

# Postgraduate Certificate

## Pediatric Cardiac Emergencies for Nursing





## Postgraduate Certificate Pediatric Cardiac Emergencies for Nursing

- » Modality: online
- » Duration: 8 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/nursing/postgraduate-certificate/pediatric-cardiac-emergencies-nursing](http://www.techtute.com/us/nursing/postgraduate-certificate/pediatric-cardiac-emergencies-nursing)

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# 01

# Introduction

This Postgraduate Certificate contains the latest advances in nursing procedures for cardiac emergencies in the critically ill pediatric patient, with the aim of guaranteeing good professional practice and improving the prognosis of the critically ill child. Through this program you will be able to update your knowledge in a practical way, 100% online, based on the latest scientific evidence and adapting the learning process to your needs.

*Good nursing practice in pediatric patients with cardiac emergencies improves survival and comorbidity*





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*This Postgraduate Certificate addresses the main advances in nursing interventions in pediatric patients with emergency cardiac pathology to improve survival and comorbidity. Learn to identify the critical situation in the pediatric patient and improve the prognosis of the critically ill child"*

The pediatric patient admitted to the emergency department for cardiac pathology requires specialized and quality care. Specifically, cardiovascular disease in children is one of the most lethal pathologies in the emergency department, so that rigorous and precise nursing professional action is essential to improve the child's prognosis.

Undoubtedly, it is necessary for the nursing professional to be constantly updated in the knowledge of pediatric heart disease and the management of the child in emergency situations, in order to provide appropriate care and interventions, always based on the latest scientific evidence.

The Postgraduate Certificate includes the latest trends on the organization of a pediatric emergency department, the process of triage of patients according to their severity, and the need for the management of specific techniques to intervene in the various life-threatening cardiac emergencies in pediatric patients.

The **Postgraduate Certificate in Pediatric Cardiac Emergencies for Nursing** contains the most complete and updated scientific program on the market. The most important features of the program include:

- ◆ Clinical cases presented by experts in the different specialties. The graphic, schematic, and eminently practical contents with which they are created, provide scientific and healthcare information on those medical disciplines that are essential to professional practice.
- ◆ Update on the techniques performed in the pediatric cardiac patient by the nursing professional.
- ◆ 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



*Update your knowledge through the Postgraduate Certificate on Pediatric Cardiac Emergencies for Nursing in a practical way and adapted to your needs"*

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*This Postgraduate Certificate may be the best investment you can make when choosing an updated program for two reasons: in addition to updating your knowledge in Pediatric Cardiac Emergencies for Nursing you will obtain a Postgraduate Certificate from TECH - Technological University”*

Forming part of the teaching staff is a group of professionals in the world of pediatric emergencies who bring to this course their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

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 immersive training program to train in real situations.

The design of the program is based on Problem-Based Learning, by means of which the nursing professional must try to solve the different professional practice situations that arise throughout the program. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of pediatric infections with extensive teaching experience.

*This program offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations*

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



02

# Objectives

The main objective of the program is the development of theoretical and practical learning, so that the nursing professional can master in a practical and rigorous way the invasive techniques in the critical pediatric patient.







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*This updated program will provide you with the skills to act safely in the performance of nursing practice, which will help you grow personally and professionally”*



