

# Postgraduate Certificate Neurological Pathology in Hospital Pediatrics





## Postgraduate Certificate Neurological Pathology in Hospital Pediatrics

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

Website: [www.techtitute.com/medicine/postgraduate-certificate/neurological-pathology-hospital-pediatrics](http://www.techtitute.com/medicine/postgraduate-certificate/neurological-pathology-hospital-pediatrics)

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# 01

# Introduction

The management of the most common pediatric neurological pathologies such as headaches, epilepsies or febrile seizures has advanced enormously in recent years, especially after the COVID-19 pandemic where these kinds of conditions were brought into the limelight. In order to continue aiding specialists in perfecting their knowledge and skills, TECH offers this course where the main scientific findings and practical advances of the last decades are compiled. This includes complete topics devoted to Guillain-Barré Syndrome, Acute Ataxia and Pediatric Stroke, among other pathologies of great interest. All this in a unique and versatile program, adapted to the demands of specialists.





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*Update your knowledge on the main neurological pathologies in pediatrics by reviewing real clinical cases and recent scientific studies of great interest”*

Neurological pathologies attract the attention of scientists and specialists from all over the world, so it is not surprising that advances in this field are common. Technological developments in areas such as genetics and imaging tests have enabled better diagnosis and provided new knowledge of a multitude of conditions, which makes it even more urgent for specialists to update their knowledge.

In order to make the program as comprehensive as possible, TECH has brought together leading professionals in pediatric neurology to develop all the contents on the program. Thanks to their scientific perspective and practical experience in a wide range of cases, the teaching content benefits from a perspective that will be highly effective when dealing with Epileptic Syndromes, Paroxysmal Disorders and Demyelinating Diseases.

All this in a 100% online course, which does not require any kind of physical attendance on the part of specialists. Without fixed schedules or classes, there is total flexibility to take the course and students can adjust the pace of study to their own personal or professional needs. All the teaching material can be downloaded from any device with an Internet connection, which enables students to study from home or anywhere else through using mobile devices, laptops or tablets.

This **Postgraduate Certificate in Neurological Pathology in Hospital Pediatrics** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ◆ Practical case studies are presented by experts in hospital pediatrics
- ◆ 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
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Special emphasis is placed on innovative methodologies in the approach to pneumological affections
- ◆ 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



*Access to the most modern treatments and prognoses to address conditions such as Guillain Barré syndrome, primary and secondary headaches or febrile seizures”*

“ *You can guarantee that the materials used have been prepared by experts who are aware of the latest developments and who know what you need to continue your professional improvement*”

The program’s teaching staff includes professionals from the sector who contribute their work experience to this 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 program designed 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Rely on the most effective teaching methodology on the academic scene, where you will get the most out of all the time you dedicate to studying*

*Apply the most advanced clinical diagnostic and imaging techniques to your daily practice*



# 02 Objectives

The program's primary objective is to provide specialists with thorough, comprehensive and up-to-date knowledge on the most common neurological pathologies in the pediatric setting. This involves a review of various conditions such as acute encephalitis or hypotonia in infants, ensuring that the series of objectives set out by TECH are met and that specialists can update their knowledge effectively.







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*You are guaranteed to get up to speed with the best available knowledge on neurological pathologies in hospital pediatrics”*



## General Objectives

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- ◆ Master the latest techniques and knowledge in modern hospital pediatrics
- ◆ Become highly fluent in pediatric patient management, ensuring maximum quality and safety during the process
- ◆ Develop exemplary skills to provide high quality care, guaranteeing patient safety based on the latest update of scientific evidence
- ◆ Gain up-to-date knowledge of hospital pediatrics





## Specific Objectives

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- ◆ Develop the diagnostic approach and practical aspects of antiepileptic drugs, as well as the diagnostic approach to hypotonic infants and the most frequent conditions such as headaches, or acute conditions such as ataxia, pediatric stroke, or demyelinating diseases, among others

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*You will quickly and efficiently achieve your goals with first-class technical and academic support”*

03

# Course Management

TECH relies on the best professionals in each area to design our programs. This Postgraduate Certificate brings together distinguished pediatric specialists in the area of neurology, adding practical nuance to all the contents in order to make them as effective as possible. This means specialists will have access to both the most recent research in neurological pathologies and the most effective proven practical methodology.





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*You will be supported by specialists who know the daily reality of the neurological approach to the most complex pathologies, making them ideal guides for your learning process”*

## Management



### Dr. García Cuartero, Beatriz

- ◆ Chief of the Pediatrics Service and coordinator of the Pediatric Endocrinology and Diabetes Unit Ramón y Cajal University Hospital, Madrid, Spain
- ◆ Specialist Physician in Pediatrics at Severo Ochoa, Leganés University Hospital, Madrid
- ◆ Primary Care Pediatrician, Area 4, Madrid
- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid
- ◆ Specialist Degree in Pediatrics, MIR accreditation at the Infantil Niño Jesús University Hospital, Madrid Specific Training Area: Pediatric Endocrinology
- ◆ PhD from the Autonomous University of Madrid (UAM) Expression of manganese superoxide dismutase, heme oxygenase and nitric oxide synthase enzymes in cultured pancreatic islets with interleukin 1 by in situ hybridization Unanimous Cum Laude Award
- ◆ Associate Professor of Pediatrics, Faculty of Medicine Alcalá de Henares University
- ◆ Social Security Research Fund (FISS) Grant, Steno Diabetes Center, Copenhagen/Hagedorn Research Laboratory Project: Pancreatic beta cell destruction mechanism and free radicals in type 1 diabetes mellitus

