

Postgraduate Certificate Principles of Neurosciences



Postgraduate Certificate Principles of Neurosciences

- » Modality: online
- » Duration: 6 Weeks
- » Certificate: TECH Global University
- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/education/postgraduate-certificate/principles-neurosciences

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01

Introduction

Neuroscience allows us to understand how neurobiological processes intervene in learning. This is key in the design of better teaching methods and educational policies. Therefore, the current teachers who want to bring to their classrooms really attractive and effective sessions must have a solid knowledge of how the nervous system works or how the brain develops. In response to this need, TECH has created this 100% online program that offers students an advanced program on the psychological processes related to learning or the formation of the brain in infants, children and adolescents. All this, through a high quality multimedia content, developed by a teaching team specialized in the educational area.





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TECH takes you for 6 weeks into the Principles of Neurosciences so that you can apply new teaching methods through their knowledge"

Neurosciences have recently become a revolutionary way of understanding almost all areas of human development. Its logic is indisputable: the brain, moderator, organizer and creator of each human being holds the keys to these processes. All this leads to a new educational approach that tends towards a global way of knowing the student, taking into account all areas of personal development.

Having all the keys to understand how the nervous system works, how is the cognitive process of memory, language or the neural basis of psychomotor skills will be essential for the teacher who wants to successfully teach their classes. For this reason, TECH has created this Postgraduate Certificate, which leads students to delve into the components of the nervous system, the role of the brain in learning or problems in psychomotor development.

To this end, the specialists will have an advanced syllabus that will lead them to delve into the main cognitive processes, the development of the brain and its direct application to teaching in the classroom. Likewise, thanks to the didactic and multimedia material, such learning will be much more dynamic and attractive. In addition, in this academic journey, the teaching professionals will be able to advance in a progressive and natural way through the content of the program, thanks to the *Relearning* method: a system based on the reiteration of key concepts that will also allow them to reduce the hours of study.

Undoubtedly an excellent opportunity to progress professionally in the education sector through a 100% online and flexible Postgraduate Certificate. Students who take this program only need an electronic device with an Internet connection to access the syllabus hosted on the Virtual Campus. A high-level program in line with current academic times.

This **Postgraduate Certificate in Principles of Neurosciences** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ Practical cases presented by experts in Neuroeducation
- ♦ 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



This Postgraduate Certificate will allow you to take a step further in your professional career as a teacher through the understanding of brain development and its relationship with student learning"

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Delve into the cognitive processes of sensation, perception or motivation through the enriched multimedia material of this Postgraduate Certificate"

The program's teaching staff includes professionals from 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 provide the professionals with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

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

Access the advanced content of this program comfortably from your computer with an Internet connection.

You will have access to real cases that will show you how the main brain structures related to motor skills work.

