



# Professional Master's Degree Clinical Neuropsychology

» Modality: online

» Duration: 12 months

» Certificate: TECH Global University

» Credits: 60 ECTS

» Schedule: at your own pace

» Exams: online

 $We b site: {\color{blue}www.techtitute.com/us/psychology/professional-master-degree/master-clinical-neuropsychology} \\$ 

# Index

02 Objectives Introduction p. 4 p. 8 05 03 Skills **Course Management Structure and Content** p. 16 p. 12 p. 20 06 07 Methodology Certificate

p. 30

p. 38





## tech 06 | Introduction

The development of Neuropsychology has allowed for a deeper understanding of disorders through the exhaustive study of the relationship between the brain and the behavior of a given clinical case. Thanks to this, specialists in this branch of psychology have been able to perfect their diagnostic strategies based on what is observed in the patient, being able to adapt pharmacological treatments and cognitive-behavioral therapies in a more effective and personalized way, as well as positively influencing the improvement of the patient's quality of life.

However, it is a science that is evolving rapidly, and each year unveils new discoveries, which is why professionals in this sector must constantly update their knowledge in order to be able to offer the best service to their patients, based on the latest science. To this end, TECH and its team of experts in Psychology and Neurology have developed this very complete Professional Master's Degree in Clinical Neuropsychology.

It is a multidisciplinary and intensive program that will provide graduates with all the information they need to master the latest developments in this discipline. It will explore the bases of clinical neuropsychology, as well as the principles of neuroanatomy, with special emphasis on cognitive functions and the different types of neurobiological bases that are known today. It will also delve into brain damage and aphasia, agraphia and alexia, as well as cognitive deficits and neurodegenerative diseases. Finally, it will focus on the main techniques of neuropsychological evaluation and rehabilitation, and will conclude with an exhaustive review of the most effective pharmacological treatments, their recommendations and the cases in which they should be avoided.

All of this, through a 100% online program which includes 1500 hours of theoretical, practical and additional material chosen and designed by the teaching team. In addition, all the content will be available from the beginning of the academic program, and can be downloaded to any device with an internet connection for offline viewing, even after the program has been completed. It is, therefore, a unique opportunity to study a program adapted to the needs of the Psychology sector and to the most complex requirements of the profession.

This **Professional Master's Degree in Clinical Neuropsychology** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- 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 self-assessment can be used to improve learning
- 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



You will be able to gain exhaustive knowledge about the bases and origins of this discipline, delving into the first authors and the most relevant works"



You'll take an in-depth review of functional neuroanatomy, from neuron composition to brain asymmetry"

The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The 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 immersive training programmed to train in 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. This will be done with the help of an innovative system of interactive videos made by renowned experts.

A program designed in relation to the latest scientific advances in neuropsychology and that covers cognitive functions and the latest developments related to the different neurobiological bases.

Would you know how to identify the types of apraxias and their characteristics? With this Professional Master's Degree, you will know in detail each one of them: ideomotor, ideational, visuoconstructive, facial and clothing.







# tech 10 | Objectives

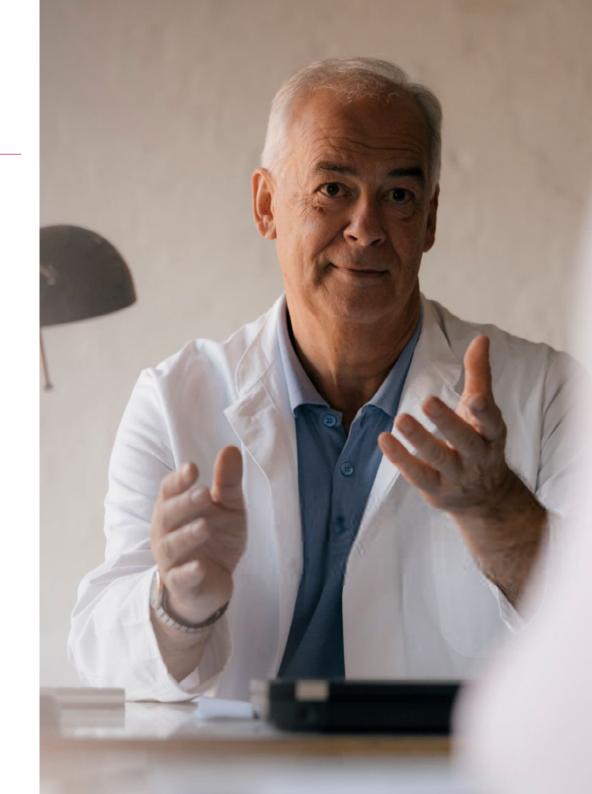


### **General Objectives**

- Describe the overall working of the brain and the biochemistry that activates or inhibits it
- Use brain activity as a map for mental health disorders
- Describe the brain-mind relationship
- Develop knowledge of the technology which can provoke changes in the brain in order to overcome mental illnesses
- Describe the most common neurological disorders in psychological behavior
- Describe the relationship between the central nervous system, the endocrine system and immune systems
- Understand current psychopharmacology and integrate this knowledge into psychological tools that can improve mental illness



A program that will give your career a professional boost thanks to the high level of precision with which each section has been designed"





