



Postgraduate Certificate

Pediatric Cardiac Emergencies for Nursing

» Modality: online

» Duration: 8 weeks

» Certificate: TECH Global University

» Credits: 8 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/nursing/postgraduate-certificate/pediatric-cardiac-emergencies-nursing

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Certificate





tech 06 | Introduction

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:

- b Clinical cases presented by experts in the different specialties. The graphic, schematic, and eminently practical contents with which they are created, provide provide scientific and healthcare information on those medical disciplines that are essential to professional practice.
- **b** Update on the techniques performed in the pediatric cardiac patient by the nursing professional.
- **b** An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- **b** All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- **b** 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"



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 Global 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.

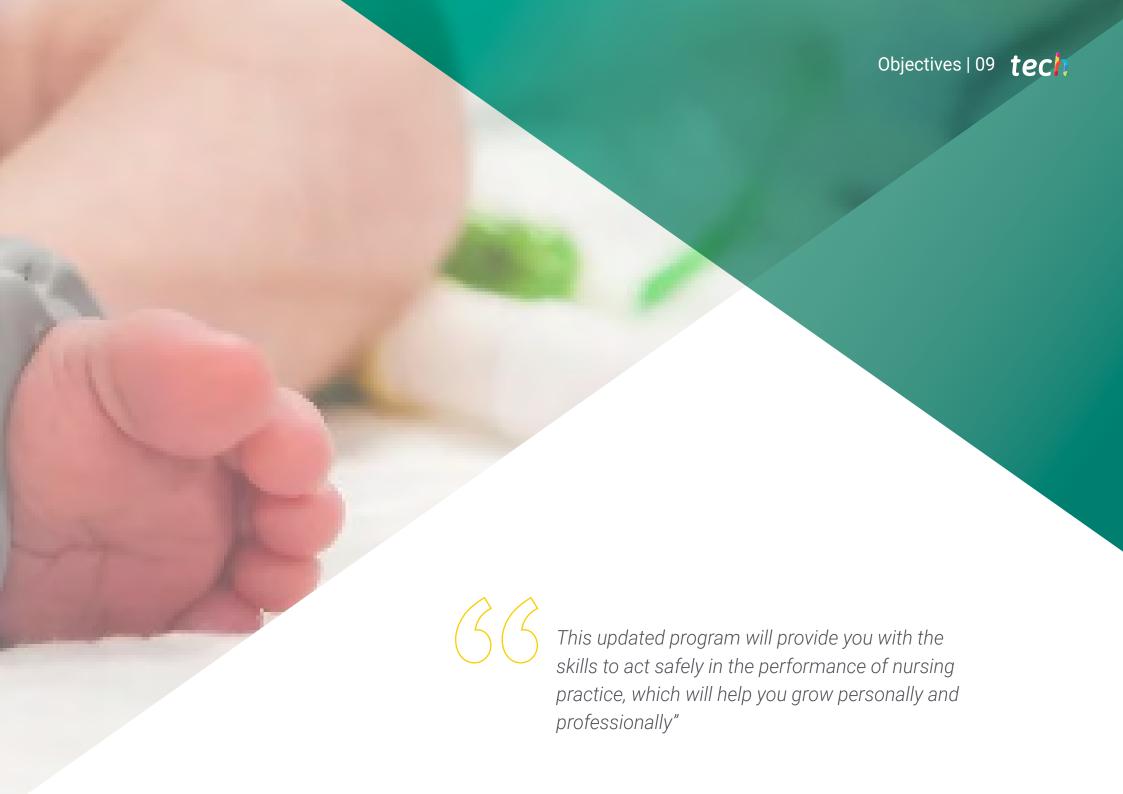
The design of the program is based on Problem-Based Learning, by means of which the nursing professional must try to solve the different professional practice situations that arise throughout the program. For this reason, you will be assisted by an innovative, interactive video system created by renowned 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







