

# Postgraduate Certificate

## Pediatric Invasive Techniques for Nursing



## Postgraduate Certificate Pediatric Invasive Techniques for Nursing

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 7 ECTS
- » Schedule: at your own pace
- » Exams: online

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

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# 01

# Introduction

This Postgraduate Certificate contains the latest advances in invasive procedures that are commonly performed by the nursing professional in the critical pediatric patient, in order to ensure good practice and improve the patient's prognosis. 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.







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*This Postgraduate Certificate addresses the main advances in pediatric invasive techniques, so that you will be able to perform them safely and with guarantees. Learn to identify the critical situation in the pediatric patient and improve the prognosis of the critically ill child"*

Basic and advanced knowledge of invasive techniques in the critically ill pediatric patient is vital to ensure the survival of patients attending pediatric emergency departments.

The program includes the approach to pediatric critical patient management procedures. In addition, throughout the Postgraduate Certificate the most relevant topics about the organization of a Pediatric Emergency Department (PED), the triage process of patients according to their severity, their transport, the need for the management of certain specific techniques to treat the various pathological situations that threaten the lives of pediatric patients: peripheral and central venous access, routes of drug administration, airway approach, intraosseous puncture, etc. are addressed.

The training offered by the Postgraduate Certificate will be complemented with material based on the latest relevant scientific publications, in order to provide a complete approach to the pediatric critical patient and to update the management of the necessary techniques to deal with serious situations in pediatric emergencies.

The **Postgraduate Certificate in Pediatric Invasive Techniques for Nursing** contains the most complete and updated scientific program on the market. The most important features of the course are:

- 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 practice.
- Update on invasive techniques performed in the critically ill pediatric patient by the nursing professional.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- 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 through the Postgraduate Certificate on Pediatric Invasive Techniques 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 Invasive Techniques 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.

This program is designed around Problem Based Learning, whereby the doctor must try to solve the different professional practice situations that arise during 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 in the different techniques and invasive procedures of pediatric nursing, which are of vital importance in the management of critical patients in children







## Specific Objectives

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- ◆ 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 the different types of pediatric critical patient transport and how both in-hospital and out-of-hospital transport is performed
- ◆ Update the procedures for performing intraosseous puncture, its indications, contraindications, necessary material and technique
- ◆ Update measurement procedures in capnography and pulse oximetry
- ◆ Identify the criteria and list the measures to apply oxygen therapy
- ◆ Describe the rapid intubation sequence, taking into account basic, advanced and difficult airway management
- ◆ Describe analgesia and sedation measures for pain management, its orthopedic surgery and reference drugs
- ◆ Update the protocols for dealing with infant deaths



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 Pediatric Invasive Techniques for Nursing”*