#### Module 1. Introduction to Neuropsychology

- Know the beginnings of neuropsychology and its first studies
- Learn about the basics of Neurobiology
- Know and contextualize the bases of the development of the central nervous system

#### Module 2. Principles of Neuroanatomy

- Know the origins and the evolutionary process of the nervous system
- Obtain a general vision on the formation of the nervous system
- Know the fundamental basics of Neuroanatomy

#### Module 3. Functional Neuroanatomy

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

#### Module 4. Cognitive Functions

- Know the most important cognitive functions
- Know and contextualize the neurobiological bases of the cognitive functions
- Know the principles and origins of cognitive functions

#### Module 5. Brain Injury

- Know and contextualize the basics of brain injury
- Know and differentiate between the different types of brain injury
- Learn the different disorders derived from brain injury

#### Module 6. Aphasias, Agraphias and Alexias

- Know and internalize the bases of aphasias, agraphias and alexias
- Know the classification and characteristics specific to aphasias, agraphias and alexias
- Know the evaluation and diagnosis of aphasias, agraphias and alexias

#### Module 7. Cognitive Deficiencies

- Know and contextualize the different cognitive deficiencies
- Classify the cognitive deficiencies according to their symptoms

#### Module 8. Neurodegenerative Diseases

- Learn about the basics of neurodegenerative diseases
- Differentiate between and contextualize the different neurodegenerative diseases
- Know the different types of dementia and learn how to differentiate between them

#### Module 9. Neurodegenerative Assessment and Rehabilitation

- Know the basics of neuropsychological assessment and rehabilitation
- Know the different assessment tools that exist within neuropsychology
- Know the different techniques in neuropsychological assessment

#### Module 10. Pharmacological Treatment

- Know and learn about the basics and foundations of psychopharmacology
- Know and classify the different types of psychopharmaceuticals
- Know and contextualize the different uses of psychopharmacological therapy

# 03 **Skills**

This Professional Master's Degree has been designed in such a way that those who study the program will develop the required skills that are demanded of any specialist working in the field of Clinical Neuropsychology. Thanks to the exhaustiveness with which it has been structured, your ability to act in situations within this field will be boosted, due to the acquisition of up-to-date knowledge. In this way, you will be able to implement the most avant-garde treatment and diagnostic strategies in your professional practice, contributing to the improvement and development of your professional skills and aptitudes in only 12 months.



# tech 14 | Skills



### **General Skills**

- Recognize patterns and indicators of mental illness
- Support your students with mental illness knowing the processes and how they occur
- Give support and encouragement to the mentally ill patient and their family based on comprehensive knowledge



Among the skills you will acquire in this program is the use of the best this program is the use of the best restorative and reparative strategies in the evaluation and rehabilitation of the neuropsychological patient"







## Specific Skills

- Describe the neurological principles of behavior
- Explain the principles of neuroanatomy
- Know the principles of cerebral biochemistry
- Describe the biochemistry of mental disorders
- Know how neuroanatomy and mental disorders work
- Recognise the biochemistry and neuroanatomy of the most well-known mental disorders in the the practitioner's outpatient clinic
- Distinguish the pharmacological treatments available
- Know what neurobehavioral networks are, and how they work
- Know the stages of pharmacological intervention in anxiety and stress disorders
- Know the processes for intervention with psychotropic drugs in depression, eating disorders, and sleep disorders





#### **International Guest Director**

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).

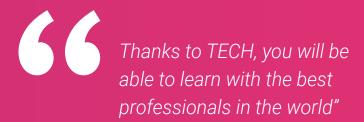
In this regard, Dr. Woods' research approach explores the application of theoretical models to elucidate the role of neurocognitive deficits (e.g., memory) in everyday functioning and health literacy in people affected by HIV and aging. In this way, his interest focuses, for example, on how people's 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.

