

Postgraduate Certificate Neonatal Pulmonology Care for Nursing





Postgraduate Certificate Neonatal Pulmonology Care for Nursing

- » Modality: online
- » Duration: 8 weeks
- » Certificate: TECH Global University
- » Credits: 8 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/nursing/postgraduate-certificate/neonatal-pulmonology-care-nursing

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01

Introduction

Neonatology is one of the most complex areas of pediatrics and requires specialized professionals to be able to care for the newborn patient adequately. For this reason, a constant updating of knowledge is essential for the development of the professional. This program is designed to update the professional in neonatal pulmonology nursing care in a practical way and adapted to their needs.





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With the Postgraduate Certificate in Neonatal Pulmonology Care for Nursing you have the opportunity to update your knowledge in a practical way and without renouncing to the maximum scientific rigor, to incorporate the latest advances in critical nursing care of the newborn"

Neonatology is a discipline in constant evolution, which is highly dependent on technology and new pharmacological treatments. This context makes the updating of procedures in Neonatal Critical Care, both those performed in the Neonatal ICU and in other care settings outside the ICU (emergency units, primary care centers, etc.), of utmost importance to maintain the provision of care based on the latest scientific evidence and to ensure the safety of the baby.

This program includes nursing care of the neonatal patient with pneumonia. In addition, it presents an update on invasive and non-invasive mechanical ventilation procedures and examination of the neonate, NICU admission procedures, and nursing care.

This Postgraduate Certificate in Neonatal Pulmonology Care for Nursing is oriented to facilitate the updating of the most used procedures, in a practical way, to contribute with quality and safety to the recovery of the newborn, improve its prognosis and avoid the sequelae of severe pathology.

This **Neonatal Pulmonology Care for Nursing** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ◆ Clinical cases presented by experts in the different specialties
- ◆ 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.
- ◆ New developments in nursing care and assessment of the critically ill newborn patient
- ◆ Includes an update on invasive and non-invasive mechanical ventilation in the neonate with pneumonia.
- ◆ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- ◆ 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



Improve the care of your newborn patients with the specialization offered by the Postgraduate Certificate in Neonatal Pulmonology Care for Nursing"

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This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Neonatal Pulmonology Care for Nursing, you will obtain a qualification endorsed by TECH Global University”

Its teaching staff includes renowned specialists in the field of neonatology, who bring the experience of their work in the country's leading medical centres to this training.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations.

The design of this program is based on Problem-Based Learning, through which the nursing professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system developed by renowned experts in neonatal critical patient care and with extensive teaching experience.

This course allows learning in simulated environments, which provide immersive education programmed to prepare for real situations.

It includes clinical cases to bring the development of the program as close as possible to the reality of nursing care.



02 Objectives

This Postgraduate Certificate is oriented towards effectively updating nurses' knowledge of the procedures for dealing with a newborn, in order to provide quality care based on the latest scientific evidence that guarantees patient safety.





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This refresher program will provide the skills to act safely in the provision of neonatal care, and will help to grow personally and professionally”



General Objective

- ♦ Allow the nursing professional to gain up-to-date knowledge of the procedures for optimal care of a newborn. This knowledge, alongside a current and evidence-based approach, should enable us to deal with the stabilisation, nursing diagnosis and care of newborns who usually require intensive care

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Make the most of this opportunity and take the step to get up to date on the latest developments in Neonatal Neurological Care for Nursing”





