

# Postgraduate Diploma Pediatric Critical Care for Nursing





## Postgraduate Diploma Pediatric Critical Care for Nursing

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 16 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-pediatric-critical-care-nursing](http://www.techtute.com/us/nursing/postgraduate-diploma/postgraduate-diploma-pediatric-critical-care-nursing)

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# 01

# Introduction

Pediatric Critical Care for Nursing requires specialized care to successfully control and stabilize hemodynamic activity and other systems that may be compromised in an emergency situation. This requires specific professional development to ensure the success and survival of the child patient. This program is designed to update nursing professionals in a practical way.





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*It is necessary to educate nursing professionals to acquire the knowledge, skills and attitudes that will enable them to approach and manage the critically ill pediatric patient in all its dimensions"*



This program is designed to enable professionals to review and approach the different techniques that allow them to identify critical patients, apply the techniques learned, as well as substitute the respiratory and circulatory functions in cases where the patient is unable to perform them by themselves or apply cardiopulmonary resuscitation techniques if necessary.

In addition, it includes the most relevant aspects about pediatric emergency department organization, the triage process of patients according to their severity, their transport, the need for CPR maneuvers, airway management, as well as all the necessary techniques (assisted ventilation, drug administration, etc.) for patient stabilization, considering their transfer to the pediatric intensive care unit if necessary.

The Postgraduate Diploma in Pediatric Critical Care for Nursing is oriented to enable nursing professionals to incorporate the advances in the field, as well as to review the most important aspects of emergency care in critical pediatric patients for nursing and their care.

This **Postgraduate Diploma in Pediatric Critical Care for Nursing** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ 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
- ♦ Diagnostic and therapeutic novelties on child care. It includes the most prevalent pathologies in pediatric intensive care
- ♦ Specific sections in each module on nursing techniques and procedures according to the child's age: peripheral and central venous access, drug administration routes, intraosseous puncture, capnography and pulse oximetry, rapid intubation sequence, as well as basic airway management, analgesia and sedation in children
- ♦ Video lessons on the different pathologies and their management
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Includes theoretical lectures, questions to the expert, discussion forums on controversial issues and individual reflection papers
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Maintaining and improving Pediatric Critical Care for Nursing is essential in order to improve prognosis and reduce sequels and complications"*

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*This Postgraduate Diploma is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Pediatric Critical Care for Nursing, you will obtain a certificate issued by TECH Global University"*

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

*Don't miss the opportunity to update your knowledge in Pediatric Critical Care to increase the quality of care.*

Its teaching staff includes leading nursing professionals, who bring to their work experience to this program, as well as other professionals who specialize in the various fields of emergency care.

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

This program is designed around Problem-Based Learning, whereby nursing professionals must try to solve the different professional practice situations that arise throughout the program. This will be done with the help of an innovative interactive video system developed by renowned experts in nursing care for Pediatric Critical Care for Nursing with extensive teaching experience.



02

# Objectives

This program is oriented towards a review of the main aspects of critically ill pediatric patient management, based on scientific evidence and the experience of recognized professionals in the field of pediatrics.





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*This program will give you a sense of confidence when taking decisions and providing care, which will help you grow both personally and professionally”*



## General Objective

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- Provide nursing professionals with up to date information on the latest protocols, as well as the different nursing techniques and procedures in pediatric cardiopulmonary resuscitation, resuscitation techniques and pediatric critical patient assessment
- Develop nursing professionals' skills to assess and manage critical situations in the pediatric emergency setting
- Provide students with the possibility of developing the correct patient care in critical situations, establishing an adequate nurse-patient-family relationship, facing the situation in an ethical, legal and responsible manner



*Make the most of this opportunity and take the leap to get up to date on the latest developments in Pediatric Emergencies for Nursing”*





## Specific Objectives

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### **Module 1. Health Care Organization for Common Pediatric Emergencies**

- ◆ Describe the procedures that nurses can perform to safely resolve potentially dangerous situations

### **Module 2. Common Advanced Pediatric and Neonatal Cardiovascular Support**

- ◆ Identify newborn patients and heart condition
- ◆ Know how to provide first aid in the event of a complication in pediatric patients
- ◆ Develop an action plan for cardiovascular emergencies

### **Module 3. Invasive Techniques in Common Critically Ill Pediatric Patients**

- ◆ Define a guide with the first aid and treat them in the most prudent way possible
- ◆ Perform emergency medical examinations
- ◆ Identify the main invasive techniques

### **Module 4. Cardiological Emergencies**

- ◆ Perform a quick general check of the patient's condition
- ◆ Identify the implements involved in cardiac processes
- ◆ Know the steps to follow in an emergency of this magnitude



03

# Course Management

The program includes expert nurses and pediatricians in the field of pediatric emergency and critical care and leading pediatricians in the field of pediatric emergency and intensive care, who bring their work experience to this program. Additionally other specialists of recognized prestige have participated in creating the contents, complementing the program in an interdisciplinary manner.





