

Master's Degree Clinical Neuropsychology





Master's Degree Clinical Neuropsychology

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

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

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01

Introduction to the Program

The educator has always played a key role in the physical and intellectual development of minors. For this reason, their understanding of the direct relationship between brain connectivity and learning is essential for the proper evolution of students and the early detection of those who may present a deficit requiring the intervention of another specialist. In this context, TECH Global University presents an innovative university program focused on the latest advances in Clinical Neuropsychology with an emphasis on Education. Additionally, it is offered in a convenient, fully online format.



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With this 100% online program, you will design educational interventions based on neuropsychological principles to optimize the comprehensive development of students”

The advancement of Clinical Neuropsychology has allowed for a greater understanding of the brain processes involved in learning, behavior, and child development. This discipline provides valuable insights for the educational context, particularly in the identification and support of students with neurocognitive difficulties. For this reason, it is essential for educators to master the use of the most modern neuropsychological tools to design pedagogical interventions tailored to students' needs, enabling a more effective and inclusive response to functional diversity in the classroom.

With this in mind, TECH Global University presents a revolutionary program in Clinical Neuropsychology. The academic itinerary will delve into the principles of neuroanatomy, as well as the neurological foundations of cognitive functions. Additionally, the syllabus will address the primary disorders affecting attention, memory, language, and executive functions. In line with this, the educational materials will provide various strategies for designing pedagogical interventions tailored to students' cognitive profiles. As such, graduates will be equipped to accurately identify the neuropsychological manifestations that interfere with the learning process, proposing solutions based on scientific evidence

Moreover, TECH has implemented a high-quality, 100% online curriculum, which requires only an electronic device with an internet connection to access all the educational materials, avoiding issues such as commuting to a physical location or adjusting to a set schedule. In addition, it will utilize the disruptive Relearning methodology, which consists of the repetition of key concepts for optimal and organic content assimilation.

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

- ♦ The development of practical cases presented by experts in Clinical Neuropsychology
- ♦ 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 in Clinical Neuropsychology
- ♦ 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 foster inclusive school environments based on a deep understanding of functional diversity from a neuropsychological perspective”

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A syllabus based on the disruptive Relearning system, which will facilitate the assimilation of complex concepts in a fast and flexible manner”

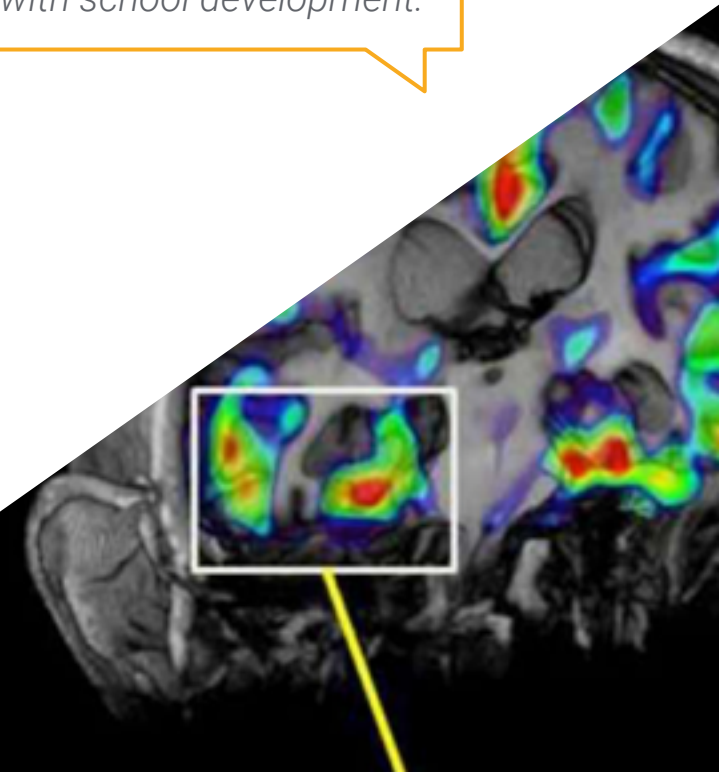
It includes a faculty composed of professionals from the field of Clinical Neuropsychology, who bring their work experience into this program, as well as recognized specialists from leading societies and prestigious universities.

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 an immersive learning experience designed to prepare for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

You will analyze how alterations in executive functions, attention, memory, and language impact academic performance.