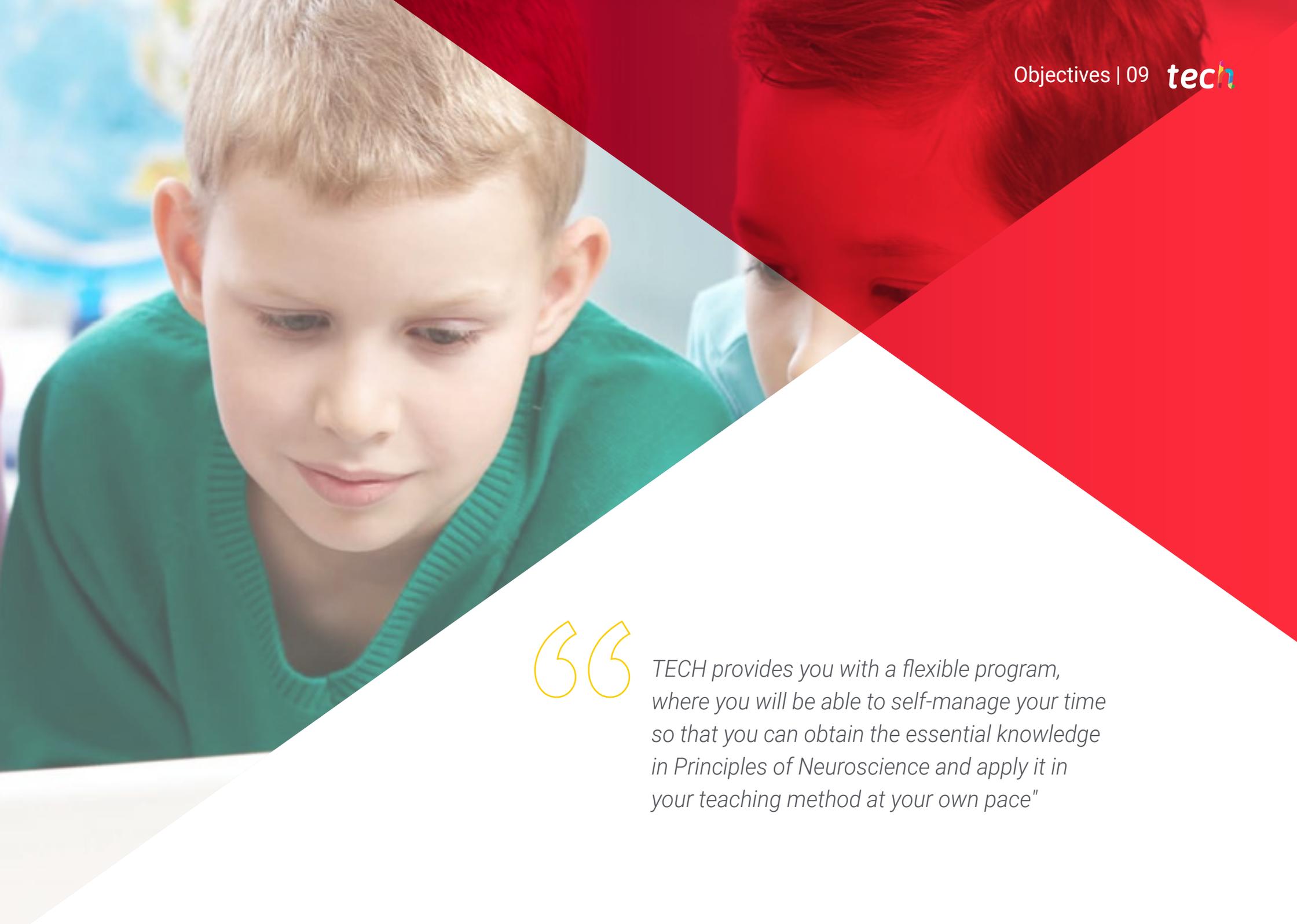


02

Objectives

TECH provides graduates with the most innovative pedagogical tools with which they can achieve effective learning on the Principles of Neuroscience. This will allow students to acquire essential knowledge that will help them understand the neural factors involved in the main cognitive processes and apply them in their teaching method. To achieve these goals successfully, the teachers will also have a team of specialized professionals who will guide them throughout this Postgraduate Certificate.





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TECH provides you with a flexible program, where you will be able to self-manage your time so that you can obtain the essential knowledge in Principles of Neuroscience and apply it in your teaching method at your own pace”



General Objectives

- ♦ Know the basis and main elements of Neuroeducation
- ♦ Integrate the new contributions of Brain Science in the teaching-learning processes



This university program will show you the relationship between the effects of the environment and brain development through 150 hours of the best theoretical, practical and additional content"





