



# Postgraduate Diploma

Pediatric Emergencies for Specialty Care Physicians

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 23 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-pediatric-emergencies-specialty-care-physicians

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Certificate

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### tech 06 | Introduction

Every day, rapid and significant demographic, social, cultural, scientific and technological changes are taking place, as well as changes in the population's health care demands and expectations. This should reinforce the value and the capacity for resolution in pediatric care. These changes also affect child morbidity and the priorities of care in child and adolescent health, posing new challenges in pediatric emergency care for Specialty Care Physicians, and reinforcing the role of the pediatrician in early stages of care.

Scientific evidence recommends pediatricians remain in emergency departments that treat children, as well as reinforce their specific function as the first point of contact children have with the healthcare system, that is, primary care physicians provide important advantages for the child population. And this must be accompanied by up-to-date professionals with the necessary skills and abilities to ensure that these objectives are met.

The program will allow physicians to learn first-hand the most important aspects of Specialty Care Physicians and to keep up to date with the advances that are being made in the discipline on a daily basis.

This **Postgraduate Diploma in Pediatric Emergencies for Specialty Care Physicians** is the most complete and up-to-date scientific program on the market. The most important features include:

- Clinical cases presented by experts in the different specialties.
- Its graphic, schematic and eminently practical contents contain scientific and practical information on the medical disciplines that are essential for professional practice.
- Latests diagnostic and therapeutic developments in child care.
- Clinical practice guidelines on the different pediatric emergencies for Specialized Care physicians.
- The presentation of hands-on workshops on procedures, diagnostic and therapeutic techniques.
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- 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.





This Postgraduate Diploma is the best investment you can make when choosing a refresher program to expand your existing knowledge in Pediatric Emergencies"

Forming part of the teaching staff is a group of professionals in the world of pediatrics, who bring to this training their work experience, as well as a group of renowned specialists, recognized 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 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.

Study the best didactic material with the best and most innovative methodology, 100% online. Study at TECH.

A Postgraduate Diploma that allows you to train skills in simulated environments, according to the principles of immersive learning.







# tech 10 | Objectives



# **General Objective**

• Update physicians in the management of urgent pathologies through the diagnostic and therapeutic techniques to be applied on pediatric patients, in order to provide global emergency care that allows for improved prognosis of the child and attention to the family.







### **Specific Objectives**

- Practice patient selection according to the different triage systems.
- Describe critical pediatric patient transport systems.
- Incorporate the techniques of incarcerated hernia reduction, gastric catheterization and child management in cases of ostomy.
- Describe the main aspects of endocrinometabolic pathologies in children.
- Review advances in the management of fungal infections, tinea, candidiasis and pityriasis versicolor.
- Analyze new developments in the management of children with ophthalmologic and otorhinolaryngologic problems.
- Describe the main advances in child management in cases of nephrourological problems, incorporating urine collection, suprapubic puncture and bladder catheterization techniques according to updated clinical guidelines.
- Define the organizational and management differential characteristics of Pediatric Emergency Departments for Specialized Care Physicians.
- Update on management procedures for children who refuse to eat and relate it to the different digestive pathologies.







#### **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 of 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



### Dr. Castaño Rivero, Antón

- · Specialist in Pediatrics and its Specialized Areas.
- · Attending Physician, Pediatric Emergency Department, Cabueñes 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 in the Pediatric Specialty Care Emergency Department of Cabueñes 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 Instructor for Specialty Care Physicians.

#### Dr. Díez Monge, Nuria

- Doctor of Medicine. Specialist in Pediatrics and its specific areas.
- Assistant Physician, Pediatrics Service, Rio 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. 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

