Postgraduate Diploma

Life-Threatening Pediatric Emergencies

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Postgraduate Diploma

Life-Threatening Pediatric Emergencies

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **20 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-life-threatening-pediatric-emergencies

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Introduction

In daily pediatrician practice, whether in the emergency or outpatient setting, it is not uncommon to see children requiring immediate intervention. It is therefore essential for pediatricians to be able to promptly recognize these situations and to guide and establish the appropriate therapy, minimizing complications and improving the child's prognosis. This program includes, in practical form, the latest advances in approaching life-threatening pediatric emergencies, so that physicians can provide quality care to children and their families.

This program will enable you to deal with life-threatening situations. Learn how to identify, initially treat and refer pediatric patients with emergency pathologies"

Pediatric emergencies require specific needs and skills that are very different from adult emergencies. The pediatric emergency department physician is confronted on a daily basis with cases of children affected by severe clinical conditions.

Pediatric emergency departments are those that provide care for children with and in need of immediate care and treatment. These places offer highly complex and diverse services to meet demand, providing all life-sustaining maneuvers that will guarantee continuity of care at another level of complexity.

The emergency physician must also know how to refer to patient history, if available, and how to interpret it. In this regard, prior medical history will focus primarily on conditions, investigations or hospitalizations that the children have had that may provide important data for subsequent evaluations. It is also important to determine immunization status if children are at risk of contracting preventable diseases.

A review of family history is important. Open-ended questions are more useful and often raise differential diagnostic possibilities. Close relatives or other family members may have had atypical presentations of common diseases that, in some way, can help doctors decide on a particular therapeutic route.

All these issues and more will be addressed in great detail during the development of this unique academic program on the Spanish-speaking online university scene.

This **Postgraduate Diploma in Life-Threatening Pediatric Emergencies** 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.
- The vital diagnostic-therapeutic novelties on pediatric emergency procedures; it also incorporates new contents: emergency electrocardiography, sedoanalgesia echoescopies in emergencies, etc.
- 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

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

End your search: this is the best Postgraduate Diploma in Life-Threatening Pediatric Emergencies. Choose TECH and start studying tomorrow"

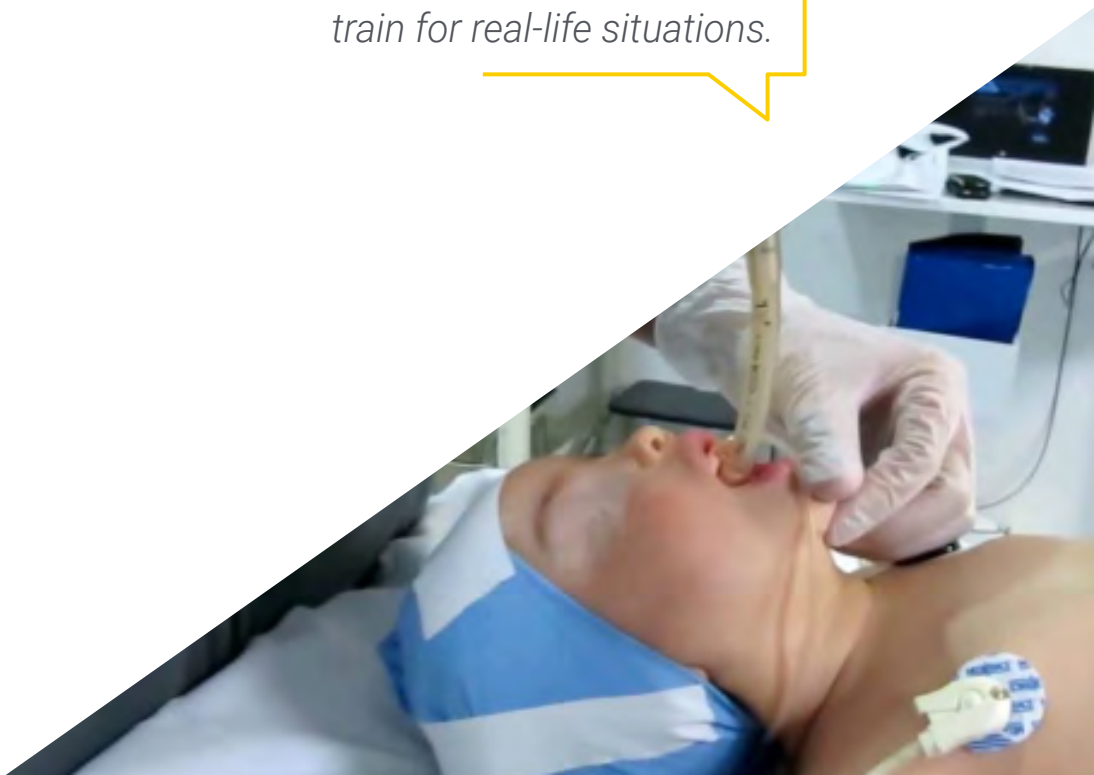
TECH offers you the best didactic material and an innovative 100% online methodology so that you can make the most of your study time.