You will identify cognitive, emotional, or behavioral alterations early on that interfere with school development.



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.



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Study at the largest online university in the world and ensure your professional success. The future begins at TECH”

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

Forbes

The best online university in the world

The most complete **syllabus**

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

TOP
international faculty



The most effective methodology

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.

World's No.1
The World's largest online university

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



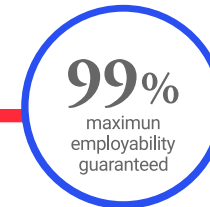
The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.



The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.

03

Syllabus

The syllabus will explore in depth the fundamentals of neuroanatomy and the neurological mechanisms that underpin cognitive functions. Throughout the program, the most relevant disorders affecting processes such as attention, memory, language, and executive control will be studied. In this framework, the pedagogical resources will provide practical tools to develop educational interventions tailored to the cognitive characteristics of students. As such, graduates will be prepared to clearly recognize neuropsychological alterations that hinder learning and apply teaching approaches backed by scientific evidence.





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You will design personalized pedagogical strategies based on the neuropsychological profile of the students”

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. 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 Lobes
 - 3.1.1. Introduction to the Frontal Lobe
 - 3.1.2. Main Features
 - 3.1.3. Principles 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. Principles 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. Principles 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. Principles of their Functioning
- 3.5. Motor Cortex
 - 3.5.1. Introduction to the Motor Cortex
 - 3.5.2. Main Features
 - 3.5.3. Principles of their Functioning

- 3.6. Temporal Lobe
 - 3.6.1. Introduction to the Temporal Lobe Cortex
 - 3.6.2. Main Features
 - 3.6.3. Principles of their Functioning
- 3.7. Parietal Lobe
 - 3.7.1. Introduction to the Parietal Lobe Cortex
 - 3.7.2. Main Features
 - 3.7.3. Principles of their Functioning
- 3.8. Occipital Lobe
 - 3.8.1. Introduction to the Occipital Lobe Cortex
 - 3.8.2. Main Features
 - 3.8.3. Principles 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 Principles of Attention
 - 4.1.1. Introduction to the Concept of Attention
 - 4.1.2. Neurobiological Principles and Foundations of Attention
- 4.2. Neurobiological Principles of Memory
 - 4.2.1. Introduction to the Concept of Memory
 - 4.2.2. Neurobiological Principles and Foundations of Memory
- 4.3. Neurological Principles of Language
 - 4.3.1. Introduction to the Concept of Language
 - 4.3.2. Neurobiological Principles and Foundations of Language
- 4.4. Neurobiological Principles of Perception
 - 4.4.1. Introduction to the Concept of Perception
 - 4.4.2. Neurobiological Principles and Foundations of Perception
- 4.5. Visuospatial Neurobiological Principles
 - 4.5.1. Introduction to Visuospatial Functions
 - 4.5.2. Principles and Fundamentals of Visuospatial Functions

- 4.6. Neurobiological Principles of Executive Functions
 - 4.6.1. Introduction to Executive Functions
 - 4.6.2. Principles and Fundamentals of Executive Functions
- 4.7. Praxis
 - 4.7.1. What are Praxis?
 - 4.7.2. Characteristics and Types
- 4.8. Agnosias
 - 4.8.1. What are Agnosias?
 - 4.8.2. Characteristics 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. Central Nervous System Infections
 - 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 Aging
 - 5.10.1. Introduction
 - 5.10.2. Psychological Disorders Related to Pathological Aging

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. Principles and Origin of Sensory Transcortical 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. Principles and Origin of Anomic Aphasia
 - 6.8.2. Characteristics and Symptomology
 - 6.8.3. Assessment and Diagnosis
- 6.9. Agraphias
 - 6.9.1. Principles and Origin of Agraphias
 - 6.9.2. Characteristics and Symptomology
 - 6.9.3. Assessment and Diagnosis
- 6.10. Alexias
 - 6.10.1. Principles and Origin of Alexias
 - 6.10.2. Characteristics and Symptomology
 - 6.10.3. Assessment and Diagnosis

Module 7. Cognitive Deficits

- 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. Apraxia 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. Other
 - 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. Asterognosia
 - 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

