

# Postgraduate Certificate Neuroeconomics





## Postgraduate Certificate

### Neuroeconomics

Course Modality: **Online**

Duration: **2 months.**

Certificate: **TECH Technological University**

**6 ECTS Credits**

Teaching Hours: **150 hours.**

Website: [www.techtute.com/us/education/postgraduate-certificate/neuroeconomics](http://www.techtute.com/us/education/postgraduate-certificate/neuroeconomics)

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01

# Introduction

Neuroeconomics, a science originating in the USA, establishes, from a scientific point of view, the relationship between the brain and economic decisions. And, above all, about the neural learning of these decisions, their mechanisms and how to act on them. A qualitative step of great relevance towards the quality education that society is demanding and that will require qualified personnel in a multidisciplinary approach.





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*The thought processes that affect  
Neuroeconomics, applied to teaching. An  
invaluable tool for the teaching professional”*

This Postgraduate Certificate in Neuroeconomics offers a broad and complete vision of the complex world of neurosciences from an applied perspective. Starting from the biological bases and the techniques of Neuro-Imaging, the different practical approaches existing in this discipline are collected.

In this program, the teaching professional will learn to understand and interpret neurosciences in order to apply them to their teaching experience.

During the training, two types of neuropsychological programs will be dealt with: the eminently biological ones focused on the neuronal bases and genetics of the brain, and the exclusively clinical programs, where the problems associated with pathologies affecting the brain and neurodegenerative diseases are studied in depth. This double vision allows a better understanding of the functioning of neurosciences from different fields, so that the professional can have different options for its application.

This program addresses the new branches of neuroscience that are currently under development, both theoretical and applied, and introduces the new branches that in a few years will be demanded by different sectors, such as Neuro-Economics or Neuro-Leadership. These insurgent areas have not yet been included in the usual educational programs which makes this Postgraduate Certificate in Neuroeconomics a unique training opportunity that will prepare you in a very unique way.

Students will have access to the latest advances in neurosciences with the most complete theoretical contents and through a developed learning system supported by practice. Thus, at the end of their specialization, they will be able to apply everything they have learned in their work.

A complete program in which you will acquire extensive theoretical and practical knowledge that will improve your skills in the performance of your position.

This **Postgraduate Certificate in Neuroeconomics** is the most comprehensive and up-to-date program on the market. The most important features include:

- ♦ More than 75 practical cases presented by experts in Neuroeconomics
- ♦ The graphic, schematic, and eminently practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice.
- ♦ New Developments in Neuroeconomics
- ♦ It contains practical exercises where the self-evaluation process can be carried out to improve learning
- ♦ With a special emphasis on innovative methodologies in Neuroeconomics.
- ♦ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- ♦ Availability of content from any device, fixed or portable, with an Internet connection



*Update your knowledge through the Postgraduate Certificate in Neuroeconomics"*

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*A complete and well-developed educational program that includes the most notorious advances in the field of Neuroeconomics, applied to personal development"*

The program is taught by professionals with extensive experience in the field of Neurosciences for teachers, as well as recognized specialists in this area, belonging to reference societies and prestigious universities.

Thanks to its multimedia content, developed with the latest educational technology, the professional will enjoy situated and contextual learning. In other words, a simulated environment that will provide immersive learning, programmed to train you for real situations.

The design of this program is based on Problem-Based Learning, through which the student must try to solve different professional practice situations. This will be done with the help of an innovative interactive video system, one of the most advanced in the educational market.

*Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.*

*Through PBL the teacher will learn the real way to apply the concepts learned, in real situations and in a highly effective immersive learning.*





02

# Objectives

This program was created to train teachers in the application of neurosciences in the development of their work in the classroom, incorporating new forms of approach to their task as educators. A high-level qualitative leap that will allow you to be at the forefront of education.