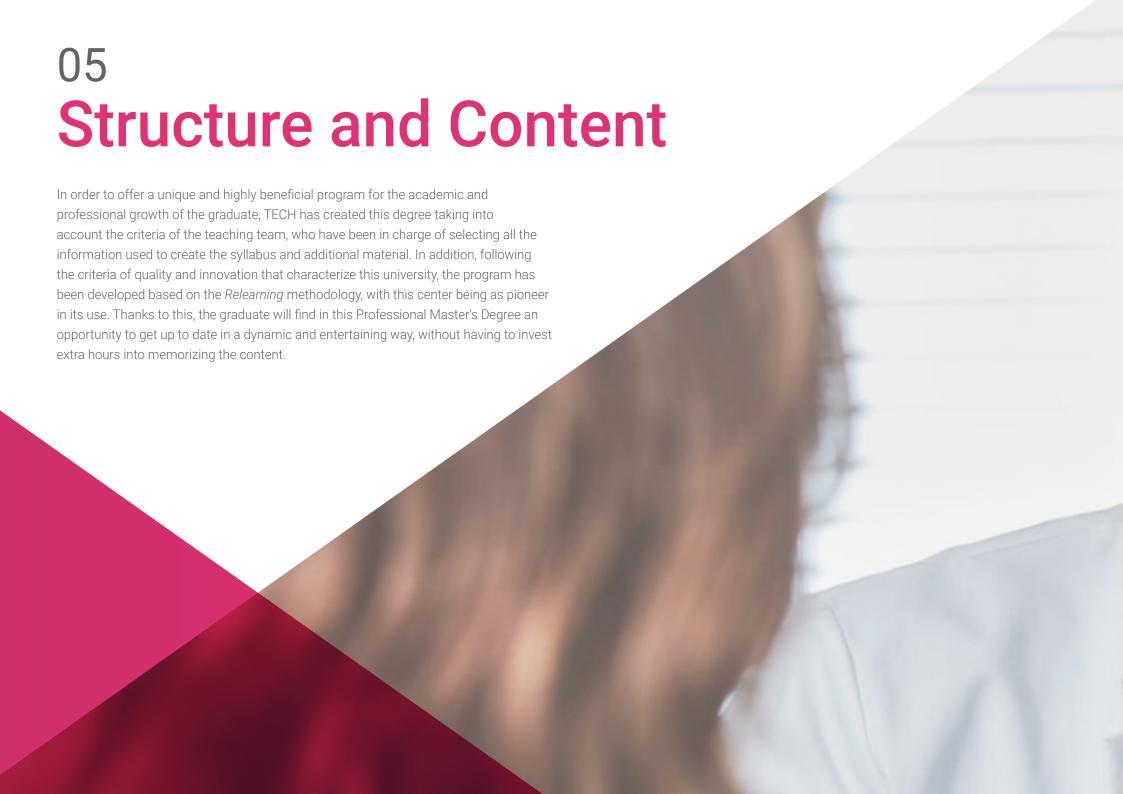
He has also founded the Clinical Neuropsychology Service at Thomas Street Health Center, where he holds a senior position as Director. Here, Dr. Woods provides Clinical Neuropsychology services to people affected by HIV, providing critical support to communities in need and reaffirming his commitment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



# Dr. Woods, Steven P

- 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)





33

In the virtual classroom you will find hundreds of hours of additional high-quality material for you to gain deeper knowledge of those aspects of the syllabus that you consider most relevant"

### tech 22 | Structure and Content

#### Module 1. Introduction to Neuropsychology

- 1.1. Introduction to Neuropsychology
  - 1.1.1. Basis and Origins of Neuropsychology
  - 1.1.2. First Approaches to the Discipline
- 1.2. First Approaches to the Neuropsychology
  - 1.2.1. First Works Within Neuropsychology
  - 1.2.2. Most Relevant Authors and Works
- 1.3. Ontogeny and Phylogeny of the CNS
  - 1.3.1. Concept of Ontogeny and Phylogeny
  - 1.3.2. Ontogeny and Phylogeny Within the CNS
- 1.4. Cellular and Molecular Neurobiology
  - 1.4.1. Introduction to Neurobiology
  - 1.4.2. Cellular and Molecular Neurobiology
- 1.5. Neurobiology of Systems
  - 1.5.1. Concepts of Systems
  - 1.5.2. Structures and Development
- 1.6. Embryology of the Nervous System
  - 1.6.1. Principles of Embryology of the Nervous System
  - 1.6.2. Phases of CNS Embryology
- 1.7. Introduction to Structural Anatomy CNS
  - 1.7.1. Introduction to Structural Anatomy
  - 1.7.2. Structural Development
- 1.8. Introduction to Functional Anatomy
  - 1.8.1. What is Function Anatomy?
  - 1.8.2. Most Important Functions
- 1.9. Neuroimaging Techniques
  - 1.9.1. Concept of Neuroimaging
  - 1.9.2. Most Commonly Used Techniques
  - .9.3. Advantages and Disadvantages.



#### Module 2. Principles of Neuroanatomy

- 2.1. Formation of the Nervous System
  - 2.1.1. Anatomical and Functional Organization of the Nervous System
  - 2.1.2. Neurons
  - 2.1.3. Glial Cells
  - 2.1.4. Central Nervous System: Brain and Spinal Cord
  - 2.1.5. Main Structures
    - 2.1.5.1. Forebrain
    - 2.1.5.2. Midbrain
    - 2.1.5.3. Rhombencephalon
- 2.2. Formation of the Nervous System II
  - 2.2.1. Peripheral Nervous System
    - 2.2.1.1. Somatic Nervous System
    - 2.2.2.2. Neurovegetative or Autonomic Nervous System
    - 2.2.2.3. White Matter
    - 2.2.2.4. Gray Matter
    - 2.2.2.5. Meninges
    - 2.2.2.6. Cerebrospinal Fluid
- 2.3. The Neurone and its Composition
  - 2.3.1. Introduction to the Neurone and its Function
  - 2.3.2. The Neurone and its Composition
- 2.4. Electric and Chemical Synapses
  - 2.4.1. What is a Synapse?
  - 2.4.2. Electrical Synapse
  - 2.4.3. Chemical Synapse
- 2.5. Neurotransmitters
  - 2.5.1. What is a Neurotransmitter?
  - 2.5.2. Types of Neurotransmitters and their Functioning
- 2.6. Neuroendocrinology (Hypothalamus-Endocrine System Relationship)
  - 2.6.1. Introduction to Neuroendocrinology
  - 2.6.2. Basis of Neuroendocrinological Functioning

