



# Professional Master's Degree

# Neurosciences

» Modality: online

» Duration: 12 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

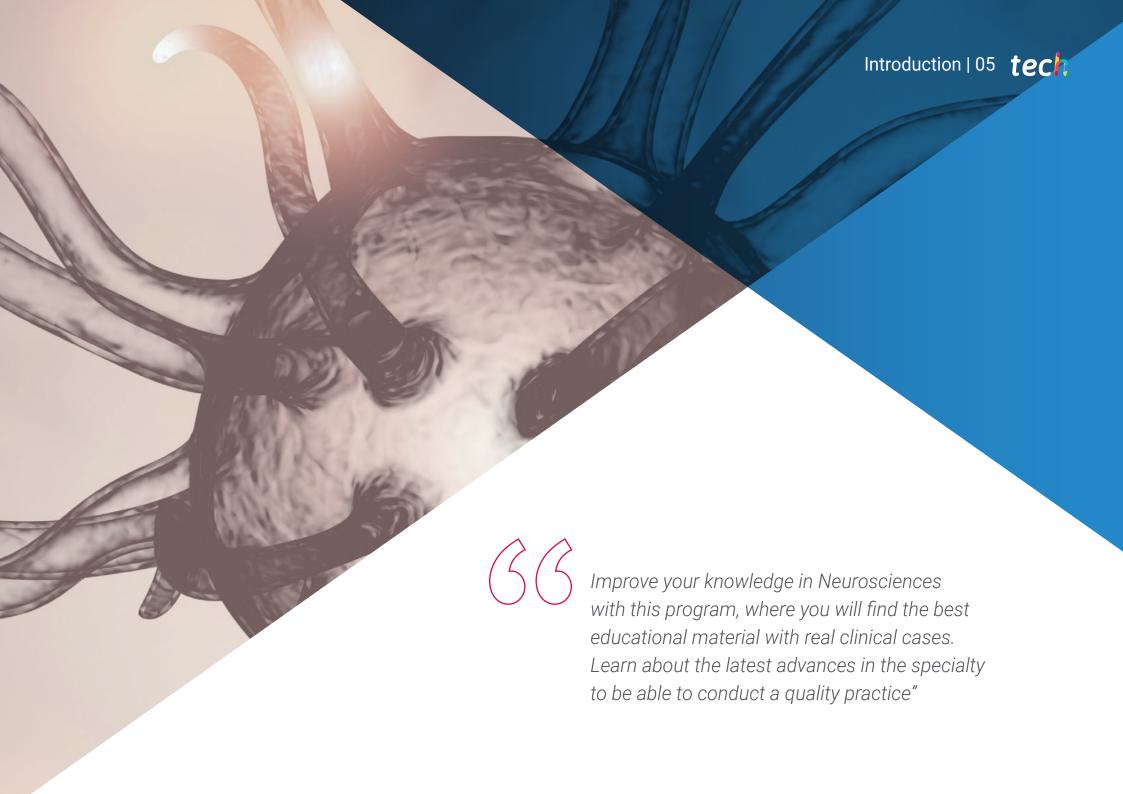
» Exams: online

Website: www.techtitute.com/pk/medicine/professional-master-degree/master-neurosciences

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# tech 06 | Introduction

This course offers a broad vision of the complex world of neurosciences from an applied perspective, starting with the biological bases and neuroimaging techniques and including a number of different practical approaches, so that any interested professional will get to grips with neurosciences, how to interpret them and, above all, how to apply them to their work.

This is an improvement when compared to the eminently biological programs which are solely focused on the neuronal bases and genetics of the brain or the exclusively clinical programs, in which the conditions that affect the brain and neurodegenerative diseases are studied in depth.

This course allows for a better understanding from a variety of different areas and perspectives, so that professionals have a variety of techniques to apply to their professional life based on their areas of interest.

This specialization program addresses the new branches in neuroscience that are currently undergoing both theoretical and applied development, there are still no specific educational programs available in this area only the practice of individual professionals and the isolated discoveries made in research laboratories. Therefore, this course is leading the way for such innovative sectors as neuromarketing or neuroeducation, while introducing new branches that in a few years will be in great demand from sectors such as neuroeconomics or neuroleadership.

Students on the program will have access to the latest advances in neuroscience at a theoretical level, in addition to learning how to apply them to their careers, thereby providing them with a distinct advantage over other professionals in the sector.

The course will empower professionals to enter the labor market with confidence or to get a promotion in their current job. The course provides extensive theoretical and practical knowledge that will improve the students professional capabilities.

