

Postgraduate Certificate Neonatal Shock and Sepsis





Postgraduate Certificate Neonatal Shock and Sepsis

- » 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/neonatal-shock-sepsis

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01

Introduction

Neonatal Shock and Sepsis are critical conditions affecting newborns that can be life-threatening. To address these situations, it is necessary to have trained professionals who can provide timely and effective care. To this effect, TECH has developed an educational proposal that seeks to train health professionals in the diagnosis and treatment of these conditions in newborns. The program covers topics such as the pathophysiology of Shock and Sepsis Neonatal, management of mechanical ventilation and antibiotic therapy. The program is taught entirely online and uses an innovative pedagogical methodology called Relearning, which combines active and collaborative learning with technology.



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Would you like to have more job opportunities in neonatology? The Postgraduate Certificate in Neonatal Shock and Sepsis is an excellent option to improve your skills and knowledge in this critical area of medicine"

The health of newborns is a major concern for health professionals around the world. In this sense, Neonatal Shock and Sepsis are two critical conditions that can occur in the first days of life and if not treated in an adequate and timely manner, can put the newborn's life at risk. For this reason, it is essential that healthcare professionals are trained to detect and treat these conditions effectively.

In this context, TECH offers a Postgraduate Certificate, which will provide participants with the opportunity to update and deepen their knowledge of the different phases of neonatal shock, the etiology and clinical signs of neonatal sepsis, as well as the diagnosis and treatment of both conditions.

During the program, topics such as pathophysiology, diagnosis, treatment and singularities of the different types of neonatal shock, as well as the different phases of shock and the evolution of the disease will be addressed. The etiology of neonatal sepsis, its diagnosis and treatment will also be discussed, as well as vasoactive drugs and special situations that may arise in the treatment of neonatal shock and sepsis.

The program is guided 100% online with practical sessions and discussion of clinical case studies. Participants will have the opportunity to interact with dynamic materials, created by experts in the field. In addition, the active participation of students in the development of clinical cases and the analysis of complex situations in the management of Neonatal Shock and Sepsis will be promoted.

This **Postgraduate Certificate in Neonatal Shock and Sepsis** 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 eminently practical contents of the book provide scientific and practical information on those disciplines that are essential 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



Develops critical skills in the assessment and treatment of neonates in shock and sepsis, acquiring in-depth knowledge of the pathophysiology and attitude to the different phases of shock"

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Upon completion of this Postgraduate Certificate, you will be better prepared to face emergency situations and provide quality care to newborns in critical situations"

Take advantage of TECH's innovative methodology, Relearning, based on active learning without memorizing, to improve your retention of knowledge and skills acquired in the program.

Access a wide variety of multimedia resources including videos and case studies, for a complete and enriching learning experience.

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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

At TECH, the selection of the faculty for the Diploma in Neonatal Shock and Sepsis was carried out in a rigorous and careful manner, with the objective of offering the highest quality training to the students. We looked for highly qualified professionals with extensive experience in the specialty, who can effectively transmit the theoretical and practical knowledge necessary for the proper diagnosis and treatment of Neonatal Shock and Sepsis. In addition, there was an adequate teaching team to carry out this updated and online degree program. All of this, based on the most recent advances in research and treatment of these pathologies, so the students can have the necessary tools to face the challenges that arise in their professional practice.





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With this focus on academic excellence, TECH ensures that its students are prepared to excel in their career and become leaders in their field of expertise”



General Objective

- ♦ 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

- Delve in the assessment of Sepsis
- Deepen Pathophysiology of shock
- To inquire into the attitude towards the different phases of shock
- Establish the necessary equipment for stabilization of the newborn baby
- Delimit Neonatal Sepsis



This program is designed to provide a complete and comprehensive overview, allowing you to acquire the skills necessary to deal with emergency clinical situations in neonates with shock and sepsis"

03

Course Management

TECH is committed to providing its students with a quality education.

That is why this Postgraduate Certificate in Neonatal Shock and Sepsis has a team of renowned professionals with extensive experience in the area, who offer the necessary tools for students to acquire a solid knowledge in the field. The degree aims to develop students' skills and provide them with the necessary guarantees so that they can specialize in this area of medicine and succeed professionally.