Specific Objectives

- ♦ Categorize neonatal stages, as well as neonatal stages by gestational age and neonatal stages by weight at birth
- ♦ Determine the differences which exist in the pediatric age group between a newborn, a child and an adolescent
- ♦ Revise the anatomical and physiological characteristics of a normal newborn
- ♦ Establish the techniques for measuring the somatometry of a newborn, as well as its morphological and physiological characteristics
- ♦ Assess the complete examination, sequence of physical examination and complete physical examination of the newborn, focusing primarily on the head and neck region, trunk region and extremities region
- ♦ Describe the process of a complete neurological examination on a newborn
- ♦ Evaluate the structure and organization of a Neonatology Service, as well as its location, the necessary equipment and materials; and the necessary human resources
- ♦ Acquire up-to-date knowledge of the arrival of a newborn in the neonatal ward, the admission criteria, its objectives and the necessary nursing interventions
- ♦ Incorporate new techniques in the physical examination of a newborn on its arrival in the neonatal ward
- ♦ Identify the modalities of respiratory assistance
- ♦ Revise the process of lung development, lung embryology and lung anatomy
- ♦ Review the respiratory physiology of a newborn
- ♦ Assess the respiratory problems of a newborn
- ♦ Establish the involvement of nursing staff in treating a newborn with a respiratory disorder
- ♦ Describe the mechanical ventilation and non-invasive ventilation techniques, as well as the nursing care involved in mechanical ventilation and the ventilation modes
- ♦ Incorporate endotracheal intubation and extubation techniques
- ♦ Acquire up-to-date knowledge of the cricothyroidotomy or coniotomy procedures
- ♦ Describe the procedure to perform a tracheotomy

03

Course Management

The program's teaching staff includes renowned nursing professionals, who carry out their clinical practice in leading hospital centers, and who bring the experience of their work to this Postgraduate Diploma. In addition, medical specialists who are members of national and international scientific societies participate in its design and preparation, complementing the teaching staff in an interdisciplinary manner.





Learn from leading professionals the latest advances in neonatal pulmonology"

International Guest Director

Dr. Roxana Diehl is a leading neonatologist of international renown, who has held high positions of great responsibility, such as Deputy Director of the Neonatal Intensive Care Unit (NICU) at the Lyon University Hospital in France. Indeed, this expert has been a key player in the field of Neonatology, with a solid academic training and an exemplary professional career, contributing significantly in the clinical field.

Throughout her career, she has held several relevant positions in prestigious institutions. For example, she has served as a Hospital Physician in Neonatology, also at the University Hospital of Lyon, also excelling during her Fellowship in Neonatology, at the Saint-Étienne Nord Hospital, where she has been recognized for her dedication to intensive neonatal care. In addition to this, she has experience as a pediatrician at the Marie Curie Hospital in Bucharest, Romania.

In addition to her clinical practice, Dr. Roxana Diehl has been an influential figure in the development of policies and protocols within the NICU. As a referring physician in the Prenatal Diagnostic Center and a member of the Ethics Committee, she has played a crucial role in making complex medical decisions and promoting ethical standards in neonatal care. Likewise, her commitment to the continuous improvement of medical care has led her to actively participate in innovative projects, including her role as referring physician for the Mobile Neonatal Unit.

Additionally, her academic merits have been equally impressive, having earned multiple university degrees in specialized areas such as Neonatal Developmental Care, Fetal Medicine and Psychoperinatal Care. These academic achievements, coupled with her clinical experience, have established her as an expert in her field, capable of influencing and improving neonatal practices globally.



Dra. Diehl, Roxana

- Deputy Director of Neonatal Intensive Care, Lyon University Hospital, France
- Hospital Physician in Neonatology, NICU, Lyon University Hospital, France
- Fellowship in Neonatology at the Hôpital Saint-Étienne Nord, France
- Pediatrician at Marie Curie Hospital in Bucharest, Romania
- University Degree in Neonatal Developmental Care from the University of Lyon
- University Degree in Fetal Medicine, University of Lyon, France
- University Degree in Psychoperinatal Care, University of Montpellier, France
- University Degree in Neonatology from the University of Saint-Étienne
- Residency in Pediatrics from the University of Saint-Étienne

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Thanks to TECH, you will be able to learn with the best professionals in the world”

Management



Dr. López Ruiz, María Amparo

- ♦ University Professor in Nursing, Medicine and Pharmacy of the Department of Biomedical Sciences at CEU Cardenal Herrera University.
- ♦ Degree in Medicine and Surgery from the University of Valencia
- ♦ Doctor of Medicine Cum Laude from the CEU - Cardenal Herrera University. Thesis: Analysis of Medication in Pediatric Population Who Attend the Emergency Department
- ♦ University expert in Neonatology: "Care in the Preterm Newborn."
- ♦ Professor of the Online Master's in Emergency Pediatrics for Nursing, CEU Cardenal Herrera University
- ♦ Professor of the Master's Degree in Advanced Aesthetic and Laser Techniques at CEU Cardenal Herrera University and NISA Hospitals Foundation.
- ♦ Postgraduate course coordinator: "First Aid, Cardiopulmonary Resuscitation and Emergency Situations Course". CEU - Cardenal Herrera University, Moncada
- ♦ Erasmus Coordinator for Medicine at the University CEU Cardenal Herrera
- ♦ NESTLÉ Award for Best Oral Communication, XXIV National Congress of the Spanish Society of Outpatient and Primary Care Pediatrics for: "Analysis of the use of Analgesic-Antipyretics in pediatric patients attending an emergency department"