This **Professional Master's Degree in Neurosciences** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical cases presented by experts in neurosciences
- 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
- The latest developments in neurosciences
- Practical exercises where the self-assessment process can be carried out to improve learning
- Emphasis on innovative methodologies in the field of neurosciences.
- 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





This Professional Master's Degree may be the best investment you can make when selecting a refresher programme for two reasons: in addition to updating your knowledge in Neurosciences, you will obtain a qualification from TECH Technological University"

The teaching staff includes medical professionals who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

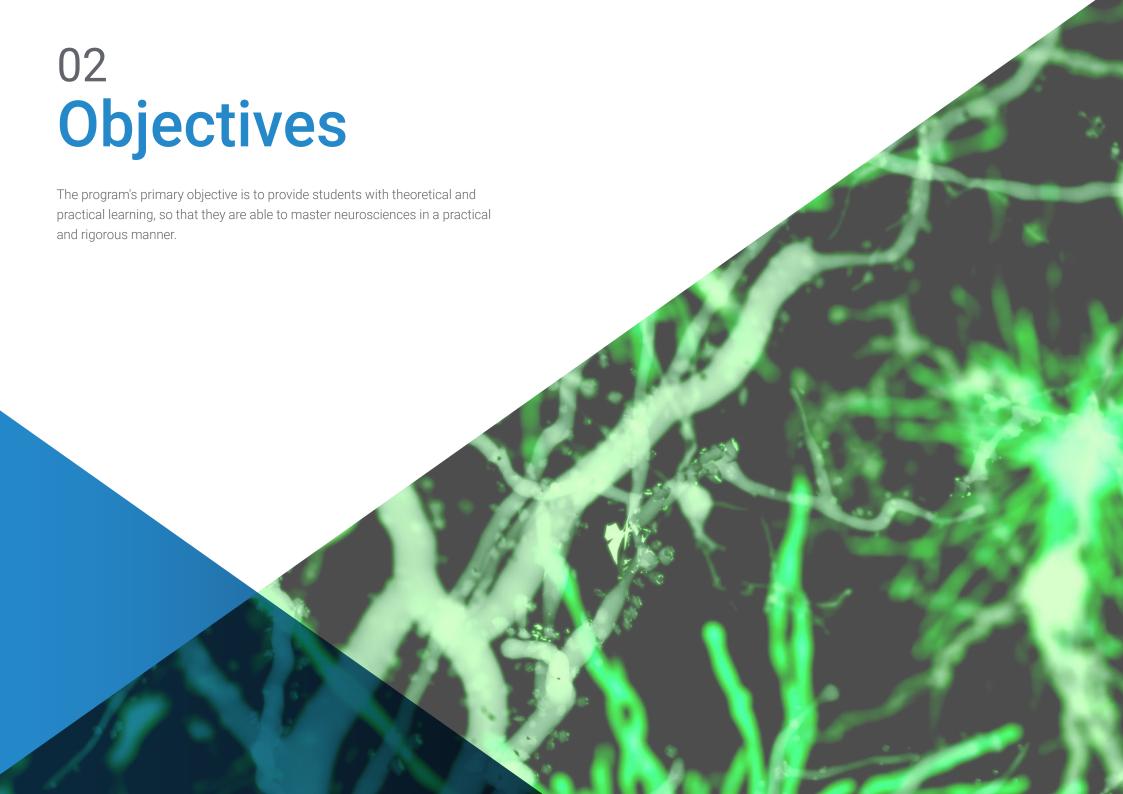
The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training experience designed to train students for real-life situations.

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

Increase your decision-making confidence and update your knowledge with this course.

Take the opportunity to learn about the latest advances in this field and apply them to your daily practice.







# tech 10 | Objectives



# **General objectives**

- Update yourself in neurosciences and its related fields, from a clinical, educational or social perspective and increase the quality of your professional performance
- Introduce students to the vast world of neurosciences from a practical perspective, so that they learn about the different disciplines involved in the study of the brain in relation to human behavior and its possibilities
- Learn the tools used in neuroscience research and practice
- Enable the development of skills and abilities by encouraging continuous training and research







# **Specific objectives**

### Module 1. Principles of Neurosciences

- Understand the types of neurons
- Identify brain hemispheres and lobes
- Differentiate between localizationism and brain functionalism
- Discover the undifferentiated neurons
- Learn programmed neural death
- Recognize interneuronal electrical communication
- Determine the role of myelin in neurons and understand interneuronal chemical communication
- Learn the peculiarities of the human brain
- Unravel the left brain
- Explore white matter
- Recognize gender differences at the neural level
- Classify hemispheric functions
- Discover the new localizationism
- Understand invasive techniques
- Recognize non-invasive techniques



# tech 12 | Objectives

### Module 2. The Emotional Brain

- Recognize the role of emotional intelligence
- Know the Mayer and Salovey model
- Differentiate between emotional maturation and emotional intelligence
- Discover emotional relearning
- Observe the relationship between intelligence and social skills
- Discover what The Papez Circuit is
- Explore the limbic brain
- Analyze the amygdala and positive emotion
- Understand the function of the amygdala and negative emotion
- Recognize the intensity of emotion
- Determine the affective value of emotion

### Module 3. Neuropsychology

- Classify neurohormones and their functions
- Differentiate between age and neuronal plasticity
- Discover neuronal development