## Professors

### Dr. Rekarte García, Saray

- ♦ Ramón y Cajal University Hospital Area Specialist Physician in Pediatrics and Specialized Areas Neuropediatrician
- ♦ Infanta Cristina Hospital Area Specialist Physician in Pediatrics and Specialized Areas Neuropediatrician
- ♦ Sanitas La Moraleja University Hospital Area Specialist Physician in Pediatrics and Specialized Areas Neuropediatrician
- ♦ Area Specialist Physician in Pediatrics and Specialized Areas Neuropediatrician, Sanitas Centro Milenium, Costa Rica
- ♦ Degree in Medicine from the University of Oviedo
- ♦ Resident Intern in Pediatrics and Specialized Areas at Asturias Central University Hospital
- ♦ Master's Degree in Pediatric Neurology and Neurodevelopment Cardenal Herrera University
- ♦ Postgraduate Diploma in Advances in Motor and Paroxysmal Disorders in Pediatric Neurology, Cardenal Herrera University

### Dr. Buenache Espartosa, Raquel

- ♦ Specialist Physician in Pediatrics and Specialized Areas with a focus on Neuropediatrics Ramón y Cajal University Hospital, Neuropediatrics Profile
- ♦ Specialist Physician in Pediatrics and Specialized Areas Alcorcón Foundation University Hospital
- ♦ Resident Doctor in Pediatrics and Specialized Areas Ramón y Cajal University Hospital
- ♦ Associate Specialist Physician in Pediatrics and Specialized Areas Henares University Hospital, Neuropediatrics Profile
- ♦ Specialist Physician in Neuropediatrics, La Zarzuela Hospital
- ♦ Degree in Medicine and Surgery Autonomous University of Madrid
- ♦ Specialist in Pediatrics and Specialized Areas MIR training at Ramón y Cajal University Hospital, Subspecialization in Neuropediatrics
- ♦ Doctorate Studies Diploma in Advanced Doctoral Studies, which accredits research proficiency, with a qualification of outstanding in the area of Pediatrics in the doctoral program Medical Specialties at the University of Alcalá

# 04

# Structure and Content

TECH prepares and structures its contents to seek maximum efficiency for the specialists who take the course. That's why we use the latest educational technology available, as well as the Relearning teaching methodology in which TECH is a pioneer. Thanks to this method, the hours invested into studying are minimized, allowing students to make the most of all the scientific findings, theses and practical exercises.





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*Thanks to the wealth of supplementary readings and video summaries provided by the professors themselves, you will be able to get up to speed much more quickly and efficiently”*

## Module 1. Neurological Disorders in Pediatrics

- 1.1. Febrile and Parainfectious Crises
  - 1.1.1. Febrile Crises
  - 1.1.2. Epidemiology
  - 1.1.3. Etiology
  - 1.1.4. Clinical Symptoms
  - 1.1.5. Diagnosis
  - 1.1.6. Treatment
  - 1.1.7. Prognosis
- 1.2. Epileptic Syndromes in Pediatric Patients: Practical Considerations in Antiepileptic Drug Management
  - 1.2.1. Epileptic Syndromes Classification and Diagnostic Approach
  - 1.2.2. Epileptic Syndromes in Infants and Preschoolers
  - 1.2.3. Epileptic Syndromes in School Children and Adolescents
  - 1.2.4. Practical Considerations in Antiepileptic Drug Management
- 1.3. Non-Epileptic Paroxysmal Disorders
  - 1.3.1. Non-Epileptic Paroxysmal Disorders
  - 1.3.2. Clinical and Etiological Characteristics
  - 1.3.3. Differential Diagnosis: Epileptic Seizures
- 1.4. Infant Hypotonia and the Most Common Neuromuscular Disorders in Infancy
  - 1.4.1. Non-Paralytic or Central Hypotonia in Infants
  - 1.4.2. Paralytic or Peripheral Hypotonia in Infants
  - 1.4.3. Most Common Neuromuscular Disorders in Childhood: Spinal Muscular Atrophy, Hereditary Sensory-Motor Neuropathies, Myasthenias, Infantile Botulism and Myopathies
- 1.5. Guillain-Barré Syndrome
  - 1.5.1. Guillain-Barré Syndrome and Classification
  - 1.5.2. Pathophysiology
  - 1.5.3. Clinical Symptoms
  - 1.5.4. Diagnostic Criteria
  - 1.5.5. Treatment
  - 1.5.6. Prognosis