Specific Objectives

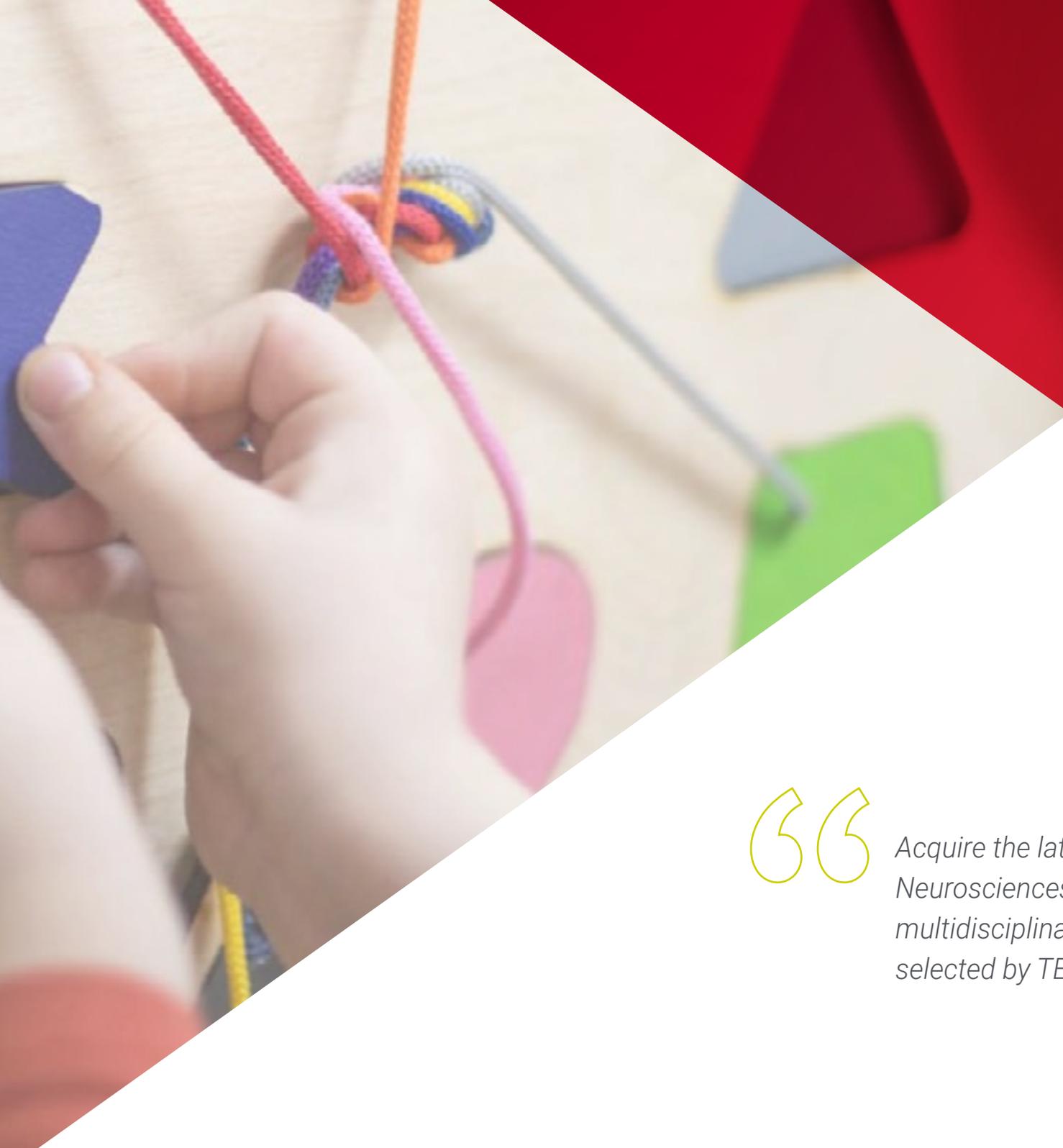
- ♦ Know how nervous system and neuronal connections function
- ♦ Gain a deeper understanding of basic brain anatomy
- ♦ Acquire general knowledge about epigenetics
- ♦ Understand the effects of the environment on brain development
- ♦ Know the phases of brain evolution

03

Course Management

This academic institution has carried out a meticulous selection process of all the faculty that integrates this Postgraduate Certificate. In this way, students will have guaranteed access to a program taught by specialists in Neurosciences and with extensive experience in this field. In this way, the graduates will be able to obtain the latest information in this field, from the hands of true professionals.





