

Postgraduate Certificate

Neonatal Shock and Sepsis





Postgraduate Certificate Neonatal Shock and Sepsis

- » 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/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



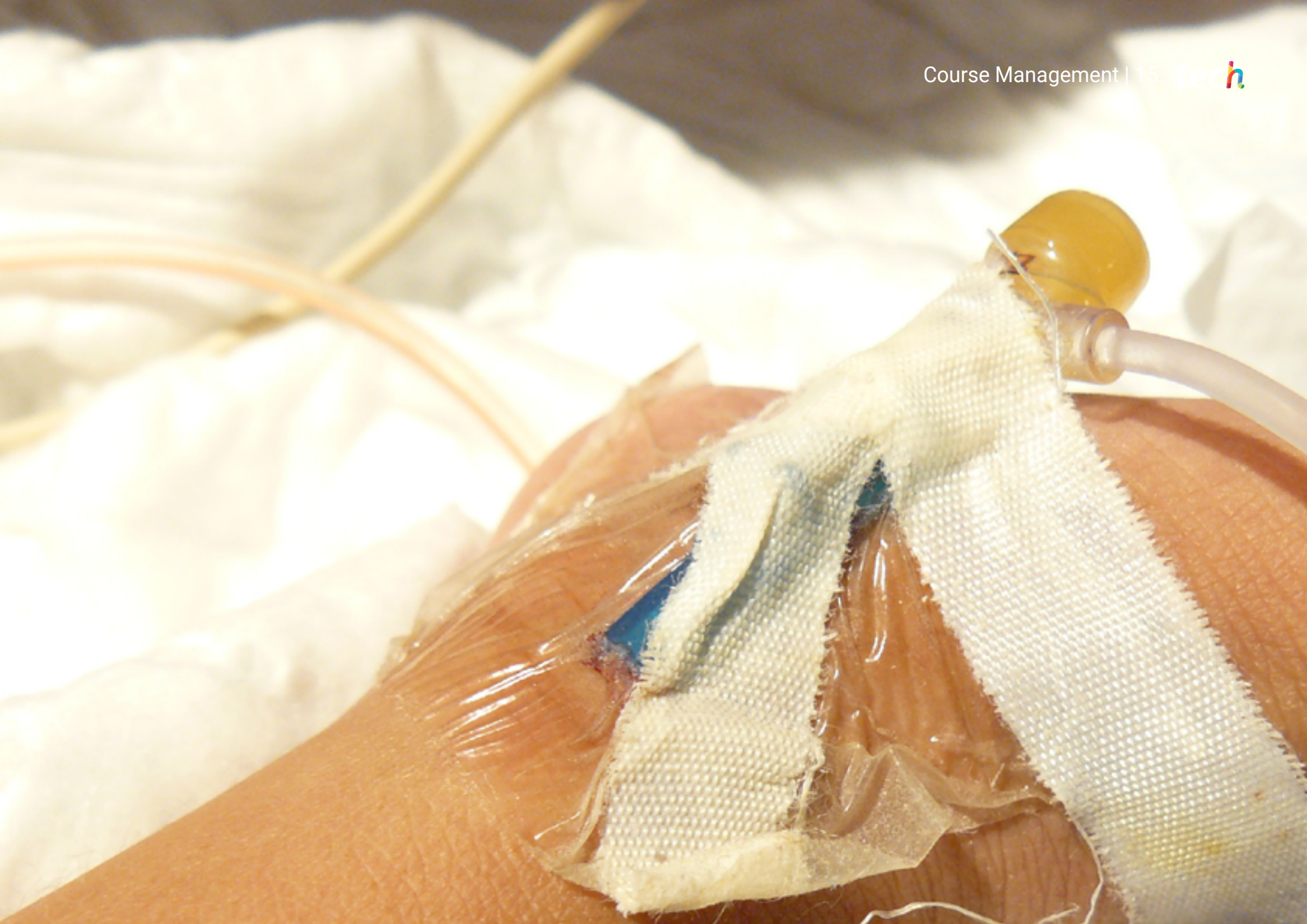
Dr. Baca Cots, Manuel

- ♦ 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



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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 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



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TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

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.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