tech 10 | Objectives

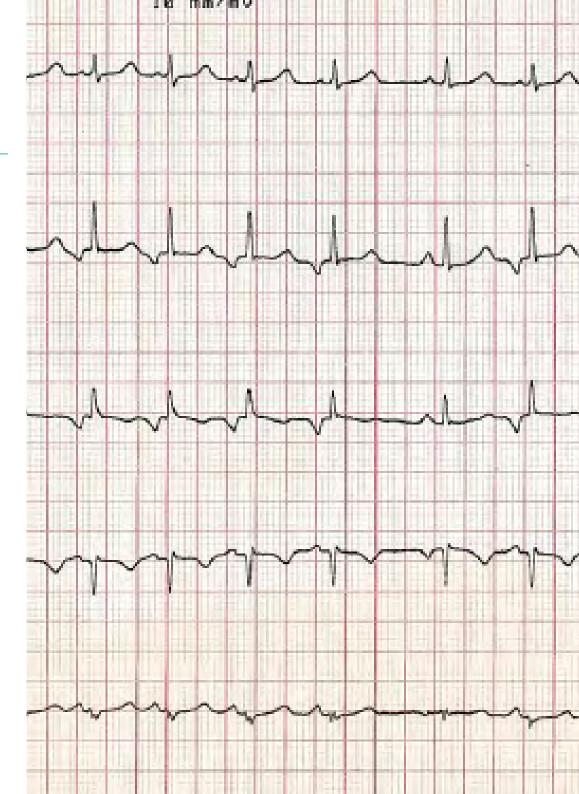


General Objective

b 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"



Objectives | 11 tech



Specific Objectives

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

03 Course Management





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

International Guest Director

Dr. Todd Florin is a recognized Pediatric Emergency Physician and clinical epidemiologist, expert in Lower Respiratory Tract Infections in children, especially in the field of Bronchiolitis and Pneumonia. In addition, at international level, he is a leader in the use of biomarkers and predictive analysis to improve the diagnosis and treatment of these conditions.

In this way, he has served as Director of Research in Emergency Medicine at the Ann & Robert H. Lurie Children's Hospital in Chicago. In addition, at the same hospital, he has directed the Grainger Research Program in Pediatric Emergency Medicine, where he has led key projects, such as the CARPE DIEM study (Catalyzing Ambulatory Research in Pneumonia Etiology and Diagnostic Innovations in Emergency Medicine), a pioneering investigation of community-acquired pneumonia, as well as other global studies, such as PERN, focused on understanding the severity of pneumonia and the impact of COVID-19 in children.

Dr. Todd Florin has also received numerous awards for his outstanding medical and research work, including the Young Investigator Award from the Academic Pediatric Association, and has been recognized for his research leadership and mentorship at renowned institutions such as Cincinnati Children's Hospital Medical Center. His vision of combining translational science with clinical care has driven significant advances in the management of Pediatric Respiratory Infections.

In fact, his work has been endorsed by prestigious institutions such as the National Heart, Lung and Blood Institute and the National Institute of Allergy and Infectious Diseases. In addition, his focus on Precision Medicine has transformed the way Respiratory Infections in children are managed, contributing to the reduction of unnecessary antibiotic use.



Dr. Florin, Todd

- Director of Emergency Medicine Research, Ann & Robert H. Lurie Children's Hospital, Chicago, United States.
- Chief of the Grainger Research Program in Pediatric Emergency Medicine at Ann & Robert H. Lurie Children's Hospital
- Assistant Physician, Division of Emergency Medicine, Ann & Robert H. Lurie Children's Hospital
- Principal Investigator of the Catalyzing Ambulatory Research in Pneumonia Etiology and Diagnostic Innovations in Emergency Medicine Study (CARPE DIEM)
- Director of Strategy and Operations at the Society for Pediatric Research
- Specialist in Pediatric Emergency Medicine at the Children's Hospital or Philadelphia
- Doctor of Medicine from the University of Rochester

- Master's Degree in Clinical Epidemiology from the University of Pennsylvania
- B.A. in Music from the University of Rochester
- Young Investigator Award from the Academic Pediatric Association Member of: Academic Pediatric Association, American Academy of Pediatrics, Pediatric Infectious Diseases Society, Society for Academic Emergency Medicine, Society for Pediatric Research



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

tech 16 | Course Management

Management



Ms. Roldán del Amo, Adela

- b 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
- b University Professor in: Diploma in Neonatal Nursing and Neonatal Intensive Care CEU Cardenal Herrera University Moncada. Valencia
- **b** 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
- b University Professor in: Diploma in Neonatal Nursing and Neonatal Intensive Care CEU- Cardenal Herrera University. Moncada. Valencia
- **þ** Professor in Child Nutrition Course at Nisa Hospitals Foundation