### Module 4. Neuroeducation

- Verify the connection between intelligence and creativity
- Analyze academic intelligence
- Discover the cognitive processes
- Observe the connection between the brain and cognition
- Discover the cognitive processes

### Module 5. Neurolinguistics

- Differentiate between gross vs. fine motor skills
- Approach the experience at the neural level
- Establish learning at the neuron level
- Observe the effectiveness of repetitive reinforcement
- Discover neuromuscular control
- Explore the neuronal insigne

### Module 6. Neuromarketing

- Verify metacognitive development
- Analyze the role of feelings
- Elucidate the processes of perception
- Explore the elements of attention
- Understand the process of attention
- Analyze the neuronal bases of memory

### Module 7. Neuroeconomics

- Delve into the concept of the economic brain
- Understand the neural basis of computational errors
- Know how the mathematical brain develops
- Confront the concepts of mathematics and intelligence



### Module 8. Neuroleadership

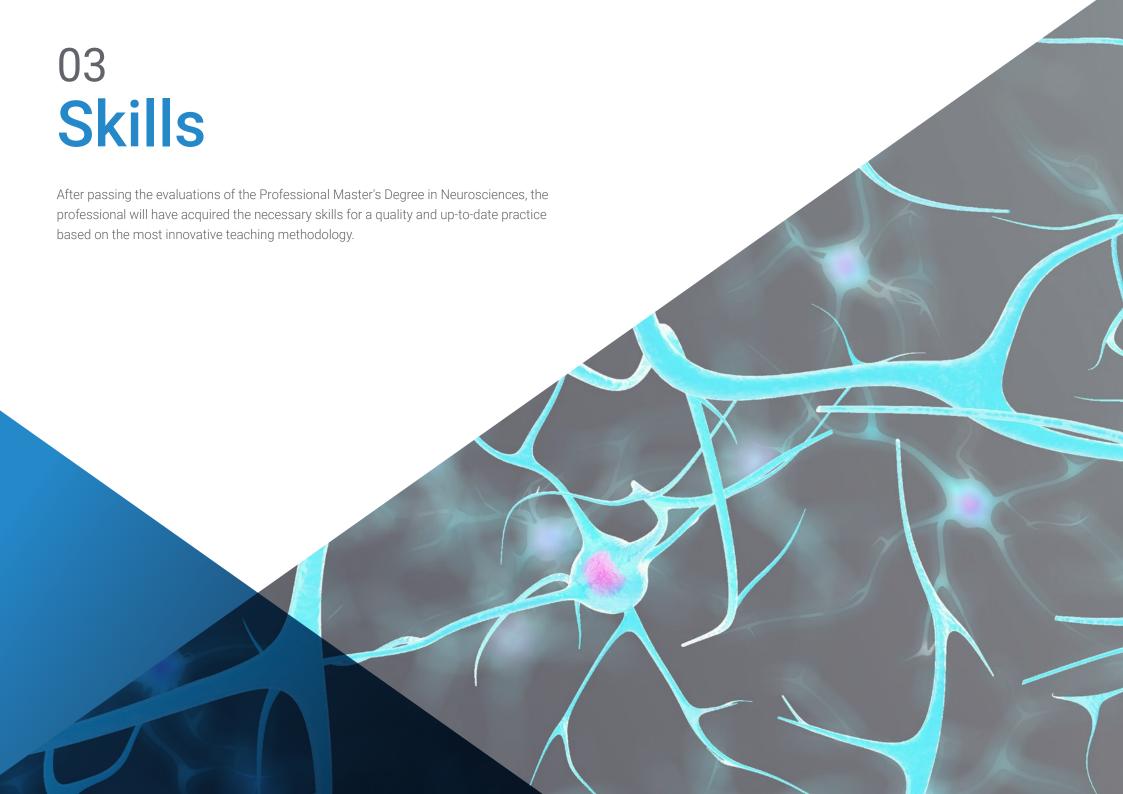
- Gain further understanding of the genetics of leadership
- Know the effects of successes and failures at the neural level
- Know how to apply the different optimization strategies of neuroleadership

### Module 9. Neuropolitics

- Explore the concept of the political brain
- Know how group membership and group bias are formed
- Study in depth the positive and negative emotions generated in politics
- Probe the candidate's brain
- Know how political branding is formed around a candidate
- Study in depth the new tools applied to neuropolitics
- Differentiate the capacity for self-control at the neuronal level

### Module 10. Other Branches of Applied Neurosciences

- Delve into neurobranding
- Know the concept of neuroarchitecture and how it works
- Acquire in-depth knowledge of neurotechnology
- Know the limits of neuroscience research
- Delve into the concept of neuroethics
- Delve into the brain's relationship with taste: neurogastronomy
- Learn more about neurocriminology and its implication in psychopathic personalities





# tech 16 | Skills



### **General skills**

- Gain knowledge that provides a basis or opportunity to be original when developing and/or applying ideas, often in a research context
- Apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study
- Be able to integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- Know how to communicate conclusions, knowledge, and supporting arguments to specialized and non-specialized audiences in a clear and unambiguous way
- Possess skills that will enable continuous studying in a manner that will be largely self-directed or autonomous



