

# Postgraduate Certificate

## Principles of Functional Neuroanatomy





## Postgraduate Certificate Principles of Functional Neuroanatomy

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/principles-functional-neuroanatomy](http://www.techtute.com/us/medicine/postgraduate-certificate/principles-functional-neuroanatomy)

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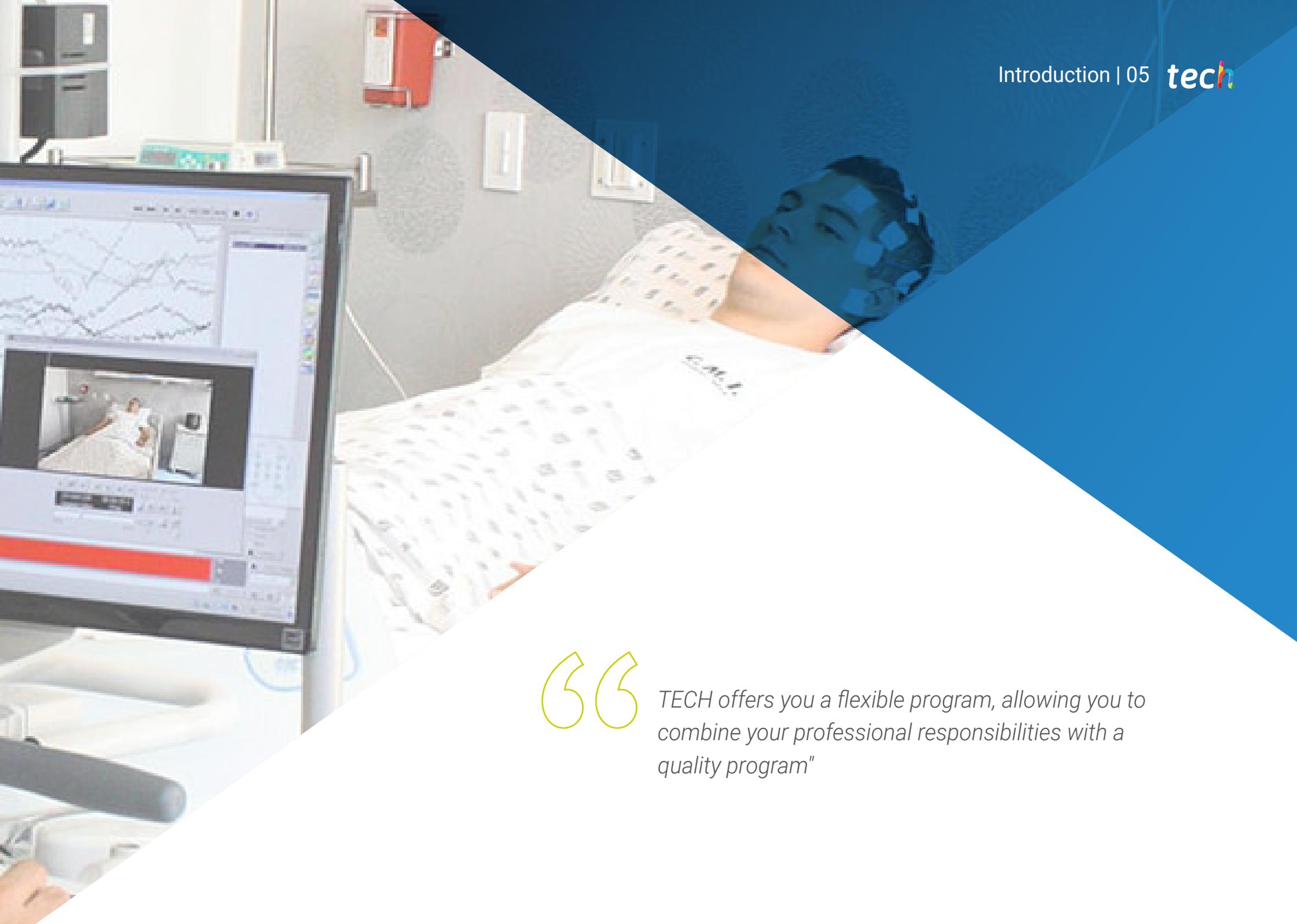
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# 01

# Introduction

The brain continues to be one of the most complex organs in the human body and one to which scientists continue to dedicate hours of research to understand it. The relevance of studies in functional neuroanatomy and knowledge of the functioning of the brain has become clear in the application of treatments in pathologies that affect learning and memory. Advances in this field lead medical professionals to want to be constantly updated. Given this panorama, this 100% online degree designed for professionals arises. who wish to combine their work responsibilities with an education quality.