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*Acquire the latest knowledge in
Neurosciences through an excellent
multidisciplinary team rigorously
selected by TECH”*

Management



Ms. Pellicer Royo, Irene

- ◆ Postgraduate Diploma in Emotional Education at the Jesuitas-Caspe School, Barcelona
- ◆ Professional Master's Degree in Medical Sciences Applied to Physical Activity and Sport by the University of Barcelona
- ◆ Professional Master's Degree in Emotional Education and Well-being from the University of Barcelona
- ◆ Degree in Physical Activity and Sport Sciences at the University of Lérida

Professors

Dr. Navarro Ardoy, Daniel

- ♦ Principal CEO at Teacher MBA
- ♦ PROFITH (PRoMoting FITness and Health) Research Group
- ♦ SAFE Research Group
- ♦ EFFECTS 262 Research Group
- ♦ Physical Education Teacher
- ♦ PhD in Physical Education Applied to Health by the Physical Activity and Health Program of the University of Granada
- ♦ PhD in Physical Education Applied to Health with research stay at Karolinska Institutet in Stockholm
- ♦ Degree in Physical Activity and Sport Sciences from the University of Granada

Ms. Rodríguez Ruiz, Celia

- ♦ Clinical Psychologist at EVEL Center
- ♦ Psychopedagogical Area Manager at Atenea Study Center
- ♦ Pedagogical Advisor at Cuadernos Rubio
- ♦ Editor of Hacer Familia Magazine
- ♦ Editor of Webconsultas Healthcare Medical Team
- ♦ Collaborator at the Eduardo Punset Foundation
- ♦ Degree in Psychology, UNED
- ♦ Degree in Pedagogies from the Complutense University of Madrid
- ♦ University Specialist in Cognitive Behavioral Therapy in Childhood and Adolescence by the UNED
- ♦ Specialist in Clinical Psychology and Child Psychotherapy by INUPSI
- ♦ Trained in Emotional Intelligence, Neuropsychology, Dyslexia, ADHD, Positive Emotions and Communication

