

# Postgraduate Certificate Digestive Disorders and Nutrition in Neonatology





## Postgraduate Certificate Digestive Disorders and Nutrition in 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/digestive-disorders-nutrition-neonatology](http://www.techtute.com/us/medicine/postgraduate-certificate/digestive-disorders-nutrition-neonatology)

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# 01

# Introduction

Nutrition and digestive disorders are one of the critical areas in neonatal care. Premature or low birth weight babies may have problems feeding and digesting properly, which can affect their development and growth. Therefore, it is crucial that health professionals have specialized knowledge in this area to provide adequate care and improve the quality of life of newborns. In view of this, TECH offers a complete program on nutrition and Digestive Disorders in newborns, as well as management and treatment strategies for these conditions. All this, in a 100% online way so that students can organize themselves according to their time availability and learning pace.



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*Thanks to this Postgraduate Certificate, you will learn about topics related to neonatal feeding, such as nutritional requirements, breastfeeding, milk banks and parenteral feeding"*

Neonatology is a branch of medicine that focuses on the medical care of newborns, especially those born prematurely or with medical complications from birth to. One of the crucial issues in neonatology is feeding, since the infant's digestive system is still immature and susceptible to Digestive and Nutritional Disorders. These irregularities are a growing concern for health professionals due to their high prevalence and their impact on the long-term health of the neonate.

Therefore, acquiring specialized knowledge in the care and management of Digestive and Nutritional Disorders in Neonatology is essential. Something that TECH provides to professionals during the development of the Postgraduate Certificate in Digestive Disorders and Nutrition in Neonatology. In the program the professional will gain a solid understanding of the anatomy and physiology of the digestive system, and the techniques for diagnosis and treatment of disorders such as gastroesophageal reflux, esophageal atresia and necrotizing enterocolitis.

The program comprehensively addresses the most relevant and current issues in the care and management of Digestive and Nutritional Disorders in Neonatology. Participants will have the opportunity to acquire practical skills and knowledge, as well as to discuss and analyze real clinical cases through a case study. The program will be taught by highly qualified and experienced professionals in the field of neonatology, and will be based on a 100% online methodology with resources and dynamic materials, which will allow participants to further deepen the topics addressed in the program.

This **Postgraduate Certificate in Digestive Disorders and Nutrition 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



*Do you want to specialize in neonatal care? Acquire the knowledge you need thanks to this Postgraduate Certificate in Digestive Disorders and Nutrition in Neonatology"*



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*Do you want to help improve the quality of life of the most vulnerable? Get trained in Neonatal Digestive and Nutritional Disorders with this Postgraduate Certificate"*

*Discover the keys to improve the health of the little ones thanks to the development of this academic program in Digestive Disorders and Nutrition in Neonatology.*

*Enroll with TECH and get a first level training through the theoretical contents and multimedia materials of this very complete program.*

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 TECH Postgraduate Certificate is to provide health professionals with complete and updated knowledge on nutrition and digestive disorders in newborns. Thus, by updating the systematized knowledge on digestive pathology, the physiopathology of the digestive system is deepened in each of the items, allowing to point out the attitudes to be taken to improve the evolution of patients from the point of view of food and nutrition. In addition, this program seeks to deepen the importance of nutrition as a key element in the long-term health of newborns.





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*Want to make a difference in the nutritional and digestive care of newborns? This Postgraduate Certificate will help you to do it. Become a professional in the field"*



## 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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- ◆ Update systematized knowledge of Digestive Pathology
- ◆ Delve into each of the items in the Pathophysiology of the Digestive System
- ◆ Point out the attitudes to be taken, from the point of view of food and nutrition, to improve the evolution of these patients
- ◆ Deepen in nutrition as an essential element for long-term health



*This program emphasizes the importance of updating knowledge in the area of Digestive Disorders and Nutrition in Neonatology, providing systematic and complete knowledge in the subject"*

# 03

# Course Management

TECH has taken a very careful and strategic direction in planning the topics of the Postgraduate Certificate in Digestive Disorders and Nutrition in Neonatology. To this end, leading experts in the field have systematically and progressively organized the curriculum of the program. These professionals will provide the student with a detailed introduction to the anatomy and physiology of the neonatal digestive system, and will advance towards a thorough understanding of the most common neonatal digestive and nutritional disorders, their causes and symptoms, as well as appropriate treatment and prevention strategies. In this way, health professionals are adequately trained by specialists in the field.





