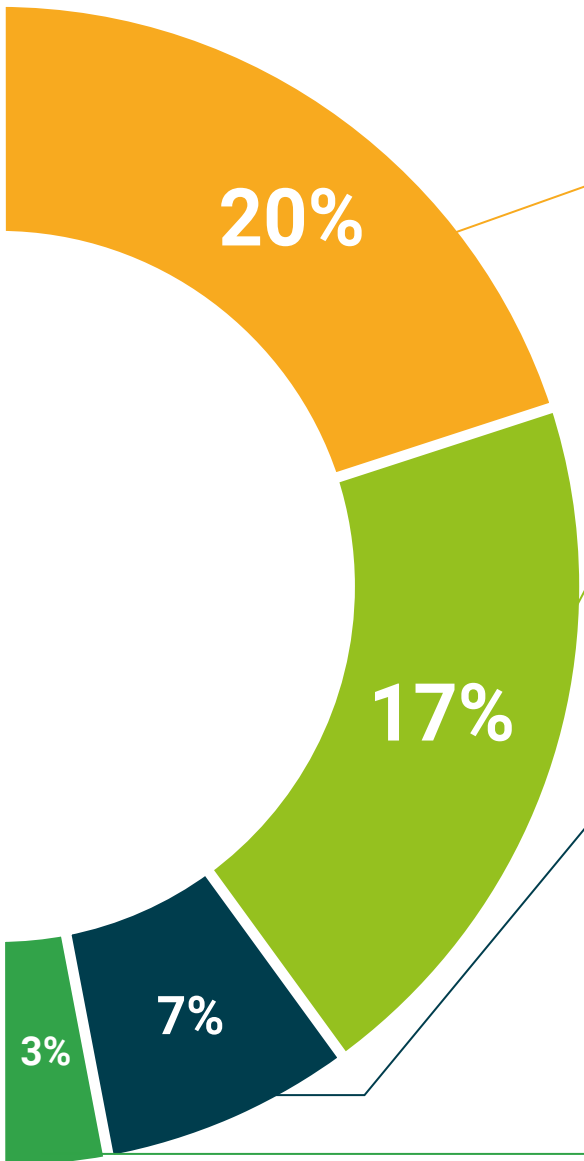
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### 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 Professional Master's Degree in Physiotherapy in Early Care guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree issued by TECH Global University.



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*Successfully complete this training program  
and receive your diploma without travel or  
laborious paperwork”*

This private qualification will allow you to obtain a **Professional Master's Degree diploma in Physiotherapy in Early 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** private qualification 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: **Professional Master's Degree in Physiotherapy in Early Care**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**

**tech** global university

Mr./Ms. \_\_\_\_\_ with identification document \_\_\_\_\_  
has successfully passed and obtained the title of:

**Professional Master's Degree in Physiotherapy in Early Care**

This is a private qualification of 1,800 hours of duration equivalent to 60 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  
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: APWORD235 | [techsite.com/certificates](https://techsite.com/certificates)

Professional Master's Degree in Physiotherapy in Early Care

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
<b>Total</b>	<b>60</b>

General Structure of the Syllabus			
Year	Subject	ECTS	Type
1º	Early Care	6	CO
1º	Normal and Pathological Child Development	6	CO
1º	Pathologies in Childhood	6	CO
1º	Childhood Cerebral Palsy (CCP) and Syndromes	6	CO
1º	Advances in Neuroscience Pediatrics	6	CO
1º	Pediatric Evaluation	6	CO
1º	Effective Evaluation and Intervention in Autism	6	CO
1º	Respiratory Physiotherapy in Pediatrics	6	CO
1º	Physiotherapy in Early Care	6	CO
1º	New Perspectives in Early Care	6	CO

Dr. Pedro Navarro Illana  
Rector

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\*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.



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



## Professional Master's Degree

Physiotherapy in Early Care

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online



# Professional Master's Degree Physiotherapy in Early Care

