

# Postgraduate Certificate

## Principles of Functional Neuroanatomy





## Postgraduate Certificate Principles of Functional Neuroanatomy

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » 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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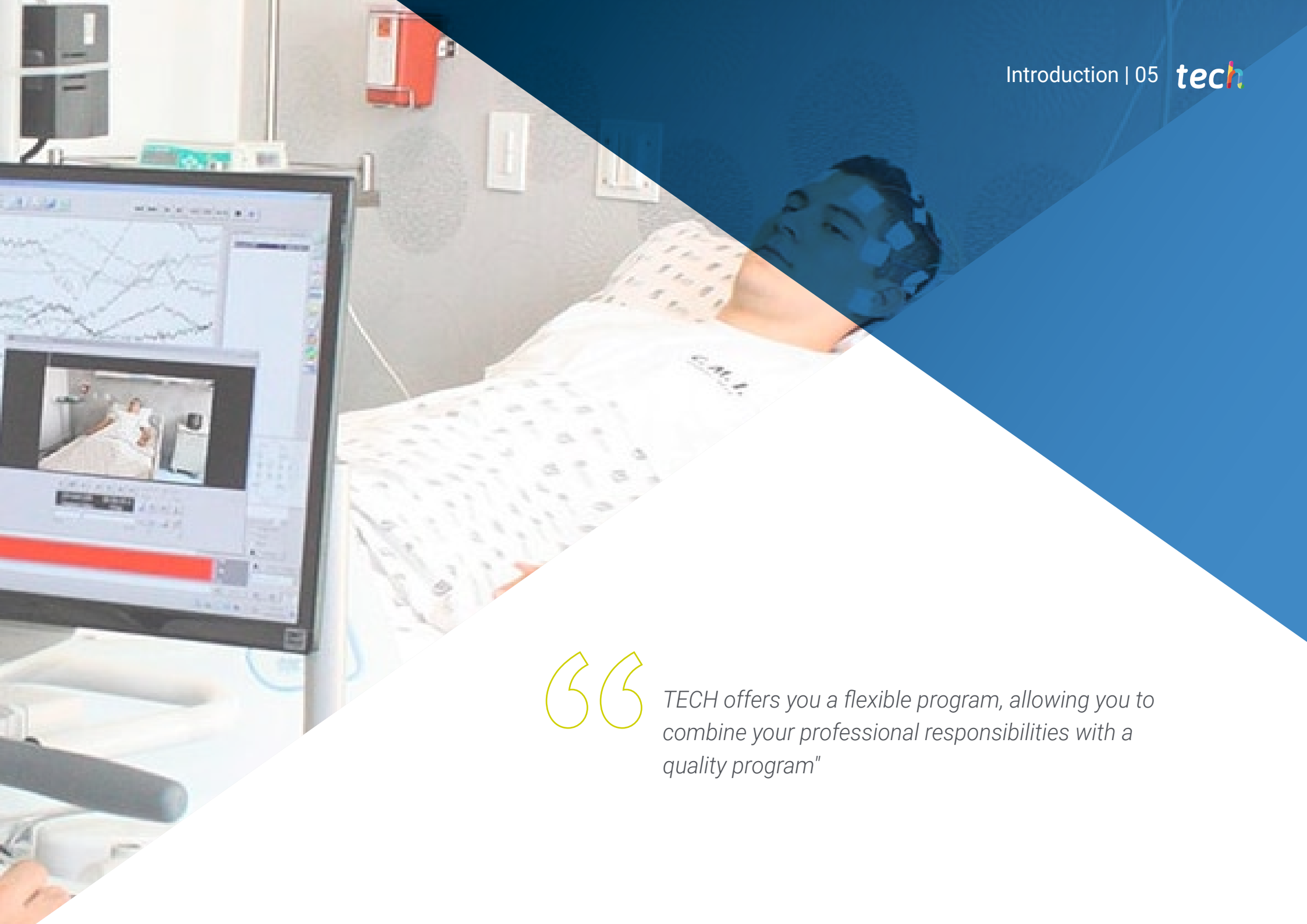
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# 01