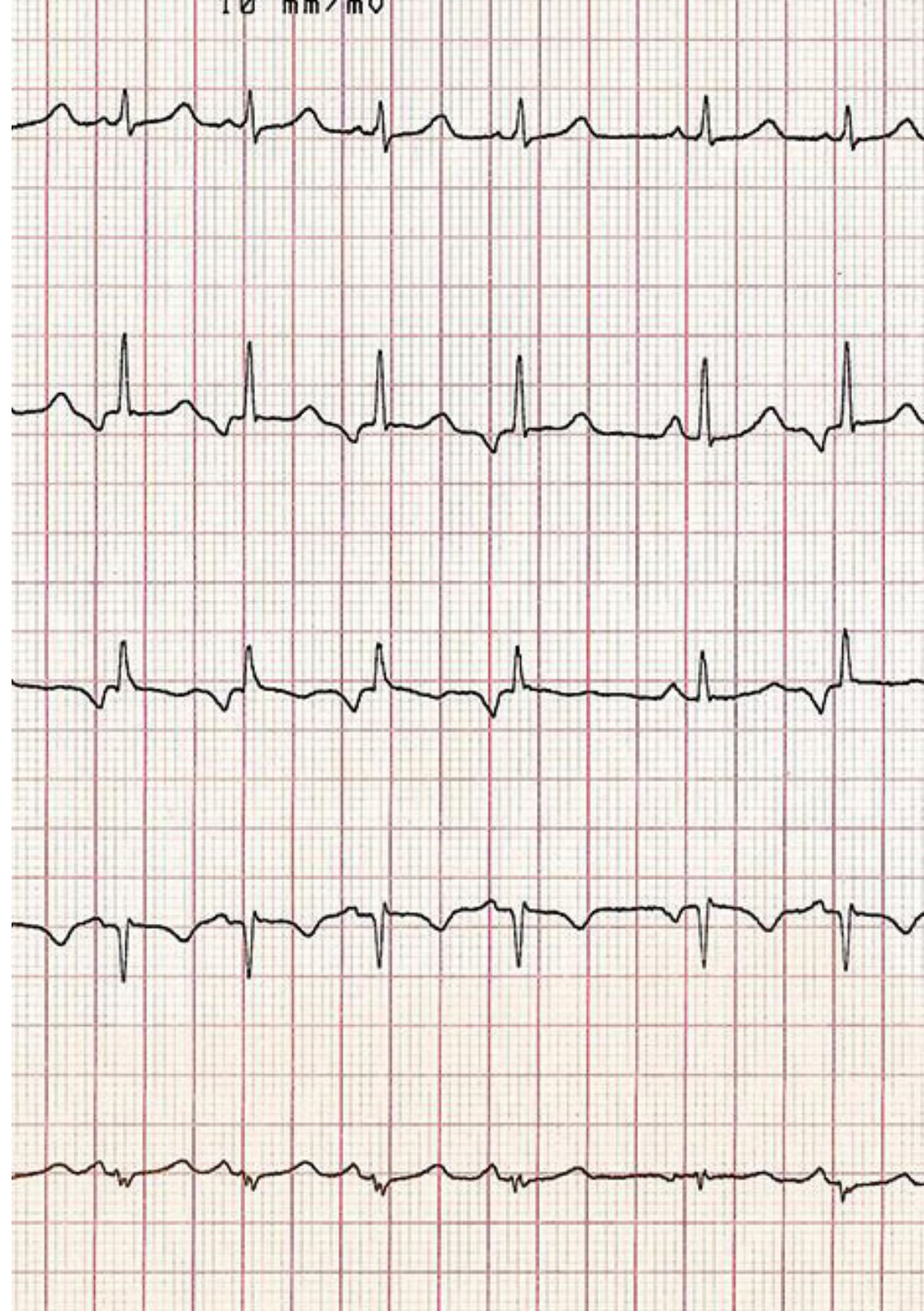
## General Objective

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- Update the nursing professional on the different techniques and procedures in the management of pediatric cardiac patients in the emergency department, as well as the approach to cardiac pathologies and the urgency with which they should be treated, being of vital importance the knowledge of the different treatments applicable to these patients who in many cases arrive at the PED in a critical situation



