

# Postgraduate Diploma Pediatric Trauma





## Postgraduate Diploma Pediatric Trauma

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-pediatric-trauma](http://www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-pediatric-trauma)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

---

*p. 28*

01

# Introduction

Pediatricians in the emergency department are confronted on a daily basis with child patients who have suffered serious and potentially life-threatening trauma, so constant professional updating is vital to maintain the quality of care provided every day. This program includes, in a practical form adapted to your needs, the latest advances in the approach to severe trauma in pediatric patients.

*It is decisive for physicians to undergo constant training to make decisions in the face of severe trauma in pediatric patients.*





*This program addresses the main aspects of pediatric trauma emergencies, so that you will be able to deal with all the situations that occur on a regular basis and that can compromise the child patient's life. Learn how to identify, initially treat and refer pediatric patients with emergency trauma pathologies"*

Like other medical specialties and subspecialties, pediatric emergencies have reached a development of progressive specialization in recent years. Physicians working in pediatric emergency care services must be able to provide comprehensive initial care to pediatric patients, basing their actions on the latest scientific evidence.

For this reason knowledge must be constantly updated through programs aimed at reinforcing their functions, both in recognizing and initially resolving the emergency, and in focusing, orienting and correctly directing situations in the face of pathologies that can be delayed.

The preparation of the pediatric trauma emergency department physician should include updating on diagnostic and therapeutic techniques such as airway management and the approach to peripheral and central airways, to ensure rapid and safe care in all pediatric ages. In addition, it should include organizational aspects of pediatric emergency services and the provision of personnel and material, with emphasis on their differential characteristics.

This program offers physicians updated specialization on the most frequent cardiac pediatric emergencies, establishing the keys for pediatric patient care, with severe trauma and the approach to the different diagnostic and treatment techniques of emergency trauma care in the pediatric age.

This **Postgraduate Diploma in Pediatric Trauma** is the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Clinical cases presented by experts. Graphic, schematic and eminently practical contents, with which they are conceived, gather scientific and assistance information on medical disciplines that are essential for professional practice.
- Latest diagnostic and therapeutic developments in the most frequent pediatric emergencies; it also incorporates new contents: minor surgery techniques, intoxications, sedoanalgesia in emergencies, etc.
- Practical workshops on procedures, diagnostic and therapeutic techniques.
- 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.



*Scientific evidence increases the quality of medical care. Keeping up to date is key to providing better patient care in life-threatening emergencies”*

“*This Postgraduate Diploma may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge of Pediatric Trauma, you will obtain a qualification from TECH Technological University*”

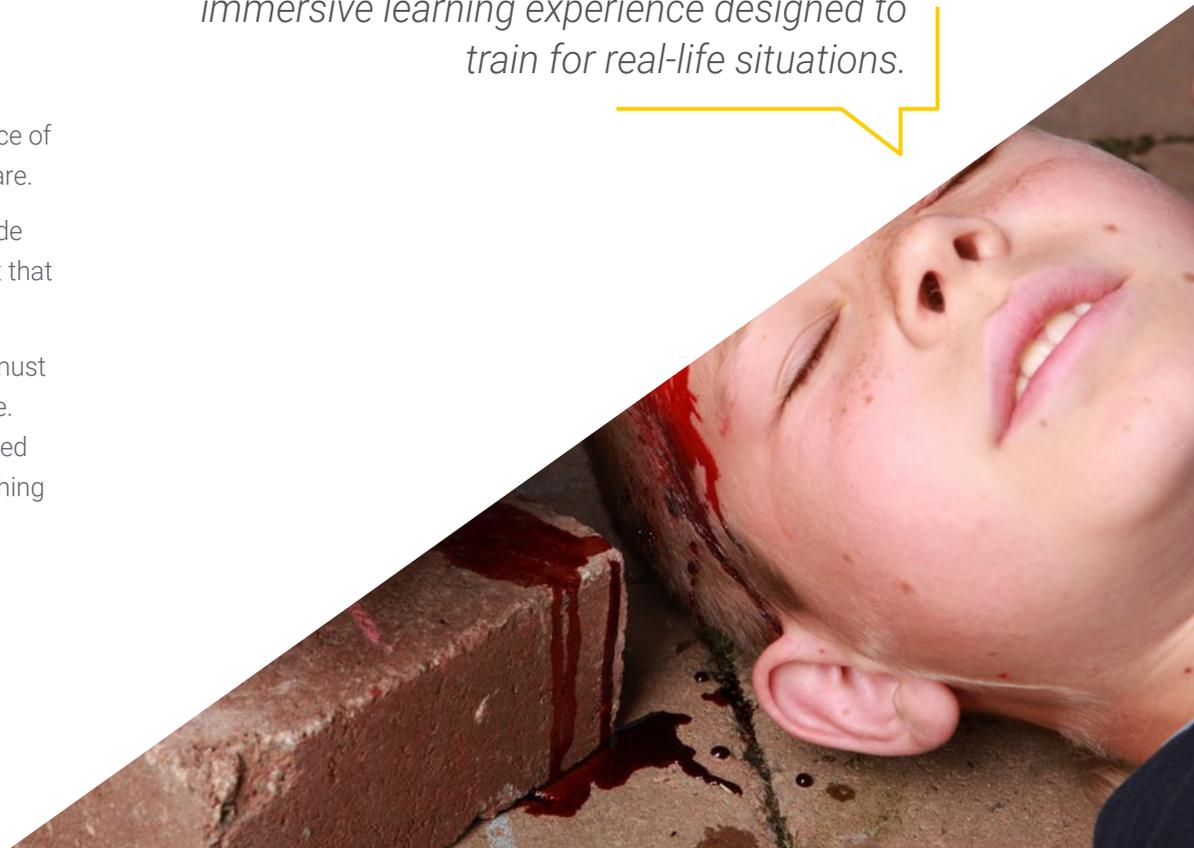
Its teaching staff includes leading pediatricians, who bring to this train the experience of their work, as well as other specialists in the various fields of emergency medical care.