Module 8. Neurodegenerative Diseases

- 8.1. Normal Aging
 - 8.1.1. Basic Cognitive Processes in Normal Aging
 - 8.1.2. Superior Cognitive Processes in Normal Aging
 - 8.1.3. Attention and Memory in Elderly People with Normal Aging
- 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. Assessment of Attention and Memory
 - 9.1.1. Introduction to the Assessment of Attention and Memory
 - 9.1.2. Main Instruments
- 9.2. Language Assessment
 - 9.2.1. Introduction to the Assessment of Language
 - 9.2.2. Main Instruments
- 9.3. Executive Functions Assessment
 - 9.3.1. Introduction to the Assessment of Executive Functions
 - 9.3.2. Main Instruments
- 9.4. Assessment of Praxis and Gnosias
 - 9.4.1. Introduction to the Assessment of Praxis and Gnosias
 - 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

- 10.1. Introduction to Psychopharmacology
 - 10.1.1. Principles 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
 - 10.4.6. 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. 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. Antiepileptic 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



You will extract valuable lessons through real cases in simulated learning environments"

04

Teaching Objectives

The Clinical Neuropsychology program offers educators a set of key competencies to understand and intervene in learning processes from a neuropsychological perspective. Throughout the program, they will acquire skills to identify cognitive, emotional, and behavioral alterations that impact academic performance. In this way, they will be equipped to design pedagogical strategies based on each student's neurocognitive profile, promote inclusive environments, and collaborate with multidisciplinary teams. Additionally, they will develop critical thinking grounded in scientific evidence, applicable to the continuous improvement of their teaching practice and the well-being of students.



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You will create highly inclusive and adaptive learning environments, optimizing the overall well-being of students with special educational needs”



General Objectives

- ♦ Understand the neuroanatomical and functional foundations that support the cognitive, emotional, and behavioral processes involved in learning
- ♦ Identify early signs of neuropsychological alterations in the school context
- ♦ Analyze the impact of neurodevelopmental disorders on academic performance and student adaptation
- ♦ Design personalized pedagogical strategies based on the neurocognitive profile of each student
- ♦ Integrate neuropsychological tools into educational practice to promote the holistic development of the student
- ♦ Foster inclusive and emotionally safe school environments based on scientific knowledge of brain functioning





Specific Objectives

Module 1. Introduction to Neuropsychology

- ♦ Learn the basic concepts of neuropsychology
- ♦ Know the methods of evaluation and the fundamentals of research in neuropsychology
- ♦ Explore the development of the nervous system and its relationship to neurological disorders
- ♦ Understand the structure and function of the nervous system at the cellular and molecular levels

Module 2. Principles of Neuroanatomy

- ♦ Know the origins and the evolutionary process of the nervous system
- ♦ Understand how the nervous system works and how nerve cells communicate with each other
- ♦ Gain an overview of the study of the nervous system
- ♦ Know the fundamental basics of Neuroanatomy

Module 3. Functional Neuroanatomy

- ♦ Understand the main functions of the brain lobes and their subdivisions
- ♦ Analyze how lesions in different areas of the frontal lobe affect thinking and behavior
- ♦ Explore how lesions in the motor cortex influence the control and execution of movements
- ♦ Understand brain asymmetry and its impact on cognitive and emotional functions

Module 4. Cognitive Functions

- ♦ Understand the neurobiological principles underlying attention
- ♦ Explore the neurobiological principles underlying language
- ♦ Research the neurobiological basis of sensory perception
- ♦ Understand the neurobiological basis of visuospatial perception

Module 5. Brain Injury

- ♦ Analyze the effects of early brain injury on neuropsychological development
- ♦ Explore the disorders caused by vascular problems in the brain
- ♦ Become familiar with epileptic disorders and their neuropsychological implications
- ♦ Understand alterations in the level of consciousness and their neuropsychological consequences

Module 6. Aphasias, Agraphias and Alexias

- ♦ Understand the characteristics and causes of Broca's aphasia
- ♦ Analyze the characteristics and causes of Wernicke's aphasia
- ♦ Explore the characteristics and causes of Conduction Aphasia
- ♦ Become familiar with the characteristics and causes of the different Aphasias, Agraphias and Alexias

Module 7. Cognitive Deficits

- ♦ Know and contextualize the different cognitive deficits
- ♦ Classify the cognitive deficiencies according to their symptoms
- ♦ Explore Executive Dysfunction Syndrome and apraxias, understanding their characteristics and how they are assessed
- ♦ Analyze agnosias and autism spectrum disorders, along with their evaluation and diagnosis

