



## Postgraduate Certificate

## Update in Neurological Consultation

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/update-neurological-consultation

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## tech 06 | Introduction

In recent years we have witnessed a considerable increase in the demand for neuropediatric care, which can be justified for several reasons.

On the one hand, the continuous advances in neurosciences have led to the discovery and diagnosis of previously unknown neurological diseases. This has led to the death of children or the development of severe sequelae.

On the other hand, the appearance of social changes and advances have led to new care demands that had been previously underdeveloped. The rise of assisted reproduction and the improvement of neonatal care techniques lead to a higher rate of multiple and premature births with increased survival rates. This leads to increased morbidity and the need for more specialized care at both the health and educational levels.

General pediatricians cannot encompass the complexity of all pediatric subspecialties. As they progress in their development, each one of them acquires a specific body and entity to become its own specialty. In addition, the particularities of child development and its variability according to age and other factors do not allow neurologists for adults to cope with the existing demand.

All this, together with the great diversity and complexity of neurological pathology. In childhood, there is a growing need for more and more neuropediatric units, and the demand for highly trained professionals in this area is increasing.

This **Postgraduate Certificate in Update in Neurological Consultation** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of clinical cases presented by experts in pediatric Neurology. 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
- Diagnostic and therapeutic novelties on pediatric neurology performance
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- With a special emphasis on evidence-based medicine and research methodologies in Pediatric Neurology
- 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



Update your knowledge through the Postgraduate Certificate in Update in Neurological Consultation, in a practical way and adapted to your needs"



This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Update in Neurological Consultation, you will obtain a qualification endorsed by TECH Global University"

Forming part of the teaching staff is a group of professionals in the field of Pediatric Neurology, who contribute their work experience to this program, as well as a group of renowned specialists, recognized by esteemed scientific communities.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

This program is designed around Problem-Based Learning, whereby the students must try to solve the different professional practice situations that arise during the academic program. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of pediatric neurology with extensive teaching experience.

The Postgraduate Certificate includes real clinical cases and exercises to bring the content of the program closer to the clinical practice of a physician.

Seize the opportunity to update your knowledge in Update in Neurological Consultation and improve your patient care.







## tech 10 | Objectives



## **General Objectives**

- Update specialist knowledge in the different syndromic disorders in this discipline through evidence-based medicine
- Promote work strategies based on a comprehensive approach and multidisciplinary care in the patient's social environment that become a reference model for achieving excellence in care
- Encourage the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific education
- Encourage professional stimulation through continuous education and research









## **Specific Objectives**

- Perform a correct anamnesis in pediatric neurology
- Apply neurological assessment scales



Make the most of the opportunity and take the step to get up to date on the latest developments in Pediatric Neurology"





## tech 14 | Course Management

## Management



## Dr. Fernández Fernández, Manuel Antonio

- Director of the Andalusian Institute of Pediatric Neurology. Sevilla, España
- Director of the Pediatric Neurology Area at Hospital San Agustír
- Director of the Pediatric Neurology Area at Hospital Quirónsalud Infanta Luisa
- Accreditation in Neuropediatrics by the Spanish Society of Pediatric Neurology (SENEP)
- Degree in Medicine and Surgery, University of Cadiz
- Master's Degree in Healthcare Services Management and Planning. CTO Business School
- Master's Degree in Entrepreneurship from GADE Business School
- Master's Degree in Leadership and Management Skills from GADE Business School
- Master's Degree in Clinical Trials from the University of Seville
- Member of: Spanish Association of Pediatrics (AEP), Spanish Association for Research on Inborn Errors of Metabolism (AEIEIM),
  Spanish Society of Inborn Errors of Metabolism (AECOM), Spanish Society of Primary Care Pediatrics (SEPEAP), Sociedad Española
  de Psiquiatría Infantil (SEPI), Sociedad Española de Pediatría Hospitalaria (SEPHO), European Paediatric Academy (EAP), Child
  Neurology Society (USA), European Pediatric Association (EPA/UNEPSA), World Federation of ADHD Associations (WFDAH), World
  Federation of ADHD Associations (WFDAH), World Federation of ADHD Associations (WFA)



