

# Postgraduate Certificate

## Neurological Disorders in Neonatology





## Postgraduate Certificate Neurological Disorders in Neonatology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/medicine/postgraduate-certificate/neurological-disorders-neonatology](http://www.techtitute.com/us/medicine/postgraduate-certificate/neurological-disorders-neonatology)

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# 01

# Introduction

Neurological disorders in Neonatology are a critical area of child health, as these disorders can have serious consequences on brain development and cognitive development of the child. In addition, this type of disorder is quite common, affecting between 1 and 2% of live-born neonates. For this reason, it is essential that healthcare professionals are trained to address and treat effectively and timely manner. It is in this context that the need for a program, which is proposed by TECH to facilitate the training of health professionals, is justified. This is done through an innovative methodology called Relearning and in a 100% online format.



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*Learn in depth about the fundamental neurological centers with this Diploma in Neurological Disorders in Neonatology and become a specialist in neonatal care”*

Neurological disorders in Neonatology are a daily reality in pediatric care, which can have serious consequences for the long-term health of the neonate. These disorders include neonatal seizures, intracranial hemorrhages, central nervous system malformations, hypoxic-ischemic encephalopathy. That is why training in the approach and treatment of these disorders is essential for health professionals involved in neonatal care.

The Postgraduate Certificate in Neurological Disorders in Neonatology developed by TECH is presented as an opportunity for health professionals involved in the care of neonates to acquire specific knowledge and skills on neurological disorders in neonatology. The program provides a solid and updated training in the field, which will enable health professionals to be prepared to offer quality and timely care to neonates with neurological disorders.

The program also covers a wide variety of topics, ranging from the anatomy and physiology of the nervous system to the diagnosis and treatment of the different neurological pathologies that can affect neonates. In addition, it also addresses issues related to neonatal care, such as the implementation of the Kangaroo Method and early neonatal discharge programs.

The program is taught entirely online and uses the Relearning pedagogical methodology, which allows students to learn in an effective and autonomous manner. Additionally, it offers great flexibility so that students can organize their academic resources according to their schedules and needs.

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

- ◆ The development of case studies presented by medical experts focused on Neonatology
- ◆ 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



*Sign up for this training and learn how to describe the fundamental items of Hypoxic-Ischemic Encephalopathy to provide better neonatal care"*

“

*Do not miss the opportunity to acquire skills to describe the fundamental items of Hypoxic-Ischemic Encephalopathy and enroll in this Postgraduate Certificate in Neurological Disorders in Neonatology”*

*Learn from experts in the field to deepen in the fundamental neurological centers and provide better neonatal care with this Postgraduate Certificate.*

*Enroll now and discover how this degree will help you become a specialist in Neurological Disorders in Neonatology and provide exceptional care for newborns!*

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.

Its 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 education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.



# 02 Objectives

With the completion of this Postgraduate Certificate, students will have the opportunity to delve into the fundamental neurological centers and describe the most relevant items of Hypoxic-Ischemic Encephalopathy, which will allow them to develop a clearer understanding of how this disease affects the neonatal brain. In addition, TECH expects degree students to be able to discern the classification and attitude towards neonatal seizures, as well as identify Neuromuscular Pathology in the neonatal period in order to provide effective and specialized care to newborns.







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*The Postgraduate Certificate in Neurological Disorders in Neonatology focuses on providing students with a solid understanding of the key neurological fundamentals related to neonatal care”*



## General Objectives

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- ◆ Delve into preterm neonates and their implications
- ◆ Update knowledge of the indications for prevention in sick neonates
- ◆ Be aware of the protocols that optimize the treatment of the sick neonate
- ◆ Describe the main characteristics of the healthy newborn and its basic care
- ◆ Systematize the main problems, disorders and diseases of the newborn, such as weight gain and metabolic development, prematurity, congenital malformations, respiratory or cardiac pathology, metabolic and blood disorders, or digestive or nutritional complications
- ◆ List and describe the main common procedures in neonatology
- ◆ Deepen in the therapeutic activities in the pathologies of the neonate
- ◆ Delve into the basic and specific aspects of complementary examinations in this subspecialty and how to perform them
- ◆ Investigate the knowledge of the different procedures of neonatal nutrition
- ◆ Analyze the follow-up of the newborn once it has been controlled in the acute period
- ◆ Illustrate and reflect on the different moments of care in the models of assistance to the newborn, both healthy and with pathology requiring hospital treatment
- ◆ Explain the various systems of care for the sick neonate, delimiting the continuity between the neonatal period of acute illness and its subsequent follow-up
- ◆ Describe all the accompaniment that the technology means for the adequate monitoring and follow-up of these children, being able to be coupled to the various guides and protocols to finally obtain a global health concept
- ◆ Deepen all the possibilities of on-site and even remote monitoring to achieve a very early and optimal performance on the impact of the disease on the neonate
- ◆ Delve into all aspects of the concepts of complementary knowledge that allow understanding perinatology as a complete subspecialty, from the fetal period to long-term follow-up in outpatient clinics
- ◆ Detail the parameters that will indicate the correct acquisition of all the developmental items of the various organs and apparatuses in order to obtain an optimal long-term result
- ◆ Specify all the elements of the pathological conditions of the sick neonate in order to be able to establish work routines with results at the level of medical excellence