Our teaching team, experts in Neurosciences, will help you achieve success in your profession"





- Understand the connection between speech and the brain
- Learn the connection between reading and the brain
- Analyze the connection between writing and the brain
- Improve brain gastronomy
- Analyze the connection between emotions and the brain in the PNIE
- Observe the role of oxidative stress and the brain in PNIE
- Understand the psychopathic personality
- Identify disorganized behaviors at the neuronal level
- Recognize the role of culture and the brain
- Explore the connection between numbers and the brain
- Learn about mathematics and the brain.
- Differentiate between simple calculations vs. complex ones on a neural level
- Identify common mathematical mistakes
- Differentiate between language and mathematics on a cerebral level
- Understand mathematical development

- Understand multiple intelligences
- Define emotional illiteracy
- Explore hypersensitivity to emotions
- Understand the relationship between intelligence and emotion
- Recognize emotional intelligence
- Analyze the relationship between creativity and intelligence
- Discover the role of self-awareness and intelligence
- Discover the connection between intelligence and linguistic development
- Explore the types of intelligence and language
- Differentiate the phases of language during childhood
- Determine the influences of the leaders' successes and failures.
- Learn the impact of the leader's successes and failures on the employee
- Discover training in neuroleadership
- Analyze the successes of neuroleadership



### Management



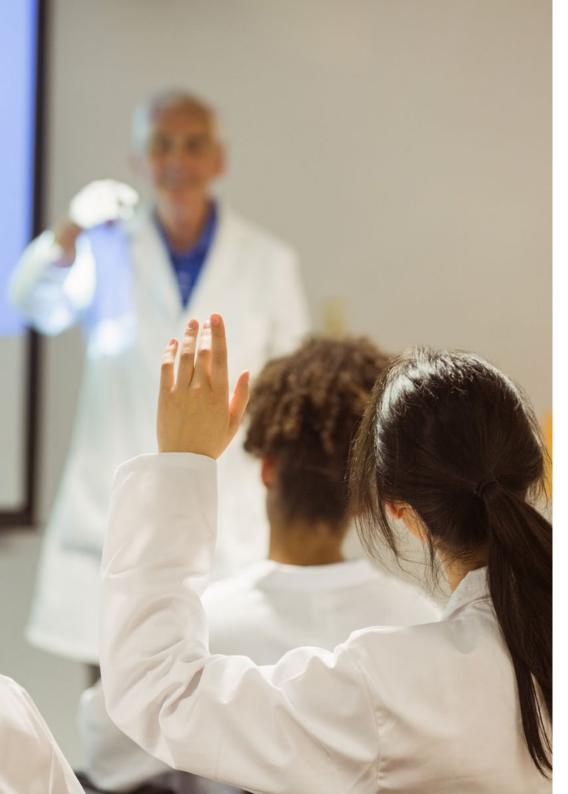
# Dr. De la Serna, Juan Moisés

- PhD in Psychology and Professional Master's Degree in Neurosciences and Behavioral Biology
- Author of the 'Cátedra Abierta de Psicología y Neurociencias' and scientific disseminator



### Ms. Jiménez Romero, Yolanda

- Educational psychologist
- Primary school teacher with a specialization in English
- Master's Degree in Neuropsychology for the Exceptionallly Gifted
- Master's Degree in Emotional Intelligence
- Neurolinguistic Programming Practitioner



