

# Postgraduate Certificate

## Motor Tasks in Brain Development

Endorsed by the NBA





## Postgraduate Certificate

### Motor Tasks in Brain Development

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

Website: [www.techtitute.com/us/physiotherapy/postgraduate-certificate/motor-tasks-brain-development](http://www.techtitute.com/us/physiotherapy/postgraduate-certificate/motor-tasks-brain-development)

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# 01

# Introduction

The motor development of children has become a fundamental pillar for social and academic awareness, allowing us to understand how the brain develops through movement. For this reason, actions such as walking, running, spinning, jumping or throwing a ball are a great source of learning and growth for children. That is why this is the main focus of the program, motor tasks and brain development. Professionals will be prepared to understand these processes and help children from an early age.





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*Motor action has been established as an important point for early brain development in children”*

Without the correct motor development, children would not be able to perform normal activities such as walking, running, jumping, doing sport, among others. Therefore, the correct development of this evolutionary stage has a great impact on the brain, to such an extent that it is essential for the correct assimilation of knowledge and information processing, making them remember better every action they perform.

For all these reasons, the program was created around Motor Tasks in Brain Development, based on new knowledge in brain science in order to put it into practice in a real teaching situation in sports or physical education.

All the content is available in a 100% online Postgraduate Certificate that gives students the ease of being able to study it comfortably, wherever and whenever they want. Students will only need a device with internet access to take their career one step further. A modality according to the current times with all the guarantees to position professionals in a highly demanded sector.

This **Postgraduate Certificate in Motor Tasks in Brain Development** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ Practical cases presented by experts in Neuroeducation
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Discover an exciting field in education and strengthen your skills to improve your teaching of sports competence”*

“

*You will have at your disposal the best materials for didactic teaching, specially designed to lead you to professional success”*

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive education programmed to prepare in real situations.

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will learn the relevance of cooperation through real cases and a neuroeducational perspective.*

*Discover how to enhance brain development through motor action.*



# 02 Objectives

TECH provides its students with quality education to meet the professional objectives that are set and help them meet the demands of the labor market. For this reason, this Postgraduate Certificate aims to discover how to enhance the child's brain development through motor action. Several real cases will be studied during the program, which will be mixed with the latest and most rigorous information on the subject.







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*Enhance your professional profile with the guarantees offered by a program focused on meeting the labor requirements in this field”*



## General Objective

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- ♦ Discover how to enhance brain development through motor action

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*Learn about the relevance of children's cooperation and interaction from a neuroeducational perspective”*





## Specific Objectives

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- ◆ Know the importance of expressive and artistic activities and brain development from a socioemotional perspective
- ◆ Identify outdoor activities and brain development
- ◆ Establish the anaerobic and aerobic physical activities that promote brain development in young people

# 03

## Course Management

To guarantee academic excellence, we have a group of professionals with extensive experience in this field, creating a syllabus that includes everything students need to specialize in Motor Practices in Brain Development, perfectly meeting the demands of today's labor market. This is what will ensure students the certainty of receiving the most updated and complete information, being able to put into practice almost instantaneously everything they learn in each class.





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*It unifies theory and practice with the support of an excellent group of experts in children's motor development”*

## Management



### Ms. Pellicer Royo, Irene

- ♦ Master's Degree in Emotional Education and Well-being
- ♦ Postgraduate in Neuroeducation
- ♦ Certificate in Management and Administration of Sports Entities
- ♦ Degree in Physical Activity and Sports Science Master's Degree in Medical Sciences applied to Physical Activity and Sport

## Professors

### Dr. De la Serna, Juan Moisés

- ♦ Doctor in Psychology Master's Degree in Neurosciences and Behavioral Biology
- ♦ University Specialist in Clinical Hypnosis
- ♦ Director of the Open Chair in Psychology and Neurosciences
- ♦ Diploma in Didactic Methodology Expert in Project Management  
Occupational Trainer