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*Mathematics and its relationship to  
child and adult brain processes, from a  
neuropsychological perspective”*



## General Objectives

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- ♦ Update the knowledge on neurosciences in their different fields of application, from the clinical, educational or social area
- ♦ Increase the quality of the teaching professional's praxis in their performance
- ♦ Introduce the teacher to the vast world of neurosciences from a practical perspective
- ♦ Know the different disciplines involved in the study of the brain in relation to human behavior and its possibilities
- ♦ Learn to use the tools used in Neuroscience research and practice
- ♦ Develop skills and abilities in emotional development in the classroom
- ♦ Direct the student towards continuing education and research



*Take the opportunity and take the step to get up-to-date on the latest developments in Neuroeconomics”*







## Specific Objectives

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- ♦ Learn the formation of the nervous system
- ♦ Understand the types of neurons
- ♦ Identify brain hemispheres and lobes
- ♦ Differentiate between localizationism and brain functionalism.
- ♦ Discover the undifferentiated neurons
- ♦ Understand programmed neural death
- ♦ Recognise interneuronal electrical communication
- ♦ Determine the role of myelin in neurons
- ♦ Understand interneuronal chemical communication
- ♦ Classify neurohormones and their functions
- ♦ Differentiate between age and neuronal plasticity
- ♦ Discover neuronal development
- ♦ Learn the peculiarities of the human brain
- ♦ Unravel the left brain
- ♦ Explore the white matter
- ♦ Recognize gender differences at the neural level
- ♦ Classify hemispheric functions
- ♦ Discover the new localizationism
- ♦ Understand invasive techniques
- ♦ Recognize non-invasive techniques
- ♦ 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

03

# Course Management

The management and development of the program will be carried out with the most qualified professors in this area, in a multidisciplinary approach: Leading experts in the field of neurosciences at the service of the best online education. Throughout the six months of training and through a high-tech communication system, you will be able to access tutoring and guidance from your faculty at all times. With the confidence of counting on the best.







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*The best professionals in the sector will be your teachers in this complete program. Backed by the best online reputation in the market"*

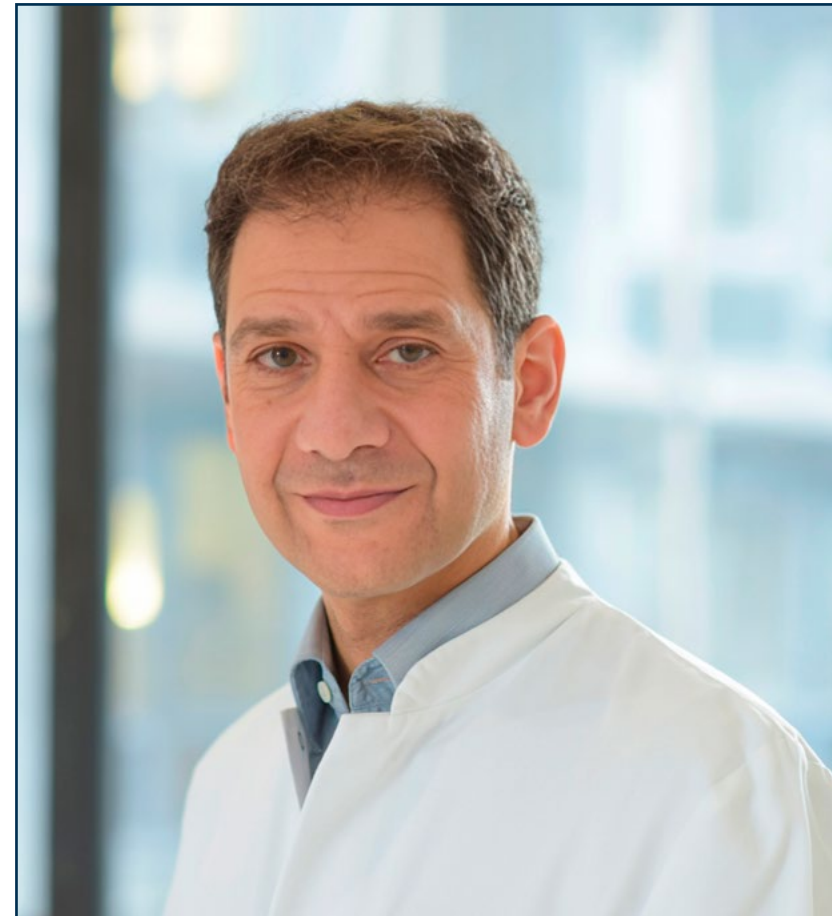
## International Guest Director

Dr. Malek Bajbouj is a Psychiatrist and Neuroscientist, specialized in the areas of Global Health, Mental Health and Affective Sciences. He also has experience as a Sleep Physician and Social, Affective and Cognitive Neuroscientist. Together with an interdisciplinary team, his work has focused on research on stress, affect and emotions. In particular, to carry out these studies, some of his main work has focused on cell culture, imaging and brain stimulation, as well as humanitarian aid.

