



## Postgraduate Certificate

Newborn General and Surgical Care for Nurses

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/nursing/postgraduate-certificate/newborn-general-surgical-care-nurses

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## tech 06 | Introduction

Neonatology is a constantly evolving discipline, 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...), of paramount importance to maintain the provision of care based on the latest scientific evidence and to ensure the safety of the baby.

This program includes general and surgical nursing care of the neonatal patient. In addition, it presents an update on nursing procedures for dermatologic changes, as well as NICU admission procedures and nursing care.

This course of Newborn General and Surgical Care for Nurses 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 Postgraduate Certificate in Newborn General and Surgical Care for Nurses contains the most complete and up to date scientific program on the market. The most important features of the course are:

- Development of clinical cases presented by experts in the different specialties. The
  graphic, schematic, and eminently practical contents with which they are created provide
  scientific and practical information on the disciplines that are essential for professional.
- New developments in general and surgical nursing care and assessment of the newborn patient.
- 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



## Introduction | 07 tech



This course may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Newborn General and Surgical Care for Nurses, you will obtain a Postgraduate Certificate from TECH Technological University"

Nurses, you will obtain a Postgraduate
te from TECH Technological University"

It includes clinical cases to bring the

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.

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

The design of this program is based on Problem-Based Learning, by means of which the nursing professional must try to solve the different situations of common practice that arise throughout the course. 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.

The course allows training in simulated environments, which provide immersive learning programmed to train for real situations.







## tech 10 | Objectives

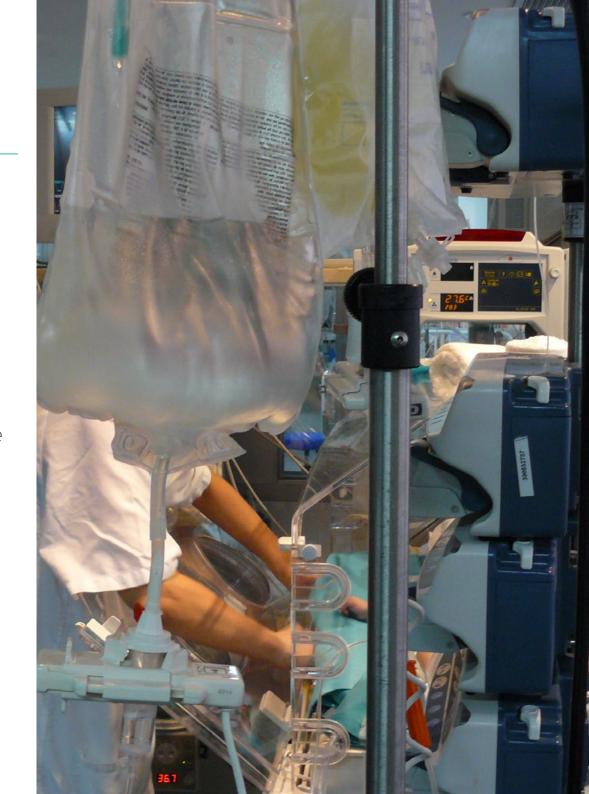


## **General Objective**

• Update the professional in general and surgical nursing care in the neonatal patient, and interventions to the newborn in the neonatal intensive care unit.



Make the most of the opportunity and take the step to get up to date on the latest developments in Newborn General and Surgical Care for Nurses"





#### **Specific Objectives**

- Update nursing care oriented to the satisfaction of the needs derived from the newborn's health problems and the prevention of complications, guaranteeing a safe and quality practice.
- Analyze the importance of providing comprehensive care to the newborn from an ethical and legal perspective.
- Update the procedures, diagnostic tests and treatments derived from the different health problems in the newborn taking into account the different levels of care.
- Update the integral care of the neonate with a surgical process to help in the optimal restoration of health and identify, intervene and/or refer for possible complications.
- Review the indication of medical devices and/or drugs, assessing the expected benefits and associated risks.
- Develop the ability to apply theoretical knowledge in daily practice.
- Identify the differences between the neonate, child and adolescent (pediatric ages).
- Differentiate between neonatal stages, as well as neonatal stages by gestational age and neonatal stages by birth weight.
- Describe the anatomical and physiological characteristics of the normal newborn infant.
- Explain the somatometry of the 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.
- Update the procedures for performing the complete neurological examination.
- Evaluate the structure and organization of the neonatology service, as well as its location, the necessary equipment and materials, and the necessary human resources.
- Describe the Neonatal Intensive Care Unit (NICU).