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*TECH offers you a flexible program, allowing you to combine your professional responsibilities with a quality program"*

Medical professionals are aware that if they want to offer the patient the most complete service through extensive and specialized knowledge that allows them to make the most accurate diagnoses and the most optimal treatments. With the aim of keeping the professional up to date in the field of functional neuroanatomy, this Postgraduate Certificate was made in an exclusive format in online mode, taught by a highly qualified teaching team and with experience in this area.

With the multimedia content that TECH uses in all its degrees, the professional will update knowledge in a more dynamic and enjoyable way. Thus, through video summaries, videos in detail, interactive diagrams or specialized readings, students will delve into the basics of frontal lobe functioning for 6 weeks, in the neuropsychology of the dorsolateral and orbitofrontal prefrontal cortex, the motor cortex or the temporal lobe. The real clinical cases provided by the teaching team give you the opportunity to get closer to reality and advance in their clinical praxis.

The professional is, therefore, before a teaching with a theoretical-practical approach that will allow him to achieve the renewal of knowledge comfortably. To do this, you will only need a computer, tablet or mobile with an internet connection with which to fully access the entire agenda of this intensive Postgraduate Certificate. Likewise, the *Relearningsystem*, based on the repetition of content, will favor progression through out the program in a more natural way, reducing the long hours of study so common in other teaching methods.

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

- ♦ The development of practical cases presented by experts in Psychology and Neurology
- ♦ 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 for 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



*You are facing a degree that gives you the opportunity to comfortably delve into the neuropsychology of the dorsolateral prefrontal cortex”*

“

*150 hours of up-to-date content  
and with the latest technology  
applied to education”*

The program includes, in its teaching staff, professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

Its 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 an immersive education designed to learn in real situations.

This program's design focuses on Problem-Based Learning, through which the professional must try to solve the different professional practice situations that arise during the academic program. This will be done with the help of an innovative system of interactive videos made by renowned experts.

*An educational program with which you  
can renew your knowledge about the  
functioning of the temporal, parietal  
and occipital lobe.*

*In just 6 weeks you will get the  
knowledge update on functional  
neuroanatomy that you are  
looking for.*



# 02 Objectives

The specialized teaching team will contribute their extensive knowledge in functional neuroanatomy so that the medical professional can further refine their knowledge in this area. Therefore, upon completion of this program, students will be aware of the latest scientific advances that have been made in this subspecialty. To do this, this institution provides the necessary educational tools to guarantee updating in a visual and dynamic way, in just 6 weeks.