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Become a highly trained specialist in neonatology and gain access to various job opportunities, including hospitals, private clinics and research centers, thanks to the Postgraduate Certificate in Neonatal Shock and Sepsis"

Management



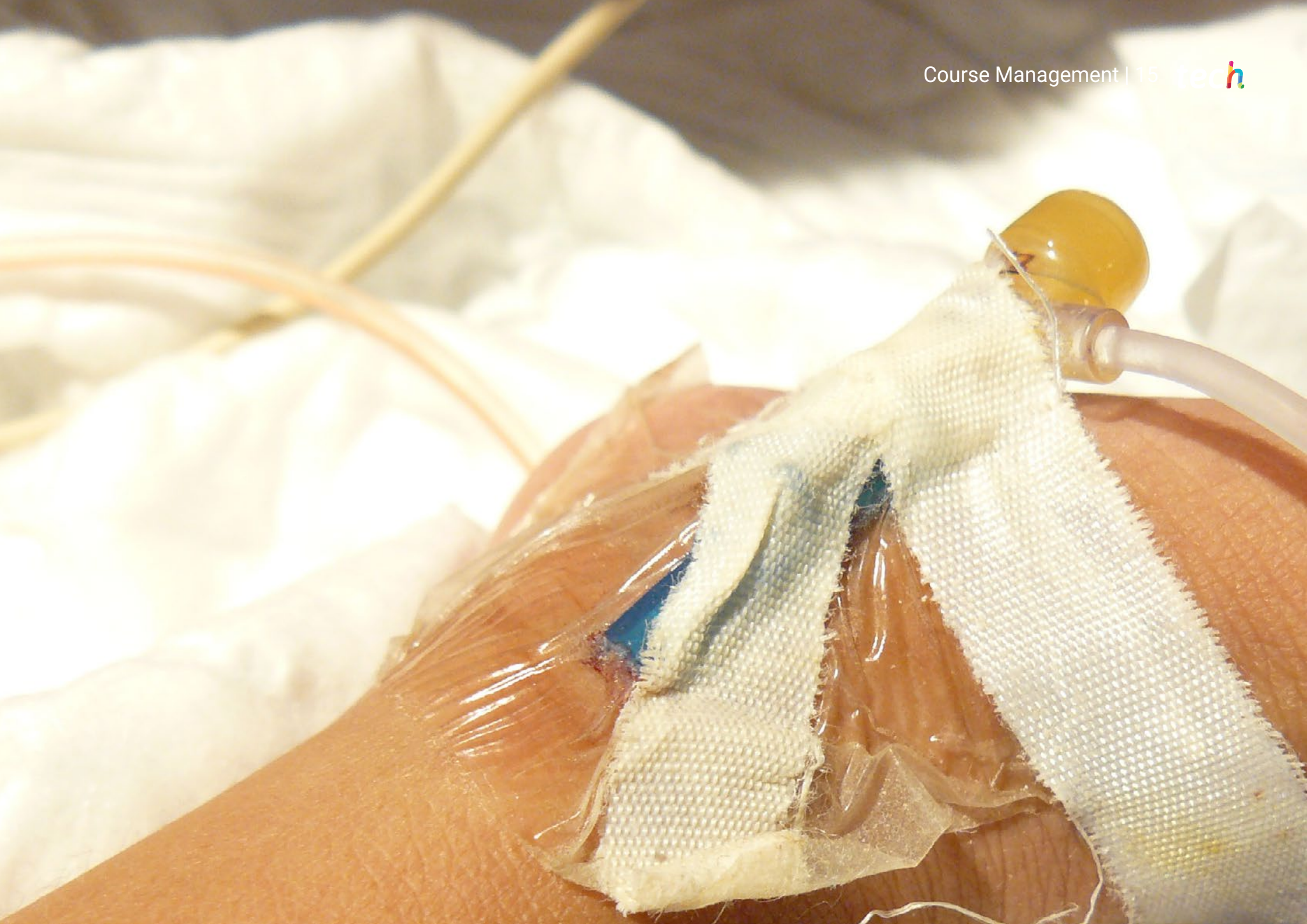
Dr. Baca Cots, Manuel

- ♦ 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. Ramón Salguero, José Manuel

