

Postgraduate Certificate Neonatology





Postgraduate Certificate Neonatology

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/neonatology

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01

Introduction

Neonatology is a branch of medicine that focuses on the medical care of newborns, especially those born prematurely or with medical complications. Due to the importance of neonatal care in infant health and family welfare, there is a great need for trained professionals in this field. In view of this requirement, TECH has developed a qualification as an ideal option for those who wish to acquire specialized knowledge and skills in this area. This program, which is taught entirely online, provides a Relearning pedagogical methodology that promotes meaningful learning and the practical application of knowledge without the need for memorization or strict study schedules.





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Do you want to learn how to classify and assign neonatal groups efficiently? Enroll in this Postgraduate Certificate in Neonatology and master this important aspect!"

Nowadays, Neonatology is an essential discipline in medical care, since advances in this area have made it possible to improve the survival and quality of life of neonates. As technology and research continue to advance, it is important for healthcare professionals to stay current and trained in the latest techniques and methods to provide the best care for newborns.

For this reason, it is necessary for health professionals to be updated in the advances in Neonatology, which is mediated by the progress of this Program in Neonatology. An excellent opportunity for health professionals to acquire the skills and knowledge necessary to provide quality care to neonates and their families.

In this Program, participants will have the opportunity to deepen in aspects such as neonatal assessments, anatomical and physiological characteristics of the newborn, admission of the newborn to the neonatal unit, neonatal transport, neonatal resuscitation, thermal control in the newborn, pain control, skin care of the newborn and management of special situations, such as neonatal abstinence syndrome.

The methodology of the program combines theory with practice, using tools such as case studies to contextualize all the content, downloadable materials that the student can access at any time. In addition, there will be the participation of highly trained professionals in the field, which will ensure quality learning and the acquisition of practical skills necessary for the care of neonates.

This **Postgraduate Certificate 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



Learn all about neonatal transport, aspects of thermoregulation and analgesia of the newborn in this degree. Enroll now and expand your knowledge!"

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Are you ready to receive neonates in the Neonatal Unit? Enroll in this Postgraduate Certificate in Neonatology and learn all about the reception protocol”

During the course of this degree, students can be assured that they are being guided by the best experts in the field of Neonatology.

This program is an excellent opportunity for health professionals to update and acquire the necessary skills to provide quality care in the specialty of Neonatology.

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

The purpose of this program is to provide participants with specialized and updated training in the care of newborns and neonates. Students will be able to deepen in the theoretical and practical knowledge necessary to identify and assess the different aspects related to the care of these patients, from their admission to the Neonatology Unit until their discharge from the hospital. In addition, participants are expected to acquire skills in the identification and assessment of risk, classification and assignment of neonatal groups, as well as in the identification of admission criteria and the basis of neonatal transport.





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In order to provide comprehensive and quality care to neonates and newborns, this program provides you with the best online methodology proposed by TECH, the Relearning"



General Objectives

- ♦ 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

- Update the initial assessment protocols
- Delve into the classification and assignment of neonatal groups
- Assess the risk, maturity and morphology of the neonate
- Identify the criteria for admission
- Describe the equipment needed to care for neonates
- Delve into the newborn reception protocol in the different Neonatology Units
- Deepen in the basis of neonatal transport
- Identify the different Thermoregulation Appearance
- Update knowledge on newborn analgesia



Update your knowledge in Neonatology and improve your initial assessment protocols thanks to this Postgraduate Certificate"

03

Course Management

The direction of the Diploma in Neonatology has been entrusted by TECH to a team of professionals highly trained in the care of newborns in critical situations, with an outstanding track record in research and teaching. This group of experts has designed a comprehensive and up-to-date curriculum that addresses all areas of interest in neonatal care, from newborn assessment and physical examination to pain control and the management of special situations such as hypothermia and neonatal abstinence syndrome.



