

Postgraduate Certificate Neurosciences for Teachers





Postgraduate Certificate Neurosciences for Teacher

- » Modality: online
- » Duration: 2 months.
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

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

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

Education is changing. The integral conception of the human being currently occupies the leading role in classroom programming and intervention for the most up-to-date professionals. Neurosciences applied to teaching provide teachers with the deepest knowledge of the functioning of the human brain in relation to learning processes and the constitution of personality. A highly significant step towards the quality education that society is demanding and that will require qualified personnel in a multidisciplinary approach.





“

The vision of human development, from the point of view of Neurosciences, in a practical approach created specifically for teachers"

This Postgraduate Certificate in Neurosciences for Teachers offers a broad and complete vision of the complex world of Neurosciences from an applied perspective. Starting from the biological principles and Neuroimaging techniques, the different practical approaches existing in this discipline are covered.

In this program, the teaching professional will learn to understand and interpret the Neurosciences in order to apply them to their teaching experience.

Throughout the course, two types of neuropsychological programs will be dealt with: the eminently biological ones focused on the neuronal bases and genetics of the brain, and the exclusively clinical programs, where the problems associated with pathologies affecting the brain and neurodegenerative diseases will be studied in depth. This bilateral approach facilitates better understanding of the functioning of Neurosciences from different fields, so that professionals have different options for application available to them.

This Postgraduate Certificate addresses the new branches of Neuroscience that are currently under development, both theoretical and applied. *Neuromarketing* and *Neuroeducation* introduce the new branches that, in a few years, will be demanded by different sectors, such as *Neuroeconomics* or *Neuroleadership*. These emerging areas have not yet been included in the usual educational programs, making this program a training opportunity that will prepare you in a very unique way.

Students will have access to the latest advances in Neurosciences with the most complete theoretical contents and through a developed learning system supported by practice. Therefore, at the end of the specialization program, they will be able to apply everything they have learned to their work.

A comprehensive program in which you will acquire extensive theoretical and practical knowledge that will improve your professional performance.

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

- ♦ More than 75 practical cases presented by experts in Neurosciences for Teachers
- ♦ 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.
- ♦ Developments in Neurosciences for Teachers
- ♦ It contains practical exercises where the self-evaluation process can be carried out to improve learning
- ♦ Special emphasis on innovative methodologies in Neurosciences for Teachers
- ♦ All of this will be complemented by 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



A complete and specific educational program that will allow you to learn the latest techniques and advances in applied neuropsychology in just a

“

During the program, you will be immersed in interactive environments, through hands-on training based on real-life situations, which will provide you with immersive learning”

The program is taught by professionals with great experience in the field of Neurosciences for Teachers, as well as recognized specialists in this area, belonging to reference societies and prestigious universities.

Thanks to its multimedia content, developed with the latest educational technology, the professional will enjoy situated and contextual learning. In other words, a simulated environment that will provide immersive learning, programmed to train for real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. The design of this program is based on Problem-Based Learning, through which the student must try to solve different professional practice situations.

Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.

A program that will put at your service the best teaching staff, made up of experts in this field.



02

Objectives

This program was created to train teachers in the application of Neurosciences in the development of their work in the classroom, incorporating new forms of approach and approach to their task as trainer. A high-level qualitative leap that will propel you to the forefront of education.



“

An effective and realistic way to understand and support the emotional development of students, understanding the processes of growth and human evolution from the support of Neurosciences”



General Objectives

- ♦ Update the knowledge on Neurosciences in their different fields of application, from the clinical, educational or social area
- ♦ Increase the quality of the teaching professional's praxis in their performance
- ♦ Introduce the teacher to the vast world of Neurosciences from a practical perspective
- ♦ Know the different disciplines involved in the study of the brain in relation to human behavior and its possibilities
- ♦ Learn to use the tools used in Neuroscience research and practice
- ♦ Develop skills and abilities in emotional development in the classroom
- ♦ Direct the student towards continuing education and research