Professors

Dr. López Peña, Rafael

- ◆ Pediatrician, specialist in PICU and NICU
- ◆ Degree in Medicine and Surgery from the University of Valencia
- ◆ Doctor of Medicine "Cum Laude" from the University of Valencia.
- ◆ Postgraduate Diploma in Neonatology

Dr. Rojas Otero, Lucila

- ◆ Pediatrician, specialist in PICU and NICU
- ◆ Degree in Medicine and Surgery from the University of Zaragoza
- ◆ Postgraduate Diploma in Neonatology

Dr. Moreno, Lucrecia

- ◆ Vice Dean of Pharmacy, Cardenal Herrera University CEU
- ◆ Degree in Pharmacy from the University of Valencia
- ◆ Doctor of Medicine "Cum Laude" from the University of Valencia.
- ◆ PhD in Pharmacy from the Cardenal Herrera University CEU.

Dr. Sanahuja Santafé, Maria Amparo

- ◆ Degree in Pharmacy from the University of Valencia
- ◆ University Professor at CEU Cardenal Herrera University
- ◆ Doctor of Medicine "Cum Laude" from the University of Valencia.

Ms. Iranzo Cobo del Cabo, Rosana

- ◆ Professor of the Degree in Nursing at the CEU Cardenal Herrera University.
- ◆ Graduate in Nursing.

Dr. Bendala Tufanisco, Elena

- ◆ Department of Biomedical Sciences of the Faculty of Health Sciences at CEU Cardenal Herrera University.
- ◆ Degree in Medicine and Surgery from the University of Valencia
- ◆ Degree in Biology from the University of Valencia
- ◆ Doctor of Biochemistry and Molecular Biology "Cum Laude" from the University of Valencia.

Ms. Roldán del Amo, Adela

- ◆ Pediatric Nurse in the NICU and PICU in the Emergency Department of the NISA 9 de Octubre Hospital (Valencia).
- ◆ Diploma in Nursing

Ms. Ribes Roldán, Sandra

- ◆ Emergency Nurse at NISA 9 de Octubre Hospital (Valencia)
- ◆ Degree in nursing

Dr. Julve Chover, Natalia

- ◆ Attending Physician. Pediatrics and PICU-Neonatal Service, NISA
- ◆ Degree in Medicine and Surgery from the University of Valencia
- ◆ Doctor of Medicine "Cum Laude" from the University of Valencia.
- ◆ Specialist in Child Neurology
- ◆ Postgraduate Diploma in Neonatology

Ms. Alfaro Ramírez, Concepción

- ◆ Pediatric Nurse at UCIN and UCIP
- ◆ Diploma in Nursing
- ◆ Nursing Supervisor at NISA 9 de Octubre Hospital





Dr. Navarro Marí, Rosa María

- ♦ Pediatrician.
- ♦ Attending Physician. Pediatrics and PICU-Neonatal Service, NISA
- ♦ Degree in Medicine and Surgery from the University of Valencia
- ♦ Postgraduate Diploma in Neonatology

Ms. Dobón García, Ana María

- ♦ Lawyer specializing in Medical and Health Law
- ♦ Degree in Law from the University of Valencia

Ms. Juan Hidalgo, Alicia

- ♦ University professor in the Psychology Faculty, University of Valencia
- ♦ Degree in Psychology from the University of Valencia
- ♦ Clinical Psychology

Mr. Martínez Dolz, Jesús

- ♦ Assistant Nurse in Pediatric and Neonatal Intensive Care Units in the city of Valencia in the following centres : Nisa 9 Octubre Hospital, Virgen del Consuelo Hospital, Clinical University Hospital and La Fe Polytechnic and University Hospital
- ♦ Degree in Nursing
- ♦ Specialist in Neonatal and Pediatric Nursing Care