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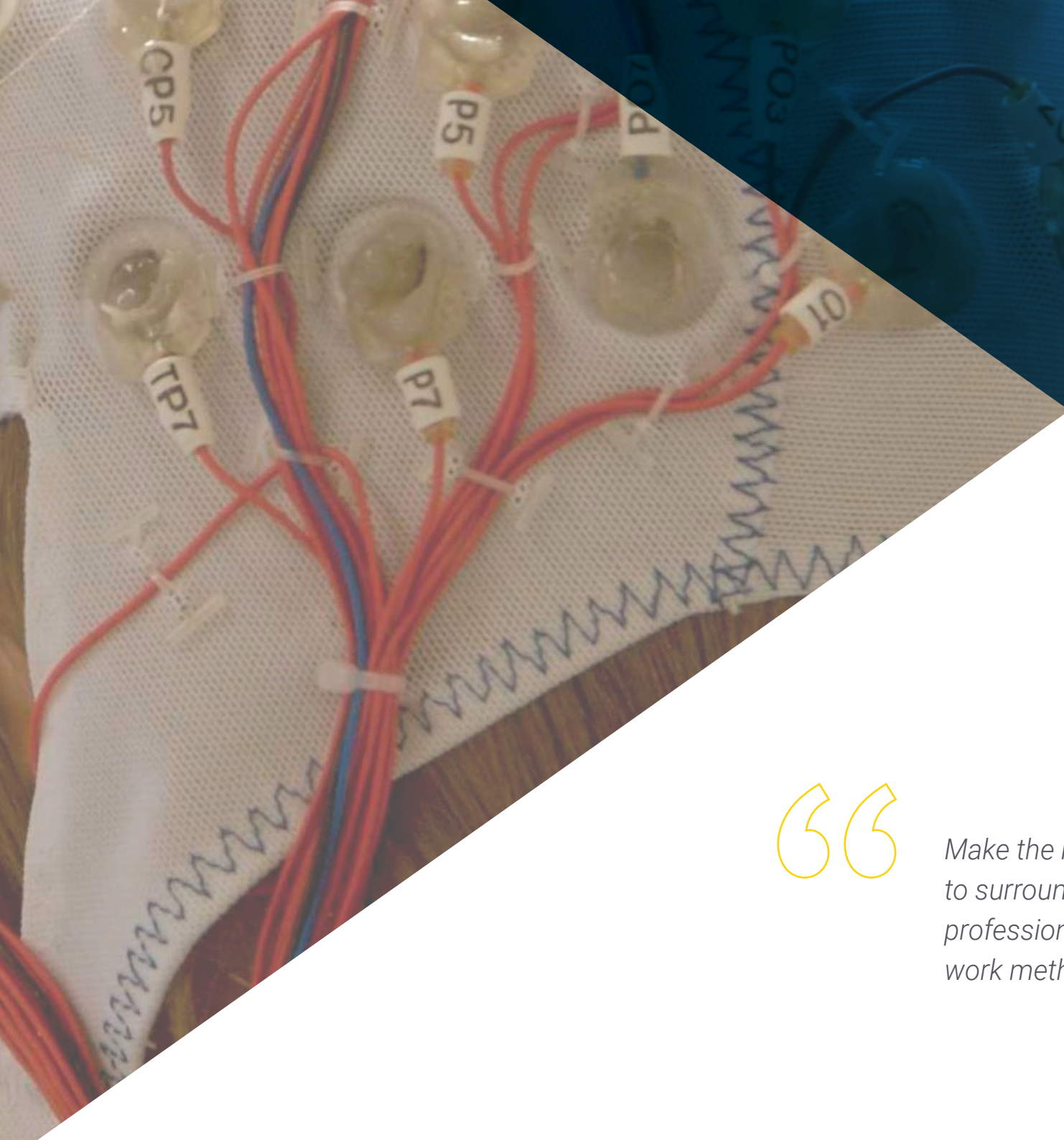
*Delve into the functioning of the different brain areas with a Diploma that consists of a theoretical-practical approach”*