# Course Management | 21 tech

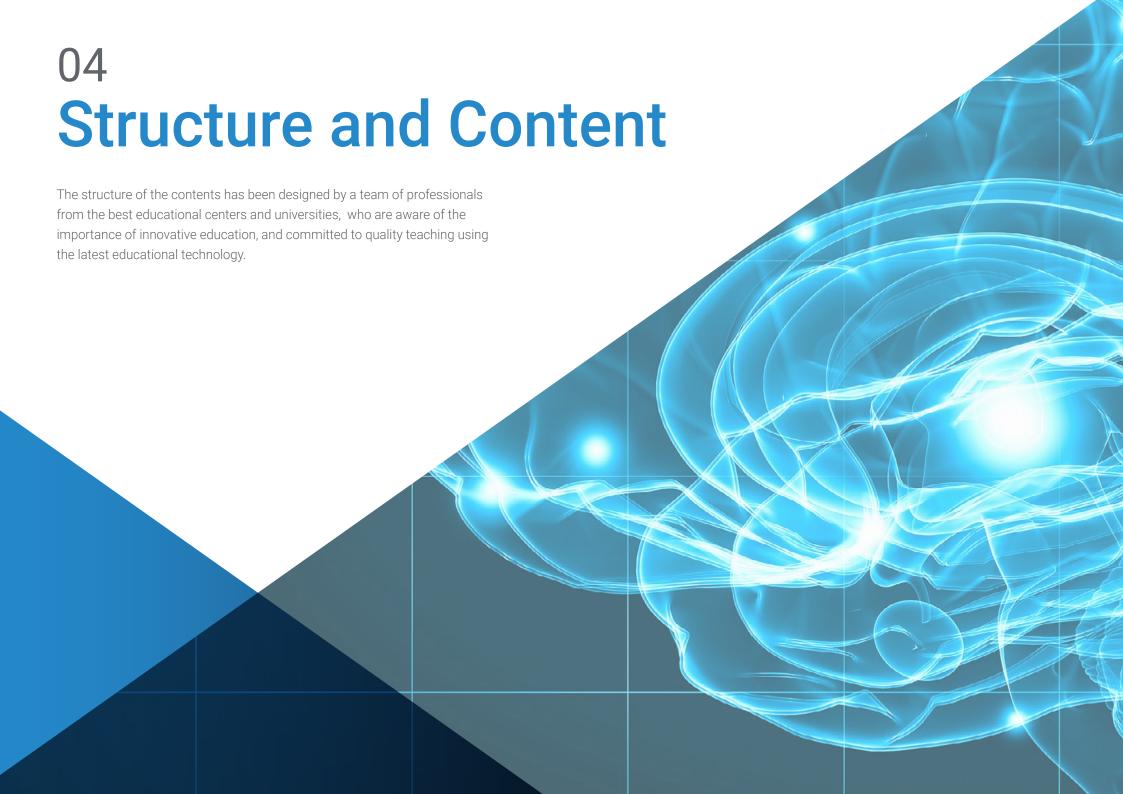
### **Professors**

### Ms. Pellicer Royo, Irene

- Physical Education Teacher at Fundació Jesuïtes Educació
- Degree in the Sciences of Physical Activity and Sport, University of Lleida
- Master's Degree in Medical Sciences applied to Physical Activity and Sport, University of Lleida
- Master's Degree in Emotional Education and Well-Being, University of Barcelona
- Postgraduate Qualification in Neuroeducation. Learning with all our potential, University of Barcelona



A program, which is backed by the results of thousands of satisfied students, that will open the doors to another way of acting and thinking to put you at the forefront of your profession"





# tech 24 | Structure and Content

### Module 1. Principles of Neurosciences

- 1.1. The Nervous System and Neurons
  - 1.1.1. The Formation of the Nervous System
  - 1.1.2. Types of Neurons
- 1.2. Neurobiological Principles of the Brain
  - 1.2.1. Brain Hemispheres and Lobes
  - 1.2.2. Localizationism vs Brain Functionalism
- 1.3. Genetics and Neurodevelopment
  - 1.3.1. Undifferentiated Neurons
  - 1.3.2. Programmed Neuronal Death
- 1.4. Myelination
  - 1.4.1. Electrical Interneuronal Communication
  - 1.4.2. Role of Myelin in Neurons
- 1.5. Brain Neurochemistry
  - 1.5.1. Interneuronal Chemical Communication
  - 1.5.2. Neurohormones and Their Functions
- 1.6. Plasticity and Brain Development
  - 1.6.1. Age vs. Neuronal Passivity
  - 1.6.2. Neurodevelopment
- 1.7. Hemispheric Differences
  - 1.7.1. Right Brain
  - 1.7.2. Left Brain
- 1.8. Interhemispheric Connectivity
  - 1.8.1. White Matter
  - 182 Differences Between Genders
- 1.9. Localizationism vs. Functionalism
  - 1.9.1. Hemispheric Functions
  - 1.9.2. New Localizationism
- 1.10. Invasive vs. Non-Invasive Brain Study Techniques
  - 1.10.1. Invasive Techniques
  - 1.10.2. Non-Invasive Techniques

### Module 2. The Emotional Brain

- 2.1. The Emotional Brain
  - 2.1.1. The Papez Circuit
  - 2.1.2. The Limbic Brain
- 2.2. Positive Emotions vs. Negative
  - 2.2.1. Amygdala and Positive Emotion
  - 2.2.2. Amygdala and Negative Emotion
- 2.3. Arousal vs. Valence
  - 2.3.1. The Intensity of Emotion
  - 2.3.2. The Affective Value of Emotion
- 2.4. Emotional Intelligence and the Education of Emotions According to the Mayer and Salovey Model
  - 2.4.1. Emotional Intelligence
  - 2.4.2. The Model of Mayer and Salovey
- 2.5. Other Intelligence Models and Emotional Transformation
  - 2.5.1. Emotional Maturity vs. Emotional Intelligence
  - 2.5.2. Emotional Relearning
- 2.6. Social-Emotional Skills and Creativity by Level of Intelligence
  - 2.6.1. Intelligence and Social Skills
  - 2.6.2. Intelligence and Creativity
- 2.7. Emotional Coefficient vs. Intelligence
  - 2.7.1. Academic Intelligence
  - 2.7.2. Multiple intelligences
- 2.8. Alexithymia vs. Hyperemotiveness
  - 2.8.1. Emotional Illiteracy
  - 2.8.2. Hypersensitivity to Emotions
- 2.9. Emotional Health
  - 2.9.1. Intelligence and Emotion
  - 2.9.2. Emotional Intelligence
- 2.10. The Social Brain
  - 2.10.1. Creativity and Intelligence
  - 2.10.2. Self-Knowledge and Intelligence