- ♦ Director of Pediatrics in the Andalusian Health Service
- ♦ Degree in Medicine from the University of Granada



04

Structure and Content

With a fully online degree TECH aims to provide students with the knowledge necessary to understand the pathophysiology, diagnosis and treatment of neonatal shock and sepsis. For this purpose, the program is structured in a module that covers topics from the pathophysiology and singularities of the different types of shock, to the etiology, diagnosis and treatment of neonatal sepsis. It also addresses the management and treatment of neonatal shock, including monitoring, etiological treatment, drugs and special situations. All of this, through the innovative Relearning methodology.



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The curriculum of this program includes multimedia materials and you will have the opportunity to study at your own pace and adapt your academic resources to your needs"

Module 1. Neonatal Shock and Sepsis

- 1.1. Neonatal Shock
 - 1.1.1. Pathophysiology
 - 1.1.2. Diagnosis
 - 1.1.3. Treatment
 - 1.1.4. Singularities of the different types
- 1.2. Types and Phases of Neonatal Shock
 - 1.2.1. Types of Shock
 - 1.2.2. Monitoring
 - 1.2.3. Phases of Neonatal Shock
 - 1.2.4. Evolution
- 1.3. Etiology and Clinical Symptoms of Neonatal Shock
 - 1.3.1. Concept
 - 1.3.2. Pathophysiology
 - 1.3.3. Neonatal specificities
 - 1.3.4. The Overview
- 1.4. Manage and Treatment for Neonatal Shock
 - 1.4.1. Monitoring
 - 1.4.2. Etiological Treatment
 - 1.4.3. Drugs
 - 1.4.4. Special Situations
- 1.5. Neonatal Sepsis and Septic Shock
 - 1.5.1. Concepts
 - 1.5.2. Pathophysiology
 - 1.5.3. Specificities of the diagnosis
 - 1.5.4. The Overview
- 1.6. Etiopathogenesis of Neonatal Sepsis
 - 1.6.1. Concepts
 - 1.6.2. Pathophysiology
 - 1.6.3. Etiopathogenesis of Neonatal Sepsis
 - 1.6.4. Monitoring





- 1.7. Etiology of Sepsis
 - 1.7.1. Hypovolemia
 - 1.7.2. Pain
 - 1.7.3. Neonatal Sepsis
 - 1.7.4. Miscellaneous
- 1.8. Clinical Symptoms of Sepsis
 - 1.8.1. According to Etiology
 - 1.8.2. Clinical data
 - 1.8.3. Monitoring data
 - 1.8.4. Results
- 1.9. Diagnosis of Sepsis
 - 1.9.1. According to Etiology
 - 1.9.2. Clinical data
 - 1.9.3. Monitoring data
 - 1.9.4. Laboratory Data
- 1.10. Treatment of Sepsis
 - 1.10.1. According to Etiology
 - 1.10.2. Vasoactive drugs
 - 1.10.3. Evolution
 - 1.10.4. The aftereffects

“Did you know that the Postgraduate Certificate in Neonatal Shock and Sepsis uses an innovative teaching methodology called Relearning? This approach will allow you to learn and apply your knowledge in real situations”