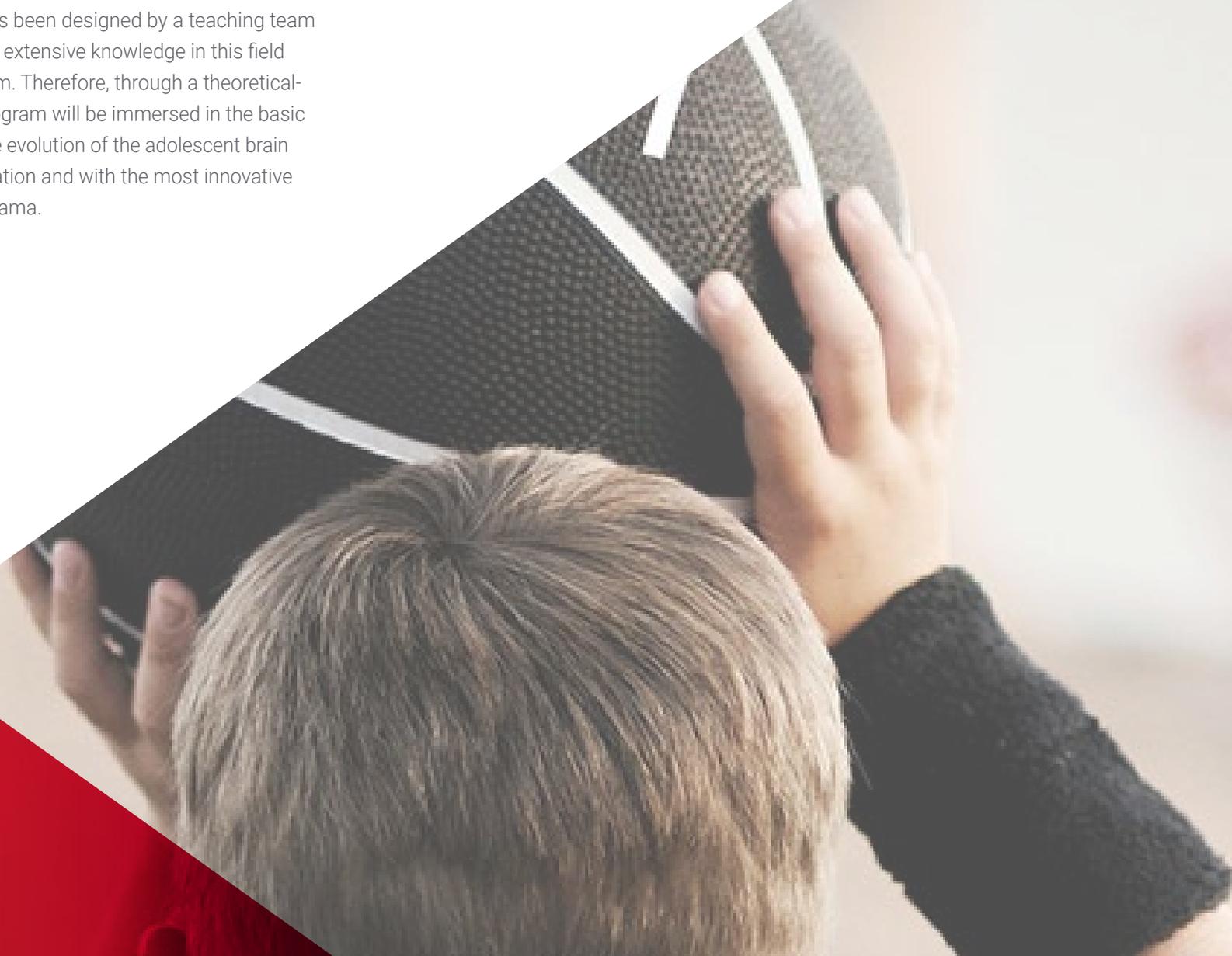
Dr. De la Serna, Juan Moisés

- ♦ Psychologist and Writer expert in Neurosciences
- ♦ Writer specializing in Psychology and Neurosciences
- ♦ Author of the Open Chair in Psychology and Neurosciences
- ♦ Scientific disseminator
- ♦ PhD in Psychology
- ♦ Degree in Psychology. University of Seville
- ♦ Professional Master's Degree in Neurosciences and Behavioral Biology Pablo de Olavide University, Seville
- ♦ Postgraduate Diploma in Teaching Methodology. La Salle University
- ♦ University Specialist in Clinical Hypnosis, Hypnotherapy. National University of Distance Education - UNED
- ♦ Postgraduate Certificate in Social Graduate, Human Resources Management, Personnel Administration. University of Seville
- ♦ Postgraduate Diploma in Project Management, Administration and Business Management. Federation of Services U.G.T
- ♦ Trainer of Trainers. Official College of Psychologists of Andalusia
- ♦ Professional Master's Degree in History and Hispanic Identities in the Western

04

Structure and Content

The syllabus of this Postgraduate Certificate has been designed by a teaching team specialized in Neurosciences, which provides its extensive knowledge in this field so that the graduate can apply it in the classroom. Therefore, through a theoretical-practical perspective, students who take this program will be immersed in the basic anatomy of the structures related to learning, the evolution of the adolescent brain or neuroplasticity. All this in only 6 weeks of duration and with the most innovative didactic material of the present academic panorama.




$$y = ax^2 + bx + c$$

“

A syllabus that will introduce you from a theoretical-practical approach to the latest advances in Neurosciences and the understanding of the adolescent brain”