Specific Objectives

- ♦ Learn the formation of the nervous system
- ♦ Understand the types of neurons
- ♦ Identify brain hemispheres and lobes
- ♦ Differentiate between localizationism and brain functionalism
- ♦ Discover the undifferentiated neurons
- ♦ Learn programmed neural death
- ♦ Recognize interneuronal electrical communication
- ♦ Determine the role of myelin in neurons
- ♦ Understand interneuronal chemical communication
- ♦ Classify neurohormones and their functions
- ♦ Differentiate between age and neuronal plasticity
- ♦ Discover neuronal development
- ♦ Learn the peculiarities of the human brain
- ♦ Unravel the left brain
- ♦ Explore white matter
- ♦ Recognize gender differences at the neural level
- ♦ Classify hemispheric functions
- ♦ Discover the new localizationism
- ♦ Understand invasive techniques
- ♦ Recognize non-invasive techniques.
- ♦ Discover the Papez Circuit.
- ♦ Explore the limbic brain
- ♦ Analyze the amygdala and positive emotion
- ♦ Understand the function of the amygdala and negative emotion
- ♦ Recognize the intensity of emotion
- ♦ Determine the affective value of emotion.



Take the opportunity and take the step to get up to date on the latest developments in Neurosciences for Teachers”

03

Course Management

The direction and development of the program will be carried out with the most qualified professors in this area, in a multidisciplinary approach: Leading experts in the field of Neurosciences at the service of the best online education. Throughout the six months of training and through a high-tech communication system, you will be able to access tutoring and guidance from your faculty at all times. With the confidence of counting on the best.





“

The best experts in Neuropsychology, at your fingertips, in the highest quality online program on the educational

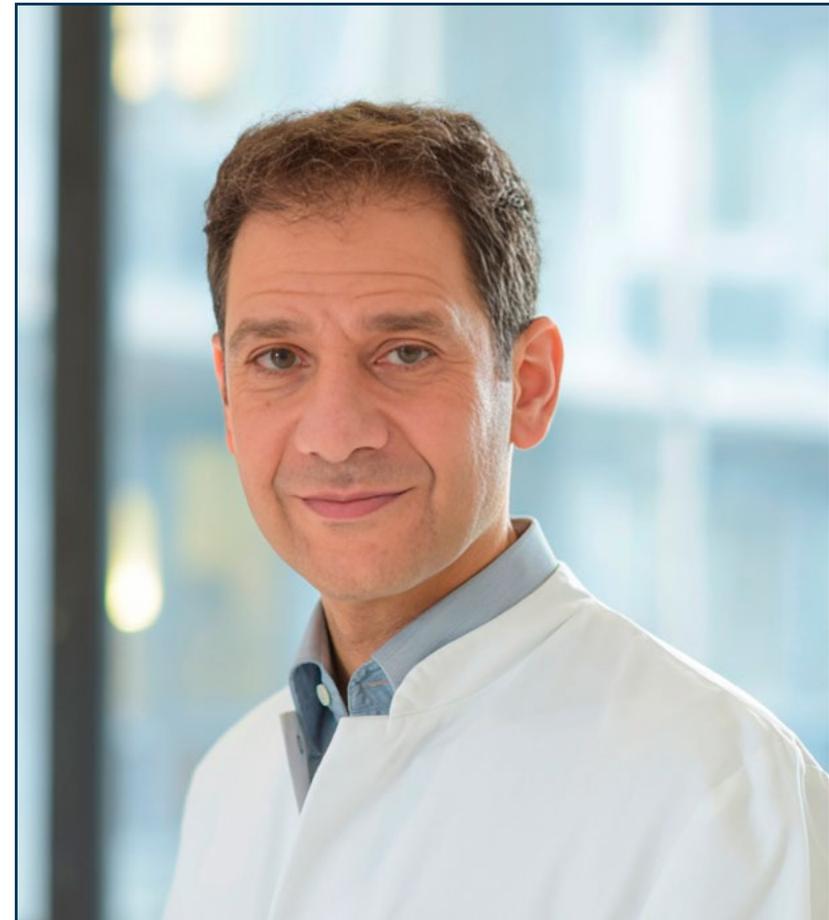
International Guest Director

Dr. Malek Bajbouj is a Psychiatrist and Neuroscientist, specialized in the areas of Global Health, Mental Health and Affective Sciences. He also has experience as a Sleep Physician and Social, Affective and Cognitive Neuroscientist. Together with an interdisciplinary team, his work has focused on research on stress, affect and emotions. In particular, to carry out these studies, some of his main work has focused on cell culture, imaging and brain stimulation, as well as humanitarian aid.