## Dr. Fernández Jaén, Alberto

- Head of the Child Neurology Department Quirón University Hospital, (Madrid)
- CADE Medical Director
- Degree in Medicine and Surgery
- Specialist in Child Neurology
- Author and contributor in scientific papers

## Professors

## Dr. Hidalgo Vicario, MARÍA Inés

- Medical Specialist in Primary Care Pediatrics at the University Children's Hospital Niño Jesús
- President of the Spanish Society of Adolescent Medicine
- Childcare Physician at the Ministry of Health and Consumer Affairs
- National Member of the Board of Directors of the Spanish Association of Pediatrics
- Doctorate in Medicine from the Autonomous University Madrid

## Dr. Eiris Puñal, Jesús

- Head of the Pediatric Neurology Unit, Santiago de Compostela University Hospital Complex
- Specialist physician at Hospital General de Galicia de Santiago de Compostela
- PhD in Medicine and Surgery from the University of Santiago de Compostela
- Member of: Spanish Society of Pediatrics, Spanish Society of Pediatric Neurology

## tech 16 | Course Management

#### Dr. Fernández Mayoralas, Daniel Martín

- Neuropediatrician at Gandía Hospital
- · Neuropediatrician at La Zarzuela Hospital
- Assistant Physician, Child Neurology Service, Hospital Universitario Quirónsalud Madrid
- Author of the book "Specialization in Hearing and Language. Anatomy, physiology, and neurology of language
- PhD in Medicine and Surgery from the University of Murcia
- Degree in Medicine and Surgery from the Faculty of Medicine of the Murcia University.
- Doctor with a Cum Laude doctoral thesis in Medicine and Surgery from the University of Murcia
- Master's Degree in Neuropediatrics from the Complutense University of Madrid
- Member of: The Spanish Society of Pediatric Neurology (SENEP), The Spanish Society of Pediatrics (SEP), The Society of Pediatrics of Madrid and Castilla-La Mancha

## Dr. Amado Puentes, Alfonso

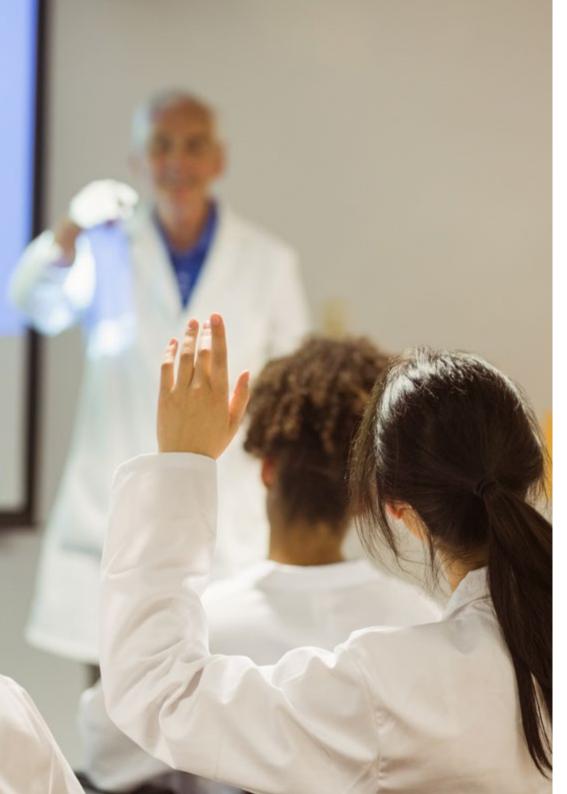
- Pediatric Physician at Amado Pediatric Clinic SLP
- Founder and Physician of La Ruta Azul
- Faculty Specialist in Neuropediatrics
- Pediatric Neurologist at the University Hospital Complex of Vigo
- Degree in Medicine and Surgery from the University of Santiago de Compostela
- Doctoral Thesis from the University of Santiago de Compostela
- Diploma of Advanced Studies from the University of Vigo
- Master in Pediatric Neurology and Neurodevelopment. CEU Cardenal Herrera University