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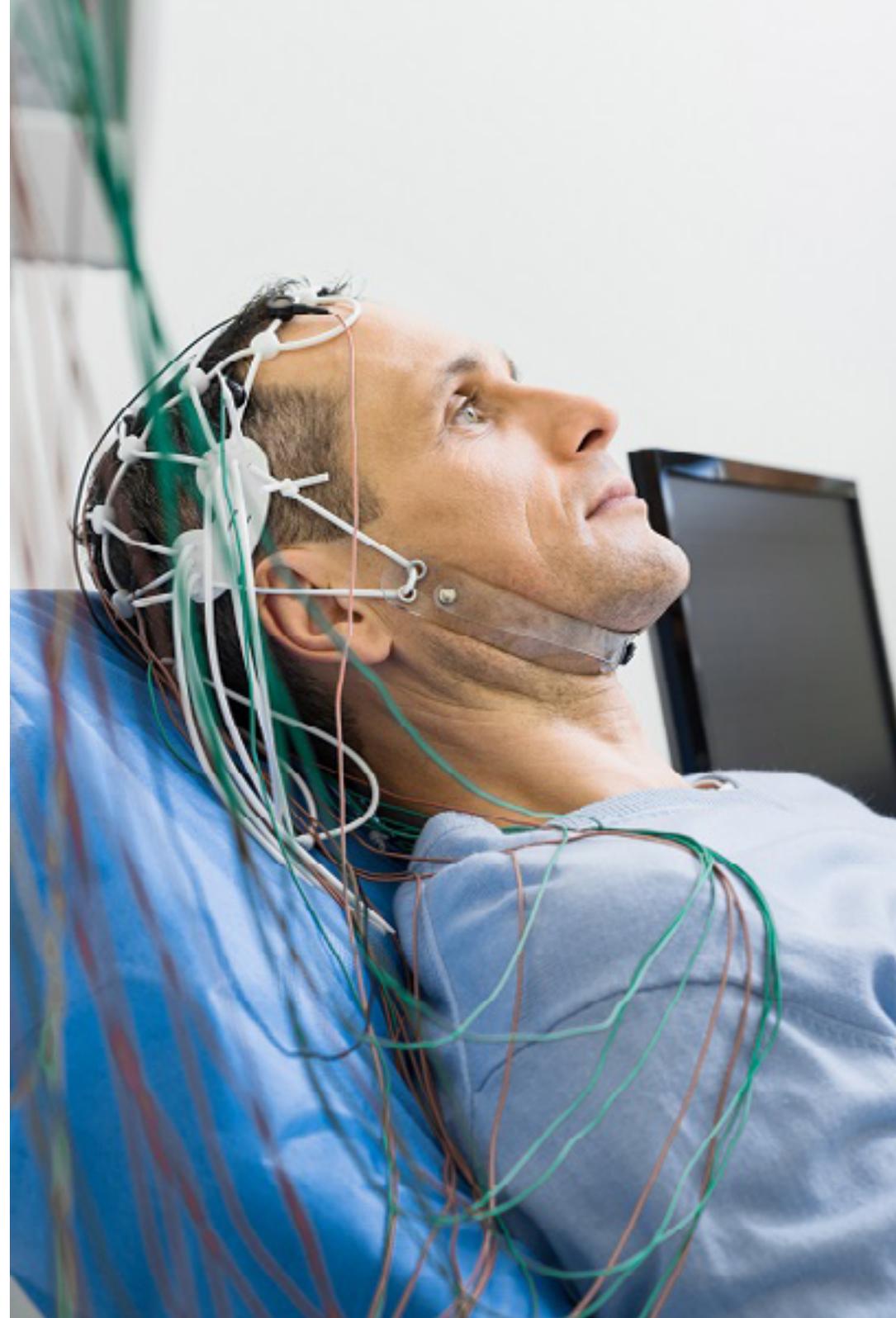
*Delve into the characteristics of cerebral asymmetry with a program that is at the educational forefront”*



## General Objectives

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- Delve into the latest developments in Functional Neuroanatomy, as well as the diagnostic and treatment strategies that are obtaining the best results
- Know in detail the aspects of Neuropsychology and its main characteristics, as well as the latest scientific evidence related to the basis of its functioning





## Specific Objectives

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- ♦ Learn and understand about the basics of functional neuroanatomy
- ♦ Differentiate between the different brain zones and their functioning