### Module 3. Neuropsychology

- 3.1. Principles of Neuropsychology
  - 3.1.1. Defining Neuropsychology
  - 3.1.2. Psychological Processes
  - 3.1.3. Neuropsychological Assessment
- 3.2. Sensation and Awareness
  - 3.2.1. Defining Sensation
  - 3.2.2. Neurological Principles of Sensation
  - 3.2.3. Evaluation of Sensation
  - 3.2.4. Defining Perception
  - 3.2.5. Neurological Principles of Perception
  - 3.2.6. Evaluation of Perception
- 3.3. Attention
  - 3.3.1. Defining Attention
  - 3.3.2. Neurological Principles of Attention
  - 3.3.3. Attention Assessment
  - 3.3.4. Attention Disorders
- 3.4. Memory
  - 3.4.1. Defining Memory
  - 3.4.2. Neurological Principles of Memory
  - 3.4.3. Memory Assessment
  - 3.4.4. Memory Disorders
- 3.5 Emotion
  - 3.5.1. Defining Emotion
  - 3.5.2. Neurological Principles of Emotion
  - 3.5.3. Emotion Assessment
  - 3.5.4. Emotional Disorders

### 3.6. Language

- 3.6.1. Defining Language
- 3.6.2. Neurological Principles of Language
- 3.6.3. Language Assessment
- 3.6.4. Language Disorders
- 3.7. Executive Functions
  - 3.7.1. Defining Executive Functions
  - 3.7.2. Neurological Principles of Executive Functions
  - 3.7.3. Executive Functions Assessment
  - 3.7.4. Executive Function Disorders
- 3.8. Motivation
  - 3.8.1. Defining Motivation
  - 3.8.2. Neurological Principles of Motivation
  - 3.8.3. Motivation Assessment
  - 3.8.4. Motivation Disorders
- 3.9. Metacognition
  - 3.9.1. Defining Metacognition
  - 3.9.2. Neurological Principles of Metacognition
  - 3.9.3. Metacognition Assessment
  - 3.9.4. Metacognition Disorders
- 3.10. Intelligence
  - 3.10.1. Defining Intelligence
  - 3.10.2. Neurological Principles of Intelligence
  - 3.10.3. Intelligence Assessment
  - 3.10.4. Intelligence Disorders

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### Module 4. Neuroeducation

- 4.1. Neural Principles of Learning
  - 4.1.1. Experience on a Neural Level
  - 4.1.2. Learning on a Neural Level
- 4.2. Cerebral Learning Models
  - 4.2.1. Traditional Learning Models
  - 4.2.2. New Learning Models
- 4.3. Cognitive Processes and Learning
  - 4.3.1. Cognitive Processes and the Brain
  - 4.3.2. Cognitive Processes and Learning
- 4.4. Emotions and Learning
  - 4.4.1. Emotion and the Brain
  - 4.4.2. Emotion and Learning
- 4.5. Socialization and Learning
  - 4.5.1. Socialization and the Brain
  - 4.5.2. Socialization and Learning
- 4.6. Cooperation and Learning
  - 4.6.1. Cooperation and the Brain
  - 4.6.2. Cooperation and Learning
- 4.7. Self-Control and Learning
  - 4.7.1. Self-Control and the Brain
  - 4.7.2. Self-Control and Learning
- 4.8. Different Minds, Different Learning Experiences
  - 4.8.1. Different Minds from Neuroeducation
  - 4.8.2. Giftedness from Neuroeducation
- 4.9. Neuromyths in Education
  - 4.9.1. The Brain and Adult Learning
  - 4.9.2. The Brain and Learning in Autism
- 4.10. Neurodidactics Applied to the Classroom
  - 4.10.1. The Neurodidactics of Attention
  - 4.10.2. The Neurodidactics of Motivation

### Module 5. Neurolinguistics

- 5.1. Language and the Brain
  - 5.1.1. Communicative Processes of the Brain
  - 5.1.2. The Brain and Speech
- 5.2. The Psycholinguistic Context
  - 5.2.1. Principles of Psycholinguism
  - 5.2.2. The Brain and Psycholinguism
- 5.3. Language Development vs. Neural Development
  - 5.3.1. Neural Principles of Language
  - 5.3.2. Neural Development of Language
- 5.4. The Spoken Language and Written Language
  - 5.4.1. Childhood and Language
  - 5.4.2. Adulthood and Language
- 5.5. The Brain in Bilingualism
  - 5.5.1. The Native Language at the Neural Level
  - 5.5.2. Multilingualism at the Neural Level
- 5.6. Developmental Speech and Language Disorders
  - 5.6.1. Intelligence and Linguistic Development
  - 5.6.2. Types of Intelligence and Language
- 5.7. Childhood Language Development
  - 5.7.1. Phases of Language in Childhood
  - 7.2. Difficulties in Childhood Language Development
- 5.8. Adolescent Brain
  - 5.8.1. Adolescence Language Development
  - 5.8.2. Language Difficulties in Adolescence