## 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

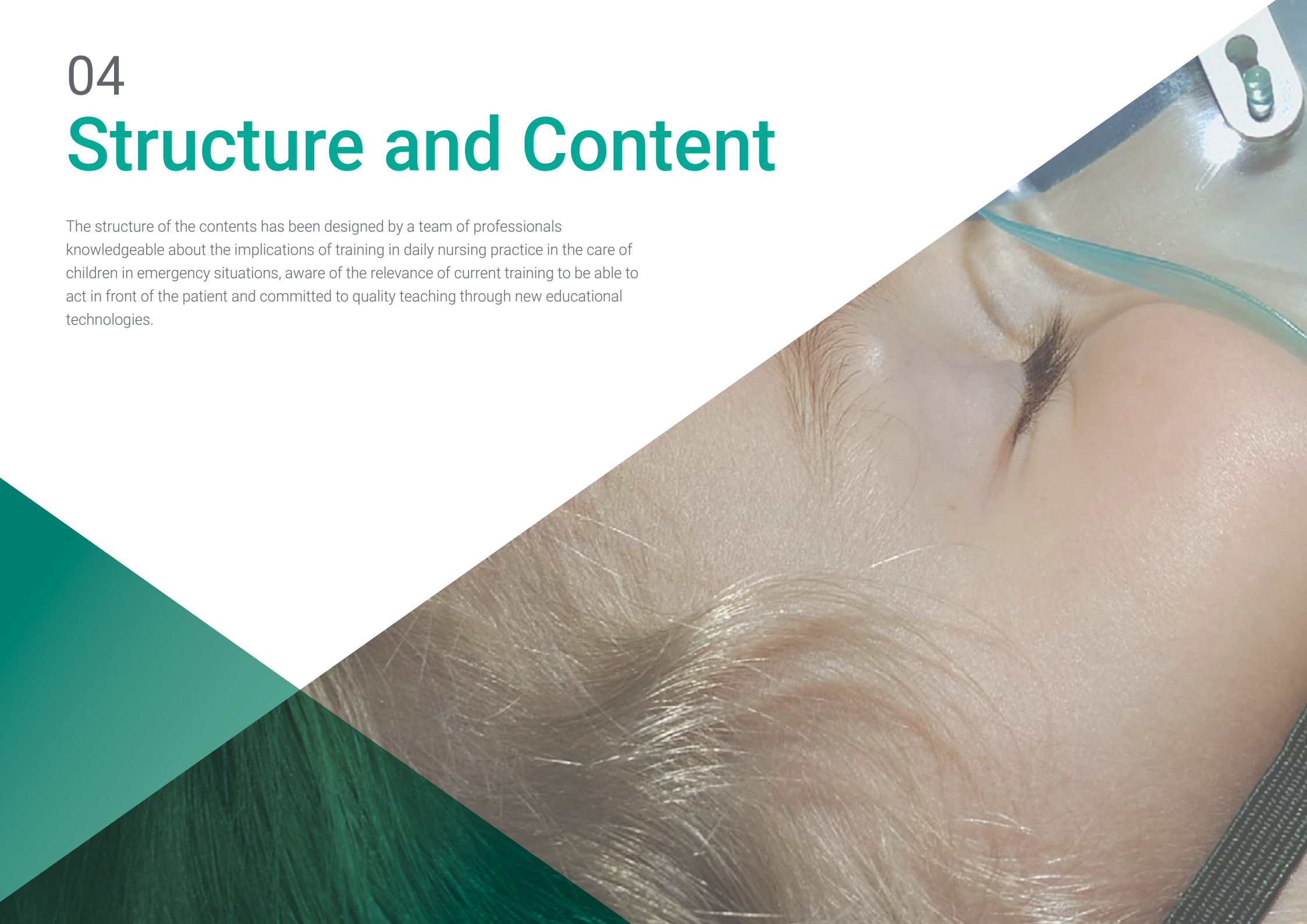
**D. Mora Rivero, Jorge**

- ♦ 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 to be 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 Invasive Techniques 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. Interhospital Transfer.
  - 1.3.2. Neonatal and Pediatric Transportation.

## Module 2. Invasive Techniques in the Critically Ill Pediatric Patient

- 2.1. Peripheral and Central Vein Access.
  - 2.1.1. Peripheral Route.
  - 2.1.2. Central Route
- 2.2. Intraosseous Puncture.
- 2.3. Capnography. Pulse Oximetry.
- 2.4. Oxygen Therapy.
- 2.5. Rapid Intubation Sequence.
- 2.6. Analgesia and Sedation.
  - 2.6.1. Pain Management.
  - 2.6.2. Procedure.
  - 2.6.3. Reference Drugs in Analgesia and Sedation.
- 2.7. Protocol for Child Death.





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*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 Invasive Techniques for Nursing guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Global University.





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

This program will allow you to obtain your **Postgraduate Certificate in Pediatric Invasive Techniques 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 Invasive Techniques for Nursing**

Modality: **online**

Duration: **6 weeks**

Accreditation: **7 ECTS**



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



future  
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education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
online training  
development languages  
classroom



**Postgraduate Certificate**  
Pediatric Invasive  
Techniques for Nursing

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 7 ECTS
- » Schedule: at your own pace
- » Exams: online

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