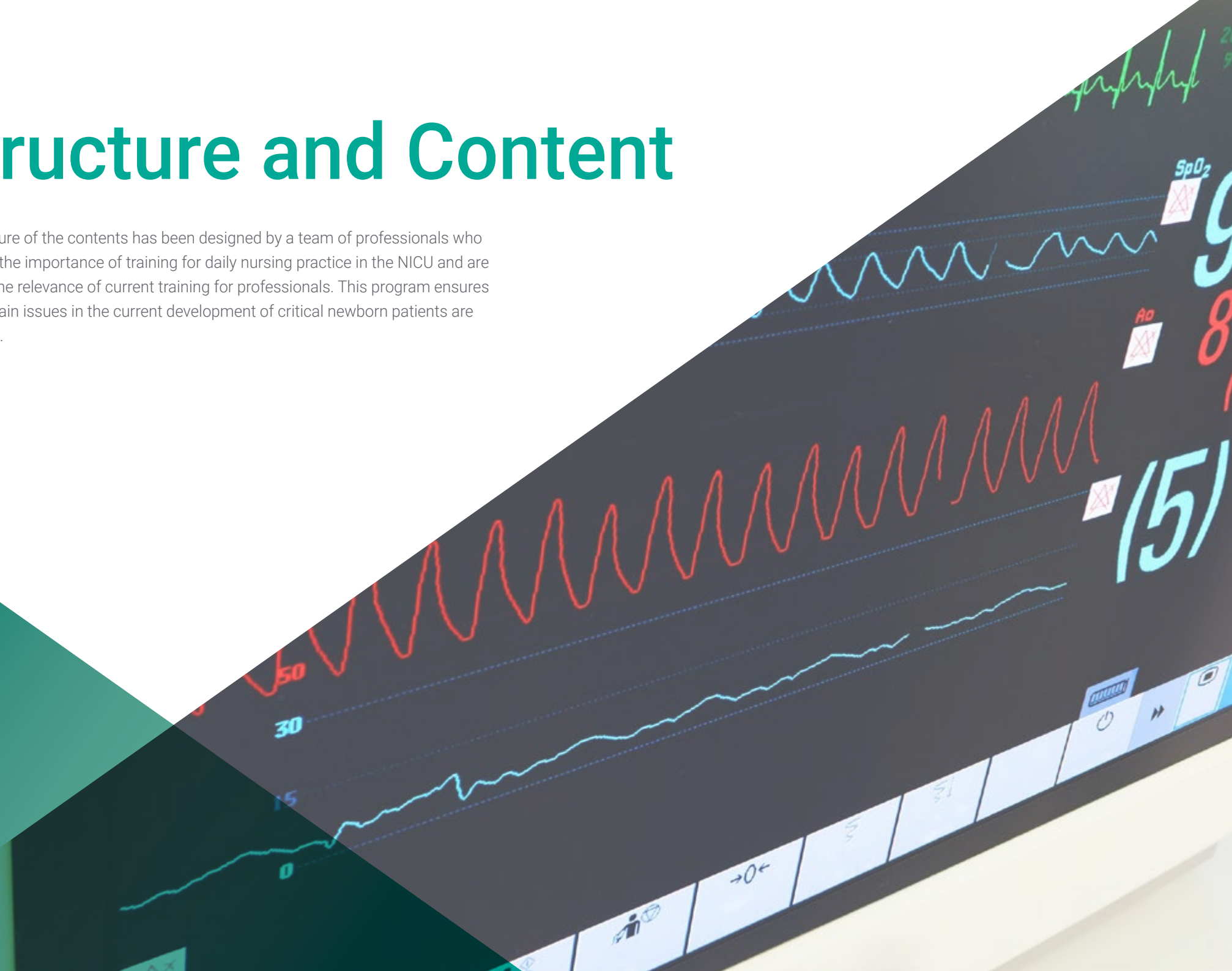
Ms. Silvestre Castelló, Dolores

- ♦ Associate Professor of Nutrition and Bromatology at CEU Cardenal Herrera University.
- ♦ Degree in Chemistry from the University of Valencia
- ♦ Doctor of Chemical Sciences "Cum Laude" from the University of Valencia.
- ♦ Diploma in Food Technology Spanish National Research Council (Consejo Superior Investigaciones Científicas)
- ♦ Postgraduate Degree in Nutrition, Dietetics and Diet Therapy, University of Navarra

04

Structure and Content

The structure of the contents has been designed by a team of professionals who recognise the importance of training for daily nursing practice in the NICU and are aware of the relevance of current training for professionals. This program ensures that the main issues in the current development of critical newborn patients are addressed.