- Neuroimmunology (Relationship between the Nervous System and Immune System)
  - 2.7.1. Introduction to Neuroimmunology
  - 2.7.2. Basis and Fundamentals of Neuroimmunology
- 2.8. Nervous System in Childhood and Adolescence
  - 2.8.1. Development of CNS
  - 2.8.2. Bases and Characteristics
- 2.9. Nervous System in Adulthood
  - 2.9.1. Bases and Characteristics of the CNS
- 2.10. Nervous System in Old Age
  - 2.10.1. Bases and Characteristics of the CNS in Old Age
  - 2.10.2. Main Related Problems

#### Module 3. Functional Neuroanatomy

- 3.1. Frontal Lobe
  - 3.1.1. Introduction to the Frontal Lobe
  - 3.1.2. Main Features
  - 3.1.3. Bases of their Functioning
- 3.2. Neuropsychology of the Dorsolateral Prefrontal Cortex
  - 3.2.1. Introduction to the Dorsolateral Prefrontal Cortex
  - 3.2.2. Main Features
  - 3.2.3. Bases of their Functioning
- 3.3. Neuropsychology of the Orbitofrontal Cortex
  - 3.3.1. Introduction to the Orbitofrontal Cortex
  - 332 Main Features
  - 3.3.3. Bases of their Functioning
- 3.4. Neuropsychology of the Medial Prefrontal Cortex
  - 3.4.1. Introduction to the Dorsolateral Prefrontal Cortex
  - 3.4.2. Main Features
  - 3.4.3. Bases of their Functioning
- 3.5. Motor Cortex
  - 3.5.1. Introduction to the Motor Cortex
  - 3.5.2. Main Features
  - 3.5.3. Bases of their Functioning

### tech 24 | Structure and Content

- 3.6. Temporal Lobe
  - 3.6.1. Introduction to the Temporal Lobe Cortex
  - 3.6.2. Main Features
  - 3.6.3. Bases of their Functioning
- 3.7. Parietal Lobe
  - 3.7.1. Introduction to the Parietal Lobe Cortex
  - 3.7.2. Main Features
  - 3.7.3. Bases of their Functioning
- 3.8. Occipital Lobe
  - 3.8.1. Introduction to the Occipital Lobe Cortex
  - 3.8.2. Main Features
  - 3.8.3. Bases of their Functioning
- 3.9. Cerebral Asymmetry
  - 3.9.1. Concept of Brain Asymmetry
  - 3.9.2. Characteristics and Functioning

#### **Module 4.** Cognitive Functions

- 4.1. Neurological Bases of Attention
  - 4.1.1. Introduction to the Concept of Attention
  - 4.1.2. Neurobiological Bases and Foundations of Attention
- 4.2. Neurobiological Bases of Memory
  - 4.2.1. Introduction to the Concept of Memory
  - 4.2.2. Neurobiological Bases and Foundations of Memory
- 4.3. Neurological Bases of Language
  - 4.3.1. Introduction to the Concept of Language
  - 4.3.2. Neurobiological Bases and Foundations of Language
- 4.4. Neurobiological Bases of Perception
  - 4.4.1. Introduction to the Concept of Perception
  - 4.4.2. Neurobiological Bases and Foundations of Perception
- 4.5. Visuospatial Neurobiological Bases
  - 4.5.1. Introduction to Visuospatial Functions
  - 4.5.2. Basis and Fundamentals of Visuospatial Functions

- 4.6. Neurobiological Basis of Executive Functions
  - 4.6.1. Introduction to Executive Functions
  - 4.6.2. Basis and Fundamentals of Executive Functions
- 4.7. Apraxias
  - 4.7.1. What are Apraxias?
  - 4.7.2. Features and Types
- 4.8. Gnosias
  - 4.8.1. What are Apraxias?
  - 4.8.2. Features and Types
- 4.9. Social Cognition
  - 4.9.1. Introduction to Social Cognition
  - 4.9.2. Characteristics and Theoretical Foundations

#### Module 5. Brain Injury

- 5.1. Neuropsychological and Behavior Disorders of Genetic Origin
  - 5.1.1. Introduction
  - 5.1.2. Genes, Chromosomes and Hereditary
  - 5.1.3. Genes and Behavior
- 5.2. Early Brain Injury Disorder
  - 5.2.1. Introduction
  - 5.2.2. The Brain in Early Childhood
  - 5.2.3. Pediatric Cerebral Palsy
  - 5.2.4. Psychosyndromes
  - 5.2.5. Learning Disorders
  - 5.2.6. Neurobiological Disorders that Affect Learning
- 5.3. Vascular Brain Disorders
  - 5.3.1. Introduction to Cerebrovascular Disorders
  - 5.3.2. Most Common Types
  - 5.3.3. Characteristics and Symptomology
- 5.4. Brain Tumors.
  - 5.4.1. Introduction to Brain Tumors
  - 5.4.2. Most Common Types
  - 5.4.3. Characteristics and Symptomology