Module 1. Principles of Neurosciences

- 1.1. The Nervous System
 - 1.1.1. Definition of the Nervous System
 - 1.1.2. Components of the Nervous System
 - 1.1.3. Classification of the Nervous Tissue
 - 1.1.4. Electrical Communication of the Neuron
 - 1.1.5. Chemical Communication of the Neuron
- 1.2. Basic Anatomy of Learning-Related Structures
 - 1.2.1. Defining Learning
 - 1.2.2. Classification of the Brain
 - 1.2.3. Formation of the Brain
 - 1.2.4. The Role of the Brain in Learning
- 1.3. Psychological Processes Related to Learning
 - 1.3.1. Defining Cognitive Processes
 - 1.3.2. The Cognitive Process of Sensation
 - 1.3.3. The Cognitive Process of Perception
 - 1.3.4. The Cognitive Process of Attention
 - 1.3.5. The Cognitive Process of Memory
 - 1.3.6. The Cognitive Process of Language
 - 1.3.7. The Cognitive Process of Emotion
 - 1.3.8. The Cognitive Process of Motivation
- 1.4. The Main Brain Structures Related to Motor Skills
 - 1.4.1. Psychomotor Skills
 - 1.4.2. Neural Bases of Motor Skills
 - 1.4.3. Motor Problems in Development
 - 1.4.4. Acquired Motor Problems
- 1.5. The Plastic Brain and Neuroplasticity
 - 1.5.1. Neuronal Plasticity
 - 1.5.2. The Plastic Brain
 - 1.5.3. Neurogenesis
 - 1.5.4. The Plastic Brain and Learning





- 1.6. Epigenetics
 - 1.6.1. The Role of Genetics in the Brain
 - 1.6.2. The Process of Gestation and the Brain
 - 1.6.3. Definition of Undifferentiated Neurons
 - 1.6.4. The Process of Programmed Neuronal Death
- 1.7. Effects of the Environment on Brain Development
 - 1.7.1. Brain and Environment
 - 1.7.2. Interneuronal Connectivity
 - 1.7.3. Inhibition of Connectivity
- 1.8. Changes in the Infant's Brain
 - 1.8.1. The Formation of the Infant's Brain
 - 1.8.2. The Process of Myelogenesis
 - 1.8.3. Brain Development
 - 1.8.4. Development of Localization
 - 1.8.5. Development of Lateralization
- 1.9. Evolution of the Adolescent Brain
 - 1.9.1. Defining Adolescence
 - 1.9.2. The Adolescent Brain
 - 1.9.3. The Role of Hormones
 - 1.9.4. Functions of Neurohormones
- 1.10. The Adult Brain
 - 1.10.1. The Adult Brain
 - 1.10.2. Connections Between the Cerebral Hemispheres
 - 1.10.3. Language Processing and the Cerebral Hemispheres

05

Methodology

This training program offers 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 Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.



It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.

Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our University is the first in the world to combine case studies 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.



Educators 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 have trained more than 85,000 educators with unprecedented success in all specialties. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, 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 (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 specialist educators 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.



Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, 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