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

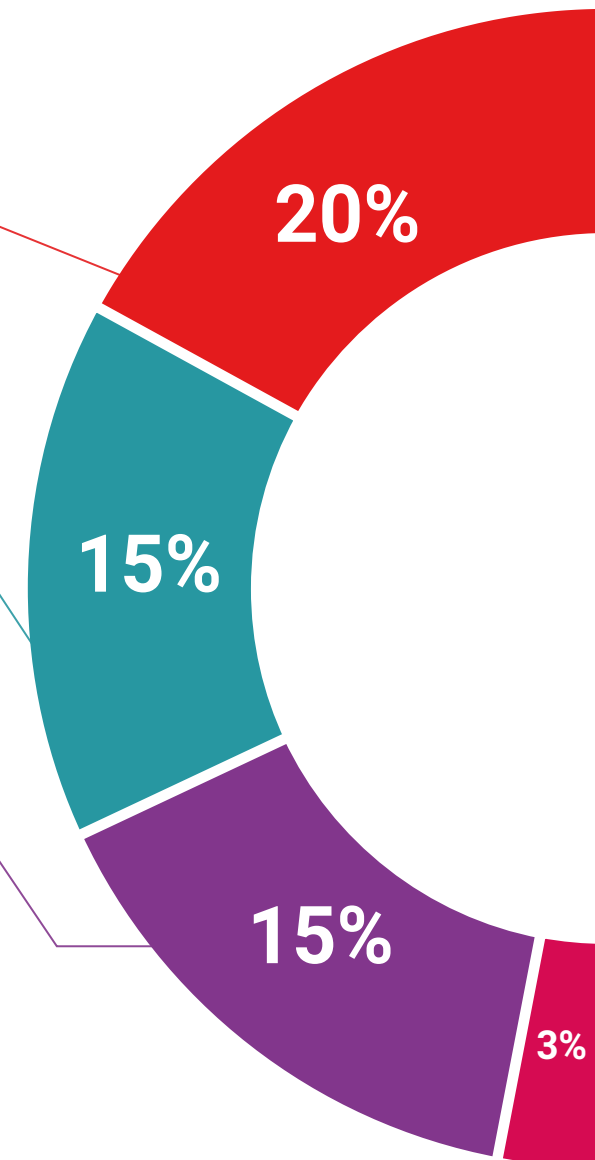
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

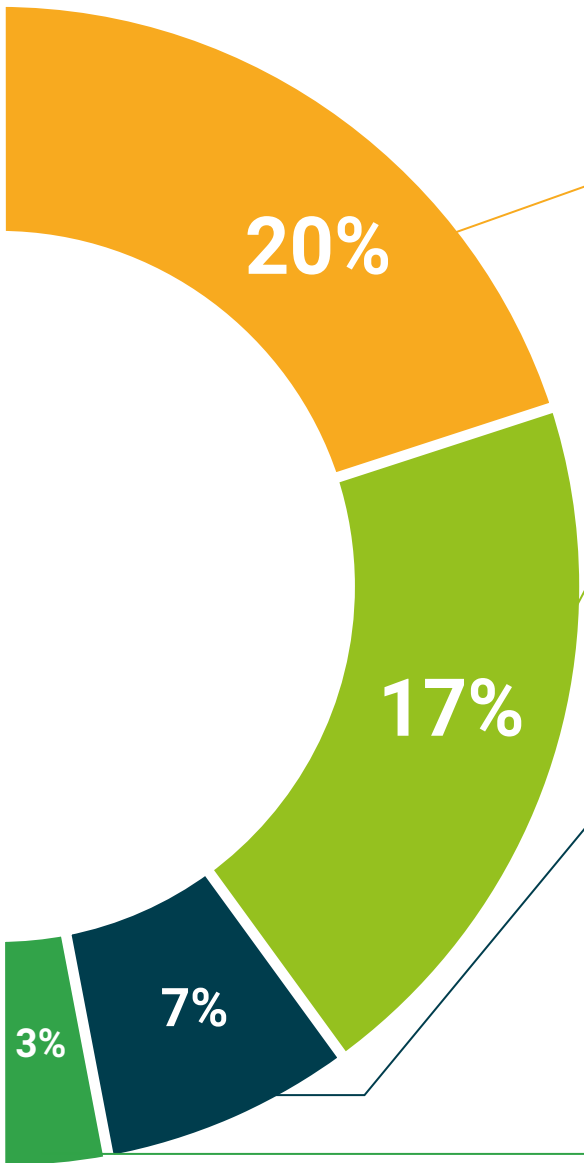
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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 Neonatal Shock and Sepsis 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 Neonatal Shock and Sepsis** 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 Neonatal Shock and Sepsis**

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.

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
development language
virtual classroom



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