

Postgraduate Certificate

Hematologic Disorders in Neonatology



Postgraduate Certificate Hematologic Disorders in Neonatology

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

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

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01

Introduction

Hematology is a branch of medicine that focuses on the study of blood and its disorders, and is fundamental for the diagnosis and treatment of various diseases. In the case of newborns, Hematologic Disorders can be especially critical, as their immune system is still developing and their ability to produce and regulate blood cells is limited. For this reason, it is essential that professionals working in neonatal care have a solid understanding of the subject. For this purpose, TECH has developed a complete and up-to-date program, 100% online and totally flexible, whose focus is on care in Neonatal Critical Care Units.



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Thanks to this 100% online Postgraduate Certificate, you will treat Hyperbilirubinemia in newborns and identify different modalities of Jaundice in newborns, applying effective treatments to improve their health"

Neonatal medical care is one of the most complex and delicate areas of medicine, and within it, Hematological Disorders represent a great challenge. Neonatal Hematology deals with the study of blood disorders in newborns, including from the development of the hematopoietic system, to the extrauterine adaptation and the alterations that may occur in the neonatal period.

In this context, TECH has developed this Postgraduate Certificate, a complete immersion in the diagnosis and treatment of neonatal anemia. Therefore, participants will explore the underlying causes, from iron deficiency to hemolytic disorders, updating on the latest therapeutic strategies to address this crucial clinical challenge in newborns.

The program will also delve into the complexity of Polycythemia in modern neonatology, from its causes to its optimal management. It will also examine the various etiologies of this disorder, including potential complications, and present evidence-based treatment strategies to ensure optimal outcomes in affected newborns.

Finally, another central theme will be neonatal Thrombocytopenia, where triggering factors, clinical implications and available therapeutic options will be discussed in depth. Additionally, concepts and causes of pathological neonatal Jaundice will be addressed, covering screening and diagnostic methods, as well as the assessment of treatment approaches, to ensure effective and safe management of this disorder.

In this way, the program will cover a wide range of topics, from generalities in Hematology and the development of the hematopoietic system in the fetus, to blood transfusion and its derivatives and immunodeficiencies. The *Relearning* pedagogical methodology, together with the flexibility to organize teaching resources, will allow students to acquire knowledge in an effective and efficient way, through a 100% online platform.

This **Postgraduate Certificate in Hematologic Disorders in Neonatology** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ The development of practical cases presented by experts in Hematologic Disorders in Neonatology.
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out 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



Are you looking to update your knowledge in Neonatal Hematology? Enroll now in this program and you will be able to intervene in different states of health and disease, applying the most recent advances in the field"

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Do you want to improve your skills in caring for neonatal patients? Enroll in this Postgraduate Certificate and learn how to intervene in critical moments using blood components”

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Discover the systematization of the different moments of intervention and become all-round professional, capable of improving the lives of newborns.

Are you interested in the transfusion of biological elements from blood to the newborn? Expand your knowledge on the subject thanks to the best resources to keep up to date on the latest trends in the field.



02 Objectives

This Postgraduate Certificate will delve into Hematology, as a fundamental basis for address different states of health and disease in newborns. This program aims to provide health professionals with an understanding of the elements that make up blood and its intervention in the care of neonatal patients, including the transfusion of biological elements and the measurement of Hyperbilirubinemia. In addition, the different modalities of Jaundice in newborns will be described, expanding the knowledge on this relevant topic in neonatal care.





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You are TECH's goal, which is why it offers you 100% online and complete education, with up-to-date tools and knowledge to improve the care of neonatal patients with Hematologic Disorders”



General Objectives

- ♦ Understand the key aspects of early neonatal assessment
- ♦ Analyze the anatomic and physiologic conditions of the neonate
- ♦ Master appropriate neonatal admission and transport procedures
- ♦ Determine neonatal resuscitation and thermal management techniques
- ♦ Develop strategies to prevent and treat hypothermia and pain
- ♦ Investigate neonatal respiratory and cardiovascular disorders
- ♦ Address neurological and metabolic disorders in neonatology
- ♦ Define infections and hematologic disorders in neonatology
- ♦ Evaluate renal and neonatal immunity disorders
- ♦ Apply new technologies to improve neonatal care





Specific Objectives

- ♦ Delve into the diagnosis and treatment of neonatal Anemia.
- ♦ Examine the causes and management of polycythemia in modern Neonatology.
- ♦ Address neonatal Thrombocytopenia
- ♦ Define concepts and causes of pathologic neonatal Hyperbilirubinemia
- ♦ Analyze methods of screening and diagnosis of neonatal Hyperbilirubinemia
- ♦ Evaluate different approaches to the treatment of Hyperbilirubinemia

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You will expand your knowledge with this Postgraduate Certificate, with which you will identify and treat blood diseases in newborns. What are you waiting for to enroll?"