Most of his professional experience has been as Medical Director and Head of the Center for Affective Neuroscience at the Charité Universitätsmedizin Berlin. In addition, his main research focus in the field of Global Mental Health has been the development of tailored, low-threshold preventive and therapeutic interventions against stress and trauma-related disorders. To this end, he has made use of digital tools and clinical trials, conducting interventions focused on reverse-innovation electrophysiological and neuroimaging approaches to improve patient phenotyping.

Likewise, Dr. Malek Bajbouj's firm commitment to Mental Health worldwide has led him to develop a large part of his professional activity in countries in the Middle East, Far East and Ukraine. In this sense, he has participated in various international conferences such as the Ukrainian-German Conference on Mental Health, Psychosocial Support and Rehabilitation. He has also written more than 175 book chapters and has an extensive list of scientific publications in which he has investigated topics such as Emotional Neuroscience, Affective Disorders and Global Mental Health.

In fact, his contributions in Psychiatry and Neuroscience have been awarded several times. One of them was in 2014, when she was awarded the Else Kröner-Fresenius Prize, recognizing her outstanding scientific research. And it is that his tireless work to strengthen the mental health of people around the world has positioned him as one of the best professionals in his field.



Dr. Bajbouj, Malek

- Medical Director of the Center for Affective Neuroscience at Charité
- Universitätsmedizin, Berlin, Germany.
- Visiting Research Fellow at the Department of Psychiatry, Columbia University and the New York State Psychiatric Institute, New York, New York, USA
- Physician and Assistant Researcher at the Free University of Berlin
- Specialist in Sleep Medicine
- Specialist in Psychiatry and Psychotherapy
- Master of Business Administration from Steinbeis-Hochschule University
- Graduate in Medicine from the Johannes Gutenberg University
- Member of:
 - Research Group Languages of Emotion at the Freie Universität Berlin

“

Thanks to TECH, you will be able to learn with the best professionals in the world”

Management



Dr. De la Serna, Juan Moisés

- ◆ PhD in Psychology
- ◆ Master's Degree in Neurosciences and Behavioral Biology
- ◆ Director of the Open Chair of Psychology and Neurosciences and science communicator
- ◆ Postgraduate Diploma in Didactic Methodology
- ◆ Postgraduate Certificate in Clinical Hypnosis
- ◆ Expert in Project Management
- ◆ Occupational Trainer



Ms. Jiménez Romero, Yolanda

- ◆ Educational psychologist
- ◆ Degree in Primary Education with English
- ◆ Educational psychologist
- ◆ Master's Degree in Neuropsychology of High Intellectual Abilities
- ◆ Master's Degree in Emotional Intelligence
- ◆ Neurolinguistic Programming Practitioner
- ◆ Specialized Teacher in High Intellectual Ability
- ◆ Co-director, Author and Teacher in Different University Educational Projects.



Professors

Ms. Pellicer Royo, Irene

- ♦ Physical Education Teacher at Fundació Jesuïtes Educació
- ♦ Bachelor of Science in Physical Activity and Sport, University of Lleida
- ♦ Master's Degree in Medical Sciences applied to Physical Activity and Sport, University of Lleida
- ♦ Certificate in Management and Administration of Sports Entities
- ♦ Master's Degree in Emotional Education and Well-being
- ♦ Postgraduate in Neuroeducation Learning with all our potential, University of Barcelona

“

Join the new teaching model, acquiring the most developed knowledge in Neurosciences in a Postgraduate Certificate that will become a highly effective tool”

04

Structure and Content

The structure of the contents of the Postgraduate Certificate in Neurosciences for Teachers has been designed by a team of professionals from leading educational centers and universities. By incorporating, as a priority, the new information and communication technologies, this program is configured as an example of innovative education, of total and permanent relevance.