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The teachers of this program offer students a rigorous and quality training that prepares them to face the challenges of clinical practice and research in neonatology"

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

Professors

Dr. Castell, Laura

- ◆ Head of the Pediatrics Department at del Vallés de Sabadell Hospital
- ◆ Head of Pediatric ICU at Hospital Universitario General de Cataluña
- ◆ Attending Physician, Pediatric Emergency Department Catalunya University Hospital
- ◆ Lecturer in undergraduate and postgraduate courses at several universities such as the Private Foundation Escoles Universitàries Gimbernat and the Universitat Internacional de Catalunya
- ◆ Coordinator of the Neonatology working group of the Catalan Society of Pediatrics
- ◆ Degree in Medicine from the University of Barcelona
- ◆ Member of: Spanish Society of Neonatology (SENEO), Spanish Association of Pediatrics (AEP), Spanish Society of Internal Pediatrics

Dr. Boix, Héctor

- ◆ Head of Service, Hospital Quirón de Barcelona
- ◆ Head of the Pediatrics Services Quirón, Teknon, Dexeus and El Pilar
- ◆ Neonatologist at the Neonatal Intensive Care Unit of Vall d'Hebron Hospital
- ◆ Pediatrician at the Monash Medical Centre in Melbourne
- ◆ Member of: Research and Standards Commissions of the Spanish Society of Neonatology (SENeo), European Society for Paediatric Research (ESPR), National Representative in the European Board of Neonatology (EBN)



04

Structure and Content

The Postgraduate Certificate in Neonatology is structured based on the main aspects that must be known in order to adequately care for and treat newborns. For this purpose, the program is divided into different sections, starting with neonatal assessments, where the newborn will be evaluated by gestational age, birth weight and complete physical examination. Finally, the treatment and care of the newborn child of mothers with uncontrolled pregnancies, drug users and neonatal abstinence syndrome is addressed. TECH provides all this through a 100% online methodology, within a virtual platform full of dynamic materials that will help enhance student learning.





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Students pursuing this program will have access to teaching materials and a team of expert neonatology faculty 24 hours a day, 7 days a week”

Module 1. Aspects of the initial moments highlighted in Neonatology

- 1.1. Neonatal Assessments
 - 1.1.1. By gestational age
 - 1.1.2. By weight at birth,
 - 1.1.3. Premature Newborns
 - 1.1.4. Complete Physical Examination of the Newborn
- 1.2. Anatomical and Physiological Characteristics of the Newborn
 - 1.2.1. Newborn Somatometry
 - 1.2.2. Morphological Characteristics
 - 1.2.3. Physiological Characteristics
 - 1.2.4. Monitoring and Follow-Up
- 1.3. Admission of the Newborn (NB) in the Neonatal Unit
 - 1.3.1. Admission criteria and objectives
 - 1.3.2. Neonatal unit organization
 - 1.3.3. Equipment and Materials
 - 1.3.4. Distribution of staff and functions
- 1.4. Neonatal Transport
 - 1.4.1. Neonatal transport equipment and supplies
 - 1.4.2. Types of Transport
 - 1.4.3. Respiratory Support
 - 1.4.4. Monitoring
- 1.5. Neonatal Resuscitation
 - 1.5.1. Initial Stabilization
 - 1.5.2. Resuscitation Equipment and Organization
 - 1.5.3. Neonatal Resuscitation Equipment
 - 1.5.4. Special Situations
- 1.6. Thermal Management in a Newborn
 - 1.6.1. Neutral Thermal Environment
 - 1.6.2. Equipment and thermal neutral environment
 - 1.6.3. Thermoregulation Skin Care
 - 1.6.4. Commissioning





- 1.7. Hypothermia in a Newborn with Hypoxic-ischemic Encephalopathy as a protection
 - 1.7.1. Commitment of Fetal Well-being
 - 1.7.2. Forms of hypothermia
 - 1.7.3. Concept of Neuro Protection
 - 1.7.4. Hypothermia management
- 1.8. Pain Management in a Newborn
 - 1.8.1. Scales of Neonatal Pain
 - 1.8.2. Pharmacology of Neonatal Pain
 - 1.8.3. Main tables for the Treatment of Pain
 - 1.8.4. Other ways to treat pain
- 1.9. Newborn Skin Basic Elements
 - 1.9.1. Neonatal skin signs
 - 1.9.2. Newborn Skin Care
 - 1.9.3. Skin and neonatal syndromes
 - 1.9.4. Skin in the Prematurity
- 1.10. Child of a mother with uncontrolled pregnancy
 - 1.10.1. Child of a smoking mother
 - 1.10.2. Fetal Alcohol Syndrome
 - 1.10.3. Son of a drug-using mother
 - 1.10.4. Neonatal abstinence syndrome

“ *The Postgraduate Certificate in Neonatology is designed to be flexible, allowing students to organize academic resources at their convenience*”

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 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 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 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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