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### Module 6. Neuromarketing

- 6.1. The Brain and Decisions
  - 6.1.1. Single or Multiple Choices
  - 6.1.2. The Neural Learning of Choices
- 6.2. Pleasure vs. Surprise
  - 6.2.1. The Brain and Pleasure
  - 6.2.2. The Brain and Surprise
- 6.3. The Consumer Brain
  - 6.3.1. Decisions and Choices on a Neural Level
  - 6.3.2. Consumption as the Purpose of Choosing
- 6.4. The Ages of the Brain
  - 6.4.1. Children's Brain and Choices
  - 6.4.2. Adult Brain and Choices
- 6.5. Male Brain vs. Female
  - 6.5.1. Male Brain and Choices
  - 6.5.2. Female Brain and Choices
- 6.6. Mirror Neurons and Social Behavior
  - 6.6.1. The Relevance of Mirror Neurons in Marketing
  - 6.6.2. Social and Prosocial Behavior in Marketing
- 6.7. Learning and Memory
  - 6.7.1. Learning Decisions
  - 6.7.2. Remembering and Forgetting Decisions
- 6.8. Neuromarketing Evaluation Techniques
  - 6.8.1. Invasive Neural Techniques
  - 6.8.2. Non-Invasive Neural Techniques
- 5.9. Neuromarketing Successes and Failures
  - 6.9.1. Applied Cases of Neuromarketing
  - 6.9.2. Neuromarketing Results
- 6.10. Sales Techniques vs. Neuromarketing
  - 6.10.1. Sales Technology and the Brain
  - 6.10.2. Neuromarketing and Sales

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### Module 7. Neuroeconomics

- 7.1. The EconomicBrain
  - 7.1.1. Numbers and the Brain
  - 7.1.2. Mathematics and the Brain
- 7.2. Neural Foundations of Calculation Errors
  - 7.2.1. Simple vs. Complex Calculations. Complexity
  - 7.2.2. Common Mathematical Mistakes
- 7.3. Development of the Mathematical Brain
  - 7.3.1. Language vs. Mathematics on a Cerebral Level
  - 7.3.2. Mathematical Development
- 7.4. Mathematics vs. Intelligence
  - 7.4.1. Intelligence and Mathematics
  - 7.4.2. Multiple and Mathematical Intelligences
- 7.5. Trends and Fads at the Neural Level
  - 7.5.1. Implicit Theories vs. Explicit Trend Indicators
  - 7.5.2. Fashion and Neural Idiom
- 7.6. Risk Assumption vs. Conservation
  - 7.6.1. Personality and Risk
  - 7.6.2. The Brain and Risk
- 7.7. Mathematical Biases
  - 7.7.1 Basic Mathematical Biases
  - 7.7.2. Complex Mathematical Biases
- 7.8. Emotions vs. Economy
  - 7.8.1. Positive Neural Emotions and the Economy
  - 7.8.2. Negative Neural Emotions and the Economy
- 7.9. Economic Success and Failure
  - 7.9.1. Economic Success on a Neural Level
  - 7.9.2 Economic Failure on a Neural Level
- 7.10. Economic Psychopathology
  - 7.10.1. Clinical and Economic Psychology
  - 7.10.2. Personality and the Economy

### Module 8. Neuroleadership

- 3.1. Genetic Leadership vs. Environmental Leadership
  - 8.1.1. The Genetics of Leadership
  - 8.1.2. Leader Training
- 8.2. Leadership Styles
  - 8.2.1. Types of Leadership
  - 8.2.2. Delegating Leadership
- 8.3. Neural Biases
  - 8.3.1. The Leader on a Neural Level
  - 8.3.2. The Employee on a Neural Level
- 8.4. Habits and Change of Patterns
  - 8.4.1. The Leader's Patterns
  - 8.4.2. The Employee's Patterns
- 8.5. Emotion vs. Leadership
  - 8.5.1. The Leader's Emotions
  - 3.5.2. The Employee's Emotions
- 8.6. Communicative Skills
  - 8.6.1. The Leader's Communication
  - 3.6.2. The Employee's Communication
- 8.7. The Stressed Brain
  - 8.7.1 The Leader's Stress
  - 8.7.2. The Employee's Stress
- 8.8. Self-Management vs. Assigning Responsibility
  - 8.8.1. The Leader's Self-Management
  - 8.8.2. The Employee's Responsibility
- 3.9. Successes and Failures on a Neural Level
  - 8.9.1. The Leader's Successes and Failures
  - 8.9.2. The Employee's Successes and Failures
- 8.10. Neuroleadership Optimization Strategies
  - 8.10.1. Neuroleadership Training
  - 8.10.2. Successes in Neuroleadership