Module 8. Neurodegenerative Diseases

- ♦ Analyze how cognitive reserve affects aging and mental health
- ♦ Explore different neurological disorders, such as Multiple Sclerosis and Amyotrophic Lateral Sclerosis
- ♦ Know the main characteristics of movement disorders such as Parkinson's Disease
- ♦ Understand the aging process and its effects on cognition

Module 9. Neuropsychological Assessment and Rehabilitation

- ♦ Comprehend the different assessment tools that exist within Neuropsychology
- ♦ Know the different techniques in Neuropsychological rehabilitation
- ♦ Explore rehabilitation techniques to improve attention, memory, executive functions and agnosias
- ♦ Understand how to adapt the environment and provide outside help to patients with neuropsychological difficulties

Module 10. Pharmacological Treatment

- ♦ Learn about the basics and foundations of psychopharmacological therapy
- ♦ Get to know and classify the different types of psychopharmaceuticals
- ♦ Get to know the different uses of psychopharmacological therapy
- ♦ Understand the importance of patient information in the context of pharmacological treatment and its role in therapeutic compliance





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You will apply a preventive approach from the classroom to minimize the impact of cognitive difficulties on the academic trajectory”

05

Study Methodology

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

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



“

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

The student: the priority of all TECH programs

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

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

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

“

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



The most comprehensive study plans at the international level

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

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

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

“

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

Case Studies and Case Method

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

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

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



Relearning Methodology

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

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

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

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



A 100% online Virtual Campus with the best teaching resources

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

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

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

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



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

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

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

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

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

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

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



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



Study Material

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

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



Practicing Skills and Abilities

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



Interactive Summaries

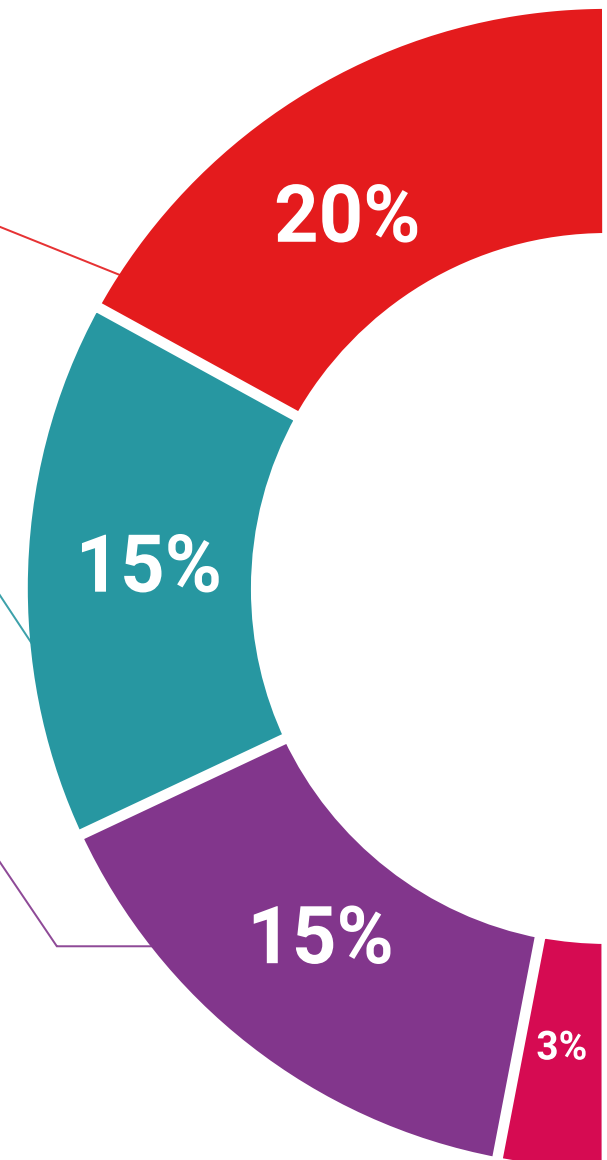
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