- 1.6. Headaches
  - 1.6.1. Headaches
  - 1.6.2. Etiology
  - 1.6.3. Classification: Primary and Secondary Headaches: Migraines, Tension and Trigemino-Autonomic Headaches, and Others
  - 1.6.4. Anamnesis and Physical Examination
  - 1.6.5. Admission Criteria and Warning Signs
  - 1.6.6. Complementary Evaluations
  - 1.6.7. In-hospital Migraine Management
  - 1.6.8. Acute and Chronic Treatment
- 1.7. Acute Ataxia
  - 1.7.1. Vestibular Ataxia and Cerebellar Ataxia
  - 1.7.2. Main Etiologic Differential Diagnosis in Children Admitted for Acute Ataxia Episodes
  - 1.7.3. Practical Management Protocols
- 1.8. Pediatric Stroke
  - 1.8.1. Epidemiology: Etiology and Risk Factors
  - 1.8.2. Pediatric Stroke Clinical Manifestations
  - 1.8.3. *Stroke Mimics*
  - 1.8.4. Pediatric Stroke Code Protocol and Hospital Diagnostic Approach
- 1.9. Acute Encephalitis
  - 1.9.1. Acute Encephalitis / Encephalopathy and Classification
  - 1.9.2. Infectious Encephalitis / Meningoencephalitis
  - 1.9.3. Immune-Mediated Encephalitis
  - 1.9.4. Toxic-Metabolic Encephalitis
- 1.10. Demyelinating Diseases:
  - 1.10.1. Acute Demyelinating Injuries in Pediatrics
  - 1.10.2. Acute Disseminated Encephalomyelitis
  - 1.10.3. Multiple Sclerosis in Childhood: Diagnostic Criteria Initial Therapeutic Approach

# 05

# Study Methodology

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

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



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

## The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist. The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

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

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



### The most comprehensive study plans at the international level

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

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

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

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

## Case Studies and Case Method

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

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

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





## Relearning Methodology

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

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

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

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



## A 100% online Virtual Campus with the best teaching resources

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

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

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

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



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

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

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

## The university methodology top-rated by its students

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

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

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

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



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



#### Study Material

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

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



#### Practicing Skills and Abilities

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



#### Interactive Summaries

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

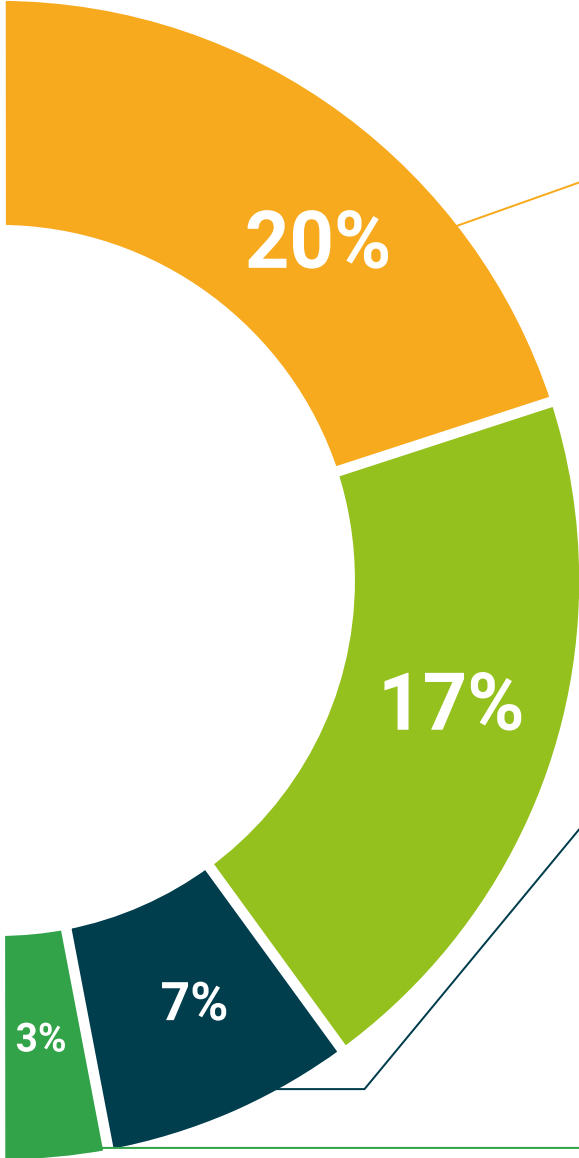
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

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





**Case Studies**

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



**Testing & Retesting**

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



**Classes**

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



**Quick Action Guides**

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



# 06 Certificate

The Postgraduate Certificate in Neurological Pathology in Hospital Pediatrics 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 diploma without travel or laborious paperwork”*

This private qualification will allow you to obtain a **Postgraduate Certificate in Neurological Pathology in Hospital Pediatrics** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: **Postgraduate Certificate in Neurological Pathology in Hospital Pediatrics**

Modality: **online**

Duration: **6 Weeks**

Accreditation: **6 ECTS**





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



**Postgraduate Certificate**  
Neurological Pathology in  
Hospital Pediatrics

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