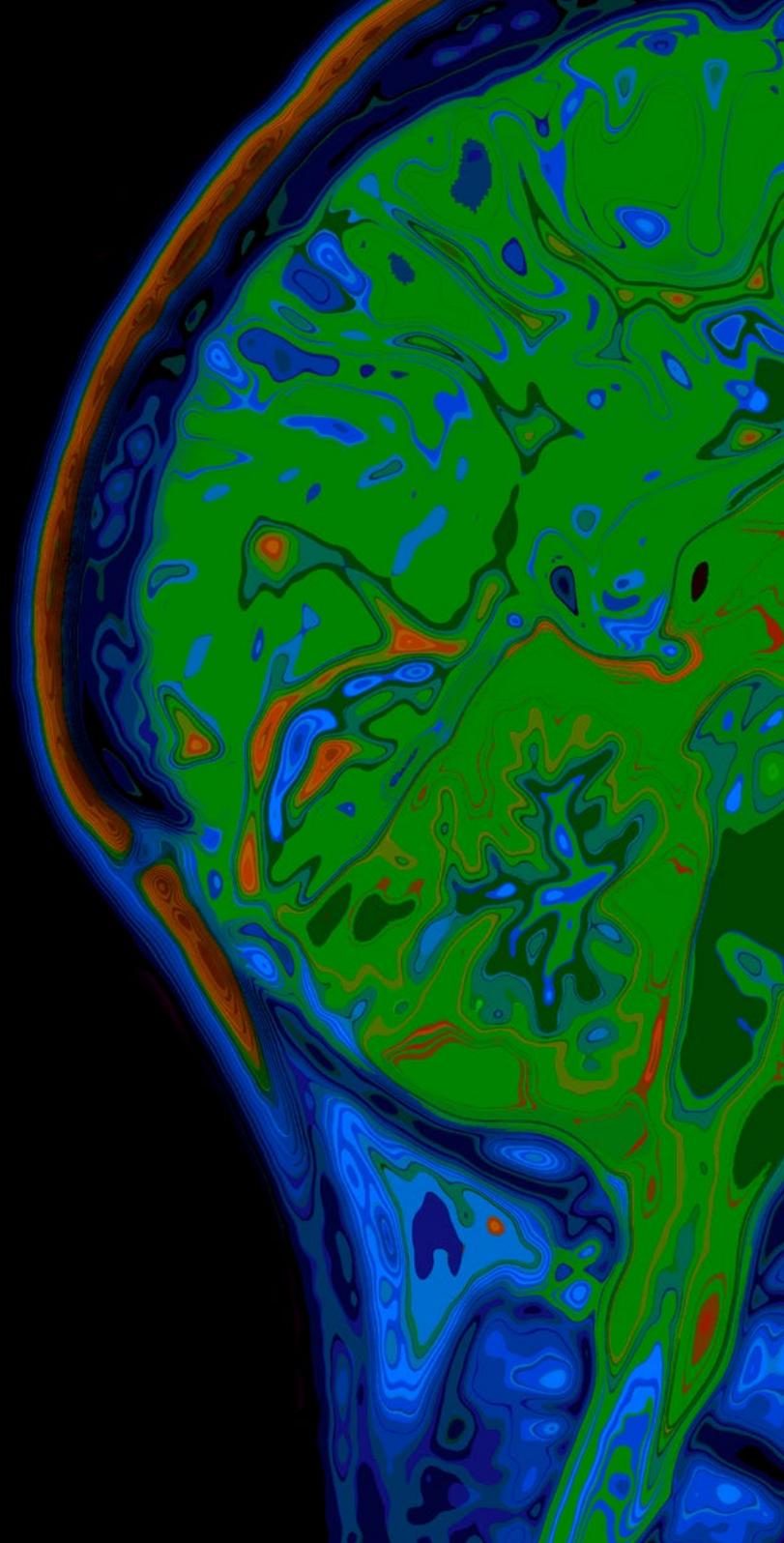


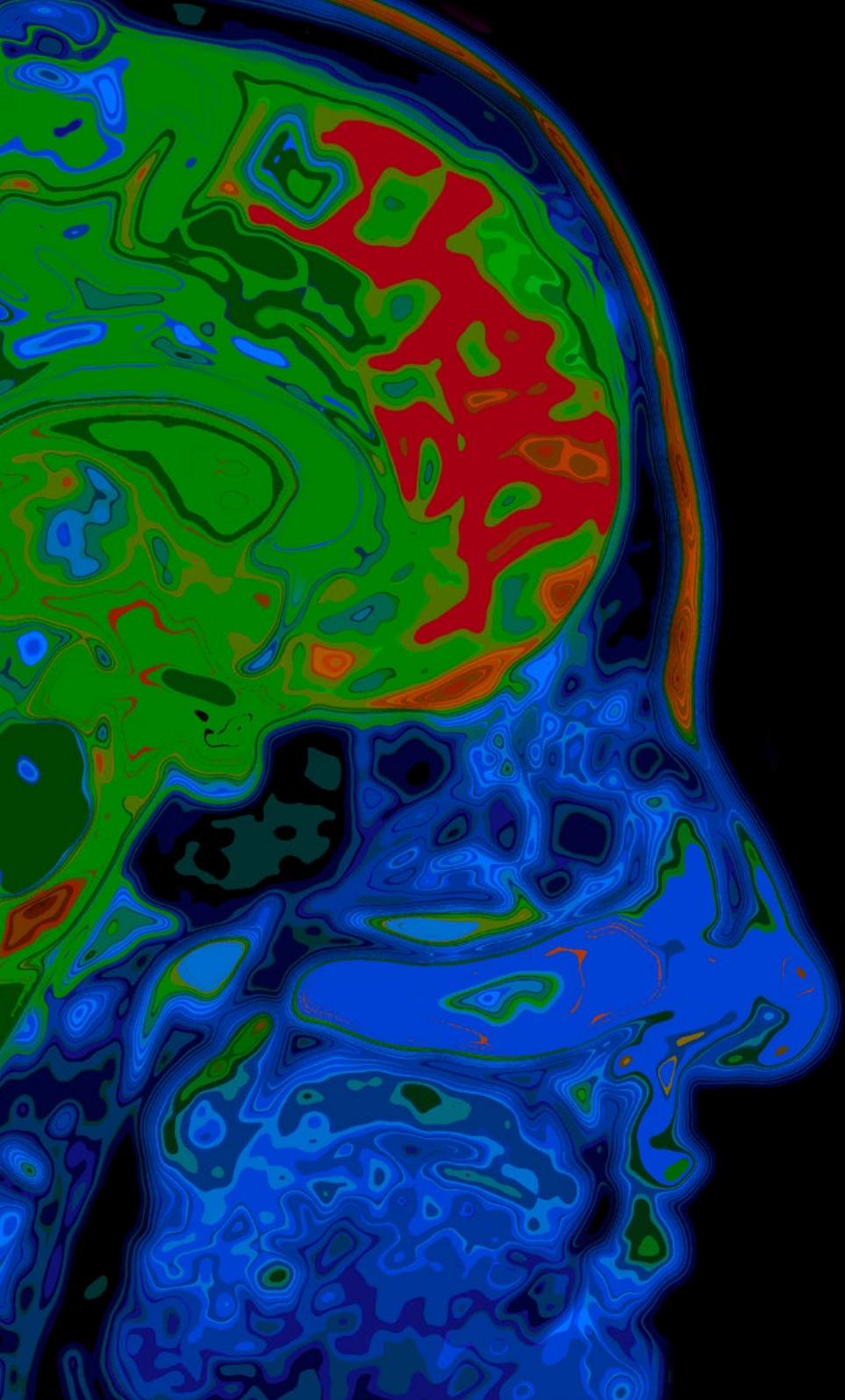
“

*This Postgraduate Certificate in
Neurosciences for Teachers contains
the most complete and up-to-date*