## Specific Objectives

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- ◆ Deepen in the fundamental neurological centers
- ◆ Describe the fundamental items of Hypoxic-Ischemic Encephalopathy
- ◆ Discern in the classification and attitude towards neonatal seizures
- ◆ Identify Neuromuscular Pathology in the neonatal period

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*This program focuses on topics such as Hypoxic-Ischemic Encephalopathy, neonatal seizures and Neuromuscular Pathology in the neonatal period”*

# 03

# Course Management

TECH, with the help of great experts in Neurological Disorders in Neonatology, has designed a complete curriculum that covers from the anatomy and physiology of the nervous system to the most complex pathologies in newborns. To ensure comprehensive training, the teaching team is made up of renowned experts in the field of neonatology and child neurology, who will share their knowledge and experience with students through a practical and dynamic approach. With this program, participants will be able to broaden their knowledge and acquire skills that will allow them to effectively face the challenges that arise in their professional practice.



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*Do you want to be part of the elite in the field of Neonatal Neurology? This program is for you! TECH has a highly qualified and experienced team that will provide you with the best tools and knowledge"*

## Management



### Dr. Baca Cots, Manuel

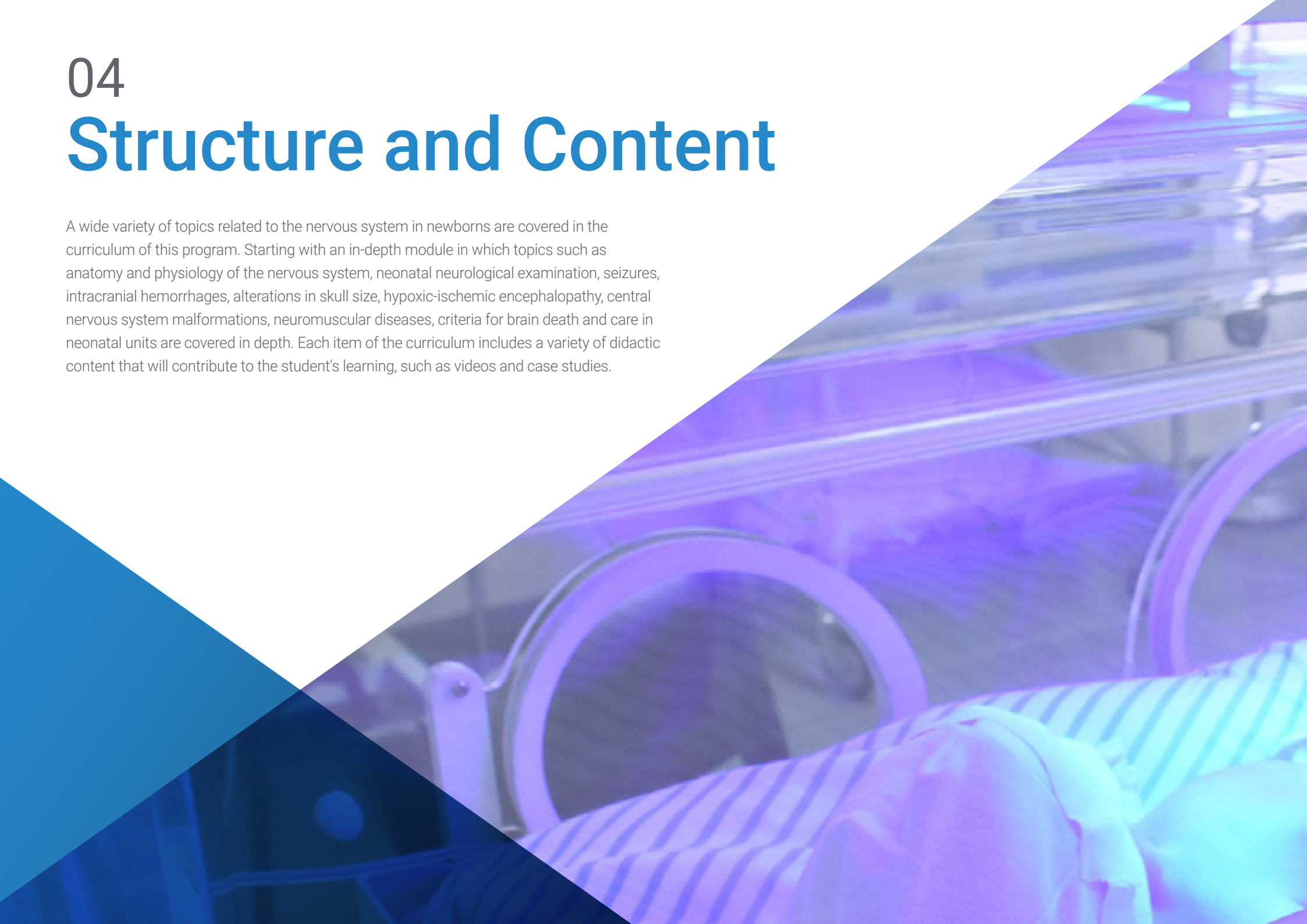
- ◆ Head of the Pediatrics and Neonatology Service at Hospital Quirón Málaga
- ◆ Head of Neonatology at Hospital Clínica Dr. Gálvez
- ◆ Head of Neonatology at Hospital Qurón of Murcia
- ◆ Head of Andalusian Health Service (SAS)
- ◆ Principal investigator of international multi-center projects
- ◆ Degree in Medicine from the University of Granada



