

Postgraduate Certificate

Neonatal and Nosocomial Infection





Postgraduate Certificate Neonatal and Nosocomial Infection

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 7 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/pharmacy/postgraduate-certificate/neonatal-nosocomial-infection



Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Study Methodology

p. 20

06

Certificate

p. 30

01

Introduction

From the end of the neonatal period to the age of 5, pneumonia, malaria, and diarrhea are the leading causes of death. As can be inferred, this entails the consideration of therapeutic approaches, which often involve the use of antibacterials, antivirals, or antifungals. Therefore, it is essential for pharmacists to have advanced knowledge in this field and to remain continuously updated.





“

Update your knowledge through the Postgraduate Certificate in Neonatal and Nosocomial Infection, in a practical way and tailored to your needs”

This program arises in response to a significant need in the field of infectious diseases. Currently, this need is driven, among other factors, by the emergence of certain diseases that are either unknown or have limited experience, such as Zika, Chikungunya, hemorrhagic fevers, and others. Additionally, diseases that were once forgotten or are less known by less experienced pharmacists, such as diphtheria, measles, whooping cough, and vaccine-associated flaccid paralysis caused by the polio virus, are making a resurgence.

From a therapeutic perspective, the rise of resistance (such as BLEES, MRSA, carbapenem-resistant Enterobacteriaceae, etc.), often exacerbated by the improper and irrational use of medications, presents challenges for clinicians when performing initial empirical treatments in certain situations.

Furthermore, everyday challenges for pharmacists include vaccine-hesitant parents, children from low-income families, infections in transplant patients, children with medical devices, and febrile illnesses without a clear focus in well-vaccinated children.

All of this underscores the importance for pharmacists to maintain ongoing training, even if they are not specialists, since a significant percentage of visits or interconsultations are related to infections. With the increasing amount of information from parents—sometimes not always corroborated—professional updates are essential to provide the correct information according to the current scientific evidence.

With this training, you will have the opportunity to undertake an academic program that consolidates the most advanced and in-depth knowledge in the field. A team of highly qualified professors with extensive international experience will provide you with the most complete and up-to-date information on the latest advancements and techniques in Infectious Diseases.

This **Postgraduate Certificate in Neonatal and Nosocomial Infection** contains the most complete and up-to-date scientific program available on the market. Its most notable features are:

- ♦ Development of clinical cases presented by experts in Infectious Diseases
- ♦ Its graphic, schematic and practical contents are designed to provide scientific and assistance information on those pharmaceutical disciplines that are essential for professional practice.
- ♦ Diagnostic-therapeutic updates on Neonatal and Nosocomial Infection Management
- ♦ Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- ♦ With a special emphasis on evidence-based medicine and research methodologies in Neonatal and Nosocomial Infection
- ♦ All of this will be complemented by 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 about the latest advances in advances in Neonatal and Nosocomial Infection and improve your patient care"

“

Improve your knowledge through this program, where you will find the best teaching material with real clinical cases. Learn here about the latest advances in the speciality to be able to perform a quality pharmaceutical practice"

The faculty includes healthcare professionals from the field of Pediatric Infectious Diseases, who bring their extensive practical experience to this training, as well as renowned specialists from leading scientific societies.

Thanks to its multimedia content, developed with the latest educational technology, professionals will benefit from situated and contextual learning—simulated environments designed to provide immersive learning experiences that prepare them for real-life situations.

The design of this program is based on Problem-Based Learning (PBL), through which pharmacists will tackle various professional practice situations presented throughout the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Infectology with extensive teaching experience.

The Postgraduate Certificate includes real clinical cases and exercises to bring the development of the program closer to the pharmacist's clinical practice.

Take advantage of the opportunity to update your knowledge in neonatal infectious diseases and enhance the care of your patients.



02 Objectives

The main objective of the program is to develop theoretical and practical learning, enabling pharmacists to master pediatric infectious diseases in a practical and rigorous manner.



“

This refresher program will generate a sense of confidence in the performance of the pharmacist's practice, which will help you grow personally and professionally"



General Objective

- ♦ Update the knowledge of pharmacists who work with children, through the latest advancements in the field of Primary Care or Hospital Infectious Diseases, to enhance the quality of care, ensure the safety of healthcare providers, and achieve the best outcomes for the patient.