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 an immersive training program to train in real situations.

This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in pediatric emergencies with extensive teaching experience.

*Increase your decision-making confidence by updating your knowledge in treating pediatric patients with severe trauma through this Postgraduate Diploma.*

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



02

# Objectives

The program is geared toward a review of the main aspects in pediatric trauma management in the emergency department, based on scientific evidence and the experience of renowned professionals in the field of critical care.



“

*This refresher program will generate a sense of security when practising medicine, which will help you grow both personally and professionally”*



## General Objective

---

- Update physicians in pediatric trauma care and diagnostic and therapeutic techniques for pediatric patients with urgent trauma pathology, in order to provide emergency care to improve the prognosis of the child and attention to the family.





## Specific Objectives

---

- ♦ Identify key signs and triage patients according to the different triage systems.
- ♦ Describe critical pediatric patient transport systems.
- ♦ Review the different routes of drug administration and their indication in each case.
- ♦ Establish capnography and pulse oximetry procedures, as well as review indications for oxygen therapy in pediatric patients according to the latest scientific evidence.
- ♦ Identify the main aspects of pediatric airway establishment, rapid intubation sequence, difficult airway and new facilitator devices.
- ♦ Establish the phases, characteristics and development of the sedoanalgesia procedure.
- ♦ Incorporate intraosseous puncture as a frequently used technique in pediatric emergency departments.
- ♦ Review the protocols for dealing with infant deaths.
- ♦ Review the diagnostic process, assessment and care of pediatric patients with traumatic brain injury.
- ♦ Incorporate into medical practice the evaluation and treatment priorities in traumatized children and the characteristics of pediatric patients in general.
- ♦ Develop and practice the sequences in the different workshops on mobilization and immobilization of trauma patients, functional bandaging, casting and reduction of painful pronation.
- ♦ Update diagnostic and therapeutic procedures to safely resolve potentially dangerous situations.

03

# Course Management

The program includes in its teaching staff revered pediatricians in pediatric trauma care, who pour into this train the experience of their work. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.





“

*Learn about the latest advances in pediatric trauma management in the emergency department”*

## Management



### Dr. Antón Castaño Rivero.

- Specialist in Pediatrics and its Specialized Areas.
- Attending Physician, Pediatric Emergency Department, Cabueñas University Hospital. Gijón
- Accredited in the subspecialty of Pediatric Emergency Medicine by the AEP.
- President of the Spanish Society of Paediatric Emergencies.
- Master's Degree in Emergencies and Acute Pathology in Pediatrics, Autonomous University from Madrid..
- CPR Instructor and Course Director accredited by the Spanish Group of Pediatric and Neonatal CPR.

