



## Postgraduate Diploma

## Trauma Emergencies in Pediatrics for Nursing

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/nursing/postgraduate-diploma/postgraduate-diploma-trauma-emergencies-pediatrics-nursing

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Certificate

## 01 Introduction

Basic and advanced knowledge of invasive techniques in the critical pediatric patient, as well as techniques to treat unintentional trauma injuries and pediatric accidents in pediatric emergency departments, is vital to prevent the development of sequelae in the child. This program allows the updating of procedures to provide individualized assistance according to the needs of patients and their families.

Children represent one of the most vulnerable groups in terms of morbidity and mortality, due to the special conditions in which they find themselves during the perinatal stage and infancy



## tech 06 | Introduction

In addition to their general training, nursing professionals who perform their care function in pediatric patient care services must have acquired the necessary knowledge and skills for their daily practice with Critically III Pediatric Patients, and it is essential to update this knowledge and skills through adapted training programs.

Throughout the program, the most important aspects in the care of urgent trauma emergencies in pediatric patients, the process of triage of patients according to their severity, their transport, the need for the management of certain specific techniques that treat the various pathological situations that threaten the lives of pediatric patients are addressed, such as peripheral and central venous access, drug administration routes, airway approach, intraosseous puncture, as well as the need for the management of specific techniques to treat the various emergencies caused by domestic accidents that may compromise the health of pediatric patients.

The Postgraduate Diploma in Trauma Emergencies in Pediatrics for Nursing is designed to enable nursing professionals to incorporate the advances that are taking place in the discipline, in addition to reviewing the most important aspects of emergency care for pediatric patients and their care.

With a duration of 6 months, this Postgraduate Diploma is designed by a teaching staff with extensive experience and recognized prestige in pediatrics and the area of traumatology emergencies in children, whose highlights are:

- Clinical cases presented by experts. 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.
- New diagnostic and therapeutic developments in caring for children. Includes pediatric triage in nursing.
- Specific sections in each module on nursing techniques and procedures according
  to the age of the child: pediatric transport, approach to infant head trauma,
  immobilizations, anaphylactic reactions, stings, bites, etc.
- Video lessons on different pathologies and how to approach them.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- 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.



The Postgraduate Diploma in Trauma Emergencies in Pediatrics for Nursing provides an update on the procedures and nursing care necessary to provide quality care to pediatric patients in emergency situations"

## Introduction | 07 tech



This Postgraduate Diploma 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 Trauma Emergencies in Pediatrics for Nursing, you will obtain a Postgraduate Diploma from TECH - Technological University"

It includes in its teaching staff expert nurses and pediatricians of reference, who pour into this training the experience of their work, in addition to other professionals specializing in different areas of care for children and their families.

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 care of children with musculoskeletal trauma and with great teaching experience.

It includes clinical cases in real simulation situations to bring the program as close as possible to nursing practice

Don't miss the opportunity to update your knowledge of trauma emergencies in pediatric patients to increase the quality of your care