Ms. Antón García, Gema

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

Ms. Balboa Navarro, Ana

- **b** Emergency Nurse the General Hospital of Elche (Alicante)
- Specialist Nurse in Pediatric Nursing
- b Master's Degree in Nursing Sciences
- b 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
- b 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

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

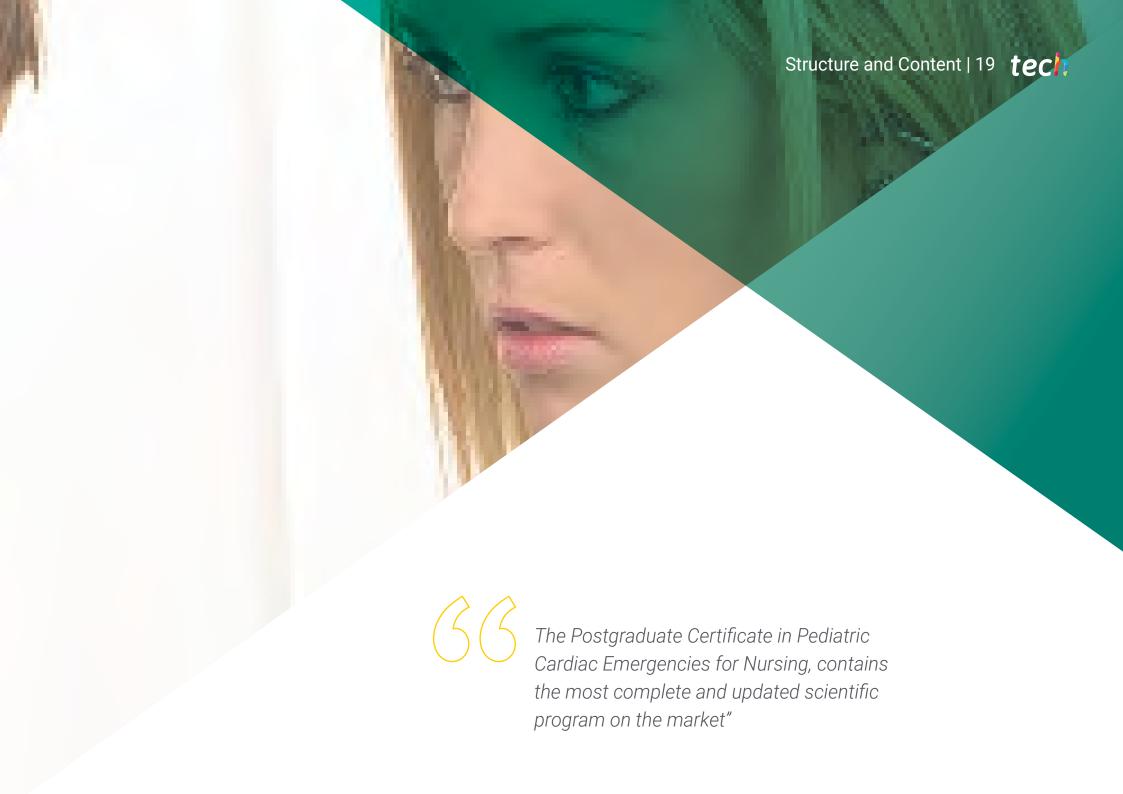
Ms. Lospitao Gómez, Sara

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

D. Mora Rivero, Jorge

- **b** Degree in Nursing from the University of Alicante
- b Master's Degree in Nursing Sciences
- b 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
- b Degree in Emergency Medical Transportation (SAMU)