Module 1. Basis in Neurosciences

- 1.1. The Nervous System and Neurons
 - 1.1.1. The Formation of the Nervous System
 - 1.1.2. Types of Neurons
- 1.2. Neurobiological Basis of the Brain
 - 1.2.1. Brain Hemispheres and Lobes
 - 1.2.2. Localizationism vs Brain Functionalism
- 1.3. Genetics and Neurodevelopment
 - 1.3.1. Undifferentiated Neurons
 - 1.3.2. Programmed Neuronal Death
- 1.4. Myelination
 - 1.4.1. Electrical Interneuronal Communication
 - 1.4.2. Role of Myelin in Neurons
- 1.5. Brain Neurochemistry
 - 1.5.1. Interneuronal Chemical Communication
 - 1.5.2. Neurohormones and Their Functions
- 1.6. Plasticity and Brain Development
 - 1.6.1. Age vs. Neuronal Plasticity
 - 1.6.2. Neurodevelopment
- 1.7. Hemispheric Differences
 - 1.7.1. Right Brain
 - 1.7.2. Left Brain
- 1.8. Interhemispheric Connectivity
 - 1.8.1. White Matter
 - 1.8.2. Differences Between Genders
- 1.9. Localizationism vs Functionalism
 - 1.9.1. Hemispheric Functions
 - 1.9.2. New Localizationism
- 1.10. Invasive vs Non-Invasive Techniques for Studying the Brain
 - 1.10.1. Invasive Techniques
 - 1.10.2. Non-Invasive Techniques





“

*A unique, key, and decisive
experience to boost your
professional development”*

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.





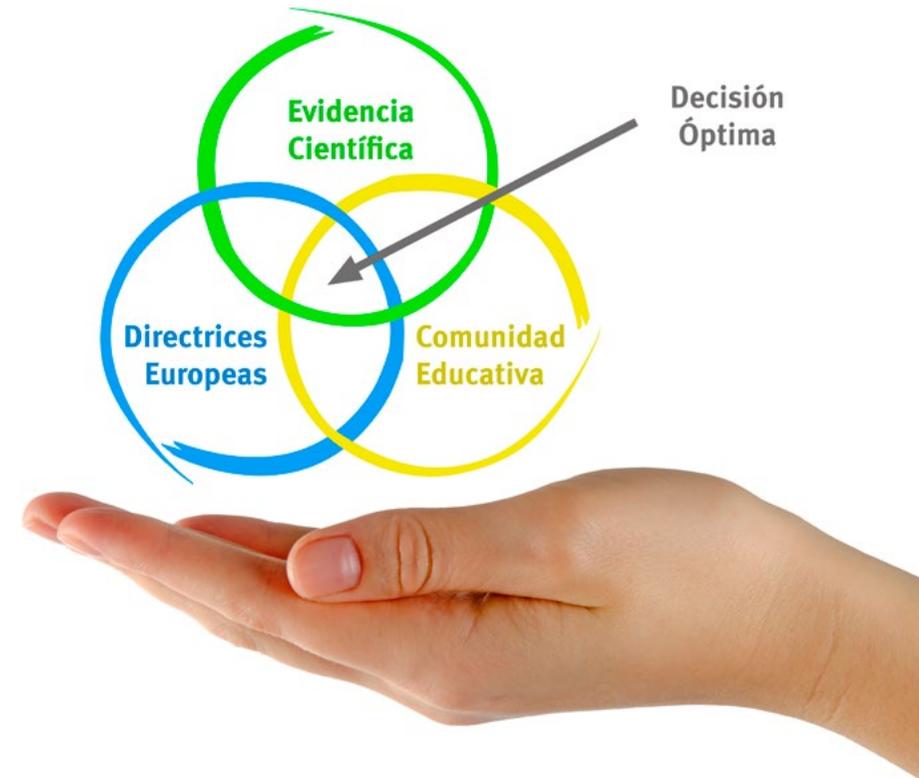
“

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.

“

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

1. Educators 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 is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
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 Harvard 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.

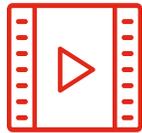
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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 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.



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, students can watch them as many times as they want.