## tech 10 | Objectives



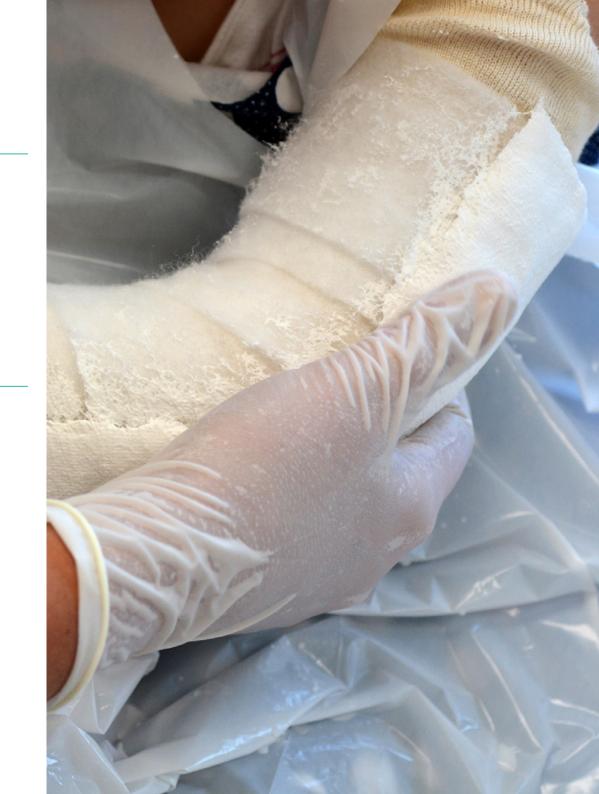
### **General Objective**

 Update the nursing professional in the management of patients with emergency osteoarticular injuries, as well as the approach to the different types of trauma that may come to the pediatric emergency department, and to train in the management of patients with unintentional injuries, or victims of different types of child accidents

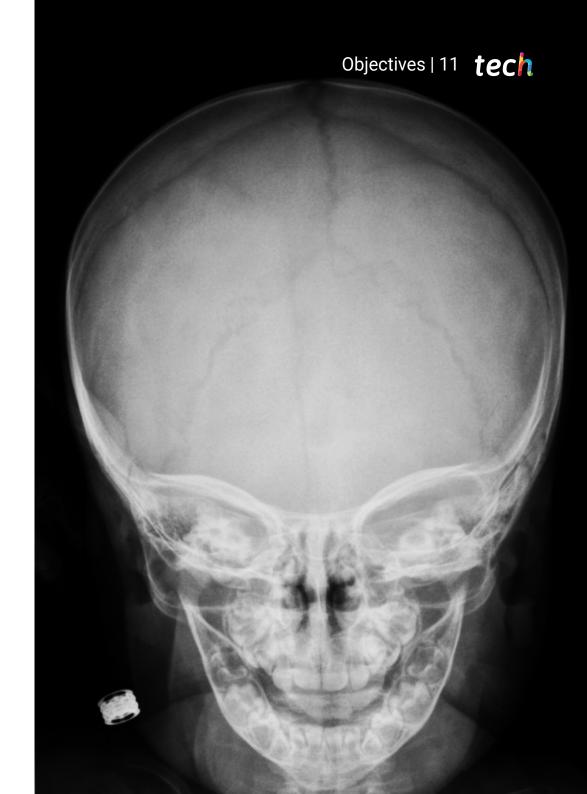


### **Specific Objectives**

- 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
- Incorporate the indications for transporting the pediatric critically ill patient and update how both in-hospital and out-of-hospital transport is performed
- Assess the initial care of pediatric trauma and the different types of injuries
- Apply the management of head trauma in the child
- Evaluate the management of upper limb and lower limb trauma
- Identify thoracic trauma and its consequences: rib fractures and contusions
- Assess infantile lameness, its diagnosis and treatment
- Describe the techniques for mobilization and immobilization of the trauma patient
- Learn about functional bandages and casts



- Classify the type of burns for further referral
- Contrast the proper treatment of burns and wounds
- Address drowning and applying emergency treatment
- Manage the treatment of stings and bites as well as assess possible complications
- Differentiate between drug and non-drug intoxications, as well as to assess their treatment according to the latest scientific evidence
- Interpret a picture of anaphylaxis, classify it according to its severity and know its treatment
- Update the basic techniques of minor surgery in the emergency department
- Use the techniques for the removal of a foreign body in the ear
- Use the techniques for the removal of a foreign body in the nose
- Apply the gastric lavage technique and the use of activated charcoal
- Analyze the communication of the pediatric patient in the ICU
- Identify the most prevalent pathologies in the ICU
- Assess the critically ill pediatric patient
- Update the care of the critically ill pediatric patient, as well as nursing techniques and their treatment







## tech 14 | Course Management

#### 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)





## tech 18 | 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.

#### Module 2. Nursing Care for Unintentional Injuries Child Accidents

- 2.1. Burns and Wounds.
- 2.2. Drowning.
- 2.4. Stings and Bites.
- 2.5. Drug and Non-drug Intoxications.
- 2.6. Anaphylaxis.
  - 2.6.1. Classification of Severity.
  - 2.6.2. Diagnostic Procedures
  - 2.6.3. Treatment and Discharge Recommendations.