tech 20 | Structure and Content

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



Structure and Content | 21 tech

Module 2. Pediatric Nursing Care in Cardiology Emergencies

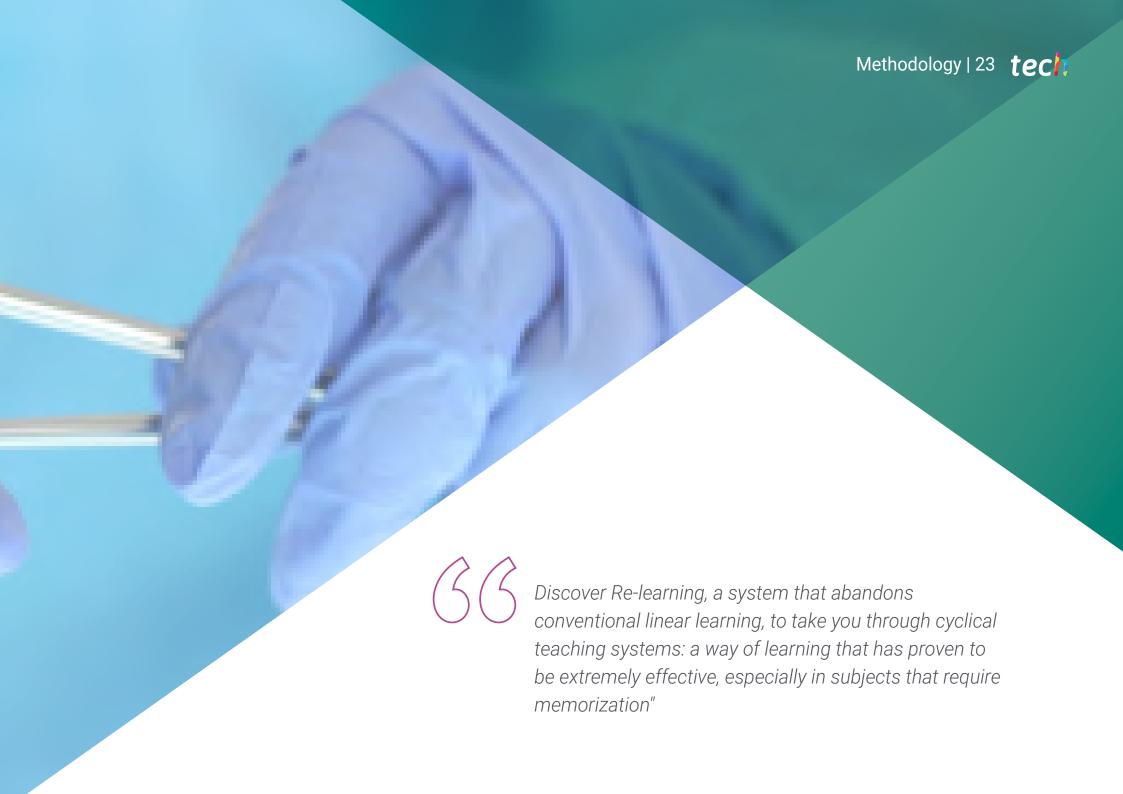
- 2.1. Arrhythmias and Syncope
 - 2.1.1. Bradyarrhythmias Diagnosis and Treatment
 - 2.1.2. Tachyarrhythmias Diagnosis and Treatment
- 2.2. Congenital Heart Disease
 - 2.2.1. Cyanotic Congenital Heart Disease
 - 2.2.2. Non-Cyanotic Congenital Heart Disease
 - 2.2.3. Diagnostic Approach
 - 2.2.4. Pediatric 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





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.



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 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. 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

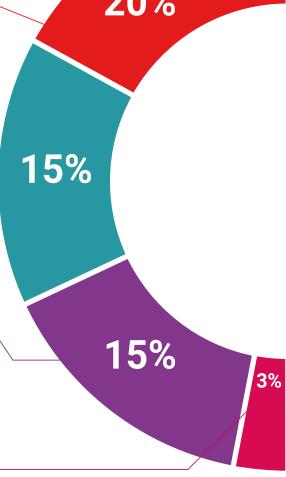
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current nursing procedures and techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many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

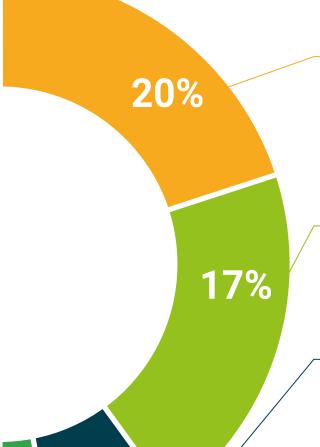
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





Additional Reading

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.



7%

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.







tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Pediatric Cardiac Emergencies 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** title 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 Pediatric Cardiac Emergencies for Nursing

Modality: online

Duration: 8 weeks

Accreditation: 8 ECTS



has successfully passed and obtained the title of:

Postgraduate Certificate in Pediatric Cardiac Emergencies for Nursing

This is a program of 240 hours of duration equivalent to 8 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



^{*}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.

health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning



Postgraduate Certificate

Pediatric Cardiac Emergencies for Nursing

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