03

Course Management

This program will offer graduates a unique opportunity to acquire specialized knowledge in the field of Hematology in Neonatology, from the hands of highly educated and experienced professionals in the fields of care, research and education. In this way, this teaching team is made up of true experts in the care of neonatal patients in intensive care units, in the research of neurological pathologies and in vaccinology, among other related fields.



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

Professors

Dr. Porta Ribera, Roser

- ♦ Neonatology in the Neonatal Unit at the Germans Trias i Pujol University Hospital
- ♦ Neonatology at Dexeus Hospital
- ♦ Coordinator of the Neonatal Unit at the Germans Trias i Pujol University Hospital
- ♦ Pediatrician in Neonatology at Germans Trias I Pujol Hospital.
- ♦ Associate Professor of Pediatrics at the Autonomous University of Barcelona
- ♦ Degree in Medicine and Surgery from the University of Barcelona.
- ♦ Certified and Instructor in Neonatal CPR by SENeo
- ♦ Certified in pediatric CPR by the European Resuscitation Council.



04

Structure and Content

Throughout this academic program, health professionals will have access to studies focused on Hematologic Disorders that can affect newborns. Additionally, they will obtain relevant information in Hematology, including the development of the hematopoietic system, embryology and pathophysiological bases. Specific topics such as neonatal Anemia, Hydrops Fetalis, Hyperbilirubinemia, treatment of Jaundice, Polycythemia, platelet disorders and blood transfusion will also be discussed in depth.



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TECH's 100% online platform offers you the opportunity to learn with excellent comfort, since you will not have to move to any educational center and you can access anytime and anywhere"

Module 1. Hematologic Disorders in Neonatology

- 1.1. Neonatal Anemia
- 1.2. Polycythemia
- 1.3. Thrombocytopenia
- 1.4. Neonatal Hyperbilirubinemia: Definition and Concepts
- 1.5. Causes of Pathological Hyperbilirubinemia
- 1.6. Screening for Hyperbilirubinemia. Diagnostic Tests
- 1.7. Treatment of Hyperbilirubinemia
- 1.8. Introduction to Bleeding Disorders and Thrombosis
- 1.9. Hemorrhagic Disorders
- 1.10. Arterial and Venous Thrombosis in the Neonatal Period



“Enroll with TECH and get a first level education through theoretical and practical contents and multimedia materials in this very complete educational program”

05 Methodology

This 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 assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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.

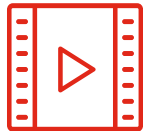
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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 adapted in 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

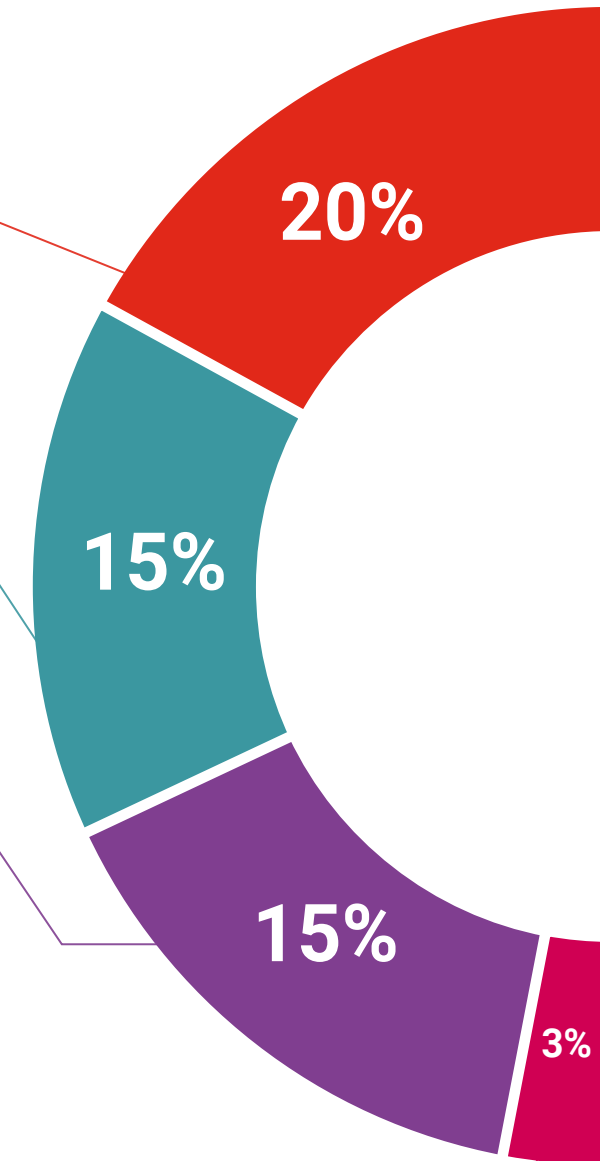
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