## Professors

### Dr. Álvarez González, Diana

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Assistant Physician of the Pediatric Emergency Department of Cabueñas Hospital (Gijón).
- ♦ Master's Degree in Pediatric Emergencies and Emergencies, International University of Andalusia.

### Dr. Benito Pastor, Helvia

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Assistant Physician, Pediatric Emergency Department, Río Hortega University Hospital (Valladolid, Castilla y León).
- ♦ American Academy of Pediatrics APLS Course Instructor.

### Dr. Campo Fernández, Nathalie

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Assistant Physician, Pediatric Emergency Department, Río Hortega University Hospital (Valladolid, Castilla y León).
- ♦ American Academy of Pediatrics APLS Course Instructor. Pediatric Emergency Safety Trainer.

### Dr. Castaño Rivero, Antón

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Attending Physician, Pediatric Emergency Department, Cabueñas University Hospital. Gijón
- ♦ CPR Instructor and Course Director accredited by the Spanish Group of Pediatric and Neonatal CPR.

**Dr. Díez Monge, Nuria**

- ♦ Doctor of Medicine. Specialist in Pediatrics and its specific areas.
- ♦ Assistant Physician, Pediatrics Service, Río Hortega Hospital, Valladolid, Castilla y León.

**Dr. Fernández Álvarez, Ramón**

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Attending Physician, Pediatric Emergency Department, Cabueñes University Hospital. Gijón
- ♦ Course Director of the APLS (Advanced Pediatric Life Support)

**Dr. Fernández Arribas, José Luis**

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Assistant Physician, Pediatric Emergency Department, Río Hortega University Hospital (Valladolid, Castilla y León).
- ♦ Pediatric and Neonatal CPR Instructor. APLS instructor. Pediatric simulation instructor

**Dr. González Calvete, Laura**

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Attending Physician, Pediatric Emergency Department, Cabueñes University Hospital. Gijón
- ♦ Pediatric Basic and Advanced CPR Instructor.

**Dr. Suárez Castañón, Cristina**

- ♦ Doctor of Medicine. Specialist in Pediatrics and its specific areas.
- ♦ Attending Physician, Pediatric Emergency Department, Cabueñes University Hospital. Gijón

**Dr. González Martín, Leticia**

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Assistant Physician, Pediatric Emergency Department, Río Hortega University Hospital (Valladolid, Castilla y León).
- ♦ Instructor in pediatric and neonatal CPR.
- ♦ Lecturer on several courses and conferences on cardiopulmonary resuscitation, emergencies and simulation.

**Dr. Lombraña Álvarez, Emma**

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Attending Physician, Pediatric Emergency Department, Cabueñes University Hospital. Gijón

**Dr. Salamanca Zarzuela, Beatriz**

- ♦ Specialist in Pediatrics and its Specialized Areas.
- ♦ Assistant Physician, Pediatric Emergency Department, Río Hortega University Hospital (Valladolid, Castilla y León).

**Dr. Velasco Zúñiga, Roberto**

- ♦ Doctor of Medicine. Specialist in Pediatrics and its specific areas.
- ♦ Assistant Physician, Pediatric Emergency Department, Río Hortega University Hospital (Valladolid, Castilla y León).
- ♦ Master's Degree in Research Methodology.

# 04

## Structure and Content

The content structure has been designed by a team of professionals who recognize the implications of specialization in good medical practice in the pediatric emergency department, are aware of the current relevance of specialization train able to treat pediatric patients with severe trauma, and are committed to quality teaching through new educational technologies.



“

*This Postgraduate Diploma in Pediatric Trauma is the most complete and up-to-date 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 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
  - 1.3.1. Out-of-hospital Transfer
  - 1.3.2. Neonatal and Pediatric Transportation

## Module 2. Invasive Techniques in Critically Ill Pediatric Patients

- 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. Analgesia and Sedation
  - 2.5.1. Approaching Pain
  - 2.5.2. Procedure
  - 2.5.3. Reference Drugs in Analgesia and Sedation
- 2.6. Protocol for Child Death
- 2.7. Rapid Intubation Sequence



