

# Postgraduate Certificate

## Neuropsychology Advanced Research Methodology





## Postgraduate Certificate Neuropsychology Advanced Research Methodology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/psychology/postgraduate-certificate/neuropsychology-advanced-research-methodology](http://www.techtute.com/us/psychology/postgraduate-certificate/neuropsychology-advanced-research-methodology)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 24*

06

Certificate

---

*p. 32*

# 01

# Introduction

What differentiates a competent professional from an excellent one is their capacity for permanent growth and updating. Being able to conduct research in this area is one of the ways to achieve this. In order to be able to perform it in a well-founded way and collect data of particular interest, we offer a program that will lead you to learn and master the necessary specific methodology. A program of high-level qualification for the professional in this scientific discipline.



“

*Learn in a few weeks the specific methodology of neuropsychology research, from the best professionals in the sector"*

The work in neuropsychology is complex. It covers a broad spectrum of intervention that requires the professional to have very specific training in the various branches of brain development. This discipline, deeply linked to neurology and the physiological study of the brain, is affected by the changes that the evolution of knowledge in this scientific branch achieves. For professionals, this means an intense challenge of permanent updating that allows them to be at the forefront in terms of the approach, intervention and follow-up of the cases that may arise in their classrooms.

Throughout this program, the student will review all the current approaches to the work practiced by neuropsychologists with regard to the different challenges posed by their profession.

The functioning of memory, language, the relationship between laterality and cognitive development, sensoriality and many other aspects, will be the topics of work and study that the student will be able to integrate in their training. A high-level step that will become a process of improvement, not only on a professional level, but also on a personal level.

This challenge is one of TECH's social commitments: to help highly qualified professionals to specialize and develop their personal, social and work skills during the course of their training.

Not only does it lead through the theoretical knowledge offered, but it also shows another way of studying and learning, more organic, simpler and more efficient. We will work to keep you motivated and to instill in you a passion for learning. We will encourage you to think and develop critical thinking.

This **Postgraduate Certificate in Neuropsychology Advanced Research**

**Methodology** contains the most complete and up-to-date program on the market. Its most notable features are:

- ◆ The latest technology in online teaching software
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ◆ Practical cases presented by practicing experts
- ◆ State-of-the-art interactive video systems
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-evaluation and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ◆ Communication with the teacher and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection
- ◆ Complementary documentation banks permanently available, even after the course



*A program created for professionals who aspire for excellence, and that will enable you to acquire new skills and strategies easily and effectively"*

“

*From the choice of topic to the formulation of hypotheses you will learn all the strengths of any research”*

Our teaching staff is made up of working professionals. This way, we ensure that we provide you with up-to-date knowledge, which is what we are aiming for. A multidisciplinary team of physicians trained and experienced in different environments, who will cover the theoretical knowledge in an efficient way, but, above all, will bring the practical knowledge derived from their own experience to the program: one of the differential qualities of this Postgraduate Certificate.

This mastery of the subject is complemented by the effectiveness of the methodological design of this Postgraduate Certificate. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. In this way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice learning: with the help of an innovative interactive video system, and *learning from an expert*, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

*An effective and proactive way to offer students new ways to improve and progress.*

*Learn how to set up a roadmap and the essential elements to complete the process effectively.*

# 02

# Objectives

The objective is to train highly qualified professionals for work experience.

An objective that is complemented in a global manner by promoting human development that lays the foundations for a better society. This objective is focused on helping professionals reach a much higher level of expertise and control. A goal that, in just six months, you will be able to achieve with a highly intensive and precise Postgraduate Certificate.







“

*If your goal is to improve in your profession, to acquire a qualification that will enable you to compete among the best, look no further: welcome to TECH"*



## General Objectives

---

- ◆ Qualify professionals for the practice of neuropsychology in education in the development of children and young people
- ◆ Learn how to carry out specific programs to improve school performance
- ◆ Access the forms and processes of neuropsychology research in the school environment
- ◆ Increase the capacity for work and autonomous resolution of learning processes
- ◆ Study the attention to diversity from the neuropsychological approach
- ◆ Get to know the different ways to implement enrichment systems of learning methodologies in the classroom, especially aimed at diverse students
- ◆ Analyze and integrate the knowledge necessary to foster student's school and social development





## Specific Objectives

---

- ◆ Devise, develop and analyze comprehensive research in the area of neuropsychology in the educational setting
- ◆ Acquire skills in the use of the tools necessary to collect and analyze data in the context of neuropsychological research
- ◆ Actively apply the results



*Take the step to get up to date on the latest developments in Neuropsychology Advanced Research Methodology”*

03

# Course Management

For our Postgraduate Certificate to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record in the field of education. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.