### Structure and Content | 25 tech

- 5.5. Cranioencephalic Traumas
  - 5.5.1. Introduction to Trauma
  - 5.5.2. Most Common Types
  - 5.5.3. Characteristics and Symptomology
- 5.6. Infections of the CNS
  - 5.6.1. Introduction the CNS Infections
  - 5.6.2. Most Common Types
  - 5.6.3. Characteristics and Symptomology
- 5.7. Epileptic Disorders
  - 5.7.1. Introduction to Epileptic Disorders
  - 5.7.2. Most Common Types
  - 5.7.3. Characteristics and Symptomology
- 5.8. Alterations in the Level of Consciousness
  - 5.8.1. Introduction to Altered Levels of Consciousness
  - 5.8.2. Most Common Types
  - 5.8.3. Characteristics and Symptomology
- 5.9. Acquired Brain Injury
  - 5.9.1. Concept of Acquired Brain Injury
  - 5.9.2. Most Common Types
  - 5.9.3. Characteristics and Symptomology
- 5.10. Disorders Related to Pathological Ageing
  - 5.10.1. Introduction
  - 5.10.2. Psychological Disorders Related to Pathological Ageing

#### Module 6. Aphasias, Agraphias and Alexias

- 6.1. Broca's Aphasia
  - 6.1.1. Basis and Origin of Broca's Aphasia
  - 6.1.2. Characteristics and Symptomology
  - 6.1.3. Assessment and Diagnosis
- 6.2. Wernicke's Aphasia
  - 6.2.1. Basis and Origin of Wernicke's Aphasia
  - 6.2.2. Characteristics and Symptomology
  - 6.2.3. Assessment and Diagnosis

- 5.3. Conduction Aphasia
  - 6.3.1. Basis and Origin of Conduction Aphasia
  - 6.3.2. Characteristics and Symptomology
  - 6.3.3. Assessment and Diagnosis
- 6.4. Global Aphasia
  - 6.4.1. Basis and Origin of Global Aphasia
  - 6.4.2. Characteristics and Symptomology
  - 6.4.3. Assessment and Diagnosis
- 6.5. Sensory Transcortical Aphasia
  - 6.5.1. Basis and Origin of Broca's Aphasia
  - 6.5.2. Characteristics and Symptomology
  - 6.5.3. Assessment and Diagnosis
- 6.6. Motor Transcortical Aphasia
  - 6.6.1. Basis and Origin of Motor Transcortical Aphasia
  - 6.6.2. Characteristics and Symptomology
  - 6.6.3. Assessment and Diagnosis
- 6.7. Mixed Transcortical Aphasia
  - 6.7.1. Basis and Origin of Mixed Transcortical Aphasia
  - 6.7.2. Characteristics and Symptomology
  - 6.7.3. Assessment and Diagnosis
- 6.8. Anomic Aphasia
  - 6.8.1. Basis and Origin of Anomic Aphasia
  - 6.8.2. Characteristics and Symptomology
  - 6.8.3. Assessment and Diagnosis
- 6.9. Agraphias
  - 6.9.1. Basis and Origin of Agraphias
  - 6.9.2. Characteristics and Symptomology
  - 6.9.3. Assessment and Diagnosis
- 6.10. Alexias
  - 6.10.1. Basis and Origin of Alexias
  - 6.10.2. Characteristics and Symptomology
  - 6.10.3. Assessment and Diagnosis

### tech 26 | Structure and Content

#### Module 7. Cognitive Deficiencies

- 7.1. Attention Pathology
  - 7.1.1. Main Attention Pathologies
  - 7.1.2. Characteristics and Symptomology
  - 7.1.3. Assessment and Diagnosis
- 7.2. Memory Pathology
  - 7.2.1. Main Memory Pathologies
  - 7.2.2. Characteristics and Symptomology
  - 7.2.3. Assessment and Diagnosis
- 7.3. Dysexecutive Syndrome
  - 7.3.1. What is Dysexecutive Syndrome?
  - 7.3.2. Characteristics and Symptomology
  - 7.3.3. Assessment and Diagnosis
- 7.4. Apraxias I
  - 7.4.1. Concept of Apraxia
  - 7.4.2. Main Modalities
    - 7.4.2.1. Ideomotor Apraxia
    - 7.4.2.2. Ideational Apraxia
    - 7.4.2.3. Constructional Apraxia
    - 7.4.2.4. Clothing Apraxia
- 7.5. Apraxias II
  - 7.5.1. Gait Apraxia
  - 7.5.2. Apaxia of Speech or Phonation
  - 7.5.3. Optical Apraxia
  - 7.5.4. Callosal Apraxia
  - 7.5.5. Examination of the Apraxias
    - 7.5.5.1. Neuropsychological Assessment
    - 7.5.5.2. Cognitive Rehabilitation
- 7.6. Agnosias I
  - 7.6.1. Concept of Agnosias