- Calculate the layout of the cribs, the physical space needs, the equipment and materials, and the human resources required.
- Define the profiles and positions of the "nursing team" as well as its operating system: "Primary Nursing" (Main Nurse)
- Update on nursing care in neonatal surgery: general preoperative and postoperative care.
- Update nursing procedures in the most frequent types of surgery in the newborn: choanal atresia, esophageal atresia with tracheoesophageal fistula, diaphragmatic hernia, abdominal wall defects, necrotizing enteritis and imperforate anus.
- Update nursing interventions in neonatal preoperative and postoperative care.
- Revise the general aspects of neonatal dermatology; its embryology and histology.
- Differentiate newborn skin care patterns
- Differentiate transient benign skin lesions: erythema toxicum neonatorum, transient neonatal pustular melanosis, mili, miliaria, neonatal acne, subcutaneous fat necrosis, mongolian or Baltz spot, nevustelangiectatic or maternal nevi.
- Assess the most frequent skin infections in the newborn: oral candidiasis (thrush), neonatal cutaneous candidiasis, impetigo neonatorum, staphylococcal scalded skin syndrome and neonatal chickenpox.





## tech 14 | Course Management

#### Management



#### Dr. López Ruiz, María Amparo

- Degree in Medicine and Surgery from the University of Valencia
- Doctor of Medicine "Cum Laude" from the University CEU Cardenal Herrera with the Thesis: "Analysis of medication in pediatric population attending an Emergency Department"
- Postgraduate in Neonatology: "Care in the Preterm Newborn"
- University Professor of Nursing, Medicine and Pharmacy. Faculty of Biomedical Sciences. CEU Cardenal Herrera University Moncada (Valencia)
- Professor of the online Master in Pediatric Emergencies for Nurses. CEU Cardenal Herrera University -- Health Class
- Professor of the Professional Master's Degree in Advanced Esthetic and Laser Techniques. CEU Cardenal Herrera University Moncada (Valencia) and NISA Hospitals Foundation (Valencia)
- Postgraduate course director: "Diploma in neonatal nursing and neonatal intensive care". CEU Cardenal Herrera University Moncada (Valencia) and NISA Hospitals Foundation (Valencia)
- Postgraduate course coordinator: "First Aid, Cardiopulmonary Resuscitation and Emergency Situations Course". CEU Cardenal Herrera University Moncada (Valencia)
- Erasmus coordinator for Medicine. CEU Cardenal Herrera University
- Personal tutor for international medical students. CEU Cardenal Herrera University Moncada (Valencia)
- Entrepreneurship tutor for Medicine. CEU Cardenal Herrera University Moncada (Valencia)
- Practice coordinator for Medicine. CEU Cardenal Herrera University Moncada (Valencia)
- Coordinator for Medicine. CEU Cardenal Herrera University Moncada (Valencia)
- NESTLÉ Award for Best Oral Communication, XXIV National Congress of the Spanish Society of Outpatient and Primary Care Pediatrics.

#### **Professors**

#### Alfaro Ramírez, Concepción

- Diploma in Nursing.
- Pediatric nurse. NICU and PICU.
- \* Nursing Supervisor. 9 de Octubre NISA Hospital. Valencia

#### Dr. Bendala Tufanisco, Elena

- Degree in Medicine and Surgery
- Degree in Biology
- Doctor in Biochemistry and Molecular Biology from the University of Valencia.
- Professor, Department of Biomedical Sciences, Faculty of Health Sciences, University Cardenal Herrera-CEU.

#### Dobón García, Ana María

- Law Degree
- Lawyer specializing in Medical and Health Law

#### Iranzo Cobo del Cabo, Rosana

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

#### Juan Hidalgo, Alicia

- Degree in Psychology
- Clinical Psychologist
- Professor, Faculty of Psychology, University of Valencia.



## tech 16 | Course Management

#### Dr. Julve Chover, Natalia

- Degree in Medicine and Surgery
- Doctor of Medicine, University of Valencia
- Specialist in Child Neurology
- Associate Doctor of the Pediatrics Service and PICU-Neonatal. NISA.
- Postgraduate in Neonatology

#### Dr. López Peña, Rafael

- Degree in Medicine and Surgery
- PhD in Medicine from the University of Valencia
- Medical Specialist in Pediatrics, Subspecialist in PICU and NICU.
- Postgraduate in Neonatology

#### Dr. Moreno, Lucrecia

- Degree in Pharmacy
- Vice-Dean of Pharmacy, University Cardenal Herrera CEU.
- Doctor in Pharmacy from the University of Valencia.
- Professor at Cardenal Herrera CEU University.