# 04

## Structure and Content

A wide variety of topics related to the nervous system in newborns are covered in the curriculum of this program. Starting with an in-depth module in which topics such as anatomy and physiology of the nervous system, neonatal neurological examination, seizures, intracranial hemorrhages, alterations in skull size, hypoxic-ischemic encephalopathy, central nervous system malformations, neuromuscular diseases, criteria for brain death and care in neonatal units are covered in depth. Each item of the curriculum includes a variety of didactic content that will contribute to the student's learning, such as videos and case studies.





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*This program addresses important topics such as the kangaroo method and early neonatal discharge programs to improve care in neonatal units and ensure better health outcomes for newborns"*

## Module 1. Neurological Disorders in Neonatology

- 1.1. Neonatal Neurology
  - 1.1.1. Embryology
  - 1.1.2. Anatomy of the Nervous System
  - 1.1.3. Physiology
  - 1.1.4. Anatomical-physiological Refresher Course
- 1.2. Neonatal Neurological Examination
  - 1.2.1. Central Nervous System
  - 1.2.2. Peripheral Nervous System
  - 1.2.3. Conscience
  - 1.2.4. Cranial nerves
- 1.3. Neonatal Seizures
  - 1.3.1. Semiology
  - 1.3.2. Classification
  - 1.3.3. Syndromes
  - 1.3.4. Treatment
- 1.4. Neonatal intracranial hemorrhages and perinatal cerebral infarction
  - 1.4.1. Neonatal Intracranial Hemorrhages
  - 1.4.2. Perinatal cerebral stroke
  - 1.4.3. Diagnosis
  - 1.4.4. Treatment
- 1.5. Alterations in the size of the skull: from Microcephaly to Hydrocephaly and Macrocephaly
  - 1.5.1. Microcephaly
  - 1.5.2. Hydrocephalus
  - 1.5.3. Macrocephaly
  - 1.5.4. Other Alterations
- 1.6. Hypoxic-Ischemic Encephalopathy and Hypothermia
  - 1.6.1. Semiology
  - 1.6.2. Classification and scales
  - 1.6.3. Diagnosis
  - 1.6.4. Hypothermia treatment





- 1.7. Malformations of the CNS. Neurologic Malformation Syndromes. Neuronal Migration Effects
  - 1.7.1. Genital Malformation Syndromes
  - 1.7.2. Specific CNS malformations
  - 1.7.3. Diagnosis
  - 1.7.4. Monitoring
- 1.8. Neuromuscular Diseases
  - 1.8.1. Semiology
  - 1.8.2. Classification
  - 1.8.3. Diagnosis
  - 1.8.4. Treatment
- 1.9. Criteria for brain death
  - 1.9.1. According to Etiology
  - 1.9.2. Clinical data
  - 1.9.3. Monitoring data
  - 1.9.4. Results Therapeutic Effort Limitation
- 1.10. Basis for the implementation of Neonatal Unit Care
  - 1.10.1. Care in Neonatal Units
  - 1.10.2. Kangaroo Method
  - 1.10.3. Neonatal Early Discharge Programs
  - 1.10.4. Results

“With *TECH* you will have a deep and adequate training in the approach and treatment of Neurological Disorders in Neonatology, fundamental knowledge for professionals dedicated to neonatal care”

# 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 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.

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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. 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.*





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.



# 06 Certificate

The Postgraduate Certificate in Neurologic Disorders in Neonatology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Neurologic Disorders in Neonatology** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Certificate in Neurologic Disorders in Neonatology**

Official N° of Hours: **150 h.**



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



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