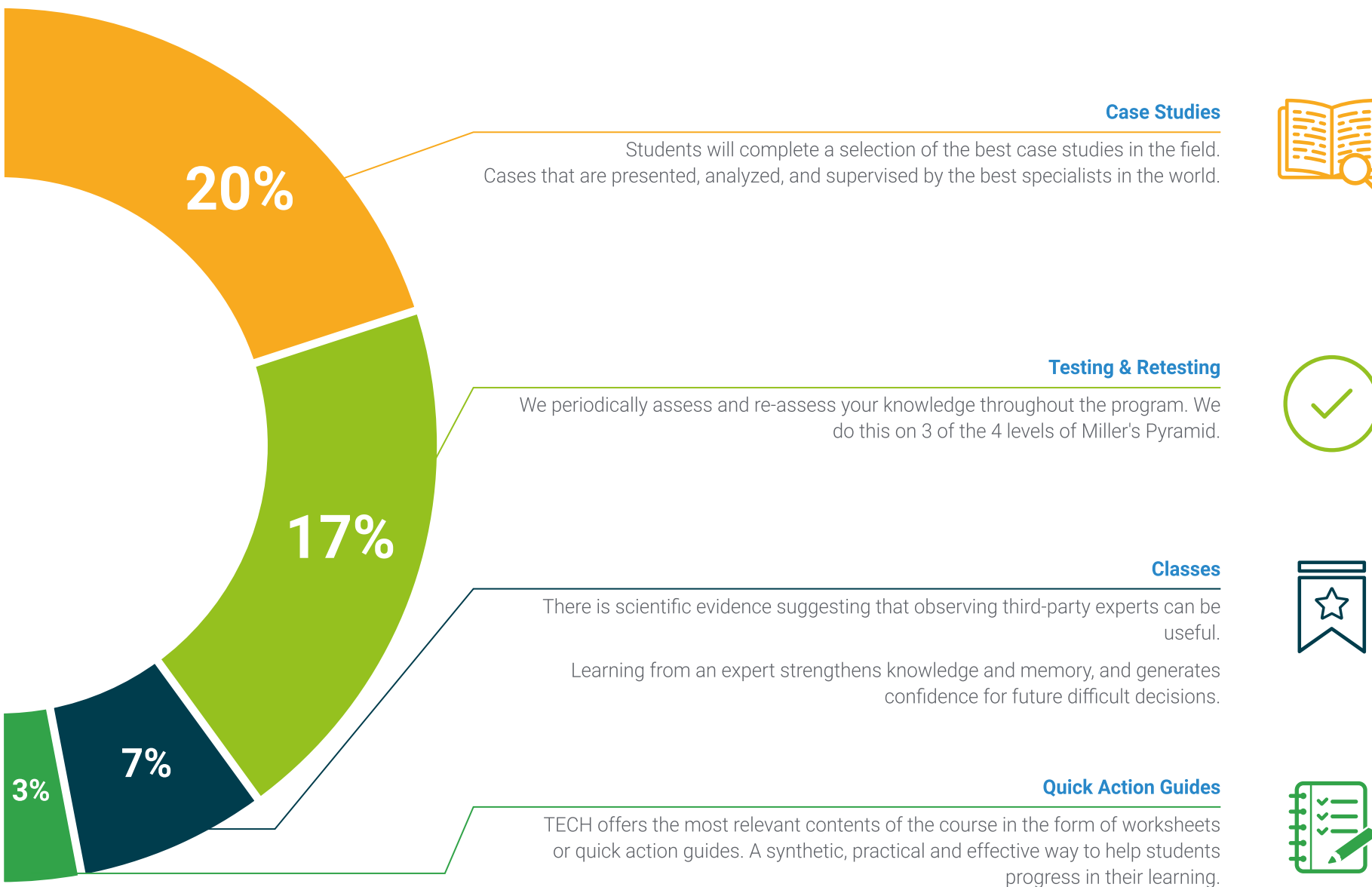
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





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

Modality: **online**

Duration: **6 Weeks**

Accreditation: **6 ECTS**





Postgraduate Certificate

Neonatal Shock and Sepsis

- » Modality: online
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Postgraduate Certificate

Neonatal Shock and Sepsis