This Postgraduate Diploma provides training in simulated environments, which allows for an immersive learning experience designed to train for real-life situations.

The teaching staff includes medical professionals who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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 experience designed to train for real-life situations.

This program is designed around Problem Based Learning, where the medical professional must try to solve the different professional practice situations that arise during the course. For this purpose, specialists will be assisted by an innovative interactive video system created by renowned experts in the field of life-threatening pediatric emergencies with extensive experience.



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Objectives

TECH Global University intends to provide students with knowledge that will enable them to recognize and interpret the signs and symptoms of children in potentially serious situations; to institute prompt and appropriate treatment for each emergency situation; to understand the need for constant monitoring and re-evaluation; and to develop the critical sense to lead the multidisciplinary team that cares for children. Ultimately, the objective is none other than to see physicians who are more than capable of saving the lives of pediatric patients.

This Postgraduate Diploma will improve your daily medical practice, taking it to the highest level"

General Objective

- Update physicians on diagnostic and therapeutic techniques for pediatric patients in life-threatening emergencies, in order to provide medical care based on evidence that will improve the child's prognosis and attention to the family.

Specific Objectives

- Identify and select triage pediatric patients according to the different triage systems.
- Describe pediatric critical patient transport systems
- Identify the signs and symptoms of the main apparently lethal syndromes and recognize critically ill children.
- Update the latest recommendations for the performance of basic and advanced cardiopulmonary resuscitation maneuvers and complete upper airway clearance of a foreign body
- 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
- Describe the main signs and symptoms of cardiac pathologies, arrhythmias, syncope, heart failure and congenital heart disease.
- Incorporate frequently used techniques in the diagnosis and treatment of cardiac pathologies, such as rapid ECG reading, electrical cardioversion for the management of tachyarrhythmias and cardiac defibrillation
- Address respiratory pathology in newborns in light of the latest scientific evidence.
- Describe the main signs and symptoms of respiratory tract pathologies in children, and the approach to acute pharyngotonsillitis, laryngitis or croup, spasmodic croup, otitis and sinusitis.
- Determine the procedures for the management of asthmatic children and chronic cough, and the different diagnostic and therapeutic techniques such as airway aspiration, thoracentesis and placement of the pleural tube, forced spirometry and bronchodynamic test.
- Describe the main signs and symptoms of pathologies of neurological etiology in children.
- Review procedures for lumbar puncture and ventriculoperitoneal shunt puncture techniques.

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Course Management

Students are before a university specialization taught by a teaching staff consisting of leading medical experts in the context of Pediatric Emergencies. You will have the opportunity to learn not only from the program curriculum, but also from contact with the teaching staff, who will be available at all times to answer any your questions.

Leading professionals in the field have come together to teach you the latest advances in Pediatric Emergencies"

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"

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 of the Pediatric 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 Trainer

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 in 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

04

Structure and Content

The content structure has been designed for physicians to acquire the most cutting-edge and up-to-date knowledge on Life-Threatening Pediatric Emergencies. To that end, TECH has worked with the teaching staff to compile dozens of studies and research papers. As a result, we have elaborated a state-of-the-art syllabus that will make students successful physicians at the head of the Pediatric Emergency Department of any hospital.