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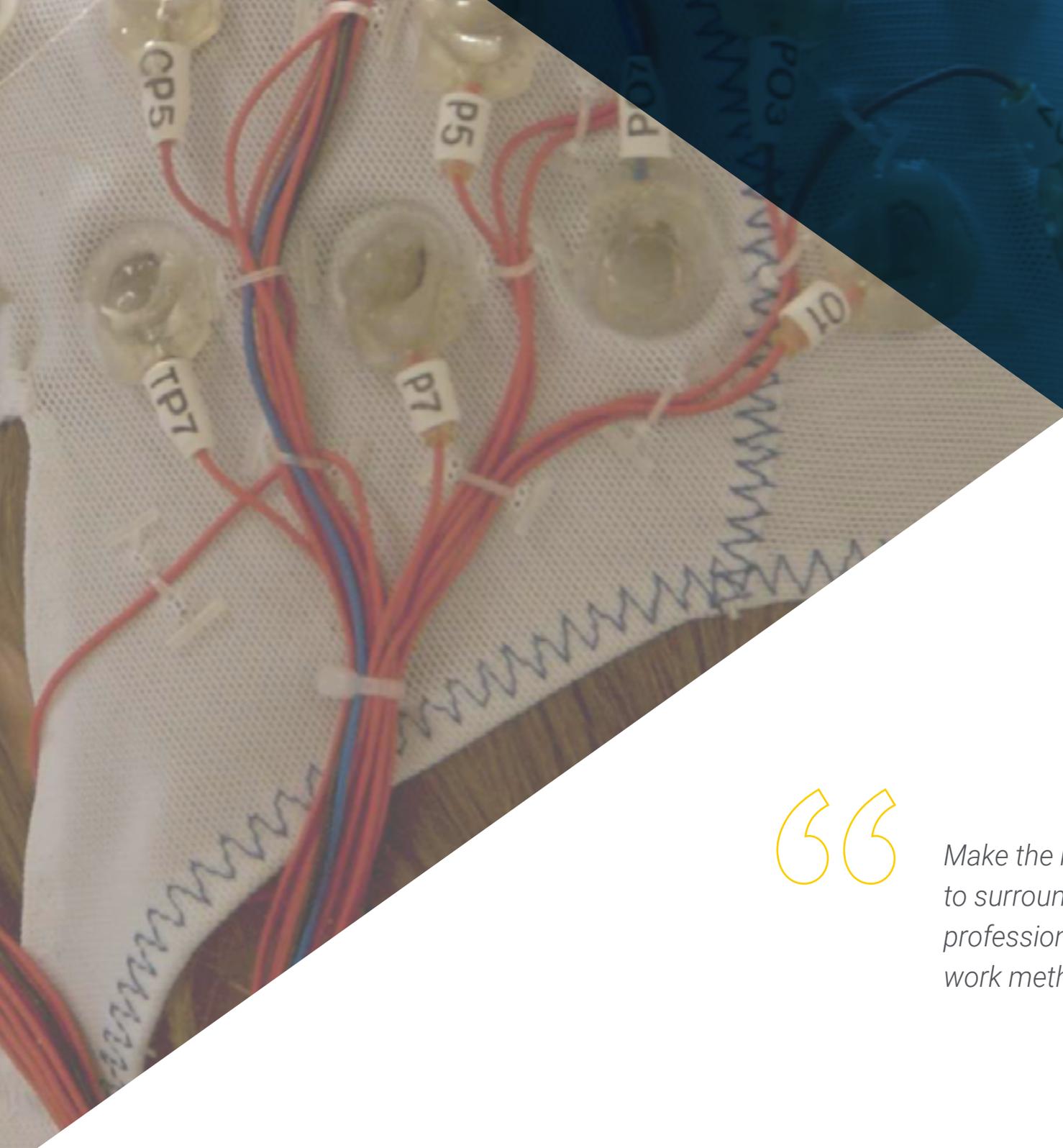
*Delve into the functioning of the different brain areas with a Diploma that consists of a theoretical-practical approach”*

# 03

# Course Management

TECH is continually committed to academic excellence. For this reason, each of its programs has teaching teams of the highest reputation. These experts have extensive experience in their professional fields and, at the same time, have achieved significant results with their empirical research and fieldwork. In addition, these specialists play a leading role within the university qualification, as they are in charge of selecting the most up-to-date and innovative content to be included in the syllabus. In addition, they participate in the elaboration of numerous multimedia resources of high pedagogical rigor.





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*Make the most of this opportunity to surround yourself with expert professionals and learn from their work methodology”*

## International guest conductor

Dr. Steven P. Woods is a leading neuropsychologist, internationally recognized for his outstanding contributions to improving clinical detection, prediction and treatment of real-world health outcomes in diverse neuropsychological populations. He has forged an exceptional career path, which has led him to publish over 300 articles and serve on editorial boards in 5 major Clinical Neuropsychology journals.

His excellent scientific and clinical work focuses primarily on the ways in which cognition can hinder and support daily activities, health and well-being in adults with chronic medical conditions. Other areas of scientific relevance, for this expert, also include health literacy, apathy, intra-individual variability and internet navigation skills. His research projects are funded by the National Institute of Mental Health (NIMH) and the National Institute on Drug Abuse (NIDA).