#### Dr. Ros Cervera, Gonzalo

- Neuropediatrician at IMED Valencia
- Neuropediatrician at General University Hospital d' Elda
- Neuropediatrician at Xàtiva Hospital
- Neuropediatrician at Valencian Institute of Neurosciences(IVANN)
- Neuropediatrician at Hospital Francesc de Borja
- Specialist in the Department of Pediatrics at Hospital del Vinalopó
- Degree in Medicine and Surgery from the University of Valencia
- Postgraduate Diploma via MIR as a family physician at the University Hospital Vall d'Hebrón
- Specialization via MIR in Pediatrics and its Specific Areas at the University Hospital La Fe
  of Valencia
- Sub-specialization in Neuropediatrics in the Department of Child Neurology at the University Hospital La Fe
- Training stay at the Neurology Department of the Children's Hospital Sant Joan de Déu in Barcelona
- International training stay at the Children's Hospital of Sankt Gallen in Switzerland
- Graduate in Research Sufficiency in the Autonomous University of Barcelona
- Neuropediatrician accredited by the Spanish Association of Pediatrics

#### Dr. Téllez de Meneses Lorenzo, Montserrat Andrea

- Pediatric Neurologist specialized in Autism and Communication Disorders
- Specialist Physician at Hospital Policlínico y Universitario La Fe
- Pediatric Neurologist in Neural Neurological Rehabilitation Clinics
- PhD in Medicine and Surgery from the University of Valencia
- Member of the English Society of Pediatrics



## Course Management | 17 tech

## Dr. Málaga Diéguez, Ignacio

- Pediatrician Expert in Neuropediatrics
- Assistant Physician of the Neuropediatrics Unit at the University Hospital Central de Asturias
- Neuropediatrician in the Neurological Institute Doctor Mateos
- Author of publications in national and international scientific journals
- Professor in undergraduate and postgraduate university studies.
- Doctor of Medicine, University of Oviedo.
- Master's Degree in Child Neurology, University of Barcelona
- Member of: SENEP, AEP, EPNS, ILAE, SCCALP

#### Dr. Gilibert Sánchez, Noelia

- Neuropsychologist at Andalusian Institute of Pediatric Neurology
- Collaborator of the project The Neuropediatrician of Online Consultations
- Master's in Advanced Studies in Brain and Behavior in the University of Seville
- Degree in Psychology in the University of Seville

## Dr. Fernández Perrone, Ana Laura

- Pediatric Neurology Specialist
- Pediatric Neurologist at Quirón Salud University Hospital
- Hospital Complex Ruber Juan Bravo de Quirónsalud
- Member of the Spanish Society of Neurology

## tech 18 | Course Management

#### Dr. Carvalho Gómez, Carla

- Specialist in Pediatric Neuropsychology
- Neuropsychology in the La Fe University Hospital from Valencia
- Specialist in Neuropsychology at at Virgen de La Macarena University Hospital
- Professor in Neuropsychology Andalusian Institute of Pediatric Neurology
- Neuropsychology teacher at the European Institute of Neuropsychology
- Lecturer in the Master's Degree in Pediatric Neurology and Neurodevelopment from CEU Cardenal Herrera University
- Degree in Psychology with a Specialization in Neuropsychology from the University of of Seville
- Master's Degree in Advanced Studies in Brain and Behavior by the University of Seville
- Postgraduate PROFESSIONAL MASTER'S DEGREE in General Health Psychology, University of La Rioja
- Master's Degree in Functional Criteria Neuropsychology from the Pablo Olavide University

## Dr. Lorenzo Sanz, Gustavo

- Head of the Neurodevelopment Unit of Child Neurology at the Ramón y Cajal Hospital in Madrid
- Associate Professor, University of Alcalá
- Doctor of Medicine and Surgery
- Specialist in pediatrics with Accreditation in pediatric Neurology diseases
- Author of more than 200 research papers in national and international journals
- Principal investigator and collaborator in numerous internationally funded research projects





