

# Postgraduate Certificate

## Motor Action in Learning Processes

Endorsed by the NBA





## Postgraduate Certificate

### Motor Action in Learning Processes

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Official N° of hours: 300 h.

Website: [www.techtute.com/us/physiotherapy/postgraduate-certificate/motor-action-learning-processes](http://www.techtute.com/us/physiotherapy/postgraduate-certificate/motor-action-learning-processes)

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# 01

# Introduction

Motor learning during childhood is fundamental for the correct development of any person, especially if it is focused on the field of learning. From a very young age, children must learn to hold objects, eat, walk and an endless number of activities related to mechanical, biochemical, psychological, social and cultural processes. This is the reason why physical therapists should be aware of the new advances in motor action in learning processes. This TECH program aims to become a highly effective academic educational tool that helps children to enhance their learning through good psychomotor skills.





*Mental health and interpersonal relationships have an impact on children's development. Get to know them and raise your professional profile to the next level"*

For physical therapists it is essential to know the study of emotions in neuroeducational processes, bearing in mind the motor action. In recent years, this has become a powerful working weapon to teach infants to perform movements that help them to develop their learning and to better assimilate information in different fields of their lives.

For all these reasons, the program focused on motor action in the learning process is fundamental to ensure that children of all ages can cultivate themselves through motor learning, thereby building powerful bridges that connect brain action and the body.

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 Action in Learning Processes** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ 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 self-assessment can be used 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



*Specialize with a program at the forefront of education and better understand the psychomotor process of children"*

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*Make the most of a 100% online Postgraduate Certificate and learn the importance of the cerebellum in the infant's cognitive and coordination processes"*

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.

*An excellent opportunity to enhance your professional profile and specialize in a field of great demand.*

*Develop your knowledge of the impact of motor action on the learning process.*



# 02 Objectives

At all times, students are accompanied by an excellent group of experts who have developed this Postgraduate Certificate program to meet the professional and academic objectives of future graduates. With the agenda focused on motor action in learning processes, it has been designed with the aim of expanding the benefits that can be offered from the perspective of physical therapist, academic performance, and also in relation to personal development based on the physical and emotional well being of children.







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*Be part of the change and learn about brain science to focus in a practical way on children's development"*



## General Objectives

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- ◆ Know the basis and main elements of Neuroeducation
- ◆ Integrate the new contributions of brain science in the teaching-learning processes
- ◆ Discover how to enhance brain development through motor action
- ◆ Implementing the innovations of Neuroeducation in the subject of physical education
- ◆ Achieve specialized knowledge as Neuroeducation professionals in the field of motor action



*Implement the innovations of Neuroeducation in the work field of physiotherapy"*





## Specific Objectives

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- ◆ Explain the emotional brain
- ◆ Describe the emotional process from a neuroscientific perspective
- ◆ Describe the main brain structures that make up the emotional process
- ◆ Define the role of emotion in the processes of learning and memory
- ◆ Describe the brain reward system
- ◆ Explain the basis of emotion education
- ◆ Describe emotional competencies
- ◆ Explain emotional chemistry in response to motor action
- ◆ Define the role of motor action in emotional changes

# 03

# Course Management

This Postgraduate Certificate is supported by an excellent group of experts who have made available to students all their experience in this field. For this reason, the program includes everything you need to know to specialize in motor action in learning processes, perfectly meeting the demands of today's labor market. This is what will ensure students the certainty of receiving the most up-to-date and comprehensive information, being able to put into practice almost instantaneously everything they learn in each class.



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*The program puts theory into practice by following the examples of real cases dictated by professionals in the field of neuroscience”*

## 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

The structure of this program focused on motor action in learning processes has been designed following the recommendations of a group of specialists in different multidisciplinary fields, which in the long term will lead to excellence in future graduates. With each class, professionals will be able to have specific knowledge to define the relevance of cooperation from a neuroeducational perspective. All this from a global point of view for the sake of its application at an international level, incorporating all the fields of work involved in the development of professionals in this type of work environment.







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*It has the support and experience  
of a recognized group of experts  
in this field of knowledge”*

**Module 1.** The Incidence of Emotions in Neuroeducational Processes, Based on Motor Action

- 1.1. Concept of Emotion and Main Emotional Theories
  - 1.1.1. The Need for Emotional Development
  - 1.1.2. Concept of Emotion
  - 1.1.3. Function and Characteristics of Emotions
  - 1.1.4. The Affective Value and the Intensity of Emotion
  - 1.1.5. Theory of Emotions
- 1.2. Education of Emotions
  - 1.2.1. The Emotional Competence Builder
  - 1.2.2. The GROF Competency Model
  - 1.2.3. Emotional Maturity
- 1.3. Emotional Intelligence
  - 1.3.1. The Emotional Competence Builder
  - 1.3.2. The Model of Mayer and Salovey
  - 1.3.3. The Social-Emotional Model of Bar-On
  - 1.3.4. Goleman's Competency Model
- 1.4. The Role of Emotion in the Body and Motor Action
  - 1.4.1. The Learning Process
  - 1.4.2. Emotion in Learning Processes
  - 1.4.3. Emotions in Motor Action
- 1.5. The Emotional Brain
  - 1.5.1. The Emotional Brain or Limbic System
  - 1.5.2. The Socioemotional Brain
- 1.6. Emotional Processing in Brain Structures.
  - 1.6.1. The Main Brain Structures Involved in Emotional Processes
  - 1.6.2. Emotional Intensity and Emotional Appraisal in the Brain Structures
  - 1.6.3. Particular Emotional Brains



- 1.7. Amygdala and Emotional Processes
  - 1.7.1. The Role of the Amygdala in Emotions
  - 1.7.2. The Conditioned Emotional Response
  - 1.7.3. Self-Control and Attention
  - 1.7.4. Self-Regulation and Exercise
- 1.8. Positive Emotions and the Brain's Reward System
  - 1.8.1. Classifications of Salient Emotions
  - 1.8.2. The Ability to Self-Generate Positive Emotions
  - 1.8.3. The Functioning of the Brain's Reward System
- 1.9. Emotional Chemistry in Response to Motor Action
  - 1.9.1. From Emotion to Action
  - 1.9.2. The Neurochemistry of Emotion
  - 1.9.3. Neurochemistry in Motor Action
  - 1.9.4. Epigenetics and Exercise
- 1.10. Emotional Health through Motor Action
  - 1.10.1. Psychoneuroimmunology
  - 1.10.2. Positive Emotions and Health
  - 1.10.3. Emotional Health from the Body



*The best education is within your reach with the completion of this Postgraduate Certificate program"*

# 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 Postgraduate Certificate in Motor Action in Learning Processes guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"*

This **Postgraduate Certificate in Motor Action in Learning Processes** 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 Motor Action in Learning Processes**

Official N° of hours: 300 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  
personalized service innovation  
knowledge present quality  
development languages  
virtual classroom



## Postgraduate Certificate

### Motor Action in Learning Processes

Course Modality: **Online**

Duration: **6 weeks**

Certificate: **TECH Technological University**

Official N° of hours: **300 h.**

# Postgraduate Certificate

## Motor Action in Learning Processes

Endorsed by the NBA