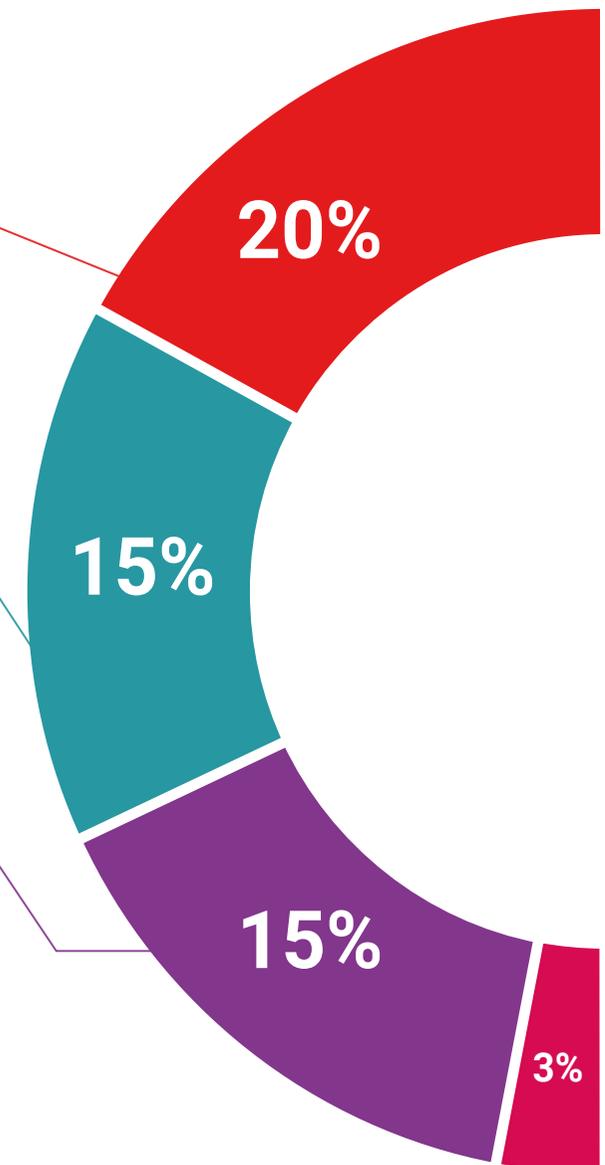
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

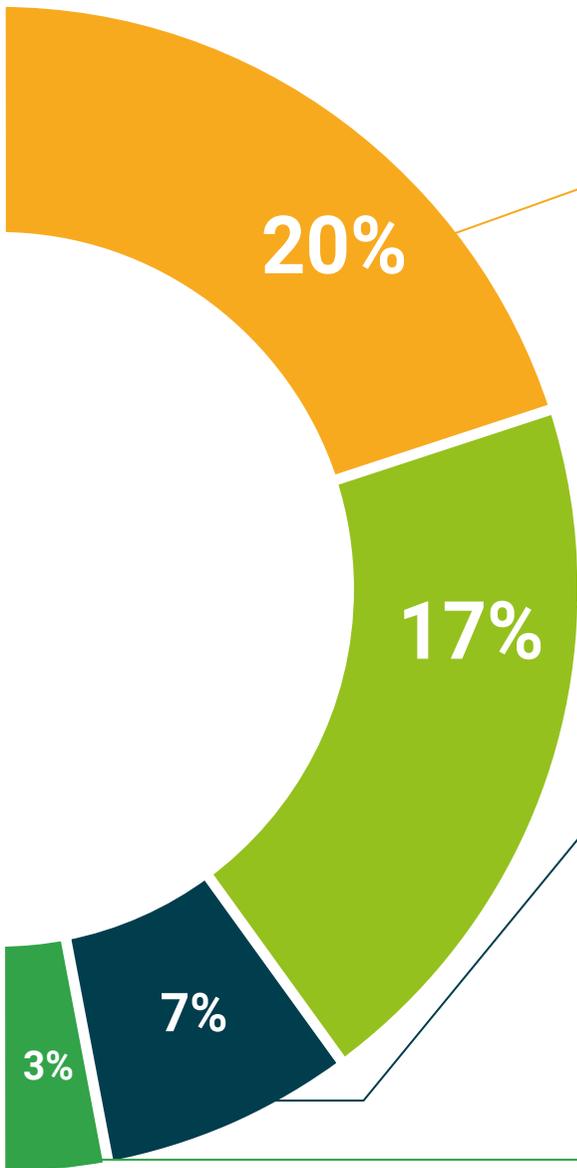
This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".



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 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 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 Principles of Neurosciences guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This private qualification will allow you to obtain a **Postgraduate Certificate in Principles of Neurosciences** 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: **Postgraduate Certificate in Principles of Neurosciences**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



*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.



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