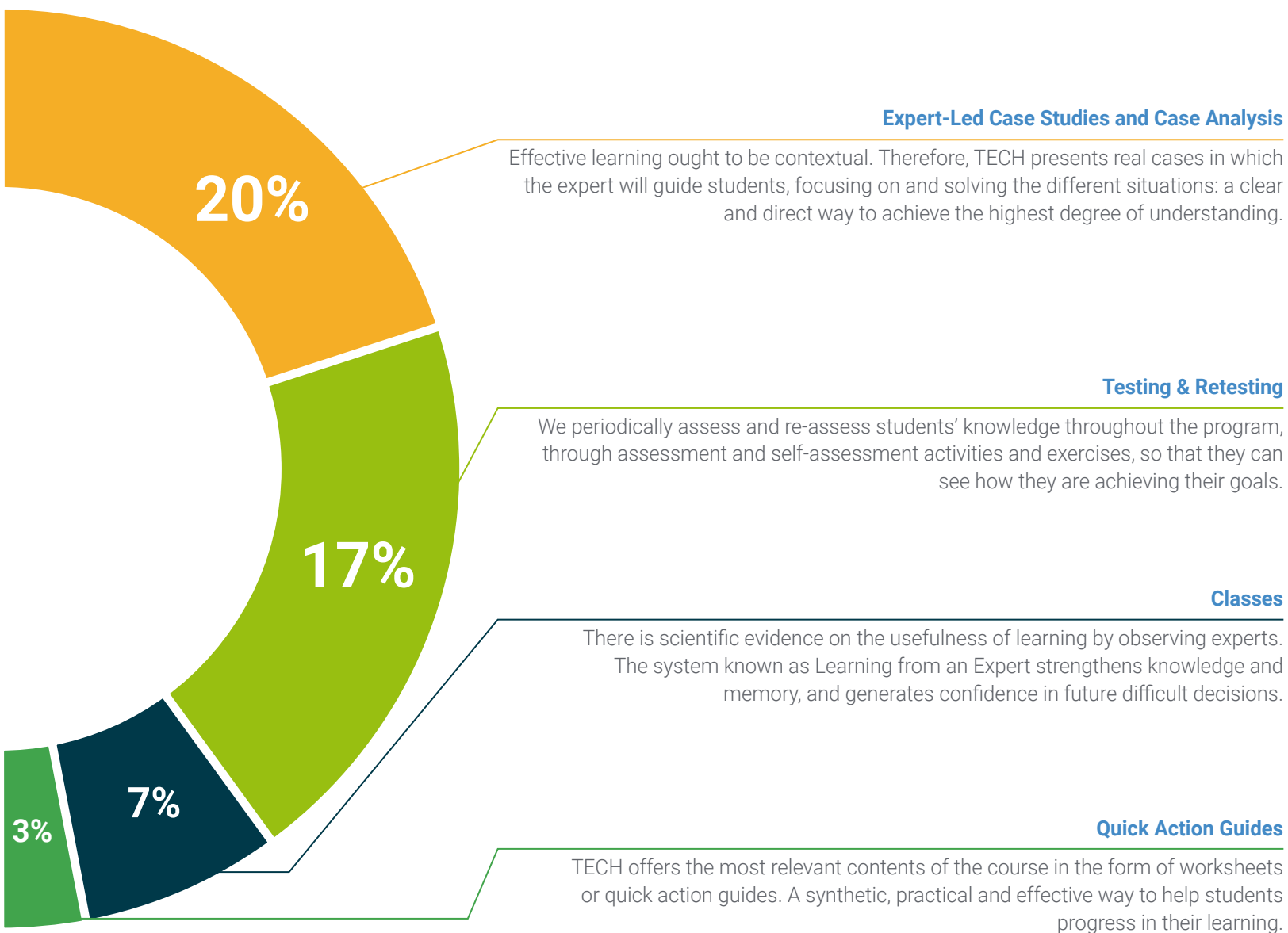
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.





06 Certificate

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



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

This private qualification will allow you to obtain a **Postgraduate Certificate in Hematologic Disorders in Neonatology** endorsed by **TECH Global University**, the world's largest online university.

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

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

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

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**





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- » Modality: Online
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