This Postgraduate Diploma in Life-Threatening Pediatric Emergencies is the most complete and up-to-date scientific program on the market"

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. Cardiologic Emergencies

2.1. Arrhythmias and Syncope
  2.1.1. Bradyarrhythmias Diagnosis and Treatment
  2.1.2. Tachyarrhythmias Diagnosis and Treatment
2.2. Congenital Heart Disease
  2.2.1. Cyanotic Congenital Heart Disease
  2.2.2. Non-Cyanotic Congenital Heart Disease
  2.2.3. Diagnostic Approach
  2.2.4. Treatment
2.3. Hypertensive Crisis
  2.3.1. Diagnostic Guidance for Hypertension in Children and Adolescents
  2.3.2. Therapeutic Guidance for Hypertension in Children and Adolescents
2.4. Heart Failure
  2.4.1. Etiology
  2.4.2. Diagnosis
  2.4.3. Treatment. Mechanical Ventricular Assistance Techniques Extracorporeal Membrane Oxygenation (ECMO)
2.5. Quick Reading of an ECG
2.6. Management of Tachyarrhythmias and Bradyarrhythmias: Electrical Cardioversion and Transcutaneous Pacing
2.7. Management of Defibrillable Arrhythmias: Defibrillation

Module 3. Respiratory Emergencies

3.1. Respiratory Pathology in Recent Newborns
  3.1.1. Incomplete Pulmonary Fluid Reabsorption Syndrome
  3.1.2. Meconium Aspiration Syndrome
  3.1.3. Hyaline Membrane Disease
  3.1.4. Pneumothorax
  3.1.5. Pneumonia
  3.1.6. Apnea in Newborns
3.2. Airway Diseases
  3.2.1. Acute Pharyngotonsillitis
  3.2.2. Laryngitis or Croup
  3.2.3. Spasmodic Croup
  3.2.4. Otitis
  3.2.5. Sinusitis
3.3. Community-Acquired Pneumonia (CAP)
  3.3.1. Diagnosis
  3.3.2. Hospital Admission Criteria
  3.3.3. Latest Advances in Treatment
3.4. Managing a Child with a Persistent Cough Chronic cough
  3.4.1. Etiology
    3.4.1.1. Persistent Bacterial Bronchitis
    3.4.1.2. Asthma
    3.4.1.3. Gastroesophageal Reflux, etc.
  3.4.2. Treatment
3.5. Caring for Asthmatic Children
  3.5.1. Clinical Diagnosis Functional Diagnosis
  3.5.2. Pharmacological Treatment Non-Pharmacological Treatment
  3.5.3. Education of Health
3.6. Inhalation Techniques Oxygen Therapy
3.7. Thoracentesis and Chest Tube Placement
3.8. Forced Spirometry Bronchodynamic Tests FEM

Module 4. Neurological Emergencies

4.1. Acute Ataxia
4.2. Alterations of Consciousness
4.3. Acute Headache
  4.3.1. Migraine
  4.3.2. Tension Headache
  4.3.3. Periodic Syndromes of Childhood
4.4. Epilepsies and Non-Epileptic Seizure Disorders in Childhood
  4.4.1. Epileptic Syndromes in Childhood and Adolescence
  4.4.2. General Treatment of Epilepsies
4.5. Bacterial and Viral Meningitis
4.6. Febrile Seizures
4.7. Puncture of the Ventriculoperitoneal Shunt Reservoir
4.8. Lumbar Puncture

Module 5. Infectious Emergencies

5.1. Exanthematous Diseases.
5.2. Whooping Cough and Pertussis Syndrome
  5.2.1. Medical treatment
  5.2.2. Control Measures
5.3. Febrile Syndrome without Focus
5.4. Sepsis. Septic Shock
5.5. Osteoarticular Infections
5.6. Fever and Neutropenia

An unparalleled academic experience in the online university world"

05

Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used, for example, 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

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately 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:

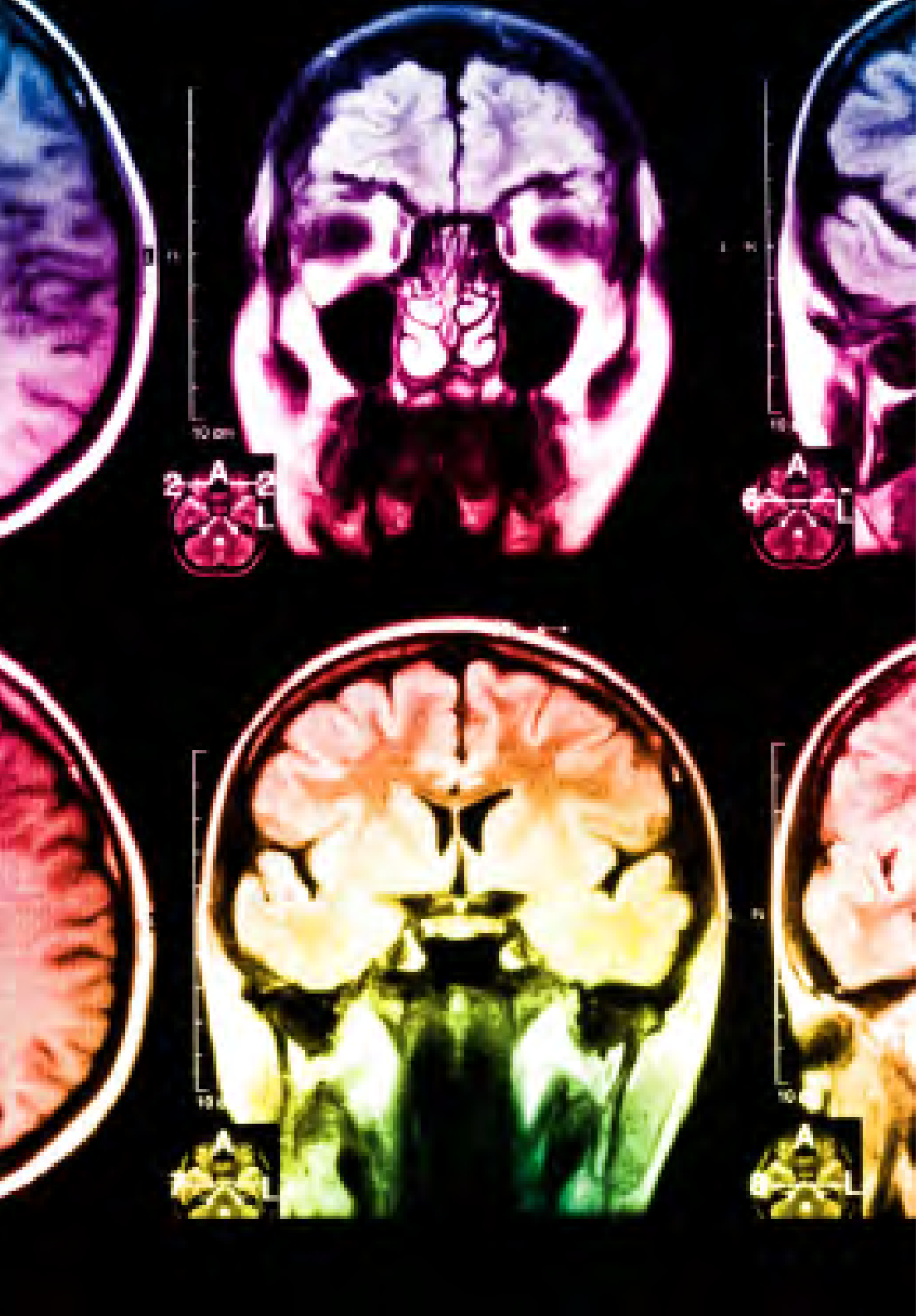
1. Students who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts 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.

This 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, a real revolution with respect to the simple study and analysis of cases.

Professionals will learn through real cases and by resolving 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).

Over 250,000 physicians have been trained using this methodology, with unprecedented success in all clinical specialties regardless of surgical load. This teaching methodology is developed in a highly demanding environment, with a university student body of high 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 (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

This program offers the best educational material, prepared with professionals 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.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.