“

*Our professors bring their vast experience and their teaching skills to offer you a stimulating and creative specialized training program”*

## Management



### Ms. Sánchez, Nuria Ester

- ♦ Degree in Psychology from the University of La Laguna
- ♦ Master's Degree in General Health Psychology from the University of La Rioja
- ♦ Training in Emergency Psychological Care
- ♦ Training in Psychological Care in Penitentiary Institutions
- ♦ Teaching and training experience
- ♦ Experience in educational attention to children at risk



03

# Structure and Content

The contents of this program have been developed by the different teachers of this Postgraduate Certificate, with a clear purpose: to ensure that our students acquire each and every one of the skills necessary to become true experts in this field.

The content of this Postgraduate Certificate enables you to learn all aspects of the different disciplines involved in this field: A complete and well-structured program that will take you to the highest standards of quality and success.



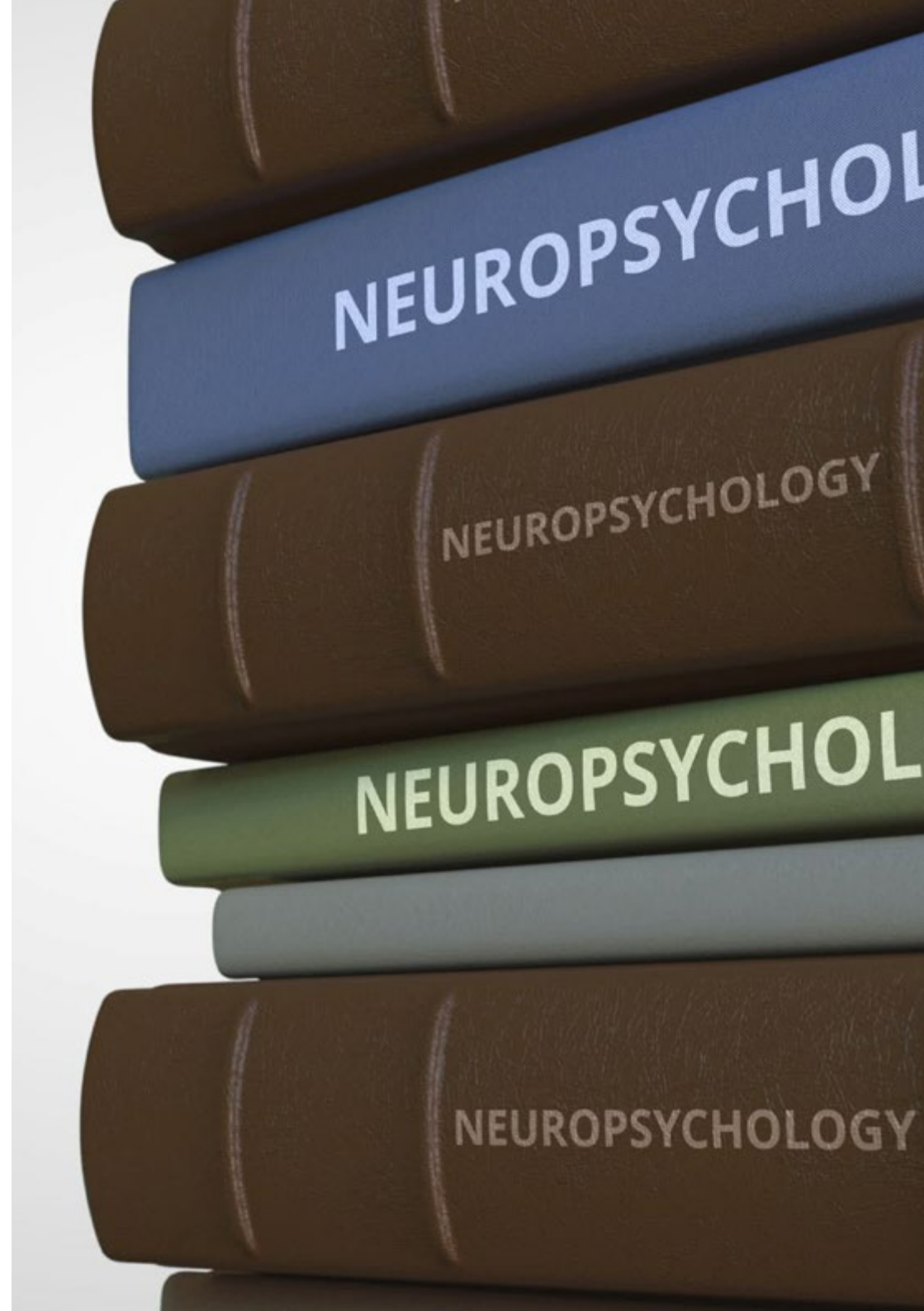


“

*Our curriculum has been designed with teaching effectiveness in mind: so that you learn faster, more efficiently, and on a more permanent basis"*

## Module 1. Research Methodology I

- 1.1. Research Methodology
  - 1.1.1. Introduction
  - 1.1.2. The Importance of Research Methodology
  - 1.1.3. Scientific Knowledge
  - 1.1.4. Research Approaches
  - 1.1.5. Summary
  - 1.1.6. Bibliographical References
- 1.2. Choosing the Topic to Research
  - 1.2.1. Introduction
  - 1.2.2. The Issue of Research
  - 1.2.3. Defining the Problem
  - 1.2.4. Choice of the Research Question
  - 1.2.5. Research Objectives
  - 1.2.6. Variables: Types
  - 1.2.7. Summary
  - 1.2.8. Bibliographical References
- 1.3. Research Proposal
  - 1.3.1. Introduction
  - 1.3.2. Research Hypothesis
  - 1.3.3. Feasibility of the Research Project
  - 1.3.4. Introduction and Justification of the Research
  - 1.3.5. Summary
  - 1.3.6. Bibliographical References
- 1.4. Theoretical Framework
  - 1.4.1. Introduction
  - 1.4.2. Elaboration of the Theoretical Framework
  - 1.4.3. Resources Used
  - 1.4.4. APA Standards
  - 1.4.5. Summary
  - 1.4.6. Bibliographical References