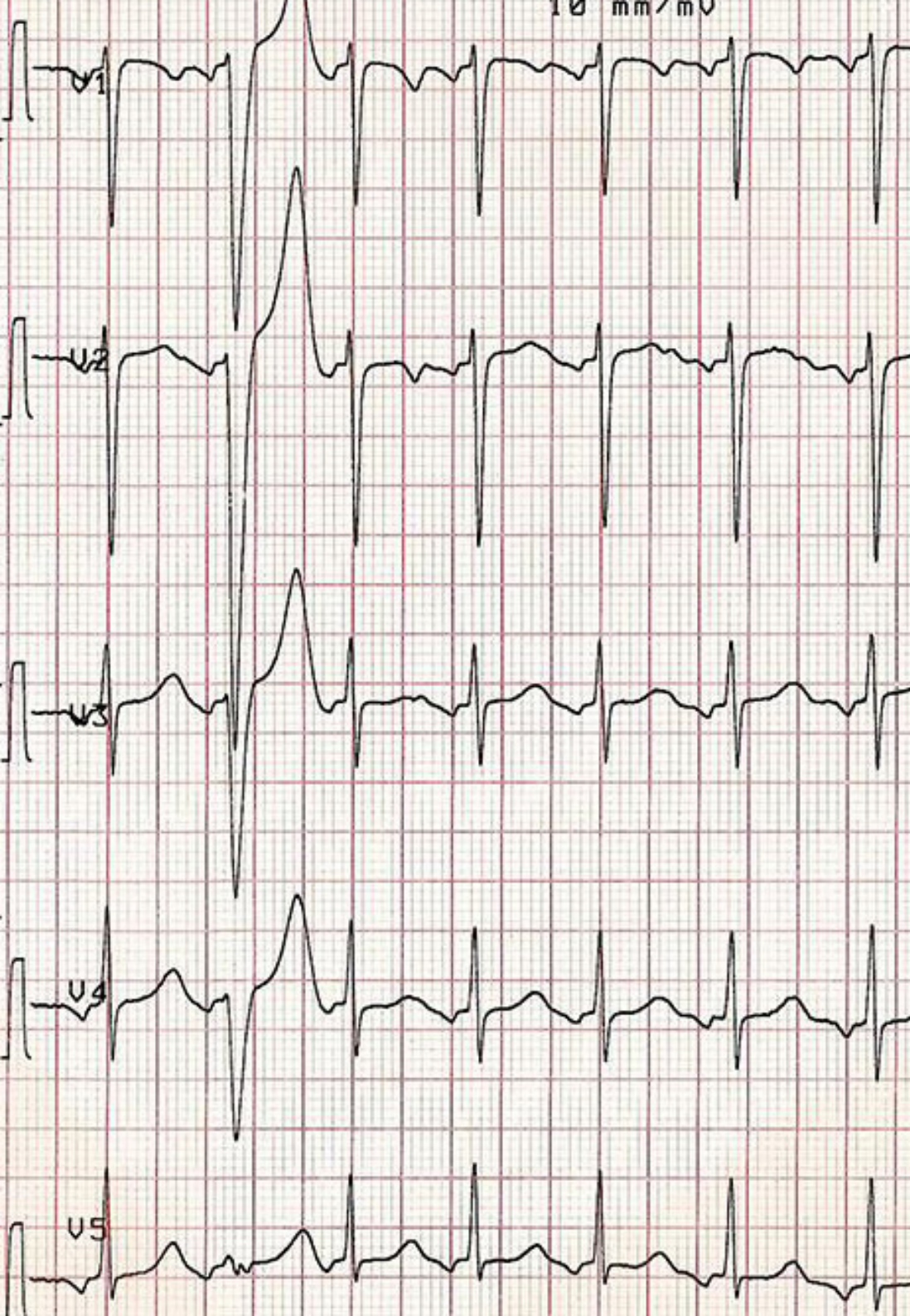
*Take advantage of the opportunity and take the step to get up to date on the latest developments in Pediatric Cardiac Emergencies"*





## Specific Objectives

- ◆ Define the equipment required by the Pediatric Emergency Department (PED), its differential characteristics, infrastructure and necessary material
- ◆ Explain the basis of triage in the Pediatric Emergency Department, as well as its classification systems
- ◆ Describe what is involved in the transport of the critically ill pediatric patient and how both in-hospital and outof-hospital transport is performed
- ◆ Describe the different types of arrhythmias, diagnosis and treatment that may come to the PED
- ◆ Update management procedures for pediatric heart failure, its etiology, diagnosis and treatment
- ◆ Describe the extracorporeal membrane oxygenation (ECMO) method
- ◆ Update the procedures for the management of hypertensive crises, as well as their diagnostic orientation
- ◆ Review the method of electrical cardioversion for the management of tachyarrhythmias and bradyarrhythmias in PED
- ◆ Update the procedures for the use of transcutaneous pacing for the management of tachyarrhythmias and bradyarrhythmias in PED
- ◆ Identify the different types of arrhythmias, and which of them are defibrillable, as well as review the defibrillation process



03

# Course Management

This program includes in its teaching staff health professionals of recognized prestige, who develop their functions in the field of pediatric emergencies, and who pour into this updated program the experience of their work. In addition, recognized specialist members of leading national and international scientific societies participate in its design and preparation.