In this regard, Dr. Woods' research approach explores the application of theoretical models to elucidate the role of neurocognitive deficits (e.g., memory) in everyday functioning and health literacy in people affected by HIV and aging. In this way, his interest focuses, for example, on how people's ability to "Remember to Remember", the so-called prospective memory, influences health-related behaviors, such as medication adherence. This multidisciplinary approach is reflected in his groundbreaking research, available on Google Scholar and ResearchGate.

He has also founded the Clinical Neuropsychology Service at Thomas Street Health Center, where he holds a senior position as Director. Here, Dr. Woods provides Clinical Neuropsychology services to people affected by HIV, providing critical support to communities in need and reaffirming his commitment to the practical application of his research to improve lives.



## Dr. Woods, Steven P

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- Founder and Director of the Clinical Neuropsychology Service at the Thomas Street Health Center
- Collaborator in the Department of Psychology, University of Houston
- Associate Editor at Neuropsychology and The Clinical Neuropsychologist
- Ph.D. in Clinical Psychology, with a specialization in Neuropsychology, Norfolk State University
- B.S. in Psychology, Portland State University
- Member of:
  - National Academy of Neuropsychology
  - American Psychological Association (Division 40, Society for Clinical Neuropsychology)

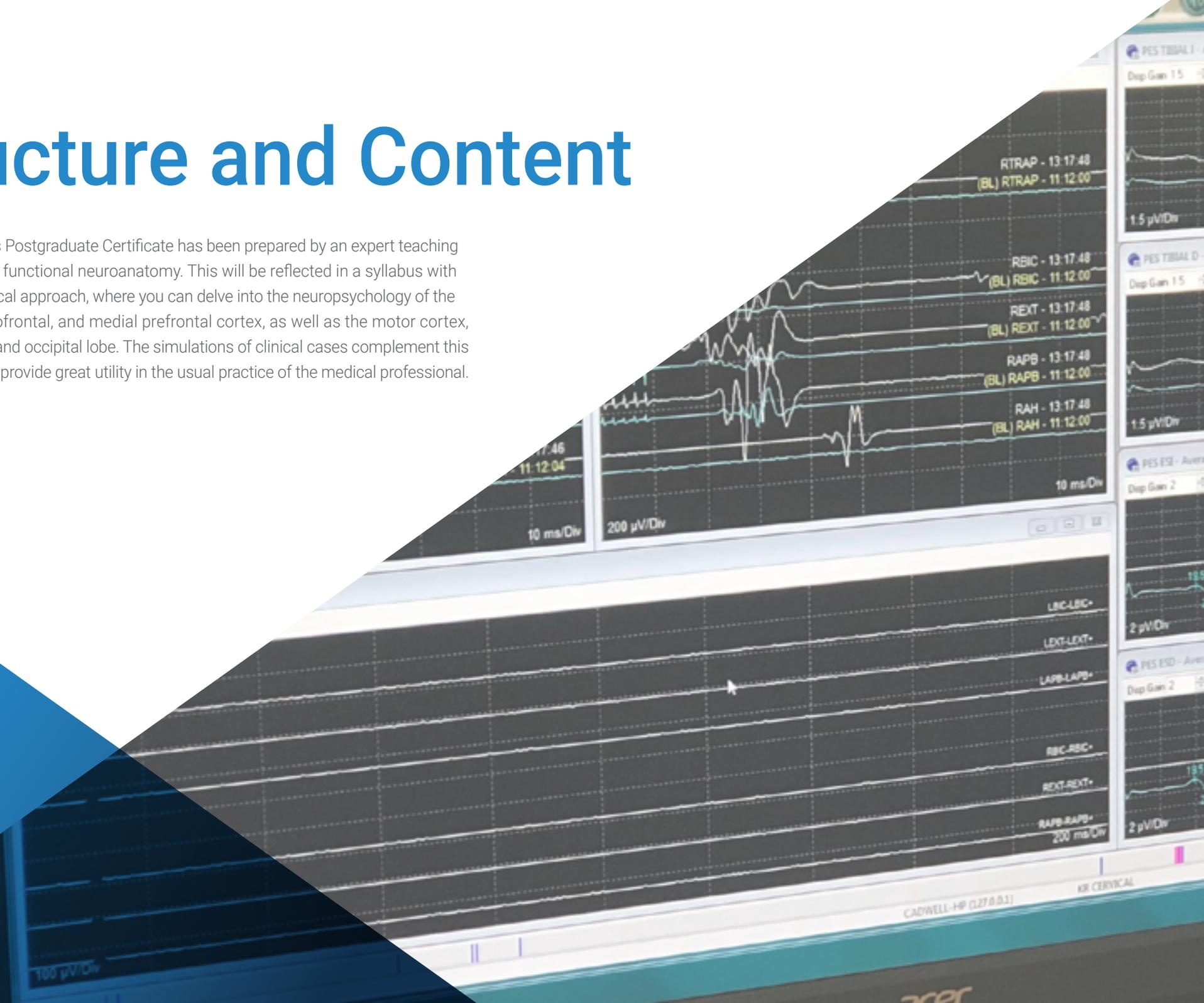
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*Thanks to TECH, you will be able to learn with the best professionals in the world”*