Interactive Summaries

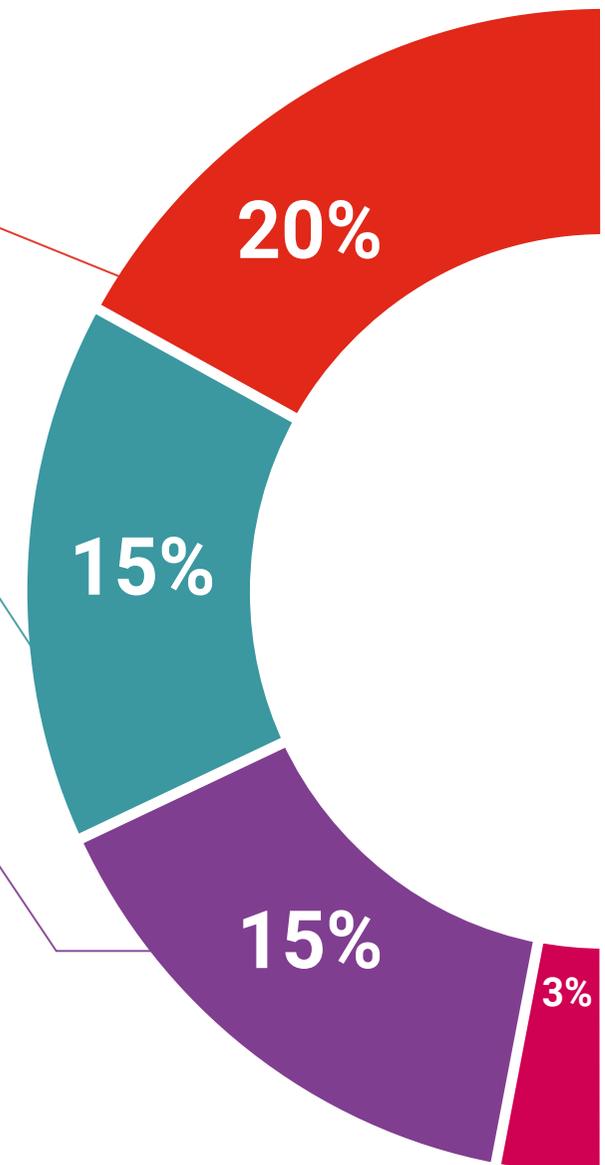
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

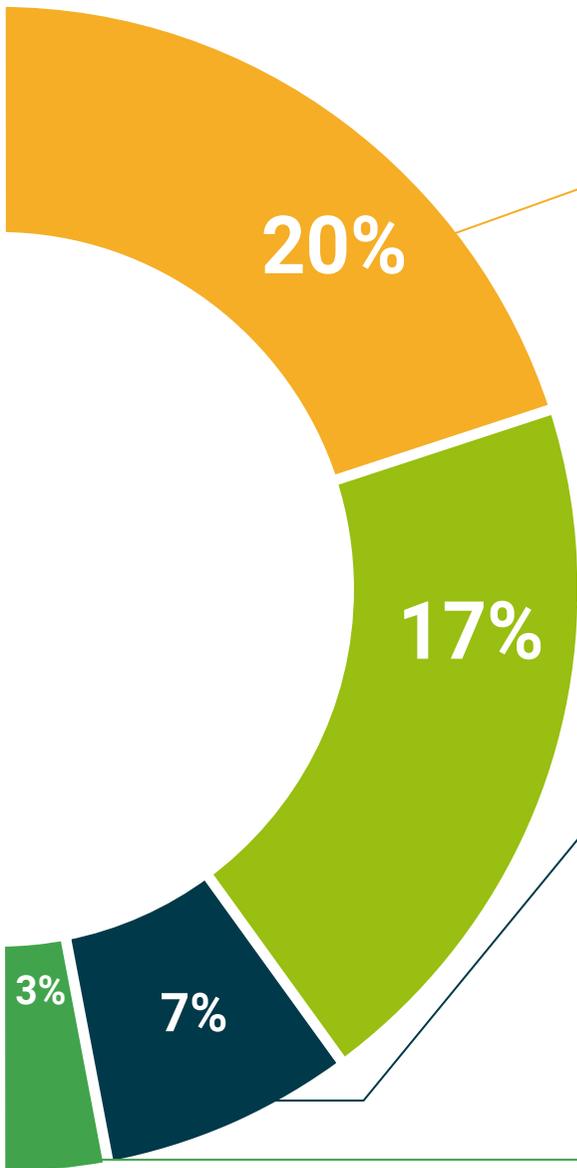
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 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 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 Neurosciences for Teachers 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*

The Postgraduate Certificate in **Postgraduate Certificate in Neurosciences for Teachers** guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by **TECH Global 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** title 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 Neurosciences for Teachers**

Modality: **online**

Accreditation: **6 ECTS**



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



Postgraduate Certificate Neurosciences for Teachers

- » Modality: online
- » Duration: 2 months
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate Neurosciences for Teachers