Most of his professional experience has been as Medical Director and Head of the Center for Affective Neuroscience at the Charité Universitätsmedizin Berlin. In addition, his main research focus in the field of Global Mental Health has been the development of tailored, low-threshold preventive and therapeutic interventions against stress and trauma-related disorders. To this end, he has made use of digital tools and clinical trials, conducting interventions focused on reverse-innovation electrophysiological and neuroimaging approaches to improve patient phenotyping.

Likewise, Dr. Malek Bajbouj's firm commitment to Mental Health worldwide has led him to develop a large part of his professional activity in countries in the Middle East, Far East and Ukraine. In this sense, he has participated in various international conferences such as the Ukrainian-German Conference on Mental Health, Psychosocial Support and Rehabilitation. He has also written more than 175 book chapters and has an extensive list of scientific publications in which he has investigated topics such as Emotional Neuroscience, Affective Disorders and Global Mental Health.

In fact, his contributions in Psychiatry and Neuroscience have been awarded several times. One of them was in 2014, when she was awarded the Else Kröner-Fresenius Prize, recognizing her outstanding scientific research. And it is that his tireless work to strengthen the mental health of people around the world has positioned him as one of the best professionals in his field.



## Dr. Bajbouj, Malek

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- Medical Director of the Center for Affective Neuroscience at Charité
- Universitätsmedizin, Berlin, Germany.
- Visiting Research Fellow at the Department of Psychiatry, Columbia University and the New York State Psychiatric Institute, New York, New York, USA
- Physician and Assistant Researcher at the Free University of Berlin
- Specialist in Sleep Medicine
- Specialist in Psychiatry and Psychotherapy
- Master of Business Administration from Steinbeis-Hochschule University
- Graduate in Medicine from the Johannes Gutenberg University
- Member of:
  - Research Group Languages of Emotion at the Freie Universität Berlin

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

## 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.



### Dr. Jiménez Romero, Yolanda

- ◆ Educational psychologist
- ◆ Primary School Teacher with a specialization in English
- ◆ Educational psychologist
- ◆ Master's Degree in Neuropsychology of High Abilities
- ◆ Master's Degree in Emotional Intelligence
- ◆ Neurolinguistic Programming Practitioner



## Professors

### Dr. Pellicer Royo, Irene

- ♦ Physical Education Teacher at Fundació Jesuïtes Educació
- ♦ Degree in 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 in Neuroeducation. Learning with all our potential, University of Barcelona

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*A high-level training that will make you take a qualitative leap in your profession and will enable you to apply the knowledge of Neuroeconomics in your daily activity”*

04

# Structure and Content

The structure of the contents in this Postgraduate Certificate in Neuroeconomics has been designed by a team of professionals from the best educational centers and universities in Spain. Through the incorporation, as a priority, of new information and communication technologies, this program is an example of innovative education, of total and permanent relevance.







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*This Postgraduate Certificate in Neuroeconomics is the scientific most comprehensive and up-to-date program on the market”*

## Module 1. Neuroeconomics

- 1.1. The Economic Brain
  - 1.1.1. Numbers and the Brain
  - 1.1.2. Mathematics and the Brain
- 1.2. Neural Foundations of Calculation Errors
  - 1.2.1. Simple Vs Complex Calculations
  - 1.2.2. Common Mathematical Mistakes
- 1.3. Development of the Mathematical Brain
  - 1.3.1. Language Vs. Mathematics on a Cerebral Level
  - 1.3.2. Mathematical Development.
- 1.4. Mathematics Vs Intelligence
  - 1.4.1. Intelligence and Mathematics
  - 1.4.2. Multiple and Mathematical Intelligences
- 1.5. Trends and Fads at the Neural Level
  - 1.5.1. Implicit Vs Explicit Theories of Trend
  - 1.5.2. Fashion and Neural Idiom
- 1.6. Risk Assumption Vs. Conservation
  - 1.6.1. Personality and Risk
  - 1.6.2. The Brain and Risk
- 1.7. Mathematical Biases.
  - 1.7.1. The Basic Biases of Mathematics
  - 1.7.2. The Complex Biases of Mathematics
- 1.8. Emotions Vs Economics
  - 1.8.1. Positive Neural Emotions and the Economy
  - 1.8.2. Negative Neural Emotions and the Economy
- 1.9. Economic Success and Failure
  - 1.9.1. Economic Success on a Neural Level
  - 1.9.2. Economic Failure on a Neural Level
- 1.10. Economic Psychopathology.
  - 1.10.1. Clinical and Economic Psychology
  - 1.10.2. Personality and the Economy







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*A unique, key, and decisive  
experience to boost your  
professional development”*

05

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have ***considered it to be one of the most effective***.