### Dr. Navarro Ardoy, Daniel

- ♦ PhD. Exercise Physiology Applied to Health Physical activity and health program  
Faculty of Medicine
- ♦ Degree in Physical Activity and Sports Science

### Ms. Rodríguez Ruiz, Celia

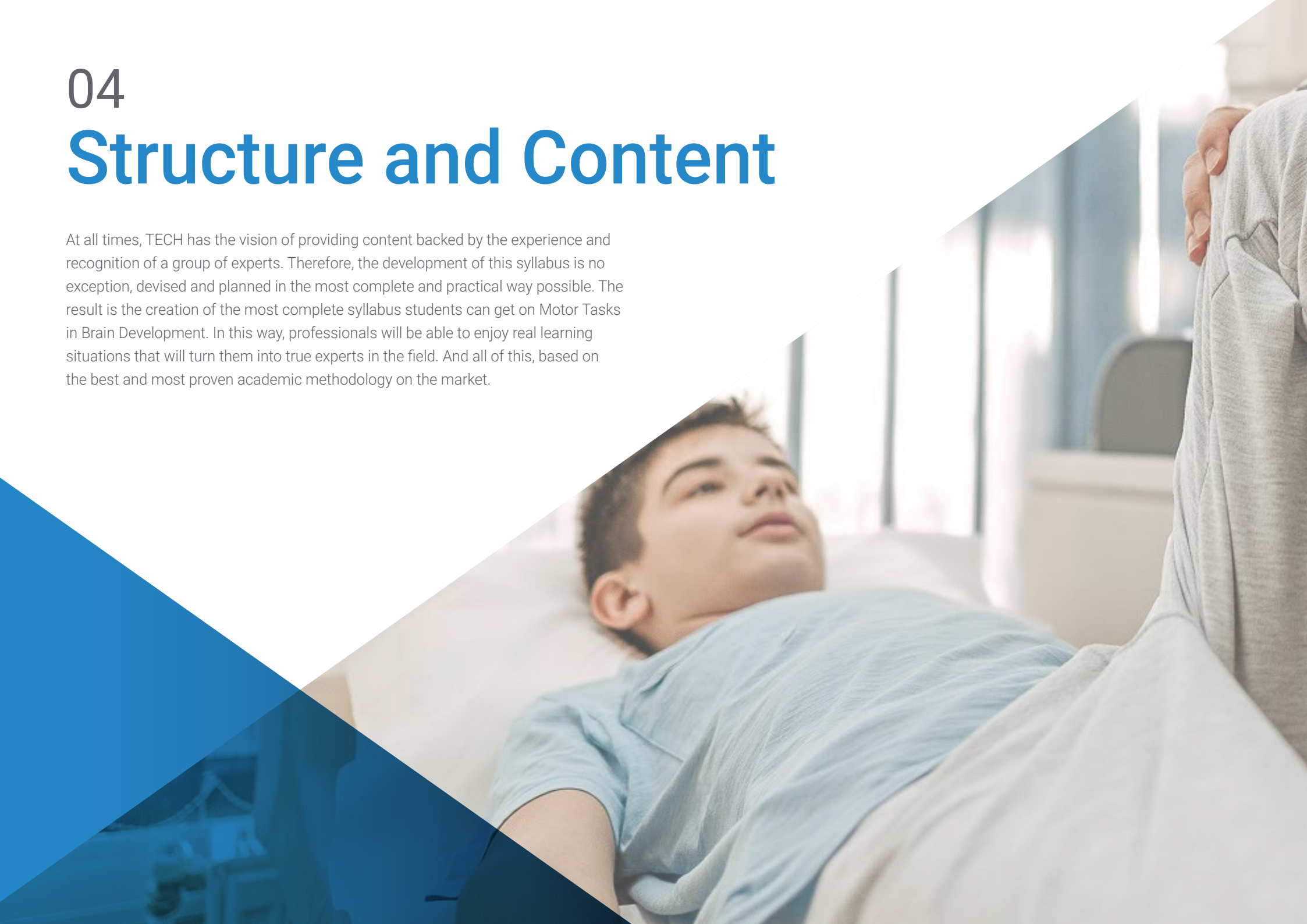
- ♦ Specialization in clinical psychology and child psychotherapy
- ♦ Specialization in Cognitive Behavioral Therapy in Childhood and Adolescence
- ♦ Degree in Pedagogy
- ♦ Degree in Psychology