- 7.6.2. Visual Agnosias
  - 7.6.2.1. Agnosia for Objects
  - 7.6.2.2. Simultanagnosia
  - 7.6.2.3. Prosopagnosia
  - 7.6.2.4. Chromatic Agnosia
  - 7.6.2.5. Others
- 7.6.3. Auditory Agnosias
  - 7.6.3.1. Amusia
  - 7.6.3.2. Agnosia for Sounds
  - 7.6.3.3. Verbal Agnosia
- 7.6.4. Somatosensory Agnosias
  - 7.6.4.1. Astereognosis
  - 7.6.4.2. Tactile Agnosia
- 7.7. Agnosias II
  - 7.7.1. Olfactory Agnosias
  - 7.7.2. Agnosia in Diseases
    - 7.7.2.1. Anosognosia
    - 7.7.2.2. Asomatognosia
  - 7.7.3. Assessment of Agnosias
  - 7.7.4. Cognitive Rehabilitation
- 7.8. Social Cognition Deficit
  - 7.8.1. Introduction to Social Cognition
  - 7.8.2. Characteristics and Symptomology
  - 7.8.3. Assessment and Diagnosis
- 7.9. Autism Spectrum Disorders
  - 7.9.1. Introduction
  - 7.9.2. ASD Diagnosis
  - 7.9.3. Cognitive and Neuropsychological Profile Associated with ASD

### Structure and Content | 27 tech

#### Module 8. Neurodegenerative Diseases

- 8.1. Normal Ageing
  - 8.1.1. Basic Cognitive Processes in Normal Ageing
  - 8.1.2. Superior Cognitive Processes in Normal Ageing
  - 8.1.3. Attention and Memory in Elderly People with Normal Ageing
- 8.2. Cognitive Reserve and its Importance in Aging
  - 8.2.1. Cognitive Reserve: Definition and Basic Concepts
  - 8.2.2. Functionality of Cognitive Reserve
  - 8.2.3. Influencing Variables in Cognitive Reserve
  - 8.2.4. Interventions Based on Improving Cognitive Reserve in the Elderly
- 8.3. Multiple Sclerosis
  - 8.3.1. Concepts and Biological Foundations of Multiple Sclerosis
  - 8.3.2. Characteristics and Symptomology
  - 8.3.3. Patient Profile
  - 8.3.4. Assessment and Diagnosis
- 8.4. Amyotrophic Lateral Sclerosis
  - 8.4.1. Concepts and Biological Foundations of Amyotrophic Lateral Sclerosis (ALS)
  - 8.4.2. Characteristics and Symptomology
  - 8.4.3. Patient Profile
  - 8.4.4. Assessment and Diagnosis
- 8.5. Parkinson's Disease
  - 8.5.1. Concepts and Biological Foundations of Parkinson's Disease
  - 8.5.2. Characteristics and Symptomology
  - 8.5.3. Patient Profile
  - 8.5.4. Assessment and Diagnosis
- 8.6. Huntington's Disease
  - 8.6.1. Concepts and Biological Foundations of Huntington's Disease
  - 8.6.2. Characteristics and Symptomology
  - 8.6.3. Patient Profile
  - 8.6.4. Assessment and Diagnosis

- 8.7. Dementia of the Alzheimer Type
  - 8.7.1. Concepts and Biological Foundations of Dementia of the Alzheimer Type
  - 8.7.2. Characteristics and Symptomology
  - 8.7.3. Patient Profile
  - 8.7.4. Assessment and Diagnosis
- 8.8. Pick's Dementia
  - 8.8.1. Concepts and Biological Foundations of Pick's Dementia
  - 8.8.2. Characteristics and Symptomology
  - 8.8.3. Patient Profile
  - 8.8.4. Assessment and Diagnosis
- 8.9. Lewy Body Dementia
  - 8.9.1. Concepts and Biological Foundations of Lewy Body Dementia
  - 8.9.2. Characteristics and Symptomology
  - 8.9.3. Patient Profile
  - 8.9.4. Assessment and Diagnosis
- 8.10. Vascular Dementia
  - 8.10.1. Concepts and Biological Foundations of Vascular Dementia
  - 8.10.2. Characteristics and Symptomology
  - 8.10.3. Patient Profile
  - 8.10.4. Assessment and Diagnosis

#### Module 9. Neuropsychological Assessment and Rehabilitation

- 9.1. Evaluation of Attention and Memory
  - 9.1.1. Introduction to the Evaluation of Attention and Memory
  - 9.1.2. Main Instruments
- 9.2. Language Evaluation
  - 9.2.1. Introduction to the Evaluation of Language
  - 9.2.2. Main Instruments
- 9.3. Executive Functions Assessment
  - 9.3.1. Introduction to the Evaluation of Executive Functions
  - 9.3.2. Main Instruments
- 9.4. Evaluation of Apraxia and Agnosia
  - 9.4.1. Introduction to the Evaluation of Apraxia and Agnosia
  - 9.4.2. Main Instruments