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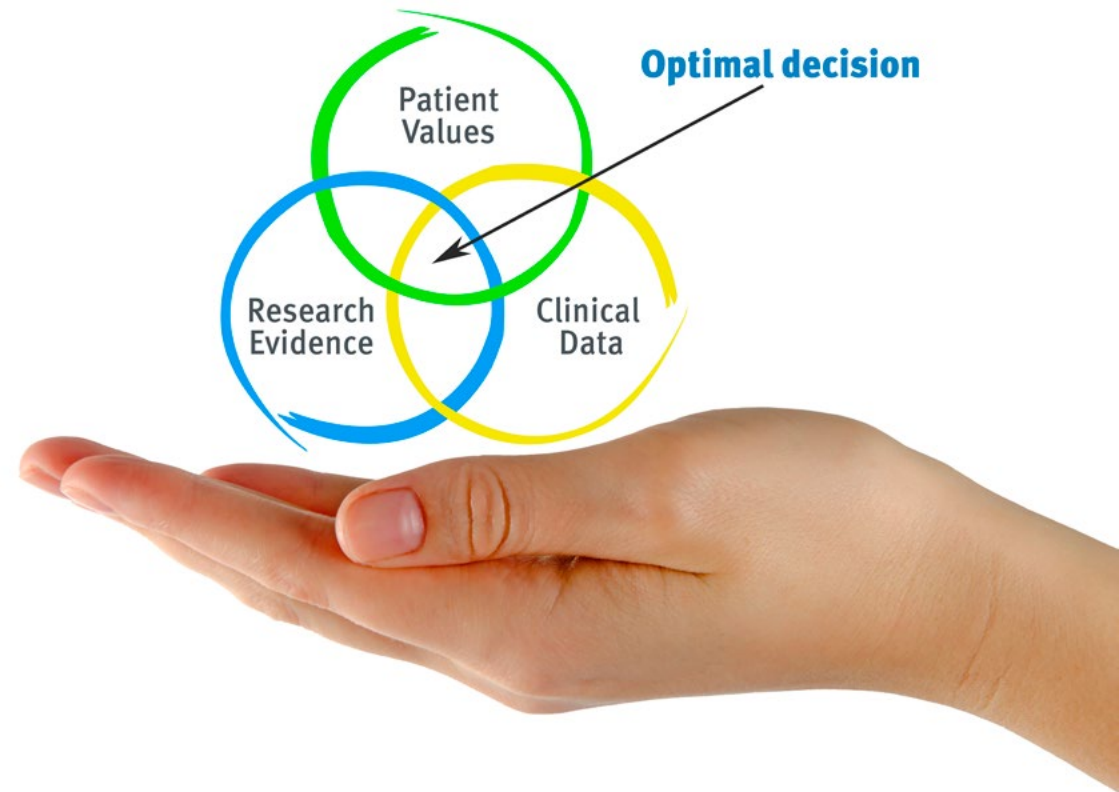
*Discover Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*



## At TECH Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method.

*With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.*



*It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.*



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*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”*

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

1. Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
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.



## Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our University is the first in the world to combine case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



*Educators will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 85,000 educators with unprecedented success in all specialties. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Re-learning 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 our learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



### Study Material

All teaching material is produced by the specialist educators who teach the course, specifically for the course, so that the teaching content is really 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.



### Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



### Interactive Summaries

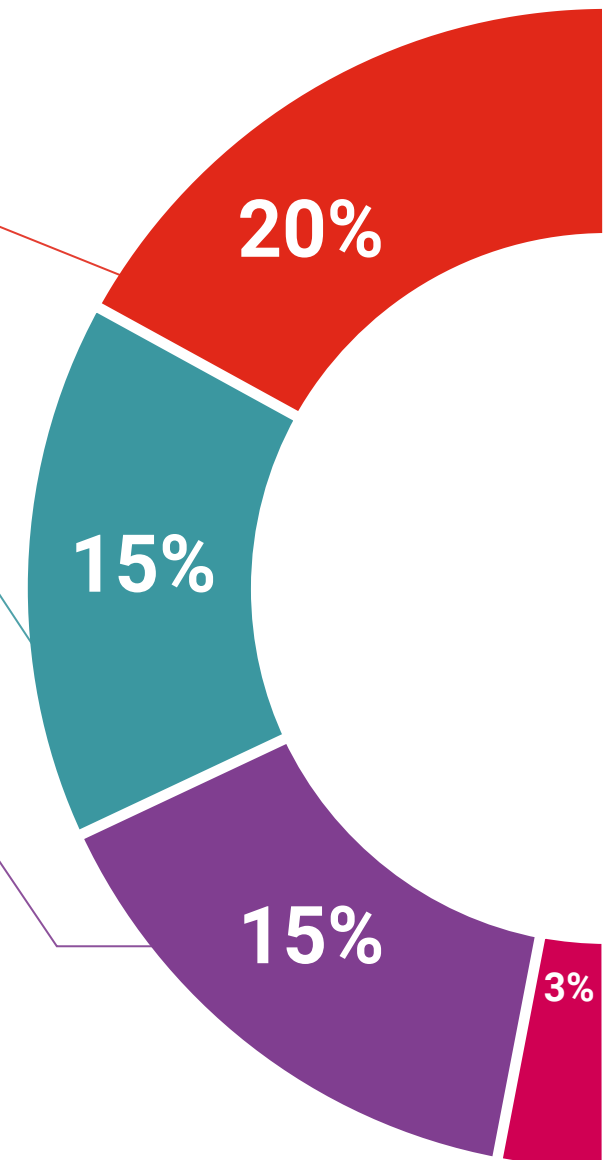
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".

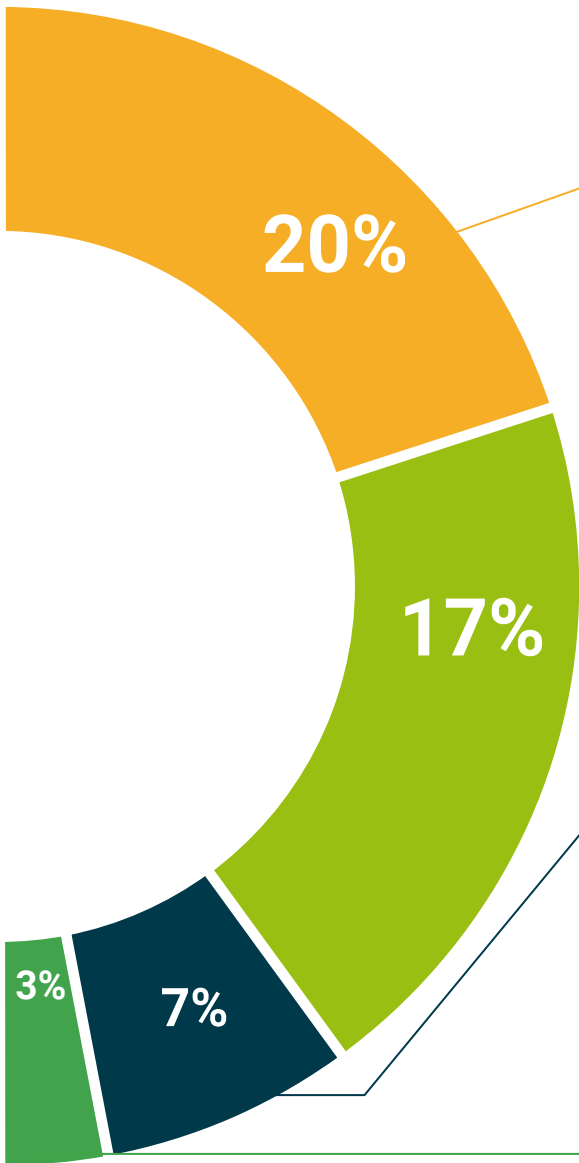


### Additional Reading

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 & Re-testing**

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 your goals.



**Classes**

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

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



**Quick Action Guides**

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



06

# Certificate

The Postgraduate Certificate in Neuroeconomics guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this program and receive your Postgraduate Certificate without travel or cumbersome paperwork”*

This **Postgraduate Certificate in Neuroeconomics** is the most comprehensive and up-to-date program on the market.

After passing the evaluation, the student will receive acknowledgement their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate , and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professionals from career evaluation committees.

Title: **Postgraduate Certificate in Neuroeconomics**

ECTS: 6



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



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development languages  
classroom



Postgraduate  
Certificate

Neuroeconomics

Course Modality: Online

Duration: 2 months.

Certificate: TECH Technological University

6 ECTS Credits

Teaching Hours: 150 hours.

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