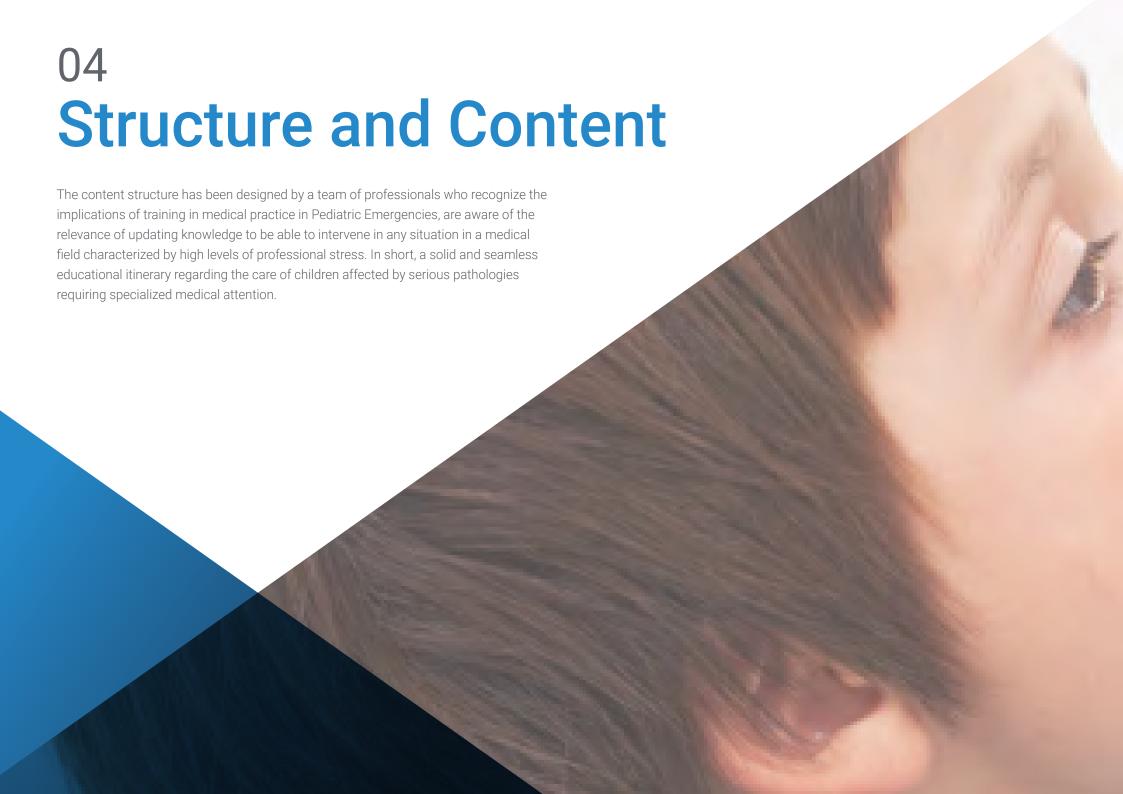
- Specialist in Pediatrics and its Specialized Areas.
- Assistant Physician, Pediatric Emergency Department, Río Hortega University Hospital (Valladolid, Castilla y León).

### Dr. Suárez Castañón, Cristina

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

#### 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.





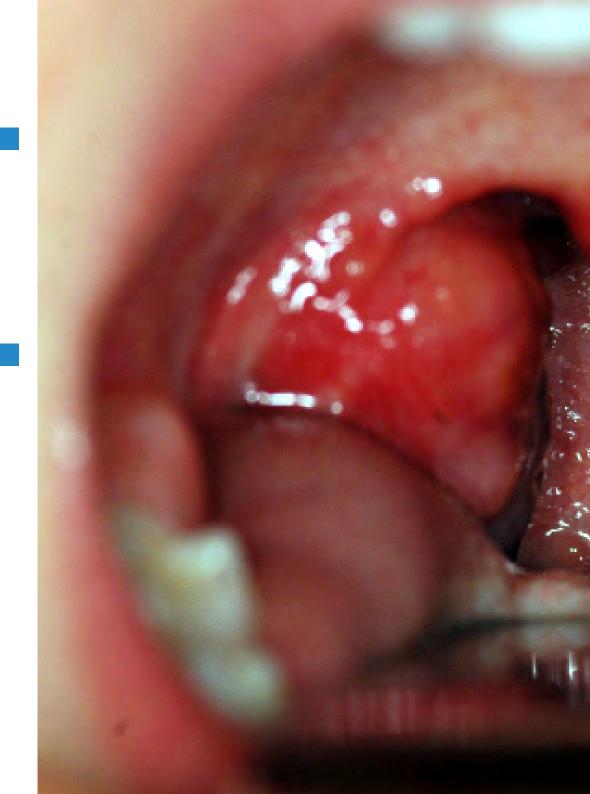
### tech 20 | Structure and Content

### **Module 1.** Health Care Organization for Common 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 In-hospital Transfer, Out-of-Hospital Transfer and ISOBAR
- 1.4. Neonatal and Pediatric Transportation

