



# Master's Degree

Clinical Neuropsychology

» Modality: online

» Duration: 12 months

» Certificate: TECH Global University

» Credits: 60 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/master-degree/master-degree-clinical-neuropsychology

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# tech 06 | Introduction

The progress that has taken place in recent years in the field of Neuropsychology, has allowed progress in the detection of cognitive impairment at very early stages by means of differential diagnosis. In addition, its application in the evaluation of the effects of surgery in patients with epilepsy, hydrocephalus and tumors, has been tremendously useful, as well as in the adaptation of pharmacological treatments. Its positive influence and potential in improving the patient's quality of life have given this specialty a boost. It is for this reason that this 100% online degree was created, where a team of experts with extensive experience will develop an advanced and intensive syllabus on Clinical Neuropsychology

A multidisciplinary program that provides the medical professional with the most up-to-date information to keep abreast of the most recent scientific studies in the approach to patients with neurodegenerative diseases. Through innovative multimedia content, students will delve, during the 12 months of this program, into 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. This teaching will also include the main techniques of neuropsychological evaluation and rehabilitation, concluding with an exhaustive review of the most effective pharmacological treatments, their recommendations and the cases in which they should be avoided

This is an excellent opportunity for medical professionals who wish to pursue a program that is compatible with their work and family life. Students only need a computer, tablet or cell phone to access the entire syllabus from the beginning of the program. In addition, all of this is done without on-site classes or fixed schedules, so you can distribute the workload according to your needs

This **Master's Degree in Clinical Neuropsychology** contains the most complete and upto-date educational 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





A Master's Degree in which you will be able to deepen your knowledge in the disorders derived from brain damage"

A program designed to provide you with an exhaustive knowledge of Neuroanatomy.

Over 12 months, you will be able to renew your knowledge in neurodegenerative diseases.

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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 learning 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. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts







# 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



An academic option that will allow you to keep abreast of recent studies on Neuropsychological assessment and rehabilitation"





#### 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. Neuropsychological 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 rehabilitation

#### 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



Skills The medical professional who studies this Master's Degree will develop the competencies required by any specialist in Clinical Neuropsychology. Thanks to the comprehensive syllabus, your ability to act will be boosted by the acquisition of up-to-date knowledge. Therefore, they will be able to apply the most advanced treatment and diagnostic strategies, contributing to the improvement and development of professional skills and aptitudes



# tech 14 | Skills

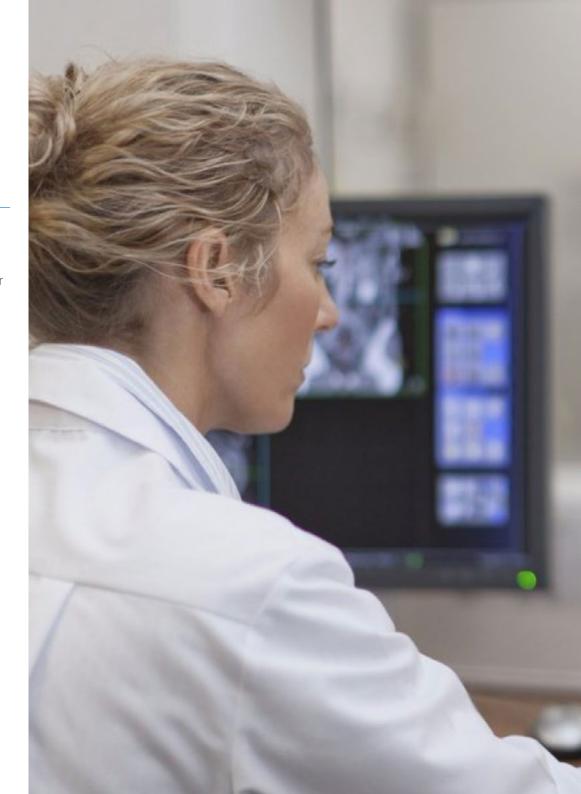


### **General Skills**

- Recognize patterns and indicators of mental illness
- Accompany 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 restorative and reparative strategies in the evaluation and rehabilitation of the neuropsychological patient"