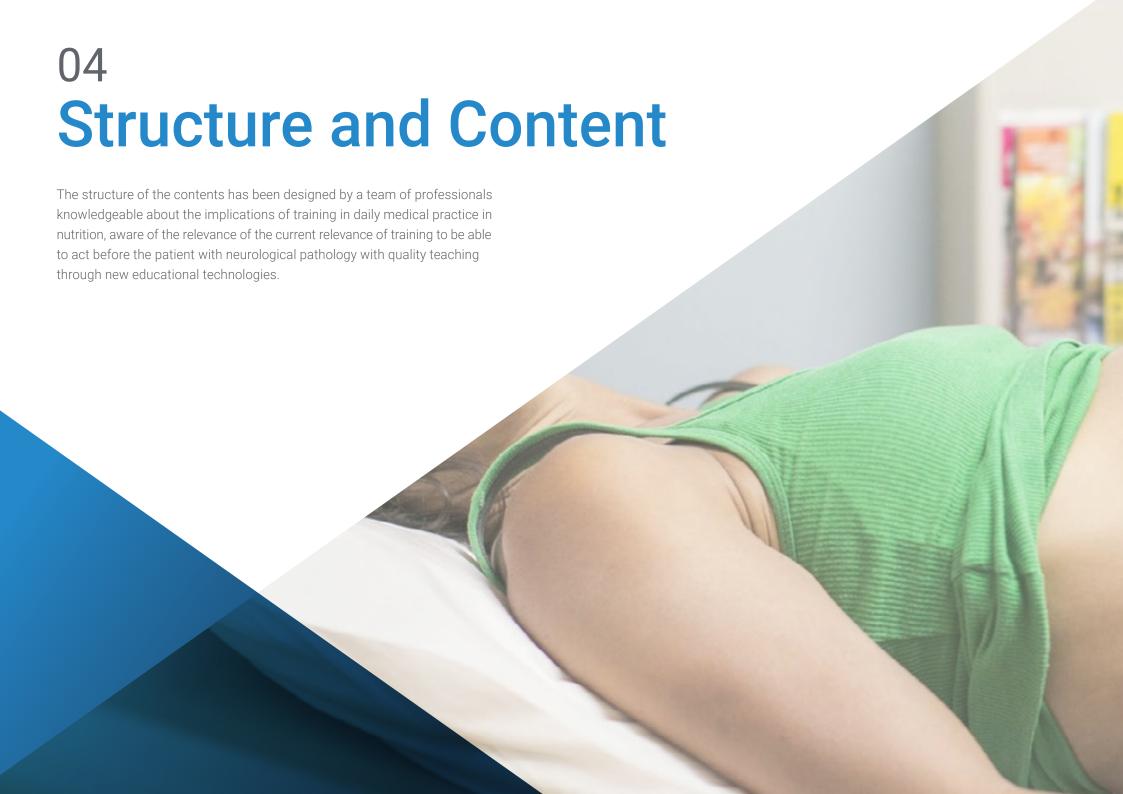
## Course Management | 19 tech

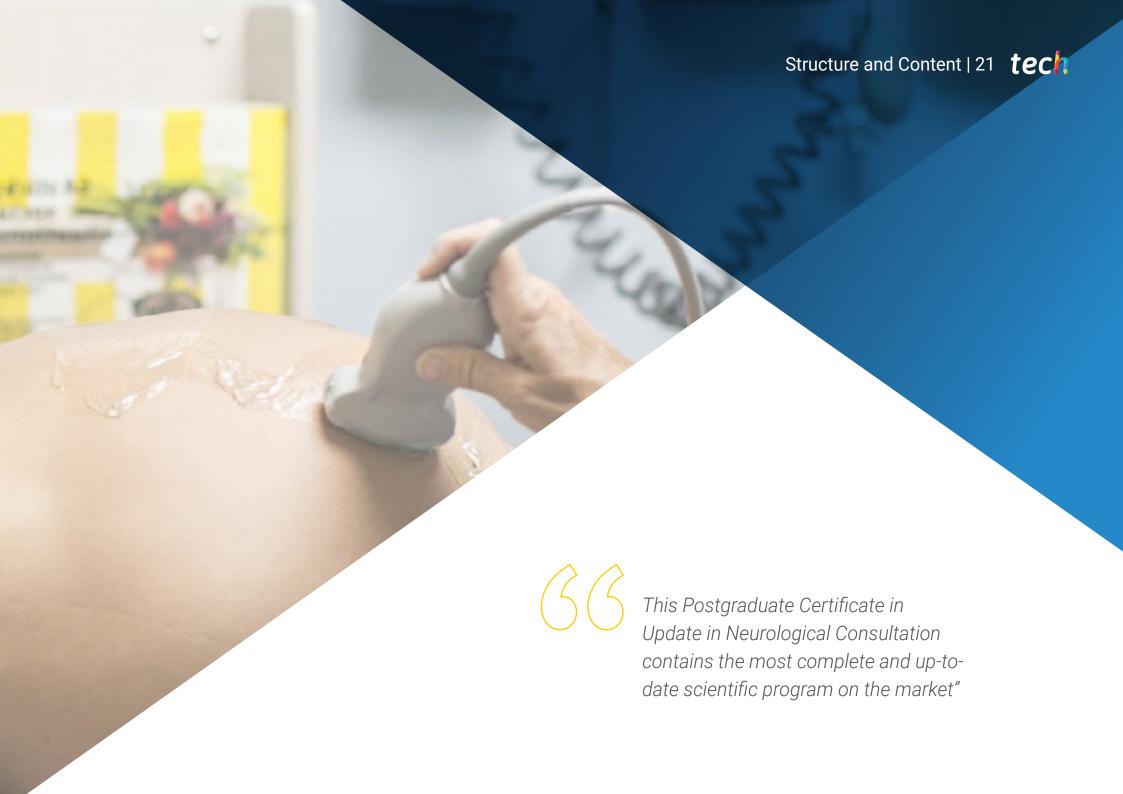
### Dr. Barbero Aguirre, Pedro

- Pediatric Neurologist Specialized in ADHD
- Head of the Neurodevelopment Unit at the University Hospital and Polytechnic La Fe
- Faculty Specialist in Pediatric Neurology at 9 de Octubre Hospital
- Specialist physician at Casa de Salud Hospital

#### Dr. Lefa Sarane, Eddy Ives

- Pediatrician Specializing in Child and Adolescent Psychiatry at HM Hospital
- Pediatrician at HM Nens Hospital
- Pediatrician in HM Sant Jordi Hospital
- Lecturer of Master's Degree in Academic Institutions
- Doctor of Medicine
- Degree in Medicine and Surgery from the University of Barcelona.
- Master's Degree in Paedopsychiatry and Child and Adolescent Psychology from the Autonomous University of Barcelona
- Master's Degree in Neuropediatrics and Neurodevelopment by Cardenal Herrera University
- Coordinator of the ADHD Working Group of the Spanish Society of Adolescent Medicine (SEMA)
- Member of: Board of Directors of the Society of Child Psychiatry of the Spanish
  Association of Pediatrics, Advisory Committee of the Adana Foundation (Insomnia
  Association for Children, Adolescents and Adults), Pedagogical Committee of the
  Training Program for the Promotion of Child and Adolescent Mental Health from
  Pediatrics of the Catalan Institute of Health