#### **Techniques and Procedures**

- 2.7. Extraction of Foreign Body from the Ear.
- 2.8. Extraction of Foreign Bodies from the Nose.
- 2.11. Incarcerated Inguinal Hernia Reduction.
- 2.10. Freeing of Trapped Penis or Scrotum.



## Structure and Content | 19 tech

#### Module 3. Nursing Care in Pediatric Trauma and Osteoarticular Injuries

- 3.1. Initial Pediatric Trauma Care.
  - 3.1.1. Types and Patterns of Injury in Pediatrics.
  - 3.1.2. Primary and Secondary Assessment.
  - 3.1.3. Spinal Cord Injuries.
- 3.2. Head Trauma in Children.
- 3.3. Limping.
  - 3.3.1. Types of Lameness.
  - 3.3.2. Treatment.
  - 3.3.3. Referral Criteria
- 3.4. Upper Extremity Trauma.
- 3.5. Lower Extremity Trauma.
- 3.6. Thoracic Trauma. Rib Fractures and Contusions.

#### Techniques and Procedures

- 3.7. Mobilization and Immobilization Workshop.
- 3.8. Reduction of Painful Pronation.
- 3.9. Hyperpronation
- 3.10. Supination-Flexion.
- 3.11. Active Mobilization Stimulation.
- 3.12. Classification of Pediatric Fractures.

#### Module 4. Nursing Care of the Critically III Pediatric Patient

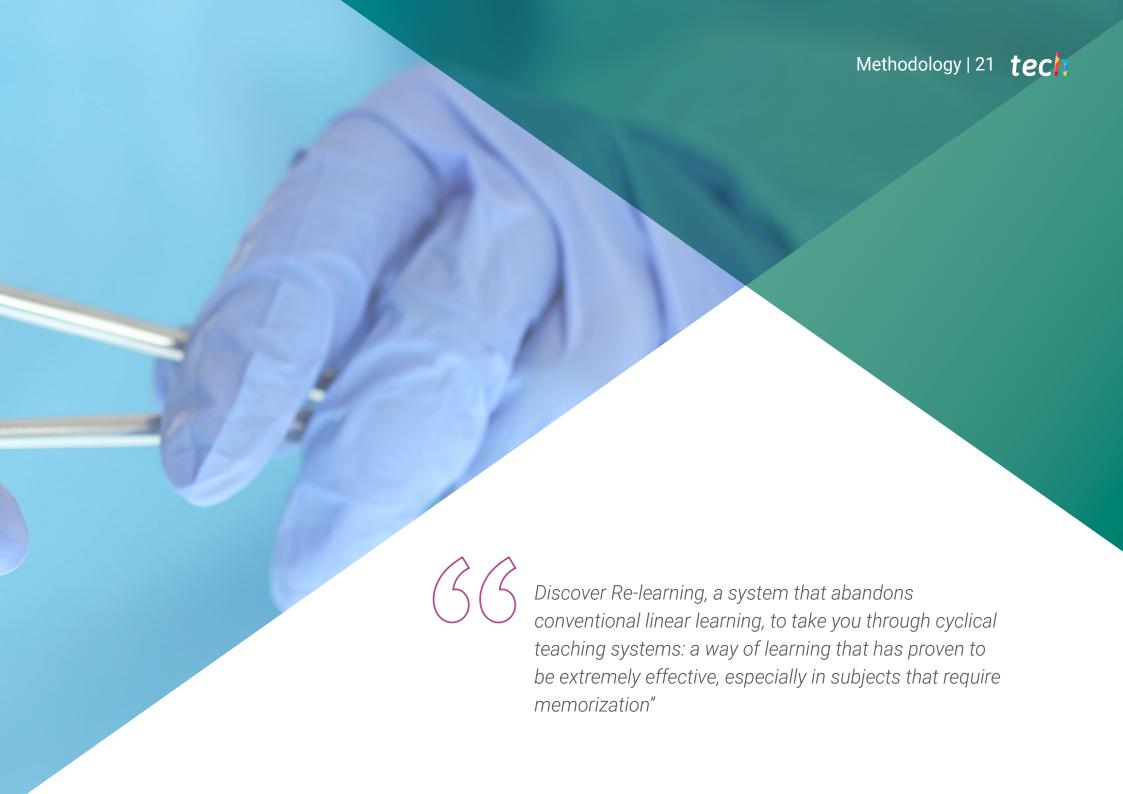
- 4.1. Communication with the Pediatric Intensive Care Patient.
- 4.2. Most Common Alterations.
- 4.3. Assessment of Critical Pediatric Patient.
  - 4.3.1. Needs Assessment.
  - 4.3.2. Most Common Pediatric Rating Scales.
- 4.4. Pediatric Assessment Triangle.
- 4.5. Critical Pediatric Patient care.