### tech 28 | Structure and Content

- 9.5. Variables that Intervene in the Recovery of a Patient
  - 9.5.1. Risk Factors
  - 9.5.2. Protective Factors
- 9.6. Strategies: Restoration, Compensation and Mixed Strategies
  - 9.6.1. Restoration Strategies
  - 9.6.2. Compensation Strategies
  - 9.6.3. Mixed Strategies
- 9.7. Rehabilitation of Attention, Memory, Executive Functions and Agnosias
  - 9.7.1. Rehabilitation of Attention
  - 9.7.2. Rehabilitation of Memory
  - 9.7.3. Rehabilitation of Executive Functions
  - 9.7.4. Rehabilitation of Agnosias
- 9.8. Adapting to the Environment and External Support
  - 9.8.1. Adapting the Environment to Meet the Constraints
  - 9.8.2. How to Help the Patient in an External Way?
- 9.9. Biofeedback Techniques as Intervention
  - 9.9.1. Biofeedback: Definition and Basic Concepts
  - 9.9.2. Techniques that Use Biofeedback
  - 9.9.3. Biofeedback as an Intervention Method in Health Psychology
  - 9.9.4. Evidence on the Use of *Biofeedback* in the Treatment of Certain Disorders
- 9.10. Transcranial Magnetic Stimulation (TMS) as an Intervention
  - 9.10.1. Transcranial Magnetic Stimulation: Definition and Basic Concepts
  - 9.10.2. Functional Areas Considered Therapeutic Targets of Transcranial Magnetic Stimulation
  - 9.10.3. Results of the Intervention Through TMS in Health Psychology

#### Module 10. Pharmacological Treatment

- 10.1. Introduction to Psychopharmacology
  - 10.1.1. Basis and Introduction to Psychopharmacology
  - 10.1.2. General Principles of Psychopharmacological Treatment
  - 10.1.3. Main Applications
- 10.2. Antidepressants
  - 10.2.1. Introduction
  - 10.2.2. Types of Antidepressants
  - 10.2.3. Mechanism of Action
  - 10.2.4. Indications
  - 10.2.5. Drugs of the Group
  - 10.2.6. Dosage and Forms of Administration
  - 10.2.7. Side Effects
  - 10.2.8. Contraindications
  - 10.2.9. Drug Interactions
  - 10.2.10. Patient Information
- 10.3. Antipsychotics
  - 10.3.1. Introduction
  - 10.3.2. Types of Antipsychotics
  - 10.3.3. Mechanism of Action
  - 10.3.4. Indications
  - 10.3.5. Drugs of the Group
  - 10.3.6. Dosage and Forms of Administration
  - 10.3.7. Side Effects
  - 10.3.8. Contraindications
  - 10.3.9. Drug Interactions
  - 10.3.10. Patient Information
- 10.4. Anxiolytics and Hypnotics
  - 10.4.1. Introduction
  - 10.4.2. Types of Anxiolytics and Hypnotics
  - 10.4.3. Mechanism of Action
  - 10.4.4. Indications
  - 10.4.5. Drugs of the Group

# Structure and Content | 29 tech

	10.4.6.	Dosage and Forms of Administration	
	10.4.7.	Side Effects	
	10.4.8.	Contraindications	
	10.4.9.	Drug Interactions	
		Patient Information	
10.5.	Mood Stabilizers		
	10.5.1.	Introduction	
	10.5.2.	Types of Mood Stabilizers	
		Mechanism of Action	
	10.5.4.	Indications	
	10.5.5.	Drugs of the Group	
	10.5.6.	Dosage and Forms of Administration	
	10.5.7.	Side Effects	
	10.5.8.	Contraindications	
	10.5.9.	Drug Interactions	
	10.5.10	. Patient Information	
10.6.	Psychostimulants		
	10.6.1.	Introduction	
	10.6.2.	Mechanism of Action	
	10.6.3.	Indications	
	10.6.4.	Drugs of the Group	
	10.6.5.	Dosage and Forms of Administration	
	10.6.6.	Side Effects	
	10.6.7.	Contraindications	
	10.6.8.	Drug Interactions	
	10.6.9.	Patient Information	
10.7.	Anti-Dementia Drugs		
	10.7.1.	Introduction	
	10.7.2.	Mechanism of Action	
	10.7.3.	Indications	
	10.7.4.	Drugs of the Group	
	10.7.5.	Dosage and Forms of Administration	

	10.7.6.	Side Effects	
	10.7.7.	Contraindications	
	10.7.8.	Drug Interactions	
	10.7.9.	Patient Information	
10.8.	Drugs for the Treatment of Dependency		
	10.8.1.	Introduction	
	10.8.2.	Types and Mechanism of Action	
	10.8.3.	Indications	
	10.8.4.	Drugs of the Group	
	10.8.5.	Dosage and Forms of Administration	
	10.8.6.	Side Effects	
	10.8.7.	Contraindications	
	10.8.8.	Drug Interactions	
	10.8.9.	Patient Information	
10.9.	Anti-Epileptic Drugs		
	10.9.1.	Introduction	
	10.9.2.	Mechanism of Action	
	10.9.3.	Indications	
	10.9.4.	Drugs of the Group	
	10.9.5.	Dosage and Forms of Administration	
	10.9.6.	Side Effects	
	10.9.7.	Contraindications	
	10.9.8.	Drug Interactions	
	10.9.9.	Patient Information	
10.10. Other Drugs: Guanfacine			
10.10.1. Introduction			
	10.10.2	. Mechanism of Action	
	10.10.3	. Indications	
	10.10.4	. Dosage and Forms of Administration	
	10.10.5	. Side Effects	
	10.10.6	. Contraindications	
	10.10.7	. Drug Interactions	
	10.10.8	. Patient Information	