# 04

## Structure and Content

The syllabus of this Postgraduate Certificate has been prepared by an expert teaching team in the field of functional neuroanatomy. This will be reflected in a syllabus with a theoretical-practical approach, where you can delve into the neuropsychology of the dorsolateral, orbitofrontal, and medial prefrontal cortex, as well as the motor cortex, temporal, parietal, and occipital lobe. The simulations of clinical cases complement this agenda and in turn provide great utility in the usual practice of the medical professional.





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*Video summaries, videos in detail or specialized readings make up the innovative teaching material of this 100% online program”*

## Module 1. Functional Neuroanatomy

- 1.1. Frontal Lobe
  - 1.1.1. Introduction to the Frontal Lobe
  - 1.1.2. Main Features
  - 1.1.3. Bases of their Functioning
- 1.2. Neuropsychology of the Dorsolateral Prefrontal Cortex
  - 1.2.1. Introduction to the Dorsolateral Prefrontal Cortex
  - 1.2.2. Main Features
  - 1.2.3. Bases of their Functioning
- 1.3. Neuropsychology of the Orbitofrontal Cortex
  - 1.3.1. Introduction to the Orbitofrontal Cortex
  - 1.3.2. Main Features
  - 1.3.3. Bases of their Functioning
- 1.4. Neuropsychology of the Medial Prefrontal Cortex
  - 1.4.1. Introduction to the Dorsolateral Prefrontal Cortex
  - 1.4.2. Main Features
  - 1.4.3. Bases of their Functioning
- 1.5. Motor Cortex
  - 1.5.1. Introduction to the Motor Cortex
  - 1.5.2. Main Features
  - 1.5.3. Bases of their Functioning
- 1.6. Temporal Lobe
  - 1.6.1. Introduction to the Temporal Lobe Cortex
  - 1.6.2. Main Features
  - 1.6.3. Bases of their Functioning





- 1.7. Parietal Lobe
  - 1.7.1. Introduction to the Parietal Lobe Cortex
  - 1.7.2. Main Features
  - 1.7.3. Bases of their Functioning
- 1.8. Occipital Lobe
  - 1.8.1. Introduction to the Occipital Lobe Cortex
  - 1.8.2. Main Features
  - 1.8.3. Bases of their Functioning
- 1.9. Cerebral Asymmetry
  - 1.9.1. Concept of Brain Asymmetry
  - 1.9.2. Characteristics and Functioning

“ You are facing a program that will allow you to properly invest your time in deepening functional neuroanatomy”

# 05

# Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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*TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”*

## The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes  
(which you might not be able to attend)”*



### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

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*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”*

## Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

*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.*



## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



*The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”*

### The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student 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.

## The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

*Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.*

*You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.*



As such, the best educational materials, thoroughly prepared, will be available in this program:



#### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### Interactive Summaries