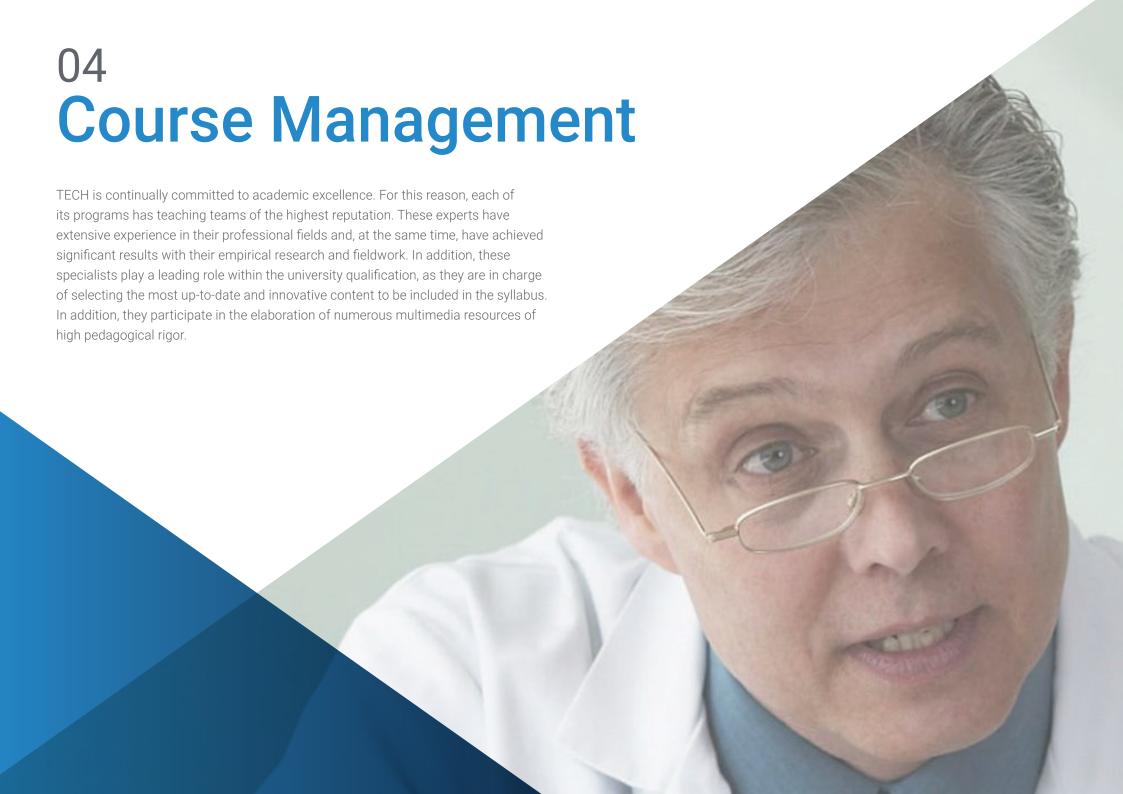


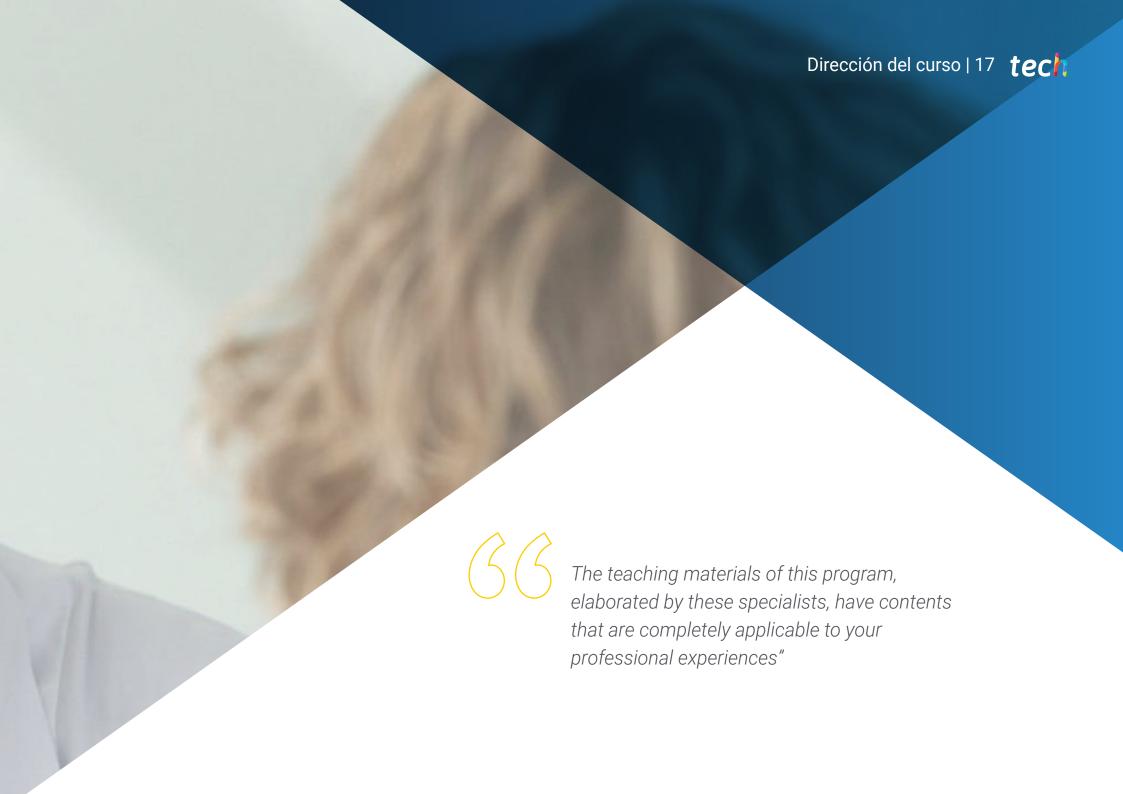




### **Specific Skills**

- 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 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.