### Module 2. Digestive Emergencies

- 2.1. Children Who Refuse to Eat
- 2.2. Acute Abdominal Pain
- 2.3. Gastrointestinal Disorders
- 2.4. Acute Dehydration
  - 2.4.1. Isonatremic Dehydration
  - 2.4.2. Hyponatremic Dehydration
  - 2.4.3. Hypernatremic Dehydration
- 2.5. Acid-base Balance Disorders
  - 2.5.1. Metabolic Acidosis Respiratory Acidosis
  - 2.5.2. Metabolic Alkalosis Respiratory Alkalosis
- 2.6. Coeliac Disease.
  - 2.6.1. Diagnostic Algorithm
  - 2.6.2. Treatment
- 2.7. Gastroesophageal Reflux (GER)
- 2.8. Constipation
- 2.9. Hepatitis
  - 2.9.1. HAV, HBV, HCV, HDV, HEV
  - 2.9.2. Autoimmune Hepatitis
- 2.10. Gastrointestinal Bleeding
- 2.11. Jaundice





### Structure and Content | 21 tech

### Module 3. Endocrinometabolic Emergencies

- 3.1. Emergencies in Diabetic Patients
- 3.2. Hydroelectrolytic Alterations
- 3.3. Adrenal Insufficiency

### Module 4. Pediatric Skin Emergencies

- 4.1. Bacterial Infections in Pediatrics
  - 4.1.1. Impetigo Contagiosa
  - 4.1.2. Folliculitis, Furunculosis and Carbuncles
  - 4.1.3. Perianal Streptococcal Dermatitis
- 4.2. Viral Infections in Pediatrics
  - 4.2.1. Human Papiloma Virus
  - 4.2.2. Contagious Molusco
  - 4.2.3. Simple Herpes
  - 4.2.4. Shingles
- 4.3. Mycotic Infections in Pediatric Dermatology
  - 4.3.1. Tinea
  - 4.3.2. Candidiasis
  - 4.3.3. Pityriasis Versicolor
- 4.4. Infestations in Pediatric Dermatology
  - 4.4.1. Pediculosis
  - 4.4.2. Scabies
- 4.5. Eczema Atopic dermatitis

### tech 22 | Structure and Content

### Module 5. Ophthalmologic and Otorhinolaryngologic Emergencies

- 5.1. Conjunctivitis and Blepharitis Pink Eye
  - 5.1.1. Most Frequent Infectious Pathology
  - 5.1.2. Non-Infectious Pathology
  - 5.1.3. Protocol for Pediatric Ophthalmologic Emergencies
- 5.2. Eyelids and Lacrimal System
  - 5.2.1. Palpebral Alterations and Malformations
  - 5.2.2. Inflammatory Pathology
  - 5.2.3. Cysts and Tumors
  - 5.2.4. Lacrimal Pathology in Children
  - 5.2.5. Palpebral Traumatology in Infancy
- 5.3. Acute Pharyngotonsillitis Acute Otitis Media Sinusitis
- 5.4. Foreign Bodies Extraction from the Eye
- 5.5. Ophthalmologic Examination with Fluorescein
- 5.6. Eversion of the Upper Eyelid

### Module 6. Nephrourological Emergencies

- 6.1. Urinary tract infections
  - 6.1.1. Diagnostic Criteria
  - 6.1.2. Referral Indications
- 6.2. Hematuria
- 6.3. Renal Lithiasis and Renal Colic
- 6.4. Acute Scrotum
  - 6.4.1. Frequency in the Pediatric Age Group
- 6.5. Suprapubic Puncture
- 6.6. Bladder catheterisation
- 6.7. Reduction of Paraphimosis