# 04

## Structure and Content

At all times, TECH has the vision of providing content backed by the experience and recognition of a group of experts. Therefore, the development of this syllabus is no exception, devised and planned in the most complete and practical way possible. The result is the creation of the most complete syllabus students can get on Motor Tasks in Brain Development. In this way, professionals will be able to enjoy real learning situations that will turn them into true experts in the field. And all of this, based on the best and most proven academic methodology on the market.







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*Learn how to implement relaxation and meditation activities for children”*

## Module 1. Motor practices that have an impact on brain development

- 1.1. Body Wisdom
  - 1.1.1. The Body as a Starting Point
  - 1.1.2. The Languages of the Body
  - 1.1.3. Body Intelligence
- 1.2. Aerobic Exercise
  - 1.2.1. The Impact of Aerobic Exercise on the Brain
  - 1.2.2. Practical Suggestions of Aerobic Exercise for Brain Development
- 1.3. Anaerobic Exercise
  - 1.3.1. How Does Anaerobic Exercise Affect the Brain?
  - 1.3.2. Practical Proposals for the Classroom
- 1.4. Play
  - 1.4.1. Playing as an Act Connatural to the Human Being
  - 1.4.2. What Happens in the Brain While We Play?
  - 1.4.3. Playing and Learning
  - 1.4.4. Practical Proposals for the Classroom
- 1.5. Muscular Strength
  - 1.5.1. Muscular Strength and its Relationship with the Brain
  - 1.5.2. Practical Proposals for the Classroom
- 1.6. Coordination Activities
  - 1.6.1. The Role of the Cerebellum in Motor Action
  - 1.6.2. Practical Coordinative Proposals for Brain Development
- 1.7. Relaxation and Meditation Activities
  - 1.7.1. Effects of Meditative Activities on the Brain
  - 1.7.2. Practical Proposals of Relaxation and Meditation for Brain Development
- 1.8. Expressive and Artistic Activities and Brain Development from a Social-Emotional Perspective
  - 1.8.1. Effects of Expressive and Artistic Activities on the Brain
  - 1.8.2. Practical Expressive and Artistic Proposals for Brain Development





- 1.9. Natural Environment Activities and Brain Development
  - 1.9.1. The "Natural " Brain
  - 1.9.2. Effect of the Activities in the Natural Environment on the Brain
  - 1.9.3. Practical Proposals to Promote the Practice of Physical Activity in the Natural Environment
- 1.10. Global Proposals for Physical Neuroeducation
  - 1.10.1. Methodological Principles
  - 1.10.2. Proposal of Aerobic Exercise and Corporal and Artistic Expression
  - 1.10.3. Strength and Coordination Proposal
  - 1.10.4. Proposal of Activities in the Natural Environment and Meditation

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*Learn with a high-level group of experts how to develop the competencies you need in your professional practice”*

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 wtte 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 adapted in 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, students can watch them as many times as they 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 exclusive educational system for presenting multimedia content 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 assess and re-assess 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 suggesting that observing third-party experts can be useful. 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 Certificate in Motor Practices in Brain Development guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 Motor Tasks in Brain Development** 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 diploma 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 Motor Tasks in Brain Development**

Official N° of hours: **150 h.**

**Endorsed by the NBA**



\*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

innovation

personalized service

knowledge present

online training

development

language

virtual classroom

**tech** technological  
university

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