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*Learn from reference professionals,  
the latest advances in nursing  
procedures in the pediatric cardiac  
patient"*

## 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

### 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: Diploma 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

- ♦ University Diploma in Nursing (D.U.E.). Alicante University School of Nursing
- ♦ Obstetrics Nurse in Elche University General Hospital (Alicante). Clinical Practice Tutor
- ♦ Professional experience in childbirth and neonatology

**Ms. Balboa Navarro, Ana**

- ♦ Emergency Nurse the General Hospital of Elche (Alicante)
- ♦ Specialist Nurse in Pediatric Nursing
- ♦ 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
- ♦ Master's Degree in Critical Care Rey Juan Carlos University I
- ♦ Collaborating researcher in the multicenter study entitled

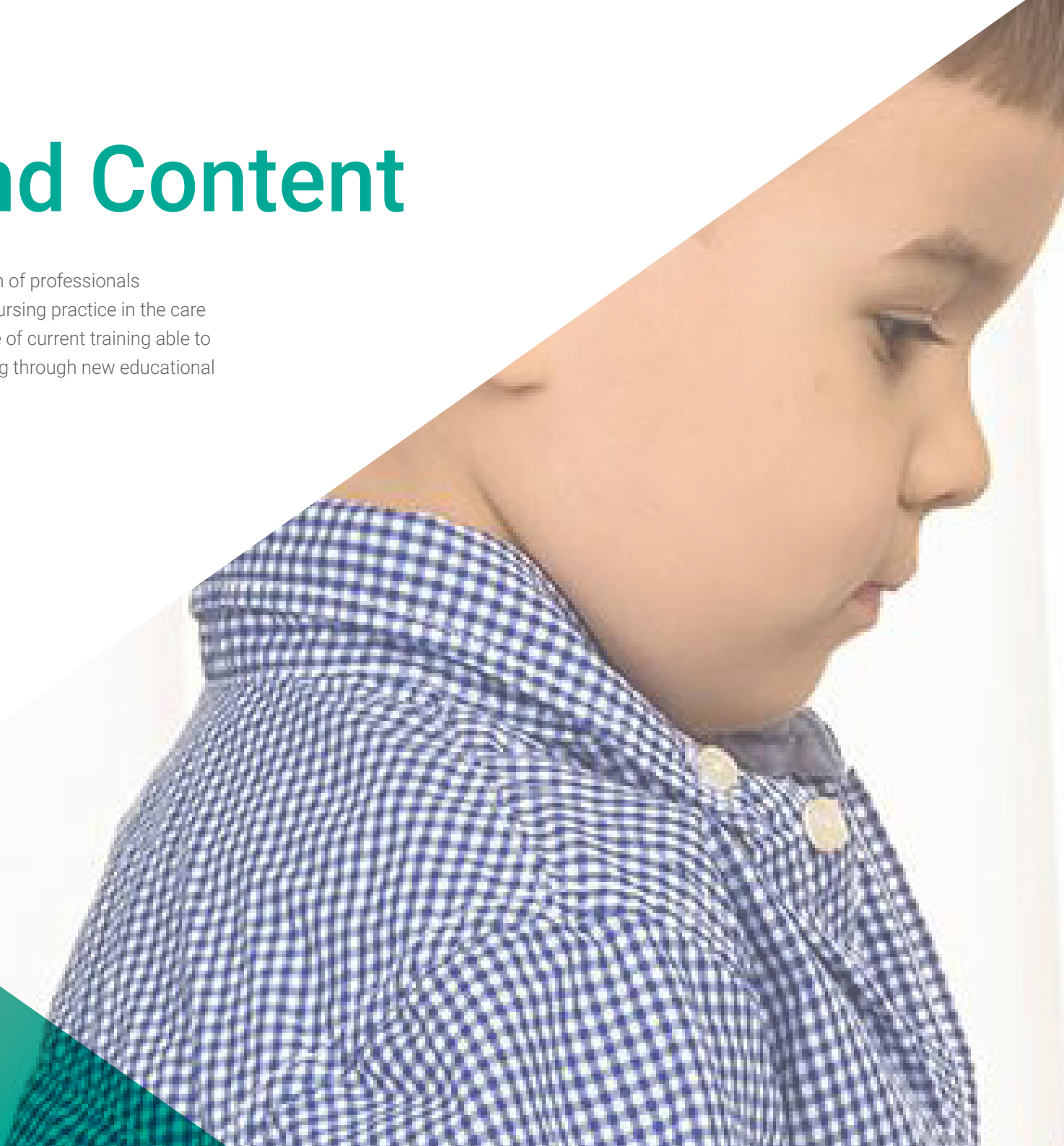
**D. Mora Rivero, Jorge**

- ♦ 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)

04

# Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of training in daily nursing practice in the care of children in emergency situations, aware of the relevance of current training able to act in front of the patient and committed to quality teaching through new educational technologies.