# 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)

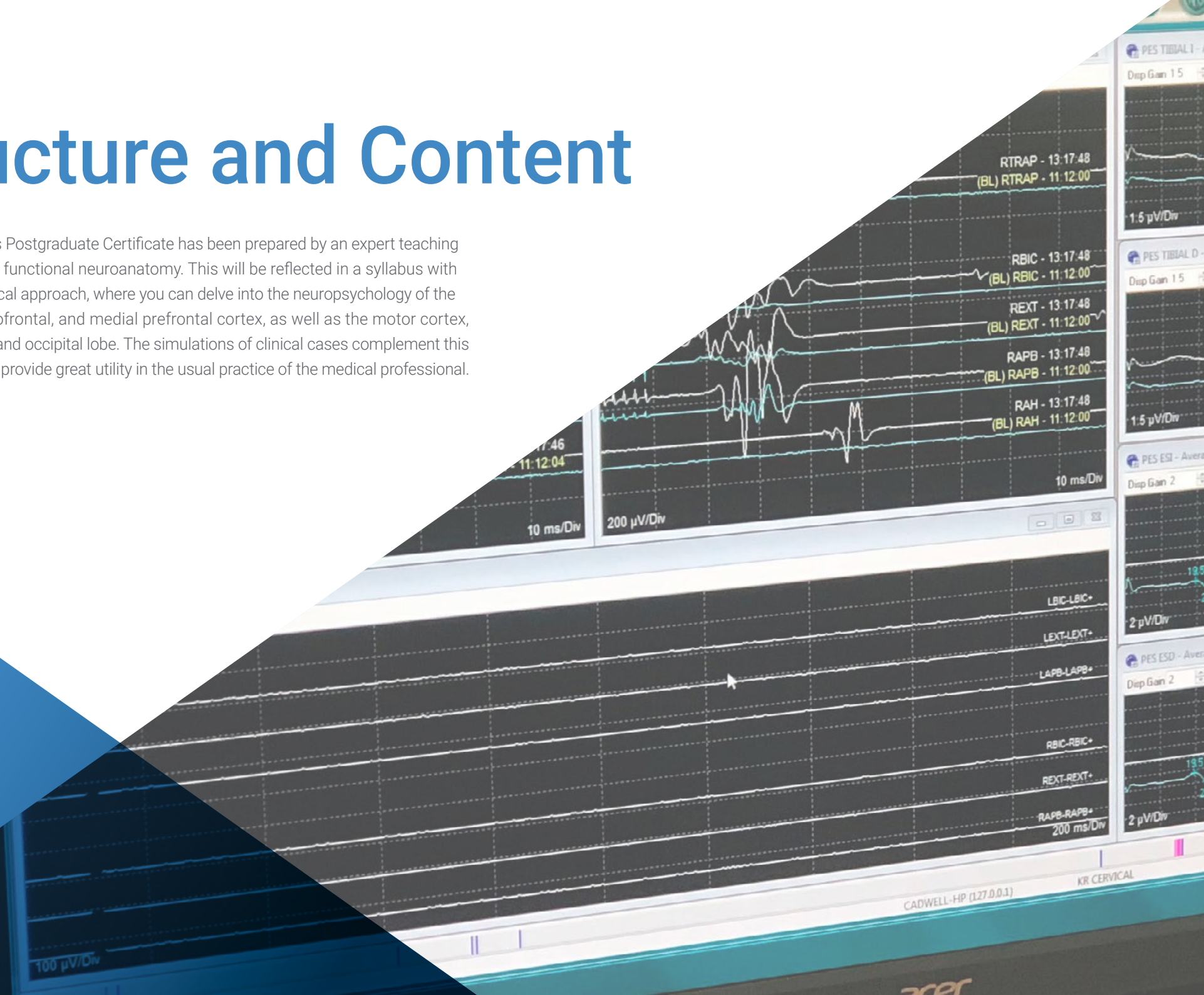
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*Thanks to TECH, you will be able to learn with the best professionals in the world”*

# 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

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

# 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. Specialists 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. Gervas, 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 in the physician's professional 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. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.



## 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.

*Professionals will learn through real cases and by resolving 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, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 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 TECH's 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 highly 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.



#### Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. 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 the videos as many times as you like.



#### 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 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 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 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 Principles of Functional Neuroanatomy** 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 Principles of Functional Neuroanatomy**

Official No. of Hours: **150 h.**



\*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  
classroom



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