### Module 3. 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. Lower Extremity Trauma
- 3.4. Upper Extremity Trauma
- 3.5. Thoracic Trauma Rib Fractures and Contusions
- 3.6. Limping
  - 3.6.1. Types of Lameness
  - 3.6.2. Treatment
  - 3.6.3. Referral Criteria
- 3.7. Classification of Pediatric Fractures
- 3.8. Mobilization and Immobilization Workshop
- 3.9. Active Mobilization Stimulation
- 3.10. Hyperpronation
- 3.11. Supination-Flexion
- 3.12. Radial Head Subluxation

### Module 4. Unintentional Injuries Child Accidents

- 4.1. Burns and Wounds
- 4.2. Drowning
- 4.3. Stings and Bites
- 4.4. Drug and Non-drug Intoxications
- 4.5. Anaphylaxis
  - 4.5.1. Classification of Severity
  - 4.5.2. Diagnostic Procedures
  - 4.5.3. Treatment and Discharge Recommendations
- 4.6. Foreign Body Extraction from the Ear
- 4.7. Foreign Bodies Extraction from the Nose
- 4.8. Freeing Trapped Penis or Scrotum
- 4.9. Incarcerated Inguinal Hernia Reduction
- 4.10. Reduction of Paraphimosis



*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.



“

*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 we use the Case Method

In a given 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 an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you can experience a way of learning 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 potential or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional 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:

1. Students 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 student to better integrate into the real world.
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.



## 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 physician 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 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. 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 training, 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.



#### Latest 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 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

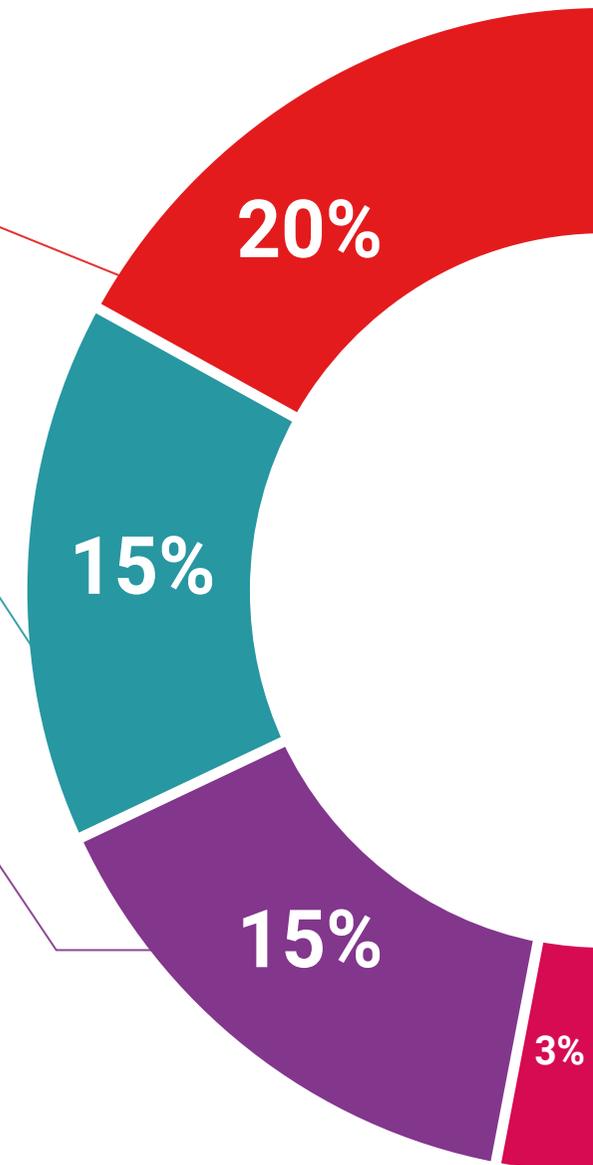
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