### Structure and Content | 23 tech

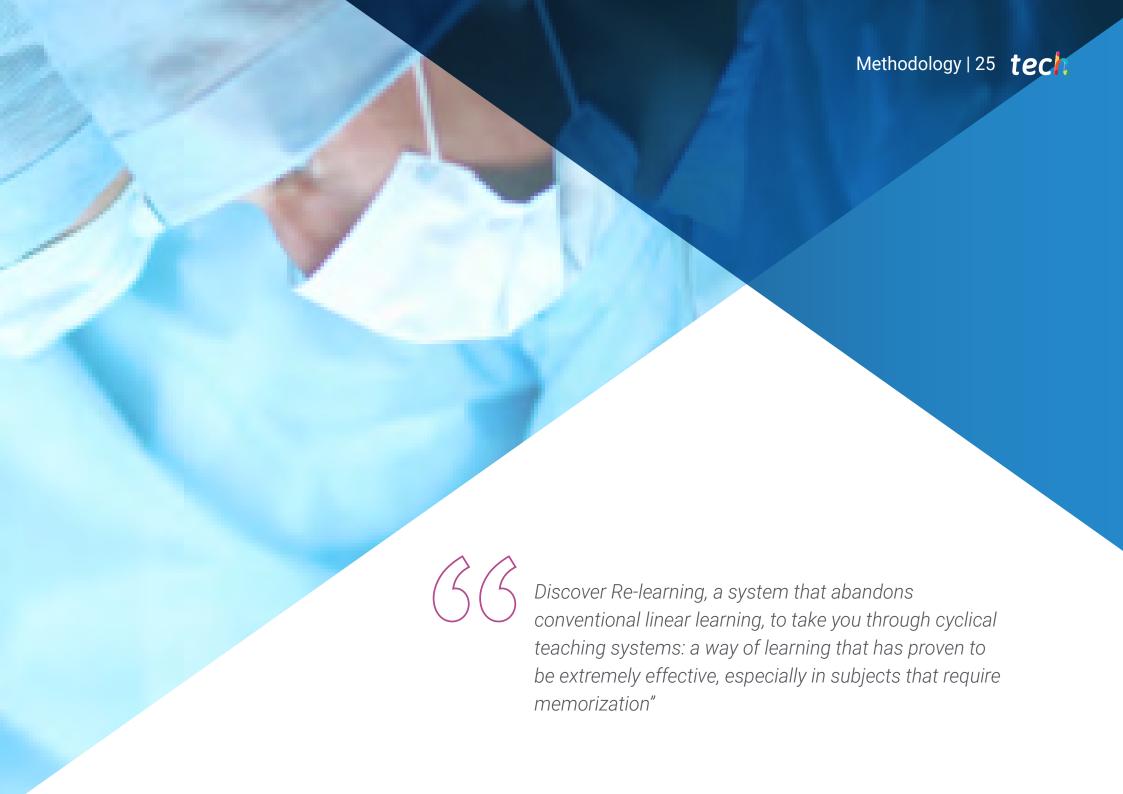
### Module 7. Special Situations in Pediatric Emergencies

- 7.1. Children with Special Needs
  - 7.1.1. Tracheostomy and Home Mechanical Ventilation
  - 7.1.2. Gastrostomies and Feeding Tubes
  - 7.1.3. Peritoneal Ventriculo-Peritoneal Shunt Valves
  - 7.1.4. Central Catheters and Prosthetic Vascular Accesses
- 7.2. Medication in Pediatrics
- 7.3. Psychiatry in the Emergency Department
  - 7.3.1. Assessment and Initial Treatment
  - 7.3.2. Psychomotor Agitation and Violence
  - 7.3.3. Suicidal Behavior
  - 7.3.4. Psychotic Disorders
- 7.4. Child Abuse
  - 7.4.1. Attitude in the Emergency Room
  - 7.4.2. Assistance in the Case of Abuse
- 7.5. Techniques and Procedures Mechanical Restraint of the Agitated or Aggressive Child



The Postgraduate Diploma most capable of providing you with the knowledge you seek"



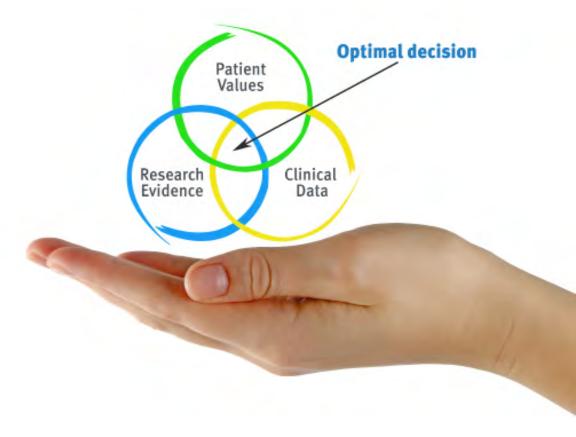


### tech 26 | Methodology

#### 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. 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 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:

- 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.
- 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.