Make the most of this opportunity and take the step to stay up-to-date with the latest updates in Neonatal and Nosocomial Infection"





Specific Objectives

- ♦ Analyze the proper interpretation of an antibiogram
- ♦ Identify the limitations of serology
- ♦ Describe genetic methods for infection diagnosis
- ♦ Identify risk factors, microorganisms, and infection prevention in neonatology
- ♦ Identify congenital infections
- ♦ Describe the current state of vertical transmission infections
- ♦ Practice the algorithms for managing infections during the neonatal period
- ♦ Identify early and late-onset neonatal sepsis
- ♦ Define the epidemiology, incidence, and risk factors of nosocomial infections
- ♦ Identify patients at risk for nosocomial infections
- ♦ Explain the management of nosocomial infections related to medical devices
- ♦ Define control and action against hospital outbreaks of infection
- ♦ Describe the role of multidrug-resistant microorganisms

03

Course Management

The program includes renowned specialists in Pediatric Infectious Diseases, Pediatrics, Microbiology, and other related fields, who contribute their practical experience to this training. Additionally, the design and development of the program involve other highly respected specialists, who contribute to an interdisciplinary approach to complete the program.



“

Learn from reference professionals, the latest advances in procedures in the field of Pediatric Infectious Diseases"

Guest Director



Dr. Hernández-Sampelayo Matos, Teresa

- ♦ Head of the Pediatrics Department at the Gregorio Marañón General University Hospital.
- ♦ Head of the Pediatric Infectious Diseases Section at the Gregorio Marañón General University Hospital.
- ♦ Emergency Pediatrics at the Gregorio Marañón General University Hospital.
- ♦ Pediatric Gastroenterology at the Gregorio Marañón General University Hospital.
- ♦ Neonatology at the Gregorio Marañón General University Hospital
- ♦ Former President of the Spanish Society of Pediatric Infectious Diseases
- ♦ Program Leader for Pediatric Antifungal Optimization at Astllas Pharma Europe Ltd.
- ♦ PhD in Medicine and Surgery from the Autonomous University of Madrid.

Management



Dr. Otero Reigada, María del Carmen

- ♦ Pediatric Infectious Diseases Specialist.
- ♦ Pediatrician and Pediatric Infectious Diseases specialist at Hospital Quirónsalud. Valencia, Spain
- ♦ Former Clinical Chief of Infectious Diseases and Infants at the University Hospital and Polytechnic La Fe.
- ♦ Pediatric Infectious Diseases Specialist.
- ♦ Specialist in Clinical Microbiology.



Faculty

Dr. Couselo Jerez, Miguel

- ♦ Pediatric Oncology Surgeon
- ♦ Pediatric Surgeon at the University Hospital and Polytechnic La Fe
- ♦ PhD in Medicine from the University of Valencia

“

Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice”

04

Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of studying in daily Pharmacist practice in Pediatric Infectious Diseases, aware of the relevance of the current the Training to be able to care for Neonates with infectious pathology with quality teaching through new educational technologies.



“

This Postgraduate Certificate in Neonatal and Nosocomial Infection, contains the most complete and up-to-date scientific program on the market”

Module 1. Infection in the Neonatal Period

- 1.1. Neonatal Infection
 - 1.1.1. Current Obstetric Factors Influencing Neonatal Infection
 - 1.1.2. Causative Agents
- 1.2. Antibiotherapy in Pregnancy
 - 1.2.1. Current Role of Antibiotherapy During Pregnancy
 - 1.2.2. Current Prophylaxis for Group B Streptococcus Infection
- 1.3. Emerging Congenital Infections
 - 1.3.1. Chagas Disease
 - 1.3.2. Zika
- 1.4. Classic Neonatal Infections and Current Epidemiological Changes
 - 1.4.1. Herpes Virus Infections
 - 1.4.2. Rubella
 - 1.4.3. Cytomegalovirus
 - 1.4.4. The Child of a Mother with Tuberculosis
 - 1.4.5. Current Status of Necrotizing Enterocolitis
 - 1.4.6. Toxoplasmosis
- 1.5. Vertical Infection
 - 1.5.1. Current Status of Vertical Infection by Hepatitis B Virus and Its Detection
- 1.6. Neonatal Sepsis
 - 1.6.1. Early-Onset Sepsis
 - 1.6.2. Late-Onset Sepsis





- 1.7. Infections in the Neonatal Intensive Care Unit
 - 1.7.1. Most Frequent Microorganisms
 - 1.7.2. Current Antibiotic Resistance in Neonatology Units
 - 1.7.3. Risk Factors
 - 1.7.4. Neonatal Fungal Infections
- 1.8. Laboratory Studies in Neonatology Units
 - 1.8.1. Etiological Identification
 - 1.8.2. Inflammatory Markers
 - 1.8.3. Multiorgan Markers

Module 2. Nosocomial Infections

- 2.1. Healthcare-Associated Infections (HAIs) in Pediatrics
- 2.2. Infections Associated with Medical Devices
 - 2.2.1. Infections Associated with Intravascular Devices
 - 2.2.2. Infections Associated with Ventilators
- 2.3. Surgical Wound Infection. Current Management



A unique, essential and decisive learning experience to boost your professional development"

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.