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This Postgraduate Certificate Neonatal Pulmonology Care for Nursing contains the most complete and up-to-date scientific program on the market”

Module 1. Important Aspects of Neonatology

1. 1. Differences between Newborn, Child and Adolescent
1. 2. Neonatal Stages
 1. 2.1. Neonatal Stages at Gestational Age
 1. 2.2. Neonatal Stages for Birthweight
 1. 2.3. Premature Newborns
 1. 2.4. Post-Term Newborn
1. 3. Anatomical and Physiological Characteristics of a Normal Newborn
 1. 3.1. Newborn Somatometry
 1. 3.2. Morphological Characteristics
 1. 3.3. Physiological Characteristics
1. 4. Complete Physical Examination of the Newborn
 1. 4.1. Physical Examination Process
 1. 4.2. General Observation
 1. 4.3. Head and Neck Region
 1. 4.4. Torso Region
 1. 4.5. Limb Region
 1. 4.6. Neurological Examination
1. 5. Structure and Organisation of the Neonatal Service
 1. 5.1. Location of the Neonatology Service
 1. 5.2. Equipment and Materials
 1. 5.3. Human Resources
 1. 5.4. Concept of Neonatal Intensive Care Unit (NICU)
 1. 5.4.1. Calculation and Layout of Crib
 1. 5.4.2. Physical Space in a Neonatal Intensive Care Unit
 1. 5.4.3. Equipment and Material in a Neonatal Intensive Care Unit
 1. 5.4.4. Human Resources in a Neonatal Intensive Care Unit
 1. 5.4.5. Profiles and Roles: "Nursing Team"
 1. 5.4.6. Operating System "Primary Nursing"



Module 2. Respiratory Pathophysiology and Respiratory Disorders in Neonatology.

- 2.1. Pulmonary Development
 - 2.1.1. Pulmonary Embryology
 - 2.1.2. Review of Pulmonary Anatomy
- 2.2. Respiratory Physiology
- 2.3. Newborn Respiratory Problems
- 2.4. Involvement of Nursing Staff in Treating a Newborn with a Respiratory Disorder
- 2.5. Mechanical Ventilation
 - 2.5.1. Nursing Care in Mechanical Ventilation
 - 2.5.2. Forms of Ventilation
 - 2.5.2.1. Non-Invasive Ventilation (NIV)
 - 2.5.2.2. Invasive Ventilation
- 2.6. Types of Materials for Administering Oxygen
- 2.7. Endotracheal Intubation and Extubation
 - 2.7.1. Endotracheal Intubation
 - 2.7.2. Extubation Process
- 2.8. Cricothyroidotomy or Coniotomy
- 2.9. Tracheotomy

“ *A unique, key, and decisive educational experience to boost your professional development* ”

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 Nursing School we use the Case Method

In a given situation, what should a professional do? 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. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing 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. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
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.

The nurse will learn through real cases and by solving 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 we have prepared more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. 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.



In this program you will have access to the best educational material, prepared with you 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 really 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.



Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current nursing procedures and techniques. All of this, first hand, and explained and detailed with precision to contribute to assimilation and a better understanding. And best of all, students can watch them as many times as they want.



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, 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, we will present students with real case developments in which the expert will guide them through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful.
Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



Quick Action Guides

We offer students 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 Pulmonology Care for Nursing 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 Pulmonology Care for Nursing** 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 Pulmonology Care for Nursing**

Modality: **online**

Duration: **8 weeks**

Accreditation: **8 ECTS**



*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University 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



Postgraduate Certificate Neonatal Pulmonology Care for Nursing

- » Modality: online
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- » Credits: 8 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Neonatal Pulmonology Care for Nursing