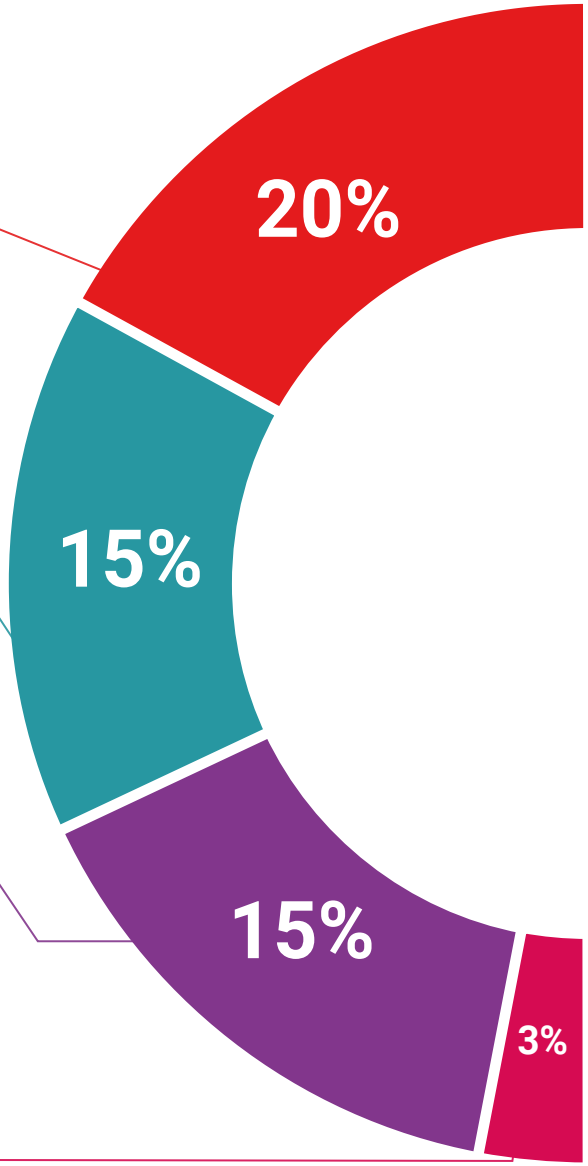
Interactive Summaries

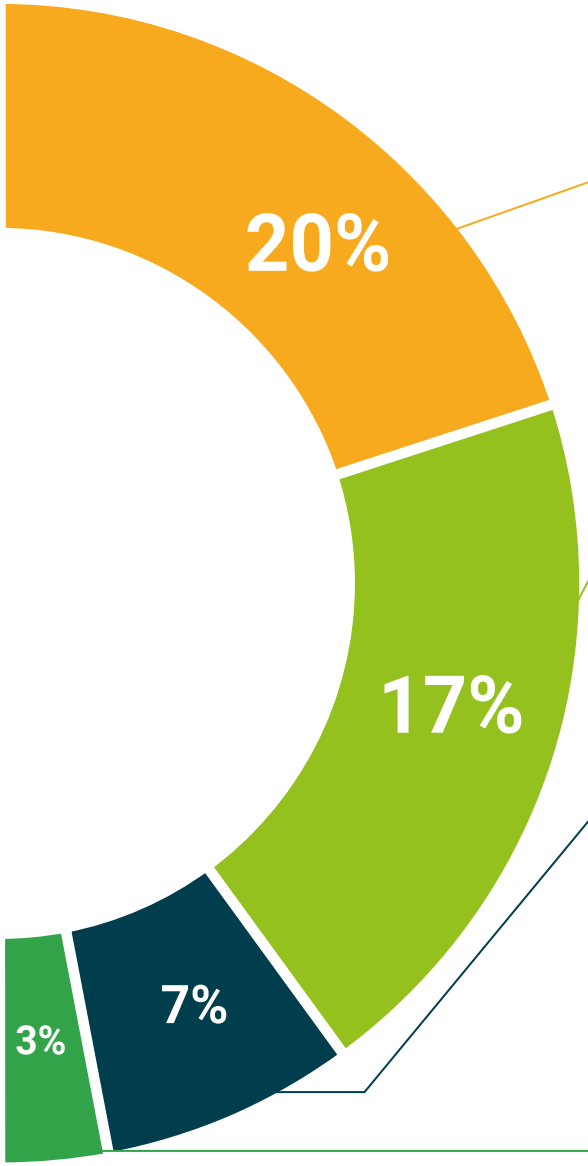
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

Testing & Retesting

The student's knowledge is periodically assessed and re-assessed throughout the program, through evaluative and self-evaluative activities and exercises: in this way, students can check how they are doing in terms of achieving their goals.

Classes

There is scientific evidence on the usefulness of learning by observing experts: The system termed Learning from an Expert strengthens knowledge and recall capacity, and generates confidence in the face of difficult decisions in the future.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.

06

Certificate

The Postgraduate Diploma in Life-Threatening Pediatric Emergencies guarantees, in addition to the most rigorous and up-to-date training, access to a qualification issued by TECH Global University.

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

This private qualification will allow you to obtain a **Postgraduate Diploma in Life-Threatening Pediatric Emergencies** 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 Life-Threatening Pediatric Emergencies**

Modality: **online**

Duration: **6 months**

Accreditation: **20 ECTS**


tech global university

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

Postgraduate Diploma in Life-Threatening Pediatric Emergencies

This is a private qualification of 600 hours of duration equivalent to 20 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy6

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

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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