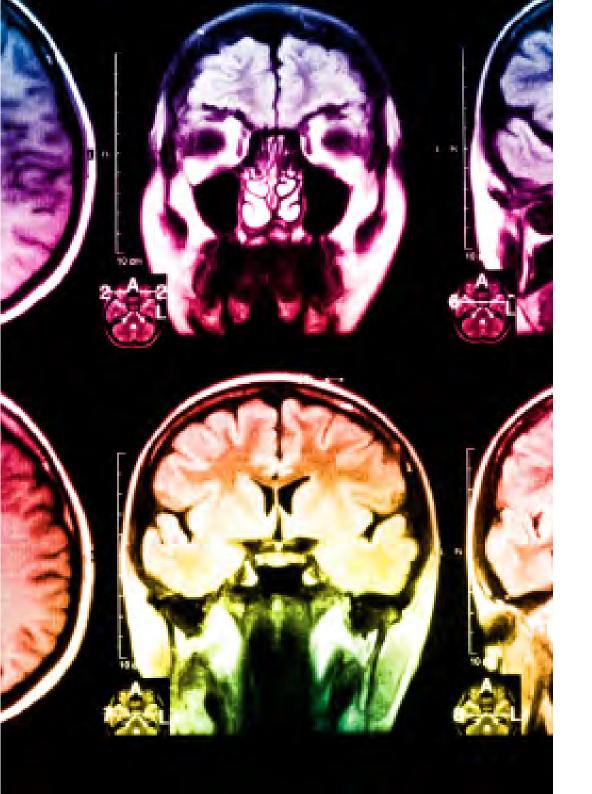
### **Re-learning Methodology**

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-theart software to facilitate immersive learning.





### Methodology | 29 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 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**

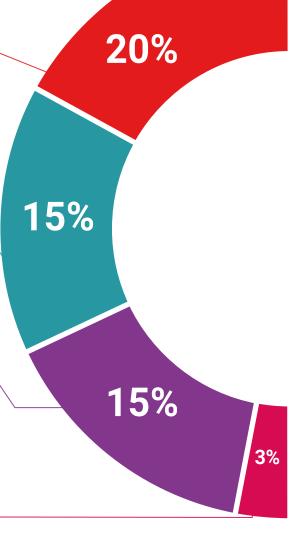
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

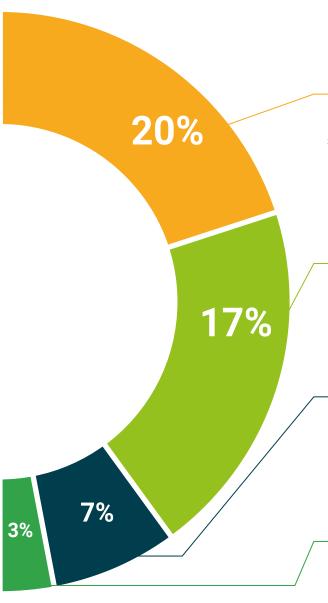
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





### **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.





### tech 34 | Certificate

This private qualification will allow you to obtain a **Postgraduate Diploma in Pediatric Emergencies for Specialty Care Physicians** 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** private qualification 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 Diploma in Pediatric Emergencies for Specialty Care Physicians

Modality: online

Duration: 6 months

Accreditation: 23 ECTS



Mr./Ms. \_\_\_\_\_ with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

### Postgraduate Diploma in Pediatric Emergencies for Specialty Care Physicians

This is a private qualification of 690 hours of duration equivalent to 23 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





# Postgraduate Diploma

Pediatric Emergencies for Specialty Care Physicians

- » Modality: online
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- » Certificate: TECH Global University
- » Credits: 23 ECTS
- » Schedule: at your own pace
- » Exams: online