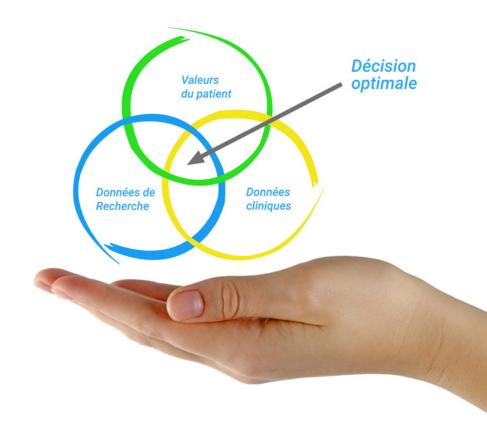


# tech 32 | Methodology

#### 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 the psychologist experiences a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the psychologist's professional practice.



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. Psychologists who follow this method not only master the assimilation of concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply their knowledge.
- 2. Learning is solidly translated into practical skills that allow the psychologist to better integrate knowledge into clinical practice.
- 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.



# tech 34 | Methodology

#### Relearning Methodology

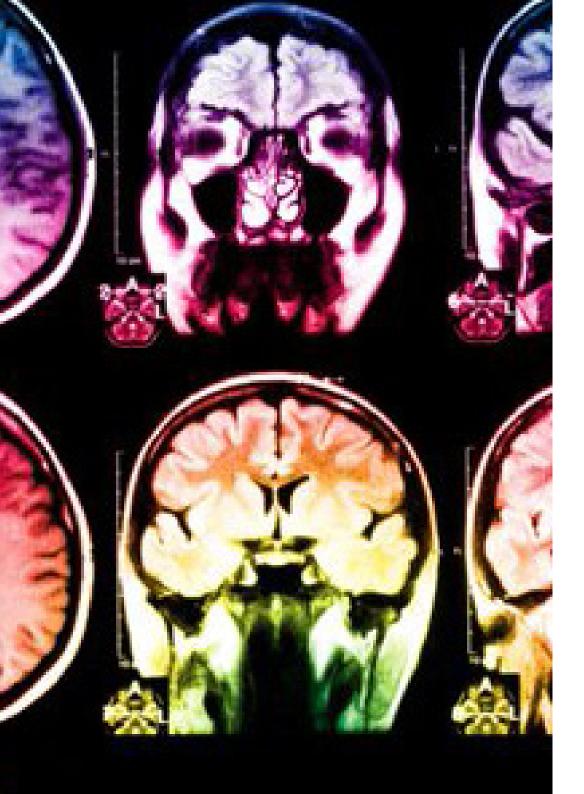
At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

The psychologist 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.





### Methodology | 35 tech

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).

This methodology has trained more than 150,000 psychologists with unprecedented success in all clinical specialties. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.

# tech 36 | Methodology

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.



#### **Latest Techniques and Procedures on Video**

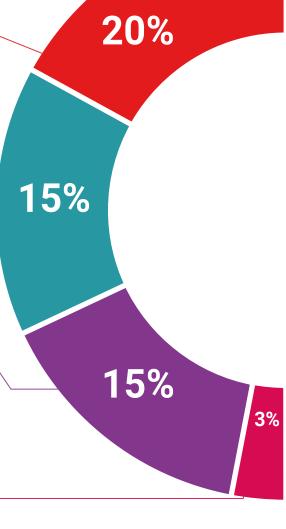
TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current psychology. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times 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.



# 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

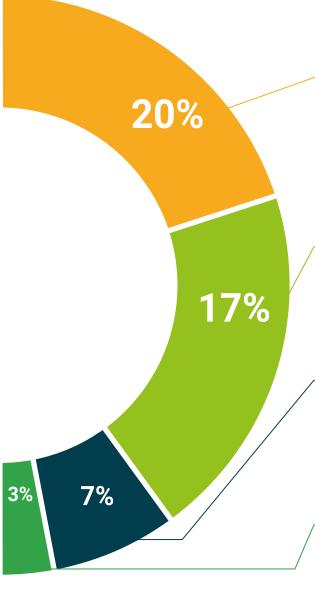
There is scientific evidence suggesting that observing third-party experts can be useful.

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.







## tech 40 | Certificate

This private qualification will allow you to obtain a **Professional Master's Degree diploma in Clinical Neuropsychology** 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.

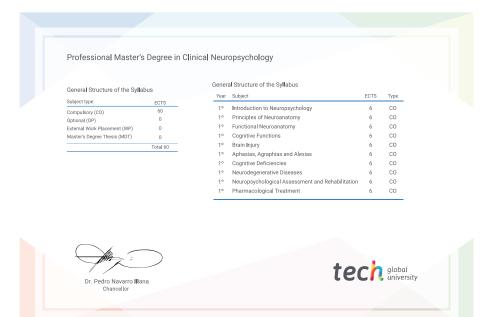
Title: Professional Master's Degree in Clinical Neuropsychology

Modality: online

Duration: 12 months

Accreditation: 60 ECTS





<sup>\*</sup>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.

tech global university



# Professional Master's Degree Clinical Neuropsychology

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