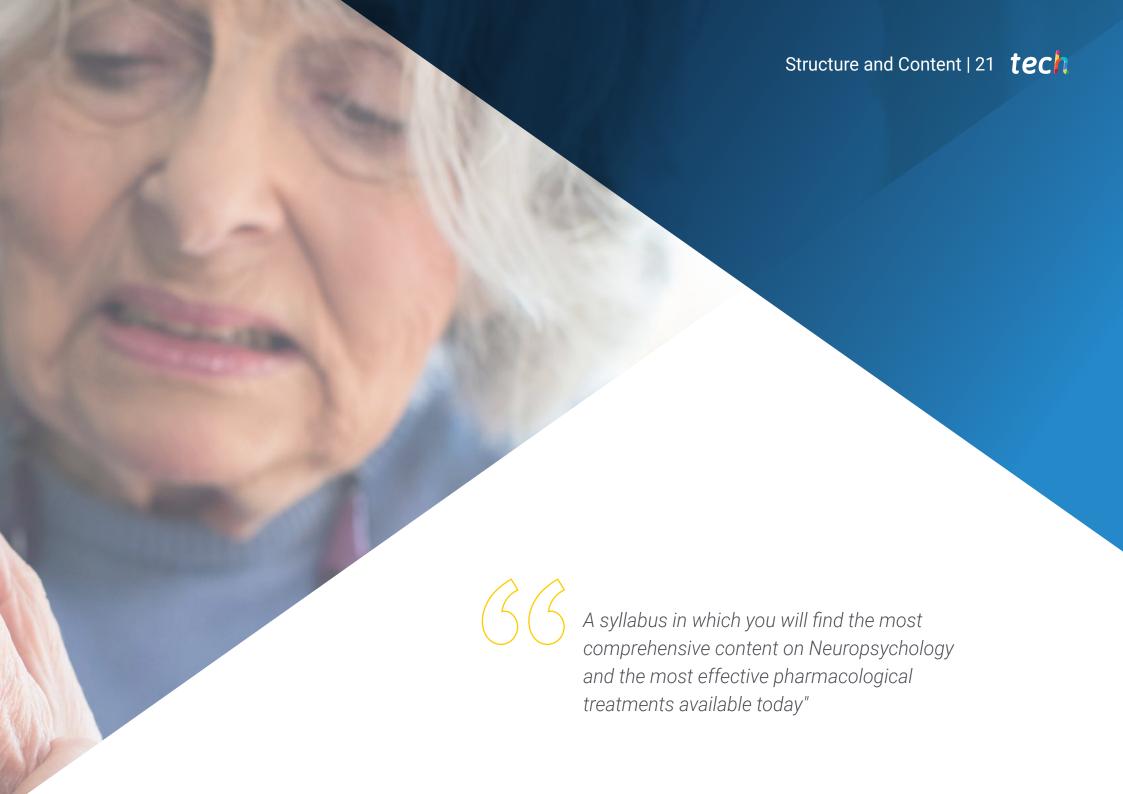


# Dr. Woods, Steven P

- 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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#### **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
  - 1.9.3. 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
- 2.7. 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
  - 3.3.2. 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
- 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

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- 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
- 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
- .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
- 6.3. 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

#### 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. Dysjective Syndrome
  - 7.3.1. What is Dysjective 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

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	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.	Agnosia	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. Prospagnosia				
		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. Asteroganosia				
		7.6.4.2. Tactile Agnosia				
7.7.	Agnosia	as 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 (	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	Autism Spectrum Disorders				
		Introduction				
	7.9.2.	ASD Diagnosis				
	7.9.3.	Cognitive and Neuropsychological Profile Associated with ASD				

#### 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
- 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

# tech 28 | Structure and Content

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.	Antipsy	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.	Anxioly	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				
	1046	Dosage and Forms of Administration				

	10.4.7.	Side Effects		
	10.4.8.	Contraindications		
	10.4.9.	Drug Interactions		
	10.4.10	. Patient Information		
10.5.	Mood Stabilizers			
	10.5.1.	Introduction		
	10.5.2.	Types of Mood Stabilizers		
	10.5.3.	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.	0.6. 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		mentia 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 you will experience 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 physician'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. 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.



### 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).

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.

# 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.



#### **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.

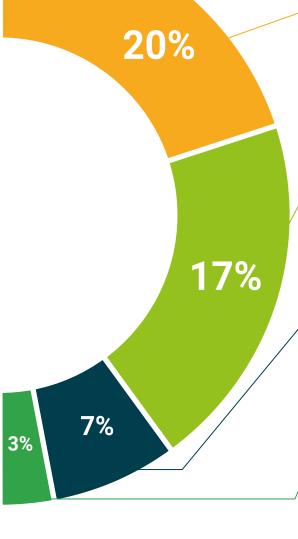
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.









# tech 36 | Certificate

This private qualification will allow you to obtain a **Master's Degree 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.

Mr./Ms. \_\_\_\_\_\_ with identification document \_\_\_\_\_\_ has successfully passed and obtained the title of:

Master's Degree in Clinical Neuropsychology

This is a private qualification of 1,800 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

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: 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.

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# Master's Degree Clinical Neuropsychology

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

