

# Postgraduate Certificate

## Cognitive Development and Processing



## Postgraduate Certificate

### Cognitive Development and Processing

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

Website: [www.techtute.com/us/psychology/postgraduate-certificate/cognitive-development-processing](http://www.techtute.com/us/psychology/postgraduate-certificate/cognitive-development-processing)

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# 01

# Introduction

Cognitive development is directly related to knowledge acquired through learning and experience. The skills that are developed through this system are remarkable in the early stages of childhood and classrooms are the main scenario to foresee problems related to learning difficulties. It is in them where psychoeducational professionals must detect problems or disorders in the development of children. This is possible when educational centers have professionals who know how to apply the latest techniques and strategies in the evaluation of executive functions. For this reason, TECH has designed a complete program that teaches cognitive development and the processing of executive thinking functions affected in LD. All this, through a 100% online modality that, together with the Relearning methodology, makes the study a flexible process with the possibility of adapting to the specific circumstances of the psychologists enrolled.



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*With this Postgraduate Certificate,  
you will obtain in only 6 weeks all the  
necessary knowledge to specialize in  
Cognitive Development and Processing "*

Being part of the development of children in schools is a responsibility that not only falls on teachers, but in which the educational counselor must actively participate. This figure is key to detecting and intervening in the pathologies associated with LD. For this reason, and in response to the demand of today's educational centers, TECH has designed a rigorous program that projects the careers of professionals in the psychological field, so that they are able to propose solutions for each case in the classroom.

TECH offers this Postgraduate Certificate in Cognitive Development and Processing to graduates in Psychology who wish to enhance their knowledge in the field of neurobiological and cognitive bases involved in learning. To achieve this, the program explores the basic processes of learning, such as memorization, attention and perception, and the appropriate diagnoses and interventions in each psychoeducational environment, among other issues. All this, to expand and update the theoretical and practical knowledge of psychoeducational professionals.

This is a university program taught in a 100% online format, which allows students to digitally enter into the different categories of the LD in the formal and non-formal framework. TECH proposes this study with the support of a teaching team versed in the neuropsychological field and downloadable materials that students will have at all times and that will make the study a flexible and dynamic process. In addition, the innovative educational system, based on Relearning methodology, will exempt specialists from long hours of memorization and will allow them to adapt the pace of study according to their personal and professional needs.

This **Postgraduate Certificate in Cognitive Development and Processing** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of case studies presented by experts in psychology and education
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*A program that addresses the implications of memory for learning disability disorders and their encoding patterns"*

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*Get all the tools you need to understand storage processes and participate in the recovery of skills impaired by LD disorders"*

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

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

*Be part of the psychoeducational vanguard at the forefront of schools today.*

*Master the development of standardized tests of executive functions and become a more competitive specialist in the job market.*



# 02

# Objectives

This program has been designed on the basis of a group of experts who will instruct graduates in Psychology, in order to make them more competitive in the workplace and master the keys to implement diversity and social integration projects in the classrooms where they will develop their job. In this line, students will delve into the basic processes of learning, such as memorization, attention and perception, and the appropriate diagnoses and interventions in each psychoeducational environment. All this, through a contextualized vision and with future social perspectives that guarantee the professional success of the psychologists enrolled in the program.







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*Project your professional career with a university program that will allow you to delve deeper into lexical, perceptual and visual access difficulties and associated disorders”*



## General Objectives

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- Understand the neurobiological and cognitive bases involved in learning
- Know the different categories of LD in the formal and non-formal framework, their assessment and diagnosis
- Identify the basic processes of learning, such as memorization, attention and perception, and make reliable diagnoses and appropriate interventions in each psychoeducational environment
- Apply specific intervention techniques and programs for Learning Difficulties
- Analyze the different pathologies related to literacy skills caused by disorders in LD





## Specific Objectives

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- Study the concept of memory, as well as its implication in Learning Difficulties
- Delve into the cognitive and neurofunctional models of numerical processing
- Study, in-depth, the main neuropsychological and psycholinguistic models in reading and writing

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*Reach your goals thanks to an innovative program that adapts to your needs and delves into the assessment systems and general intelligence tests”*

03

# Course Management

TECH has called on a team of teachers versed in psychoeducation to transmit theoretical and practical knowledge to psychology graduates enrolled in this program. Thanks to their collaboration, students will be able to learn about deficiencies in cognitive development, assessment and standardized tests of executive functions and their diagnosis. It is an enriching experience for the psychologists to obtain a completely personalized tutoring adapted to their interests, being able to maintain direct contact with the teaching staff through tutorials and the Virtual Classroom.