- 1.5. Bibliography
  - 1.5.1. Introduction
  - 1.5.2. Importance of Bibliographic References
  - 1.5.3. How to Reference According to APA Standards?
  - 1.5.4. Format of Annexes: Tables and Figures
  - 1.5.5. Bibliography Managers: What Are They and How to Use Them
  - 1.5.6. Summary
  - 1.5.7. Bibliographical References
- 1.6. Methodological Framework
  - 1.6.1. Introduction
  - 1.6.2. Roadmap
  - 1.6.3. Sections to be Included in the Methodological Framework
  - 1.6.4. The Population
  - 1.6.5. The Sample
  - 1.6.6. Variables:
  - 1.6.7. Instruments
  - 1.6.8. Procedure
  - 1.6.9. Summary
  - 1.6.10. Bibliographical References
- 1.7. Research Designs
  - 1.7.1. Introduction
  - 1.7.2. Types of Designs
  - 1.7.3. Characteristics of the Designs Used in Psychology
  - 1.7.4. Research Designs Used in Education
  - 1.7.5. Research Designs Used in Education Neuropsychology
  - 1.7.6. Summary
  - 1.7.7. Bibliographical References
- 1.8. Quantitative Research
  - 1.8.1. Introduction
  - 1.8.2. Designing Randomized Groups
  - 1.8.3. Designing Randomized Groups with Blocks
  - 1.8.4. Other Designs used in Psychology
  - 1.8.5. Statistical Techniques in Quantitative Research
  - 1.8.6. Summary
  - 1.8.7. Bibliographical References
- 1.9. Quantitative Research II
  - 1.9.1. Introduction
  - 1.9.2. Unifactor Intrasubject Designs
  - 1.9.3. Techniques for Controlling the Effects of Intrasubject Designs
  - 1.9.4. Statistical Techniques
  - 1.9.5. Summary
  - 1.9.6. Bibliographical References
- 1.10. Results
  - 1.10.1. Introduction
  - 1.10.2. How to Gather Data
  - 1.10.3. How to Analyze Data
  - 1.10.4. Statistical Programs
  - 1.10.5. Summary
  - 1.10.6. Bibliographical References
- 1.11. Descriptive Statistics
  - 1.11.1. Introduction
  - 1.11.2. Research Variables
  - 1.11.3. Quantitative Analyses
  - 1.11.4. Qualitative Analyses
  - 1.11.5. Resources that Can Be Used
  - 1.11.6. Summary
  - 1.11.7. Bibliographical References
- 1.12. Hypothesis Contrast
  - 1.12.1. Introduction
  - 1.12.2. Statistical Hypotheses
  - 1.12.3. How to Interpret Significance (P-Value)?
  - 1.12.4. Criteria for Analyzing Parametric and Non-Parametric Tests
  - 1.12.5. Summary
  - 1.12.6. Bibliographical References