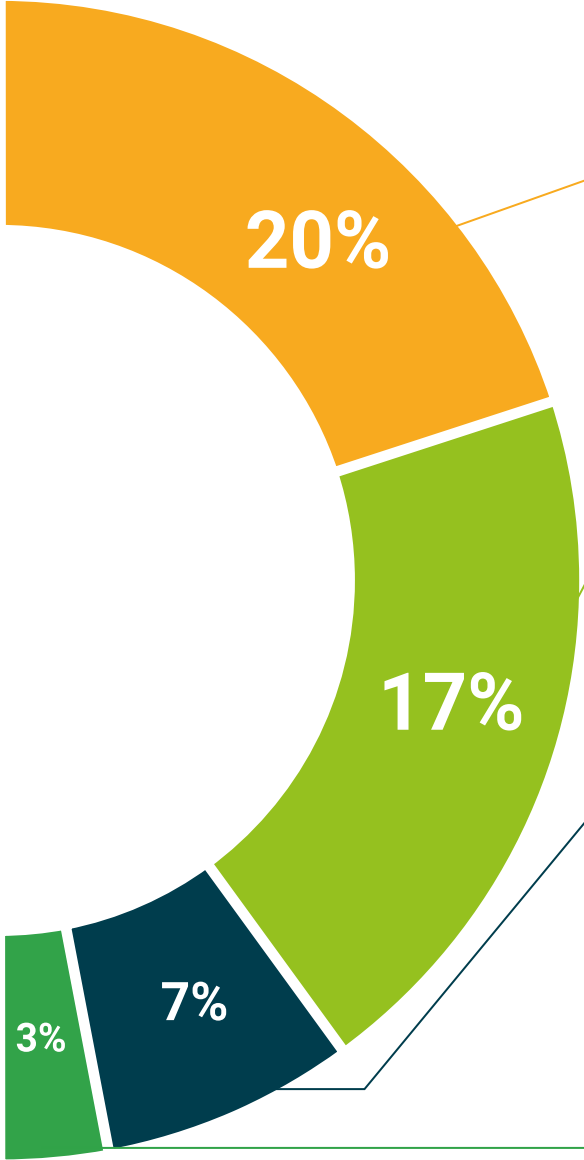
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





Case Studies

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



Testing & Retesting

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



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.
Learning from an expert strengthens knowledge and memory, and generates confidence for future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



06

Certificate

The Master's Degree in Clinical Neuropsychology guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree issued by TECH Global University..



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This private qualification will allow you to obtain a **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.

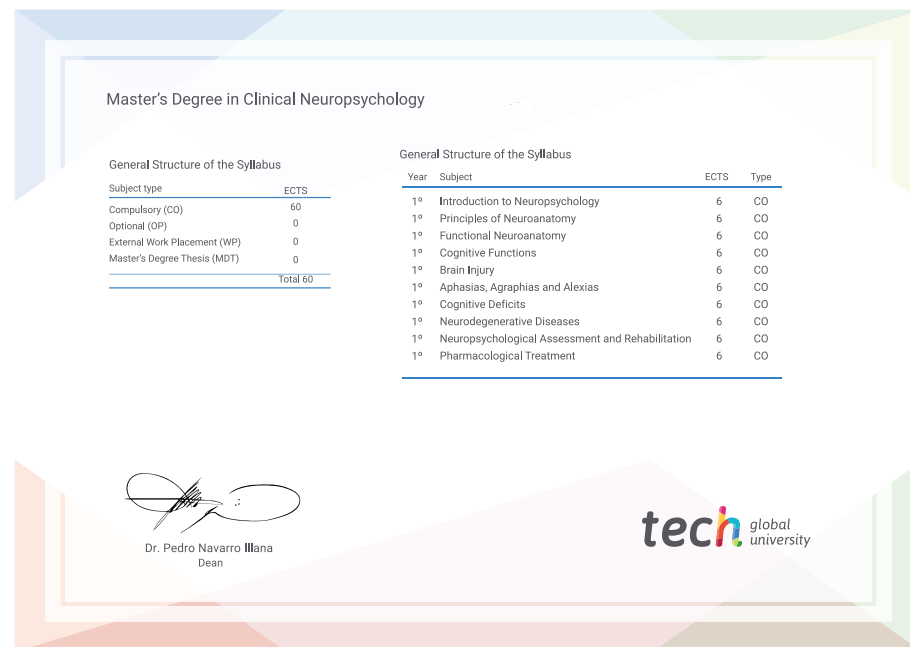
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in Clinical Neuropsychology**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**



*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.



Master's Degree Clinical Neuropsychology

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

Master's Degree

Clinical Neuropsychology