## tech 22 | Structure and Content

## Module 1. Update on Neurology Consultations

- 1.1. Medical History in Pediatric Neurology
  - 1.1.1. Clinician Personal Skills
  - 1.1.2. Advantages and Disadvantages of Good Communication and Information
  - 1.1.3. Orientation of the Medical History According to Disorders
    - 1.1.3.1. Headaches
    - 1.1.3.2. Epilepsy
  - 1.1.4. Orientation of the Medical History According to Age
    - 1.1.4.1. Prenatal Medical History
    - 1.1.4.2. Neonatal Medical History
    - 1.1.4.3. Medical History in Young Children
    - 1.1.4.4. Medical History in Older Children
  - 1.1.5. Medical History of Psychomotor Development
  - 1.1.6. Medical History of Language Development
  - 1.1.7. Medical History of the Mother/Father-Child Bond
  - 1.1.8. Personal and Family History
- 1.2. Neurological Examination of Newborns and Infants
  - 1.2.1. Basic Neurological Examination
  - 1.2.2. General Data
  - 1.2.3. External Aspect
  - 1.2.4. Functional Behaviors
  - 1.2.5. Sensory Functions
  - 1.2.6. Motility
  - 1.2.7. Primary Reflexes and Postural Attitudes
  - 1.2.8. Tone, Hand Pressure and Manipulation
  - 1.2.9. Cranial Nerves
  - 1.2.10. Sensitivity
  - 1.2.11. Neurological Assessment Scales
- 1.3. Neurological Examination of Older Children



- 1.4. Neuropsychological Examination of Preschool Children
  - 1.4.1. The 3 First Years of Life
  - 1.4.2. Development
  - 1.4.3. First Trimester
  - 1.4.4. 3-6 Month Period
  - 1.4.5. 6-9 Month Period
  - 1.4.6. 9-12 Month Period
  - 1.4.7. 12-18 Month Period
  - 1.4.8. 18-24 Month Period
  - 1.4.9. 24-36 Month Period
- 1.5. Neuropsychological Examination of School Children
  - 1.5.1. Evolution from Age 3 to 6
  - 1.5.2. Development
  - 1.5.3. Cognitive Assessment
  - 1.5.4. Language Evaluation
  - 1.5.5. Attention Evaluation
  - 1.5.6. Memory Evaluation
  - 1.5.7. Evaluation of Psychomotor Skills and Rhythm
- 1.6. Psychomotor Development
  - 1.6.1. The Concept of Psychomotor Development
  - 1.6.2. Psychomotor Development Assessment
  - 1.6.3. Warning Signs in Psychomotor Development Evaluation
  - 1.6.4. Psychomotor Development Evaluation Scales
- 1.7. Complementary Evaluations
  - 1.7.1. Prenatal Diagnosis
  - 1.7.2. Genetic Studies
  - 1.7.3. Biochemical Studies
    - 1.7.3.1. Blood
    - 1.7.3.2. Urine
  - 1.7.4. Cerebrospinal Fluid

- 1.7.5. Diagnostic Imaging
  - 1.7.5.1. Ultrasound
  - 1.7.5.2. CAT
  - 1.7.5.3. Magnetic Resonance
  - 1.7.5.4. Positron Emission Tomography (PET)
  - 1.7.5.5. Single Photon Emission Computed Tomography (SPECT)
  - 1.7.5.6. Magnetoencephalography
- 1.7.6. Neurophysiological Studies
  - 1.7.6.1. Electroencephalogram
  - 1.7.6.2. Visual Evoked Potential of the Torso and Somatosensation.
  - 1.7.6.3. Electroneurogram (ENG)
  - 1.7.6.4. Electromyogram (EMG)
  - 1.7.6.5. Nerve Conduction Velocity (NCV)
  - 1.7.6.6. Single Fiber Study
- 1.7.7. Neuropathological Studies
- 1.7.8. Neuropsychological Studies



A unique, key, and decisive training experience to boost your professional development"





## tech 26 | Methodology

#### At TECH we use the Case Method

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

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



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



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

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

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





## Relearning Methodology

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

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

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



## Methodology | 29 tech

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

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

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

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

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



#### **Study Material**

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

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



#### **Surgical Techniques and Procedures on Video**

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



#### **Interactive Summaries**

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

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





#### **Additional Reading**

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

## **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



## **Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence on the usefulness of learning by observing experts.

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



#### **Quick Action Guides**

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









## tech 34 | Diploma

This program will allow you to obtain your **Postgraduate Certificate in Update in Neurological Consultation** 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 Update in Neurological Consultation

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Certificate in Update in Neurological Consultation

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.

health confidence people information tutors education information teaching guarantee accreditation teaching institutions technology learning



# Postgraduate Certificate Update in Neurological Consultation

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