### Module 9. Neuropolitics

- 9.1. The Political Brain
  - 9.1.1. The Social Brain
  - 9.1.2. The Political Option on a Neural Level
- 9.2. Attentional Biases
  - 9.2.1. Personal Choice
  - 9.2.2. Family Tradition
- 9.3. Political Affiliation
  - 9.3.1. Belonging to a Group
  - 9.3.2. Group Biases
- 9.4. Political Emotions
  - 9.4.1. The Positive Emotions of Politics
  - 9.4.2. The Negative Emotions of Politics
- 9.5. Right vs. Left
  - 9.5.1. Right-Wing Brain
  - 9.5.2. Left-Wing Brain
- 9.6. The Politician's Image
  - 9.6.1. Candidate and the Brain
  - 9.6.2. Political Collaborators and the Brain
- 9.7. The Party Brand
  - 9.7.1. Political Branding
  - 9.7.2. The Brain and Political Brands
- 9.8. Political Campaigns
  - 9.8.1. Advertising Campaigns in Politics
  - 9.8.2. Electoral Campaigns in Politics
- 9.9. The Decision to Vote
  - 9.9.1. The Voter's Profile
  - 9.9.2. The Undecided Person's Profile
- 9.10. New Tools Applied to Neuro-Politics
  - 9.10.1. Cases of Application of Neuropolitics
  - 9.10.2. Successes of Neuropolitics

### Module 10. Other Branches of Applied Neurosciences

- 10.1. Neurobranding
  - 10.1.1. Personal Brand and Personal Style in the Brain
  - 10.1.2. Improving Brain Branding with Neuroscience Techniques
- 10.2. Neuroarchitecture
  - 10.2.1 Amazement and Awe in Neuroscience
  - 10.2.2. Functionality and Environmental Development in Neuroscience
- 10.3. Neurotechnology
  - 10.3.1. The Use of Technologies in Neuroscience
  - 10.3.2. Neuroimplants
- 10.4. Neuroethics
  - 10.4.1. The Limits of Research in Neuroscience
  - 10.4.2. The Dangers of Neuroscience
- 10.5. Neurospirituality
  - 10.5.1. The Neural Center of Faith
  - 10.5.2. The Neural Center of Spirituality
- 10.6. Neurofashion
  - 10.6.1. Fashion and the Brain
  - 10.6.2. Style and Taste at the Cerebral Level
- 10.7. Neurogastronomy
  - 10.7.1 Taste and the Brain
  - 10.7.2. Improving Cerebral Gastronomy
- 10.8. Psychoneuroimmunoendocrinology
  - 10.8.1. Emotions and the Brain
  - 10.8.2. Oxidative Stress and the Brain
- 10.9. Neurocriminology
  - 10.9.1. Psychopathic Personality
  - 10.9.2. Neural Disorganized Behaviors
- 10.10. Neuroculture
  - 10.10.1. Culture and the Brain
  - 10.10.2. Society and the Brain





# 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:

- 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**

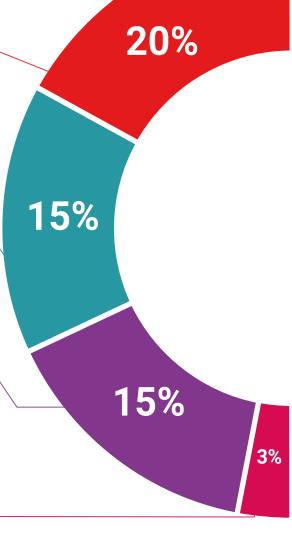
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many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

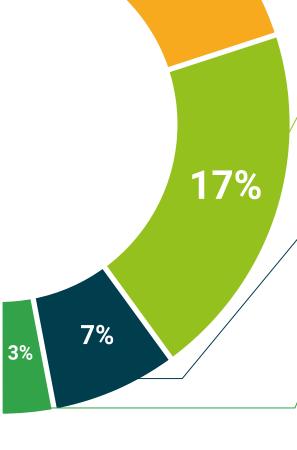
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



### **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 40 | Certificate

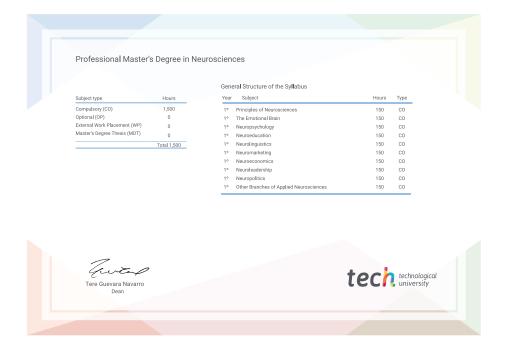
This **Professional Master's Degree in Neurosciences** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: **Professional Master's Degree in Neurosciences** Official N° of hours: **1,500 h.** 





<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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# Professional Master's Degree Neurosciences

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