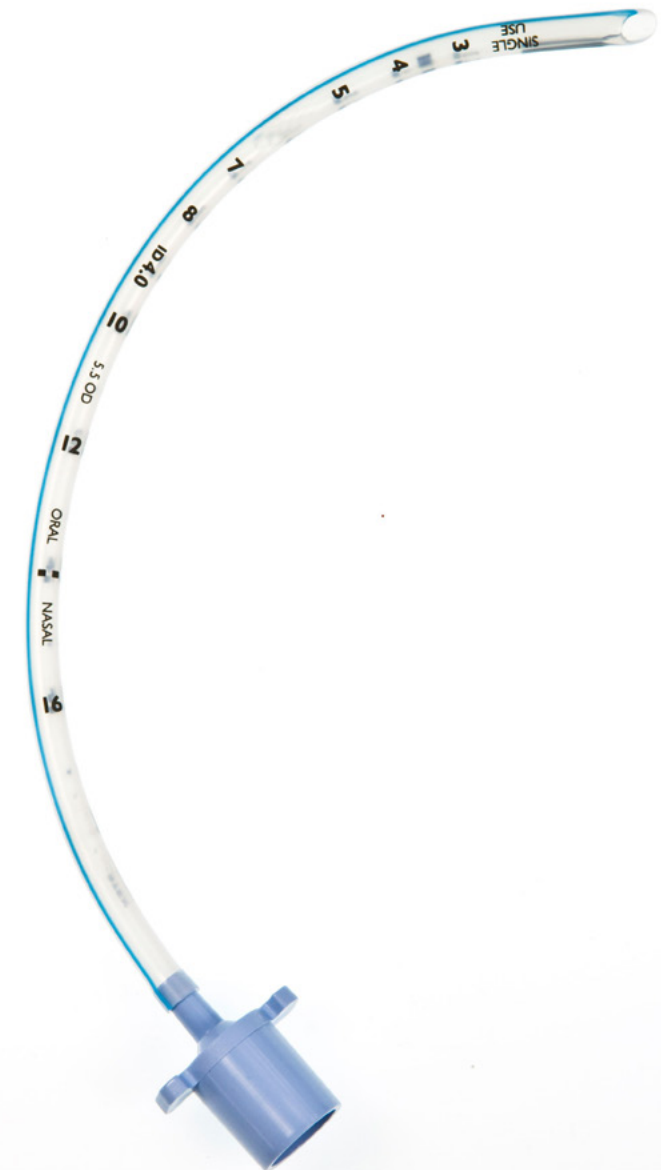


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*The Postgraduate Certificate in Pediatric Cardiac Emergencies for Nursing, contains the most complete and updated scientific program on the market”*

## Module 1. Health Care Organization for Pediatric Emergencies

- 1.1. Equipment in the Pediatric Emergency Department (PED)
  - 1.1.1. Differential Characteristics of PED.
  - 1.1.2. Infrastructure, Staffing
  - 1.1.3. Material
- 1.2. Triage Therapy in Pediatrics
  - 1.2.1. Definition
  - 1.2.2. Classification Systems
- 1.3. Transport of Critical Pediatric Patient
  - 1.3.1. Intrahospital Transfer.
  - 1.3.2. Neonatal and Pediatric Transportation