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*Learn the latest advances in Pediatric Critical Care for Nursing from leading professionals”*



## Management



### Ms. Roldán del Amo, Adela

- ◆ University Diploma in Nursing. University School of Nursing Nuestra Señora de los Desamparados of Valencia
- ◆ Specialist Nurse in Pediatric Nursing
- ◆ Pediatric Nurse in the Pediatric Hospitalization Unit 9 de Octubre NISA Hospital
- ◆ University Professor in: Diploma in Neonatal Nursing and Neonatal Intensive Care CEU – Cardenal Herrera University Moncada. Valencia
- ◆ University Professor in: First Aid, Cardiopulmonary Resuscitation and Emergency Situations CEU- ardenal Herrera University. Moncada. Valencia

## Professors

### Mr. Mora Rivero, Jorge

- ◆ Degree in Nursing from the University of Alicante
- ◆ Master's Degree in Nursing Sciences
- ◆ Emergency Nurse at the General University Hospital of Elche( Alicante, Spain)  
Clinical Practice Tutor
- ◆ Professional teaching experience in University Masters and Postgraduate Courses
- ◆ Postgraduate Diploma in Primary Care Emergencies
- ◆ Degree in Emergency Medical Transportation (SAMU)

### Ms. Alfaro Ramírez, Concepción

- ◆ Diploma in Nursing. Catholic University of Valencia (UCV)
- ◆ Specialist Nurse in Pediatric Nursing
- ◆ Pediatric Emergency Services Supervisor 9 de Octubre Hospital NISA Valencia
- ◆ University Professor in: Postgraduate Certificate in Neonatal Nursing and Neonatal Intensive Care CEU– Cardenal Herrera University. Moncada. Valencia
- ◆ Professor in Child Nutrition Course at Nisa Hospitals Foundation

**Ms. Antón García, Gema**

- ♦ Nurse of the Obstetrics Service at the General University Hospital of Elche
- ♦ Clinical practice tutor of Obstetrics at the General University Hospital of Elche
- ♦ University Diploma in Nursing (DUE) at the University School of Nursing. Alicante, Spain
- ♦ Professional experience in childbirth and neonatology

**Ms. Balboa Navarro, Ana**

- ♦ Emergency Nurse the General Hospital of Elche( Alicante)
- ♦ Specialist Nurse in Pediatric Nursing
- ♦ Professional Master's Degree in Nursing Sciences
- ♦ Instructor of Basic Life Support and Advanced Cardiovascular Life Support at the Spanish Society of Emergency Medicine and American Heart Association (SEMES-AHA)
- ♦ Pediatric and neonatal CPR instructor with the Spanish Group of Pediatric and Neonatal CPR
- ♦ Advanced Provider of "International Trauma Life Support" of SEMES-ITLS
- ♦ APLS credential (American Academy of Pediatrics and American College of Emergency Physicians)
- ♦ Professional teaching experience in University Masters and Postgraduate Courses

**Ms. López Ruiz, María Amparo**

- ♦ Degree in Medicine and Surgery. University of Valencia
- ♦ Pediatric Services 9 de Octubre NISA Hospital. Valencia
- ♦ Postgraduate course director: Diploma in Neonatal Nursing and Neonatal Intensive Care at CEU Cardenal Herrera– Moncada University (Valencia) and NISA Hospitals Foundation (Valencia)

**Ms. Lospitao Gómez, Sara**

- ♦ Nurse, Intensive Care Medicine Department, Fuenlabrada University Hospital, Madrid
- ♦ Cardiac Surgery Post-Surgical Intensive Care Unit (PCU) 12 de Octubre Hospital
- ♦ Coronary Intensive Care Unit 12 de Octubre Hospital
- ♦ Professional Master's Degree in Critical Care Rey Juan Carlos University I
- ♦ Collaborating researcher in the multicenter study entitled



*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 pediatric nursing skills, aware of the relevance of current knowledge in order to provide quality care to pediatric patients and committed to teaching through new educational technologies.



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*This Postgraduate Diploma in Pediatric Critical Care for Nursing is the most complete and up-to-date scientific program on the market”*



### Module 1. Health Care Organization for Common Pediatric Emergencies

- 1.1. Equipment in the Pediatric Emergency Department (PED)
  - 1.1.1. Differential Characteristics of PEDs
  - 1.1.2. Infrastructure, Staffing
  - 1.1.3. Material
- 1.2. Triage in Pediatrics
  - 1.2.1. Definition
  - 1.2.2. Classification Systems
- 1.3. Transport of Critical Pediatric Patient. In-hospital Transfer, Out-of-Hospital Transfer and ISOBAR
- 1.4. Neonatal and Pediatric Transportation