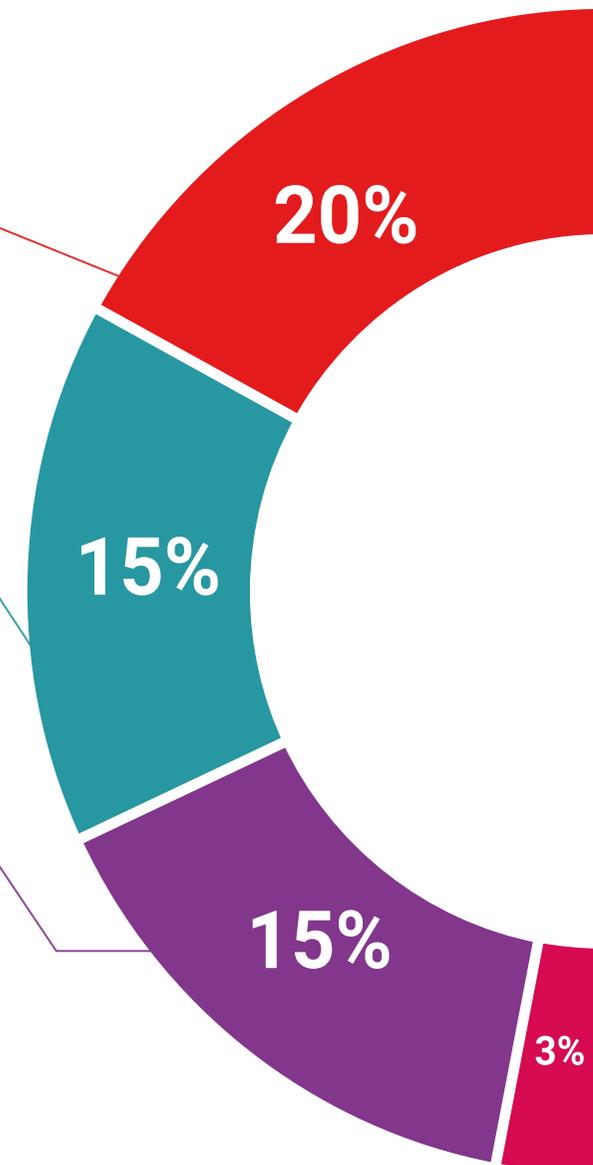
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

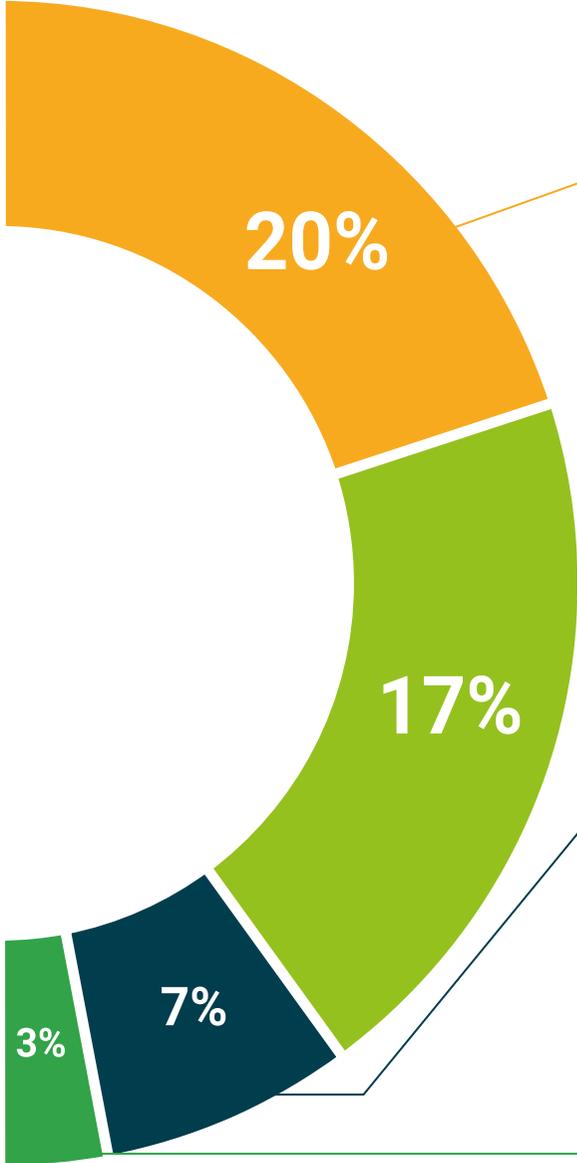
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





**Case Studies**

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



**Testing & Retesting**

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



**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 for 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 Functional Neuroanatomy 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 Nombre del Programa** 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 Functional Neuroanatomy**

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 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**  
Principles of Functional  
Neuroanatomy

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