## Module 2. Pediatric Nursing Care in Cardiology Emergencies

- 2.1. Arrhythmias and Syncope
  - 2.1.1. Bradyarrhythmias Diagnosis and Treatment
  - 2.1.2. Tachyarrhythmias Diagnosis and Treatment
- 2.2. Congenital Heart Disease
  - 2.2.1. Cyanotic Congenital Heart Disease
  - 2.2.2. Non-Cyanotic Congenital Heart Disease
  - 2.2.3. Diagnostic Approach
  - 2.2.4. Pediatric Dentistry
- 2.3. Hypertensive Crisis
  - 2.3.1. Diagnostic Guidance for Hypertension in Children and Adolescents
  - 2.3.2. Therapeutic Guidance for Hypertension in Children and Adolescents
- 2.4. Heart Failure
  - 2.4.1. Etiology
  - 2.4.2. Microbiological
  - 2.4.3. Treatment. Mechanical Ventricular Assistance Techniques Extracorporeal Membrane Oxygenation (ECMO)
- 2.5. Quick Reading of an ECG
- 2.6. Defibrillation
- 2.7. Cardioversion and Temporary Pacemaker



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

# 05

# Methodology

This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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.



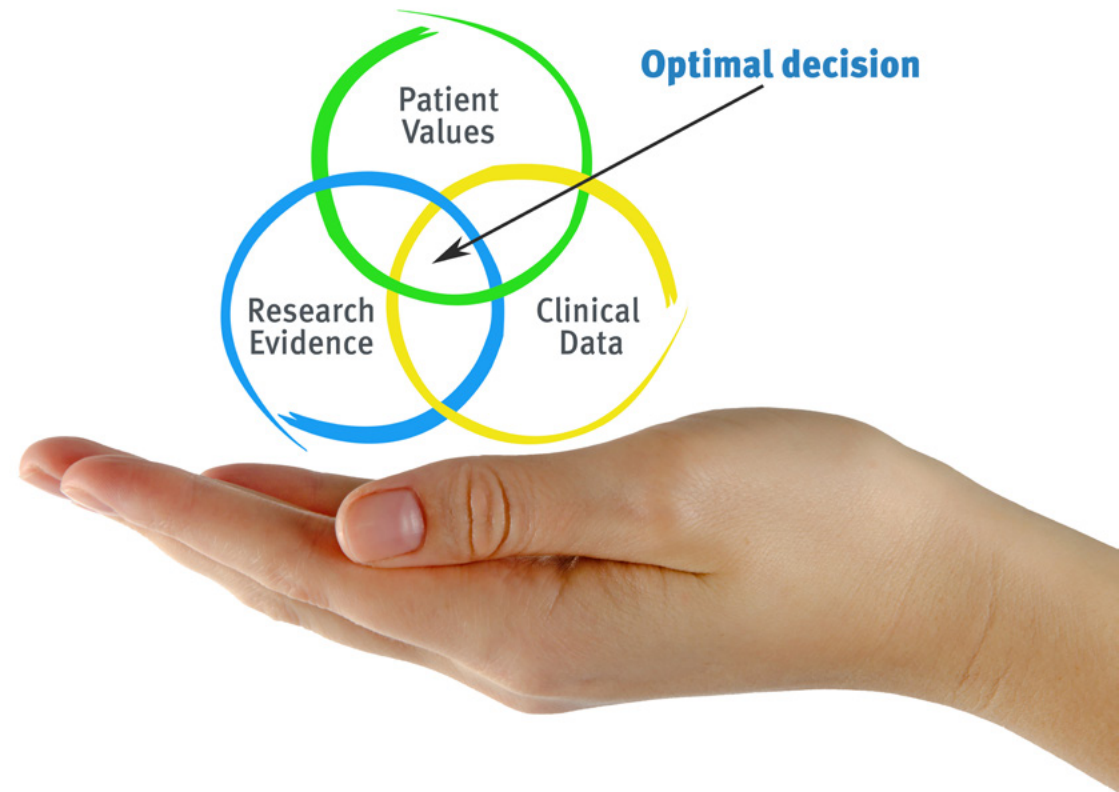
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*Discover Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH Nursing School we use the Case Method

In a given 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 abundant 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 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*



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. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the 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 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 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.



# 06 Certificate

The Postgraduate Certificate in Pediatric Cardiac Emergencies for Nursing guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH- Technological University.





*Successfully complete this training and receive your diploma without travel or laborious paperwork"*

The **Postgraduate Certificate in Pediatric Cardiac Emergencies for Nursing** contains the most complete and updated scientific program on the market.

After students have passed the evaluations, they will receive their **Postgraduate Certificate** issued by **TECH - Technological University**.

The diploma 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 Pediatric Cardiac Emergencies for Nursing**

Nº Teaching Hours: **200 hours**.



\*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  
classroom



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