#### Dr. Navarro Marí, Rosa María

- Degree in Medicine and Surgery
- Pediatrician.
- \* Associate Doctor of the Pediatrics Service and PICU-Neonatal. NISA.
- Postgraduate in Neonatology





## Course Management 17 tech

#### Ribes Roldán, Sandra

- Degree in Nursing
- Nurse in Accident and Emergency department.
- 9 de Octubre NISA Hospital. Valencia, Spain

#### Dr. Rojas Otero, Lucila

- Degree in Medicine and Surgery
- Medical Specialist in Pediatrics, Subspecialist in PICU and NICU.
- Postgraduate in Neonatology

#### Roldán del Amo, Adela

- Diploma in Nursing.
- Pediatric nurse. NICU and PICU.
- 9 de Octubre NISA Hospital. Valencia, Spain

#### Dr. Sanahuja Santafé, Ma Amparo

- Degree in Pharmacy
- Professor at Cardenal Herrera CEU University.
- Doctor in Pharmacy from the University of Valencia.

#### Silvestre Castelló, Dolores

- Graduate in Chemistry
- \* Associate Professor of Nutrition and Bromatology at the University Cardenal Herrera CEU.
- Doctor in Chemical Sciences from the University of Valencia.
- Diploma in Food Technology Spanish National Research Council (Superior Council for Scientific Research).
- Postgraduate Degree in Nutrition, Dietetics and Diet Therapy from the University of Navarra.





## tech 20 | Structure and Content

#### Module 1. Important Aspects of Neonatology

- 1.1. Differences between Neonate, Child and Adolescent
- 1.2. Neonatal Stages
  - 1.2.1. Neonatal States by Gestational Age
  - 1.2.2. Neonatal States by Birth Weight
  - 1.2.3. Preterm Newborn
  - 1.2.4. Postterm Newborn
- 1.3. Anatomical and Physiological Characteristics of the Normal Newborn
  - 1.3.1. Newborn Somatometry
  - 1.3.2. Morphological Characteristics
  - 1.3.3. Physiological Characteristics
- 1.4. Complete Newborn Physical Exam and Examination
  - 1.4.1. Physical Examination Sequence
  - 1.4.2. General Observation
  - 1.4.3. Head and Neck Region
  - 1.4.4. Trunk Region
  - 1.4.5. Extremity Region
  - 1.4.6. Neurological Examination
- 1.5. Structure and Organization of a Neonatology Service
  - 1.5.1. Location of the Neonatology Service
  - 1.5.2. Equipment and Material
  - 1.5.3. Human Resources
  - 1.5.4. Concept of Neonatal Intensive Care Unit (NICU)
    - 1.5.4.1. Calculation and Layout of Cribs
    - 1.5.4.2. Physical Space in the Neonatal Intensive Care Unit
    - 1.5.4.3. Equipment and Material in Neonatal Intensive Care Unit
    - 1.5.4.4. Human Resources in the Neonatal Intensive Care Unit
    - 1.5.4.5. Profiles and Roles: "Nursing Team"
    - 1.5.4.6. Operating System "Primary Nursing" (Main Nurse)



#### Module 2. General Skin Care in Neonatology

- 2.1. General Information on Neonatal Dermatology
  - 2.1.1. Embryological Reminder
  - 2.1.2. Histological Reminder
- 2.2. Newborn Skin Care
- 2.3. Transient Benign Skin Lesions
  - 2.3.1. Erythema Toxicum Neonatorum
  - 2.3.2. Transient Neonatal Pustular Pustular Melanosis
  - 2.3.3. Milia
  - 2.3.4. Miliaria
  - 2.3.5. Neonatal Acne
  - 2.3.6. Subcutaneous Fat Necrosis
  - 2.3.7. Mongolian or Baltz's Stain
  - 2.3.8. Nevustelangiectatic or Maternal Nevi
  - 2.3.9. Harlequin Coloring
- 2.4. Infections in the Newborn
  - 2.4.1. Oral Candidiasis (Thrush)
  - 2.4.2. Neonatal Cutaneous Candidiasis
  - 2.4.3. Impétigo Neonatorum
  - 2.4.4. Staphylococcal Scalded Skin Syndrome
  - 2 4 5 Varicella Nonatal