“

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.

“

*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.

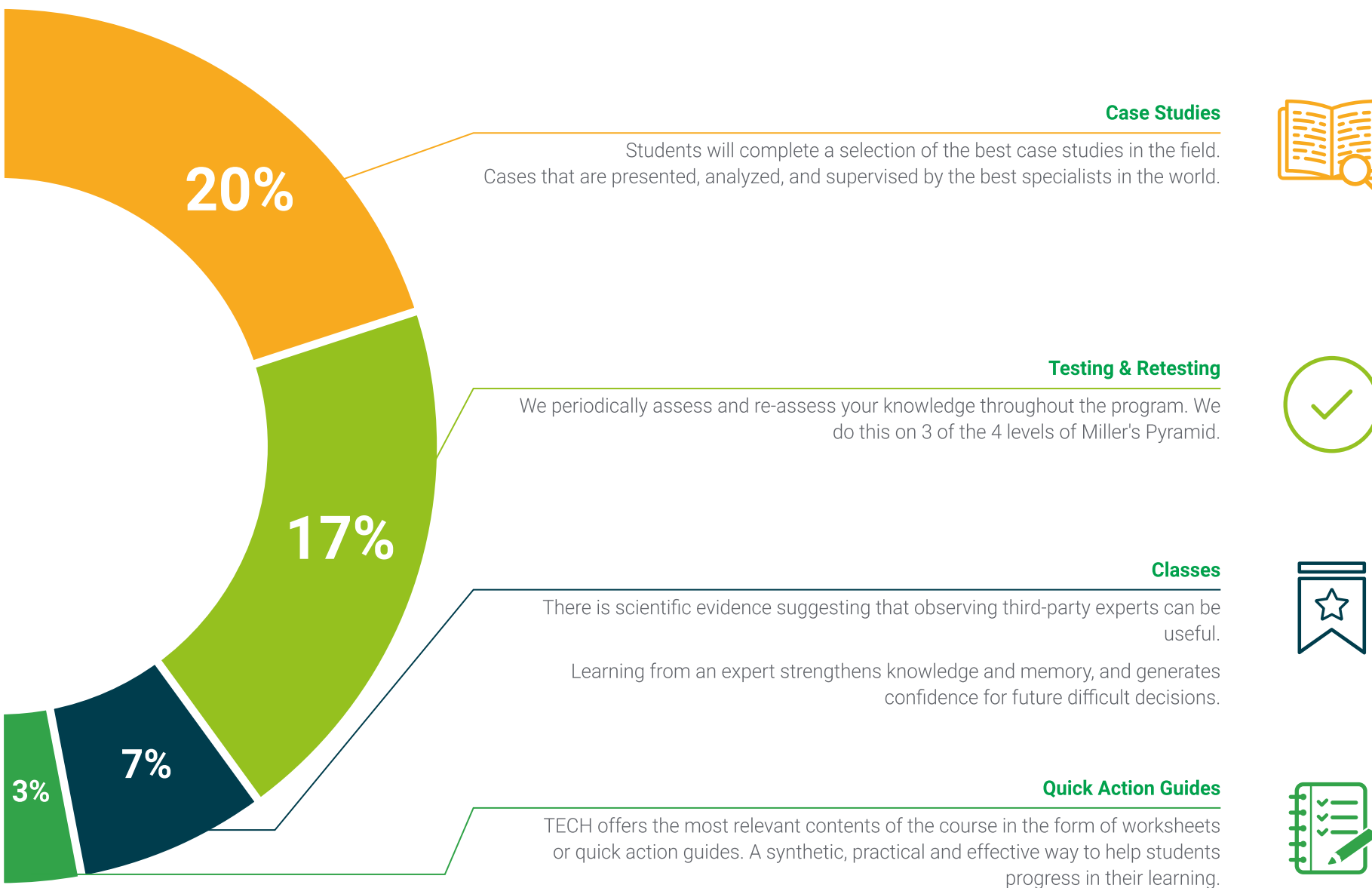
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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



“

*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 and Nosocomial Infection** 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 and Nosocomial Infection**

Modality: **online**

Duration: **6 weeks**

Accreditation: **7 ECTS**





Postgraduate Certificate
Neonatal and Nosocomial
Infection

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 7 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Neonatal and Nosocomial Infection