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*Attend to signs of difficulty in semantic and syntactic processing and understand how they influence reading comprehension and other neuropsychological skills"*

## Management



### Ms. Torres García, Cathaysa

- ♦ Teacher of kids reading workshops at PIALTE
- ♦ Educational psychologist and Early Childhood Education teacher at Centro Infantil Higopico
- ♦ Psychologist at Hamelín Children's Center
- ♦ Freelance Educational Psychologist
- ♦ University Lecturer
- ♦ Bachelor's Degree in Pedagogy, University of La Laguna
- ♦ Master's Degree in Educational Psychology at the University of La Laguna
- ♦ University Specialist in Early Childhood Care at the Antonio de Nebrija University

## Professors

### Ms. López, Ana Karina

- ♦ Psychologist, trainer and facilitator in the field of social participation of the elderly program of the Fundación la Caixa
- ♦ Clinical psychologist in the field of child and adolescent psychotherapy at the Psychological Office María Auxiliadora
- ♦ Graduate in Psychology at Arturo Michelena University
- ♦ Master's Degree in General Health Psychology at the University of La Laguna
- ♦ Diploma in Organizational Psychology and Human Resources at the University of Carabobo



# 04

## Structure and Content

The Postgraduate Certificate in Cognitive Development and Processing is an innovative program that is taught through a 100% online modality to make it possible to study in a flexible way. TECH offers a complete and rigorous program focused on Cognitive Development and Processing of executive thinking functions affected in Learning Disabilities, among many other issues. In addition, this program is developed in only 6 academic weeks in a comprehensive manner and through downloadable educational content, which specialists can access at any time and place and even at the end of the program.






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*Update your knowledge in the basic processes of learning, such as memorization, attention and perception and become a multidisciplinary specialist"*

**Module 1. Cognitive Development and Processing: Developmental Processes and Executive Thinking Functions Affected in LD**

- 1.1. Processing and Learning Theory
  - 1.1.1. What is the Processing Theory Based on?
  - 1.1.2. Main Learning Authors and Implications
  - 1.1.3. How is Processing Theory Applied in the Psycho-Educational Field?
- 1.2. Memory Implications for LD
  - 1.2.1. Memory Concept and Types
  - 1.2.2. Coding Processes and Models
  - 1.2.3. Storage and Retrieval Processes
  - 1.2.4. The Influence of Memory on Learning
  - 1.2.5. Memory and Learning Research
  - 1.2.6. Executive Functioning and Interdependence with Attention and Perceptual Processes
- 1.3. Attention and LDs
  - 1.3.1. Attention Concept and Types
  - 1.3.2. Attention Processes and Models
  - 1.3.3. The Influence of Attention on Learning
  - 1.3.4. Attention and Learning Research
  - 1.3.5. Attentional Executive Functioning and Interdependence with Other Executive Agents
- 1.4. Perception and LDs
  - 1.4.1. Perception Concept and Types
  - 1.4.2. Perceptual Processes and Models
  - 1.4.3. The Influence of Perception on Learning
  - 1.4.4. Perception and Learning Research
  - 1.4.5. Perceptual Executive Functioning and Interdependence with Other Executive Agents
- 1.5. General Intelligence Assessment and Testing
  - 1.5.1. Why is it Important to Assess General Intelligence?
  - 1.5.2. Main General Intelligence Models
  - 1.5.3. What Exactly Do Intelligence Tests Measure and What Are They Useful for in the Educational Setting?
  - 1.5.4. Main Standardized Tests for Intelligence Scales in Education