#### Module 3. Neonatal Preoperative and Postoperative Care.

- 3.1. Nursing Care in Neonatal Surgery
  - 3.1.1. General Preoperative Care
  - 3.1.2. General Postoperative Care
- 3.2. Most Frequent Surgeries
  - 3.2.1. Choanal Atresia
  - 3.2.2. Esophageal Atresia with Tracheoesophageal Fistula
  - 3.2.3. Diaphragmatic Hernia
  - 3.2.4. Abdominal Wall Defects
  - 3.2.5. Necrotizing Enteritis
  - 3.2.6. Imperforate Anus
- 3.3. Nursing Interventions in Preoperative and Postoperative Neonatal Care



A unique, key, and decisive training experience to boost your professional development"



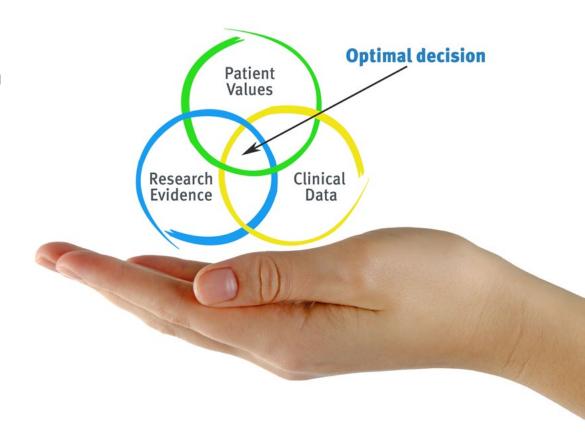


## tech 24 | Methodology

#### At TECH Nursing School we use the Case Method

In a given clinical situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, 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.



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:

- 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 university program.





#### **Re-learning Methodology**

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

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.



### Methodology | 27 tech

At the forefront of world teaching, the Re-learning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best Spanish-speaking online university (Columbia University).

With this methodology we have trained more than 175,000 nurses with unprecedented success, in all specialties regardless of from the workload. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our 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**

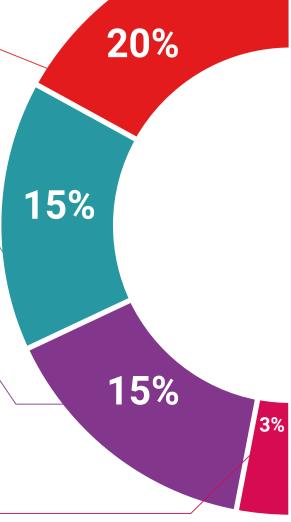
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current nursing procedures and techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you 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 unique multimedia content presentation training system 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 training.

#### **Expert-led case studies and case analysis**

Effective learning ought to be contextual. For this reason, we will present you with real case developments in which the expert will guide you through the development of attention and the resolution of different situations: a clear and direct way to achieve the highest degree of understanding.

#### **Testing & Re-Testing**



We periodically evaluate and re-evaluate 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



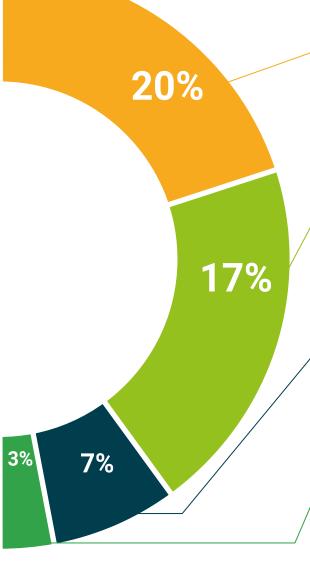
There is scientific evidence on the usefulness of third-party expert observation.

Learning from an expert strengthens knowledge and memory, and generates confidence in our difficult future decisions.

#### **Quick Action Guides**



We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







## tech 32 | Certificate

This **Postgraduate Certificate in Newborn General and Surgical Care for Nurses** contains the most complete and up-to-date 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 certificate 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 Newborn General and Surgical Care for Nurses
Official N° of Hours: 200 h.



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

health confidence people

education information tutors
guarantee accreditation teaching
institutions technology learning



# Postgraduate Certificate Newborn General and Surgical Care for Nurses

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