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*Experts in Digestive Disorders and Nutrition in Neonatology have designed a detailed curriculum to provide comprehensive and detailed training to improve the care and quality of life of newborns"*

## 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 Quirón 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

This 100% online TECH program covers a wide variety of topics related to feeding and Digestive Disorders in neonates. First, the generalities, embryology and anatomy of the digestive tract will be explored, with special emphasis on physiology and the interaction between anatomy and physiology. In addition, specific disorders such as gastroesophageal reflux, esophageal atresia and necrotizing enterocolitis will be discussed, where the etiology, diagnosis, treatment and follow-up of patients will be analyzed. In addition, information will be provided on breastfeeding and measures to promote it, the nutrients needed by the breastfeeding neonate and the goals to be achieved. All of them through TECH's innovative and dynamic Relearning methodology.







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*This program is designed to provide a comprehensive and up-to-date knowledge in neonatal care and feeding to those interested in this field"*

## Module 1. Digestive Disorders and Nutrition in Neonatology

- 1.1. Generalities, embryology and anatomy of the digestive system
  - 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. Gastroesophageal Reflux
  - 1.2.1. Ethology
  - 1.2.2. Diagnosis
  - 1.2.3. Treatment
  - 1.2.4. Monitoring
- 1.3. Esophageal Atresia
  - 1.3.1. Classification
  - 1.3.2. Diagnosis
  - 1.3.3. Treatment
  - 1.3.4. Monitoring
- 1.4. Necrotizing Enterocolitis
  - 1.4.1. Ethology
  - 1.4.2. Diagnosis
  - 1.4.3. Treatment
  - 1.4.4. Monitoring
- 1.5. Requirements and Feeding Objectives of the Breastfeeding Infant. Breastfeeding: measures to promote breastfeeding
  - 1.5.1. Breastfeeding
  - 1.5.2. Measurements to Inhibit Breastfeeding
  - 1.5.3. Nutrients
  - 1.5.4. Objectives
- 1.6. Milk Banks. Composition of Breast Milk
  - 1.6.1. Milk Banks
  - 1.6.2. Composition of Breast Milk
  - 1.6.3. Traceability
  - 1.6.4. Security/Safety







- 1.7. Parenteral feeding in the preterm neonate
  - 1.7.1. Carbohydrates
  - 1.7.2. Amino Acids
  - 1.7.3. Lipids
  - 1.7.4. Remaining composition
- 1.8. Enteral Diet Formula milk for premature infants. Trophic feeding
  - 1.8.1. Enteral Feeding
  - 1.8.2. Premature infant formula
  - 1.8.3. Trophic feeding
  - 1.8.4. Other situations
- 1.9. Feeding monitoring: growth charts. Biochemical control parameters
  - 1.9.1. Growth charts
  - 1.9.2. Biochemical parameters
  - 1.9.3. Evolution
  - 1.9.4. Other situations
- 1.10. Probiotics: possible indications and uses
  - 1.10.1. Fundamentals of probiotic knowledge
  - 1.10.2. Indications
  - 1.10.3. Specific utilities
  - 1.10.4. Forms of use

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*Within this program, topics such as breast milk fortification, parenteral and enteral feeding, feeding monitoring and probiotics, utilities and forms of use will be addressed”*

# 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 Digestive Disorders and Nutrition 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 Digestive Disorders and Nutrition 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 Digestive Disorders and Nutrition 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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