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- A close-up photograph of a person's hands holding a blue, spiky stress ball. The person is wearing a light blue shirt and blue and white striped pants. The background is a bright, out-of-focus window with a green plant in the foreground.
- 1.6. Neuropsychological and Psycholinguistic Models in Literacy
    - 1.6.1. Neuropsychological Literacy Theories
    - 1.6.2. Psycholinguistic Literacy Theories
    - 1.6.3. Reading Acquisition Developmental Model
    - 1.6.4. Writing Acquisition Developmental Model
    - 1.6.5. Access to the Lexicon: Visual and Phonological Route Models
    - 1.6.6. Semantic and Syntactic Processing: Reading Comprehension
    - 1.6.7. Lexical, Perceptual and Visual Access Difficulties and Associated Disorders
  - 1.7. Neuropsychological and Numerical Processing Models in MD
    - 1.7.1. Numerical Processing and Calculation Principles
    - 1.7.2. Cognitive and Neurofunctional Model of Numerical Processing
    - 1.7.3. Acalculia, Dyscalculia and Other Related LD: ADHD, Dyslexia
    - 1.7.4. Case Study Research and Description in MD
  - 1.8. Assessment and Standardized Tests for Executive Functions
    - 1.8.1. Introduction to Standardized Tests of Executive Processes. Why is it Important to Measure Executive Functions?
    - 1.8.2. Main Standardized Tests of Executive Functions in the Educational Setting
    - 1.8.3. Memory Assessment Kits
    - 1.8.4. Attention and Perception Assessment Kits
    - 1.8.5. Evaluating and Diagnosing Recommendations Based on Standardized Tests

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*Get into the psycholinguistic theories of reading and writing and put into practice the visual and phonological route models”*

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.



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*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. 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 psychologist's professional practice.

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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. 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.



06

# Certificate

The Postgraduate Certificate in Cognitive Development and Processing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 program will allow you to obtain your **Postgraduate Certificate in Cognitive Development and Processing** 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.

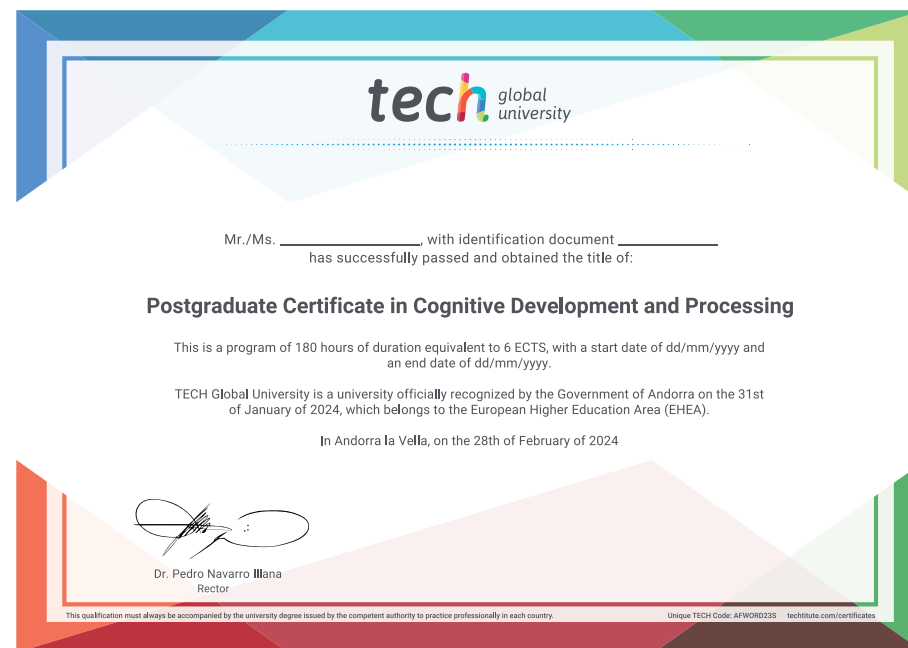
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Cognitive Development and Processing**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 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



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