### Module 2. Common Advanced Pediatric and Neonatal Cardiovascular Support

- 2.1. Apparently Lethal Syndromes
  - 2.1.1. Sudden Infant Death
  - 2.1.2. Treatment
  - 2.1.3. Home Monitoring
- 2.2. Recognition and Management of Critically Ill Children
  - 2.2.1. Epidemiology, Etiology and Prevention of CRP in Childhood
  - 2.2.2. Pediatric Assessment Triangle (PAT) and its Utility
  - 2.2.3. Pediatric ABCDE Evaluation
- 2.3. Basic Pediatric Cardiopulmonary Resuscitation
- 2.4. Advanced Pediatric Cardiopulmonary Resuscitation Advanced Airway Management
- 2.5. Basic Concepts of Mechanical Ventilation
- 2.6. Infusion Routes and Drugs
- 2.7. Pediatric AVS Algorithms and Treatment of Arrhythmias
- 2.8. Neonatal Resuscitation
- 2.9. Stabilization, Post-Resuscitation and Neonatal Transportation





**Module 3. Invasive Techniques in the Common Critically Ill Pediatric Patient**

- 3.1. Peripheral and Central Vein Access
  - 3.1.1. Peripheral Route
  - 3.1.2. Central Route
- 3.2. Intraosseous Puncture
- 3.3. Capnography, Pulse Oximetry
- 3.4. Oxygen Therapy
- 3.5. Analgesia and Sedation
  - 3.5.1. Approaching Pain
  - 3.5.2. Procedure
  - 3.5.3. Reference Drugs in Analgesia and Sedation
- 3.6. Rapid Intubation Sequence

**Module 4. Cardiologic Emergencies**

- 4.1. Arrhythmias and Syncope
  - 4.1.1. Bradyarrhythmias Diagnosis and Treatment
  - 4.1.2. Tachyarrhythmias Diagnosis and Treatment
- 4.2. Congenital Heart Disease
  - 4.2.1. Cyanotic Congenital Heart Disease
  - 4.2.2. Non-Cyanotic Congenital Heart Disease
  - 4.2.3. Diagnostic Approach
  - 4.2.4. Treatment
- 4.3. Hypertensive Crisis
  - 4.3.1. Diagnostic Guidance for Hypertension in Children and Adolescents
  - 4.3.2. Therapeutic Guidance for Hypertension in Children and Adolescents
- 4.4. Heart Failure
  - 4.4.1. Etiology
  - 4.4.2. Diagnosis
  - 4.4.3. Treatment. Mechanical Ventricular Assistance Techniques Extracorporeal Membrane Oxygenation (ECMO)
- 4.5. Quick Reading of an ECG
- 4.6. Management of Tachyarrhythmias and Bradyarrhythmias: Electrical Cardioversion and Transcutaneous Pacing
- 4.7. Management of Defibrillable Arrhythmias: Defibrillation

# 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. Gervas, 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

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of 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.*

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 trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is really specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### Nursing Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you want.



### Interactive Summaries

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

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



### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





**Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



**Testing & Retesting**

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



**Classes**

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



**Quick Action Guides**

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.





# 06 Certificate

The Postgraduate Diploma in Pediatric Critical Care for Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Pediatric Critical 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.

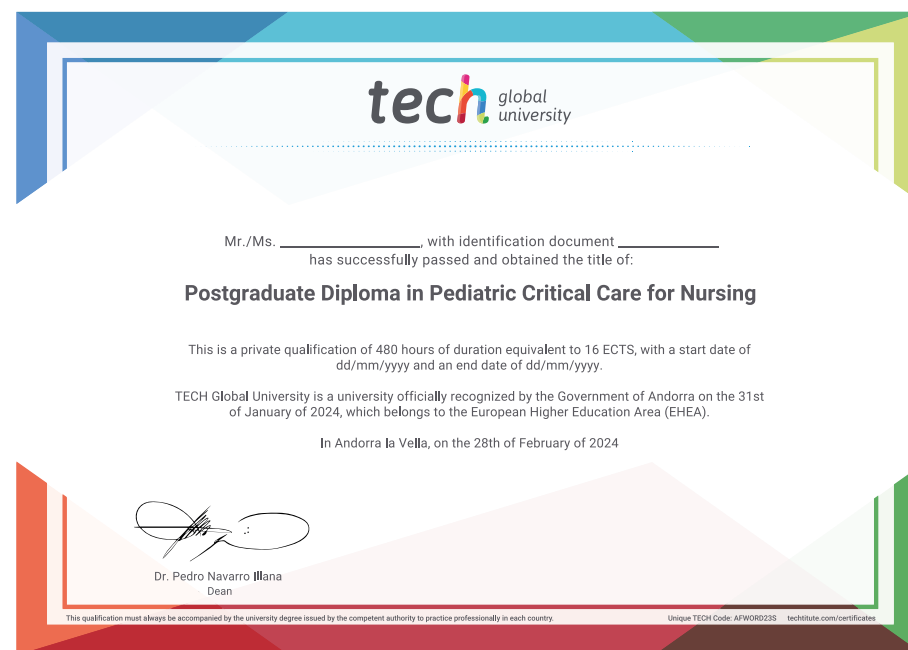
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Pediatric Critical Care for Nursing**

Modality: **online**

Duration: **6 months**

Accreditation: **16 ECTS**



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

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

**tech** global  
university

**Postgraduate Diploma**  
Pediatric Critical Care  
for Nursing

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