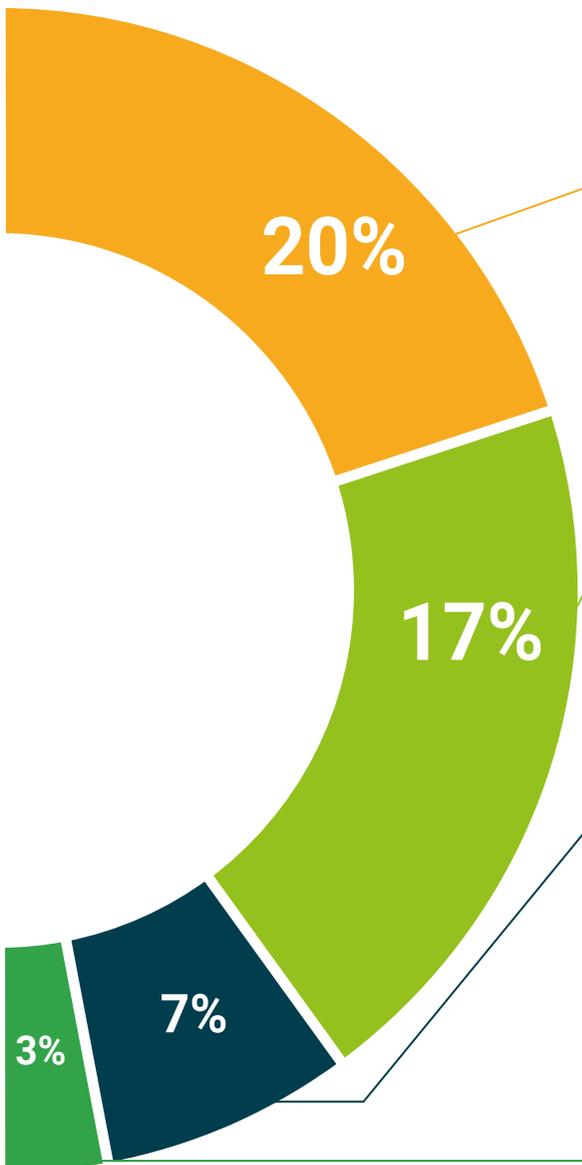
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".



#### 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 & Retesting**

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 difficult future 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 Diploma in Pediatric Trauma** guarantees, in addition to the most rigorous and up-to-date training, access to a qualification issued by **TECH Technological University**.





“

*Successfully complete this specialisation  
and receive your university degree without  
travel or laborious paperwork”*

This **Postgraduate Diploma in Pediatric Trauma** is the most complete and up-to-date scientific program on the market.

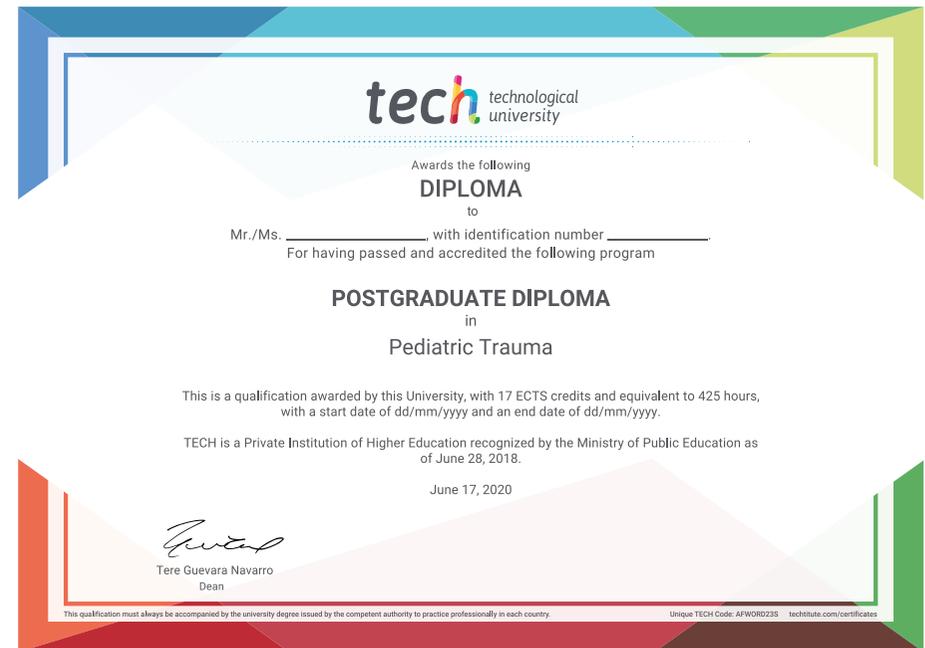
After the student has passed the assessments, they will receive their corresponding **certificate** issued by La **TECH Technological University** via tracked delivery.

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

Title: **Postgraduate Diploma in Pediatric Trauma**

ECTS: **17**

Official Number of Hours: **425**



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



**Postgraduate Diploma**  
Pediatric Trauma

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Diploma

## Pediatric Trauma