- 1.13. Correlational Statistics and Independence Analysis
  - 1.13.1. Introduction
  - 1.13.2. Pearson Correlation
  - 1.13.3. Spearman's Correlation and Chi-Square
  - 1.13.4. Results
  - 1.13.5. Summary
  - 1.13.6. Bibliographical References
- 1.14. Group Comparison Statistics
  - 1.14.1. Introduction
  - 1.14.2. Mann-Whitney T-Test and Mann-Whitney U-Test
  - 1.14.3. T-Test and Wilcoxon Signed Ranges
  - 1.14.4. The Results
  - 1.14.5. Summary
  - 1.14.6. Bibliographical References
- 1.15. Discussion and Conclusions
  - 1.15.1. Introduction
  - 1.15.2. What is the Discussion?
  - 1.15.3. Organization of the Discussion
  - 1.15.4. Conclusions
  - 1.15.5. Limitations and Outlook
  - 1.15.6. Summary
  - 1.15.7. Bibliographical References
- 1.16. Elaboration of the Program Final Project
  - 1.16.1. Introduction
  - 1.16.2. Front Page and Contents
  - 1.16.3. Introduction and Justification
  - 1.16.4. Theoretical Framework
  - 1.16.5. Methodological Framework
  - 1.16.6. The Results
  - 1.16.7. Intervention Program
  - 1.16.8. Discussion and Conclusions
  - 1.16.9. Summary
  - 1.16.10. Bibliographical References

## Module 2. Research Methodology II

- 2.1. Research in the Educational Environment
  - 2.1.1. Introduction
  - 2.1.2. Research Characteristics
  - 2.1.3. Research in the Classroom
  - 2.1.4. Keys Needed for Research
  - 2.1.5. Examples:
  - 2.1.6. Summary
  - 2.1.7. Bibliographical References
- 2.2. Neuropsychological Research
  - 2.2.1. Introduction
  - 2.2.2. Educational Neuropsychological Research
  - 2.2.3. Knowledge and the Scientific Method
  - 2.2.4. Types of Approaches
  - 2.2.5. Research Stages
  - 2.2.6. Summary
  - 2.2.7. Bibliographical References
- 2.3. Ethics of Research
  - 2.3.1. Introduction
  - 2.3.2. Informed Consent
  - 2.3.3. Data Protection Law
  - 2.3.4. Summary
  - 2.3.5. Bibliographical References
- 2.4. Reliability and Validity
  - 2.4.1. Introduction
  - 2.4.2. Reliability and Validity in Research
  - 2.4.3. Reliability and Validity in Assessment
  - 2.4.4. Summary
  - 2.4.5. Bibliographical References