- 4.5.1. Airway and Ventilatory Management for Critically III Pediatric Patients.
- 4.5.2. Nursing Techniques in the Critically III Pediatric Patient: Monitoring, Venous Access, and Safety and Comfort.
- 4.5.3. Administrating Medication for Paediatric Patients.
- 4.5.4. Interhospital Transport for Critically III Pediatric Patients.
- 4.6. Pharmacological Administration.
  - 4.6.1. Peripheral Venous Vessels.
  - 4.6.2. Intraosseous Route.
  - 4.6.3. Intratracheal Route.
  - 4.6.4. Central Routes
  - 4.6.5. Most Commonly Used Drugs and Fluids.



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.

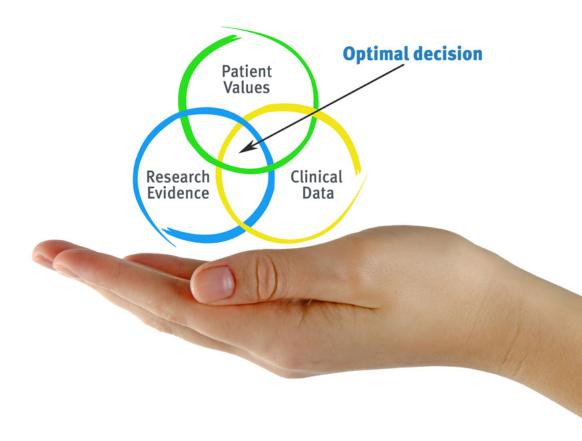


## tech 22 | Methodology

#### 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



### Metodology | 25 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**

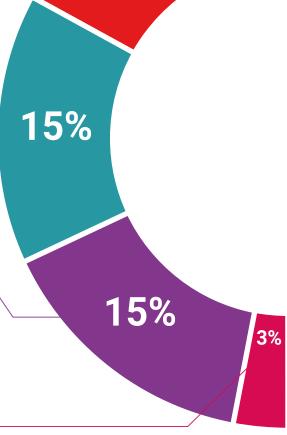
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current nursing procedures and techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many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

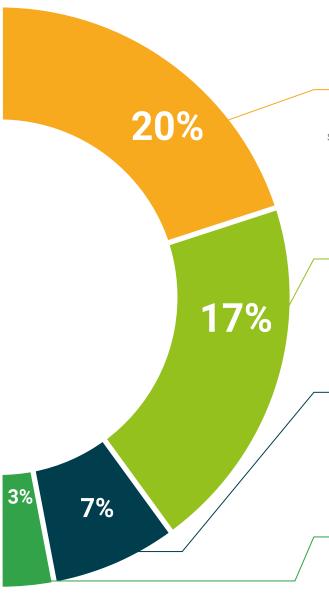
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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. 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.



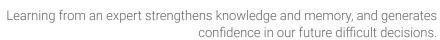
#### **Testing & Re-testing**

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.





#### **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

The Postgraduate Diploma in Trauma Emergencies in Pediatrics for Nursing contains the most complete and updated scientific program on the market.

After the student has passed the assessments, they will receive their corresponding Postgraduate Diploma issued by TECH - Technological University via tracked delivery.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional from career evaluation committees.

Title: Postgraduate Diploma in Trauma Emergencies in Pediatrics for Nursing Official Number of Hours: 425



<sup>\*</sup>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.

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institutions technology learning



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