- 2.5. Controlling Variables in Research
  - 2.5.1. Introduction
  - 2.5.2. Choosing Variables
  - 2.5.3. Controlling Variables
  - 2.5.4. Sample Selection
  - 2.5.5. Summary
  - 2.5.6. Bibliographical References
- 2.6. The Quantitative Research Approach
  - 2.6.1. Introduction
  - 2.6.2. Features
  - 2.6.3. Stages
  - 2.6.4. Assessment Tools
  - 2.6.5. Summary
  - 2.6.6. Bibliographical References
- 2.7. Qualitative Research Approach I
  - 2.7.1. Introduction
  - 2.7.2. Systematic Observation
  - 2.7.3. Research Stages
  - 2.7.4. Sampling Techniques
  - 2.7.5. Quality Control
  - 2.7.6. Statistical Techniques
  - 2.7.7. Summary
  - 2.7.8. Bibliographical References
- 2.8. Qualitative Research Approach II
  - 2.8.1. Introduction
  - 2.8.2. The Survey
  - 2.8.3. Sampling Techniques
  - 2.8.4. Survey Stages
  - 2.8.5. Research Designs
  - 2.8.6. Statistical Techniques
  - 2.8.7. Summary
  - 2.8.8. Bibliographical References
- 2.9. Qualitative Research Approach III
  - 2.9.1. Introduction
  - 2.9.2. Types of Interviews and Characteristics
  - 2.9.3. Preparing the Interview
  - 2.9.4. Group Interviews
  - 2.9.5. Statistical Techniques
  - 2.9.6. Summary
  - 2.9.7. Bibliographical References
- 2.10. Single Case Designs
  - 2.10.1. Introduction
  - 2.10.2. Features
  - 2.10.3. Types
  - 2.10.4. Statistical Techniques
  - 2.10.5. Summary
  - 2.10.6. Bibliographical References
- 2.11. Research-Action
  - 2.11.1. Introduction
  - 2.11.2. Objectives of Research-Action
  - 2.11.3. Features
  - 2.11.4. Phases
  - 2.11.5. Myths
  - 2.11.6. Examples:
  - 2.11.7. Summary
  - 2.11.8. Bibliographical References
- 2.12. Gathering Information for Research
  - 2.12.1. Introduction
  - 2.12.2. Techniques for Gathering Information
  - 2.12.3. Assessing Research
  - 2.12.4. Assessment
  - 2.12.5. Interpretation of Results
  - 2.12.6. Summary
  - 2.12.7. Bibliographical References

- 2.13. Data Management in Research
  - 2.13.1. Introduction
  - 2.13.2. Databases
  - 2.13.3. Data in Excel
  - 2.13.4. Data in SPSS
  - 2.13.5. Summary
  - 2.13.6. Bibliographical References
- 2.14. Spreading Results in Neuropsychology
  - 2.14.1. Introduction
  - 2.14.2. Publications
  - 2.14.3. Specialized Journals
  - 2.14.4. Summary
  - 2.14.5. Bibliographical References
- 2.15. Scientific Journals
  - 2.15.1. Introduction
  - 2.15.2. Features
  - 2.15.3. Types of Journals
  - 2.15.4. Quality Indicators
  - 2.15.5. Submitting Articles
  - 2.15.6. Summary
  - 2.15.7. Bibliographical References
- 2.16. The Scientific Article
  - 2.16.1. Introduction
  - 2.16.2. Types and Characteristics
  - 2.16.3. Structure
  - 2.16.4. Quality Indicator
  - 2.16.5. Summary
  - 2.16.6. Bibliographical References





- 2.17. Scientific Conferences
  - 2.17.1. Introduction
  - 2.17.2. The Importance of Conferences
  - 2.17.3. Scientific Committees
  - 2.17.4. Oral Communications
  - 2.17.5. The Scientific Poster
  - 2.17.6. Summary
  - 2.17.7. Bibliographical References

“A complete program that will take you through the necessary knowledge to compete with the best in your profession”

05

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.**

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.





“

*Discover Relearning, 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 we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

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



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

“

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

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

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



## Relearning Methodology

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

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

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



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

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

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

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

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



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



#### Study Material

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

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### Latest Techniques and Procedures on Video

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



#### Interactive Summaries

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

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



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





**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 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.



05

# Certificate

The Postgraduate Certificate in Neuropsychology Advanced Research Methodology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.





“

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

This program will allow you to obtain your **Postgraduate Certificate in Neuropsychology Advanced Research Methodology** 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** title 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: **Postgraduate Certificate in Neuropsychology Advanced Research Methodology**

Modality: **online**

Duration: **6 weeks**

Accreditation: **12 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.

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



## Postgraduate Certificate

### Neuropsychology Advanced Research Methodology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Certificate

Neuropsychology Advanced  
Research Methodology