

# Professional Master's Degree

## Pediatric Emergency Nursing





## Professional Master's Degree Pediatric Emergency Nursing

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/nursing/professional-master-degree/master-pediatric-emergency-nursing](http://www.techtute.com/us/nursing/professional-master-degree/master-pediatric-emergency-nursing)

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01

# Introduction

The organization of emergency pediatric patient care services is often different from that of adults, so it is necessary for professionals who work with them to specialize in this area. The role of nursing professionals is key, and keeping them constantly up-to-date is essential in order to maintain the necessary quality and safety level of their services.







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*New pediatric emergency scenarios encourage us to propose new refresher programs that meet the real needs of experienced professionals, so that they can implement advances in emergency patient care for children"*

This Pediatric Emergency Nursing program includes theoretical knowledge and updates, but also provides instruction in pediatric advanced life support techniques, pediatric airway management, venous access and administration of drugs in appropriate doses, or immobilization of the pediatric polytraumatized patient, among other skills, to ensure immediate and high-quality care in the pediatric age group.

Furthermore, the fact that pediatric patients are different to adult emergency patients in a number of ways, necessitates education for pediatric emergency services and nursing professionals who work in them, in order to provide individualized and quality health care.

As such, it is necessary to update nursing professionals so that they have the competencies, skills and attitudes that will enable them to approach and pediatric emergencies in all forms and at all levels of care.

This Professional Master's Degree in Pediatric Emergency Nursing, offers professionals the opportunity to get up to date in the approach and intervention of the most important pediatric emergencies, establishing key elements for the care of patients in critical condition and the implementation of different emergency care diagnostic and treatment techniques. In addition, it addresses organizational aspects of pediatric emergency services and the provision of personnel and material, with emphasis on their differential characteristics.



*This Professional Master's Degree in Pediatric Emergency Nursing includes real clinical cases and exercises to bring the development of the program to daily practice"*

This **Professional Master's Degree in Pediatric Emergency Nursing** contains 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 content is designed to provide scientific and healthcare information in the medical disciplines that are essential for professional practice
- New diagnostic-therapeutic developments on the nursing professional's actions in the most frequent pediatric emergencies, both cardiorespiratory and infectious, digestive, neurological, etc., with specific sections in each module on nursing techniques and procedures according to age: airway aspiration, gastric lavage in poisoning, catheterization, immobilization of the polytraumatized patient, among others
- Includes pediatric nursing triage, and pediatric advanced life support techniques, based on the latest ILCOR 2015 recommendations
- Workshops on invasive techniques for the critically ill patient that are essential to work with in the emergency department: how to perform an intraosseous puncture, which drugs and doses to prepare in the rapid intubation sequence, how to manage a difficult airway, etc.
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- Clinical practice guidelines for each emergency. These guides follow the scientific and pedagogical criteria of the scientific societies of reference in emergency medicine
- All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- Content available from any device with Internet connection



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*This Professional Master's Degree is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Pediatric Emergency Nursing, you will obtain a qualification issued by TECH Global University"*

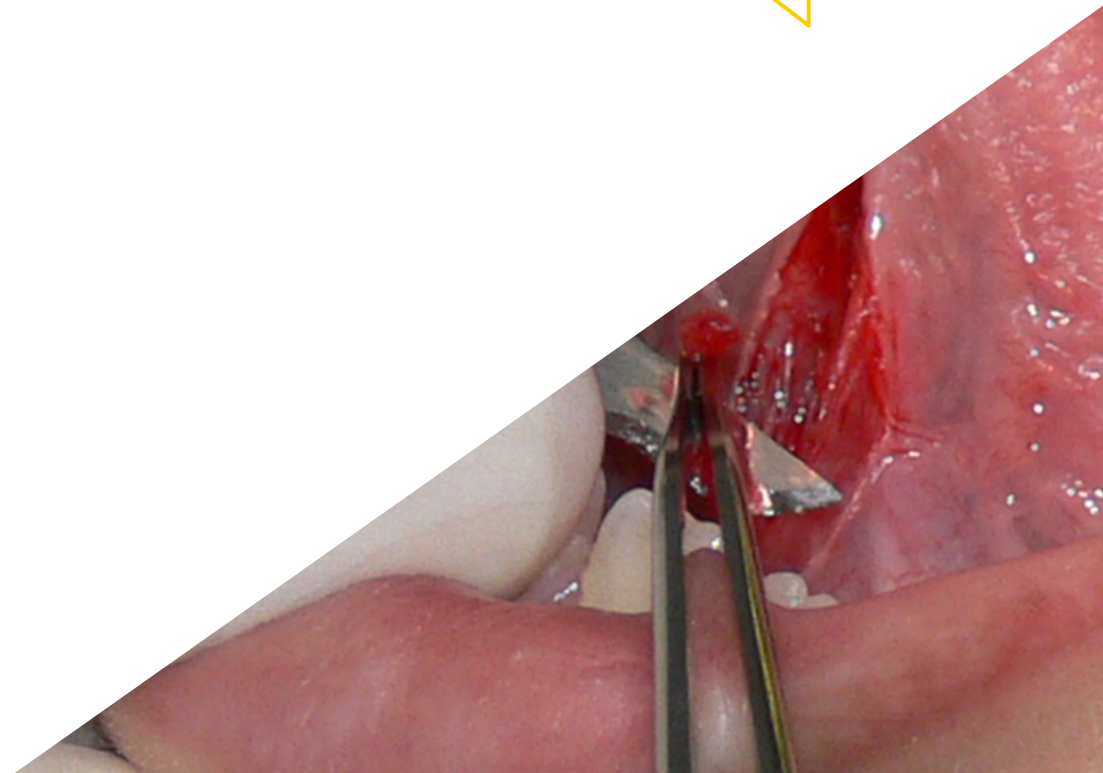
This professionalizing program is designed to update nursing professionals who develop their functions in the field of pediatric patient emergency care, and who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in an educational way to integrate theoretical knowledge into nursing practice, and the theoretical-practical elements will facilitate knowledge updates and decision-making in patient management.

Thanks to the multimedia content, developed with the latest educational technology, nursing professionals will benefit from situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to train in real situations.

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

*Expand your knowledge through this Professional Master's Degree in Pediatric Emergency Nursing, in a practical way and adapted to your needs.*

*This Professional Master's Degree gives you the opportunity to practice in simulated environments, which provide immersive learning programmed to train in real situations.*



# 02 Objectives

This program is oriented towards effectively updating the physician's knowledge of Nursing Professionals, in order to provide quality care based on the latest scientific evidence that guarantees patient safety.





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



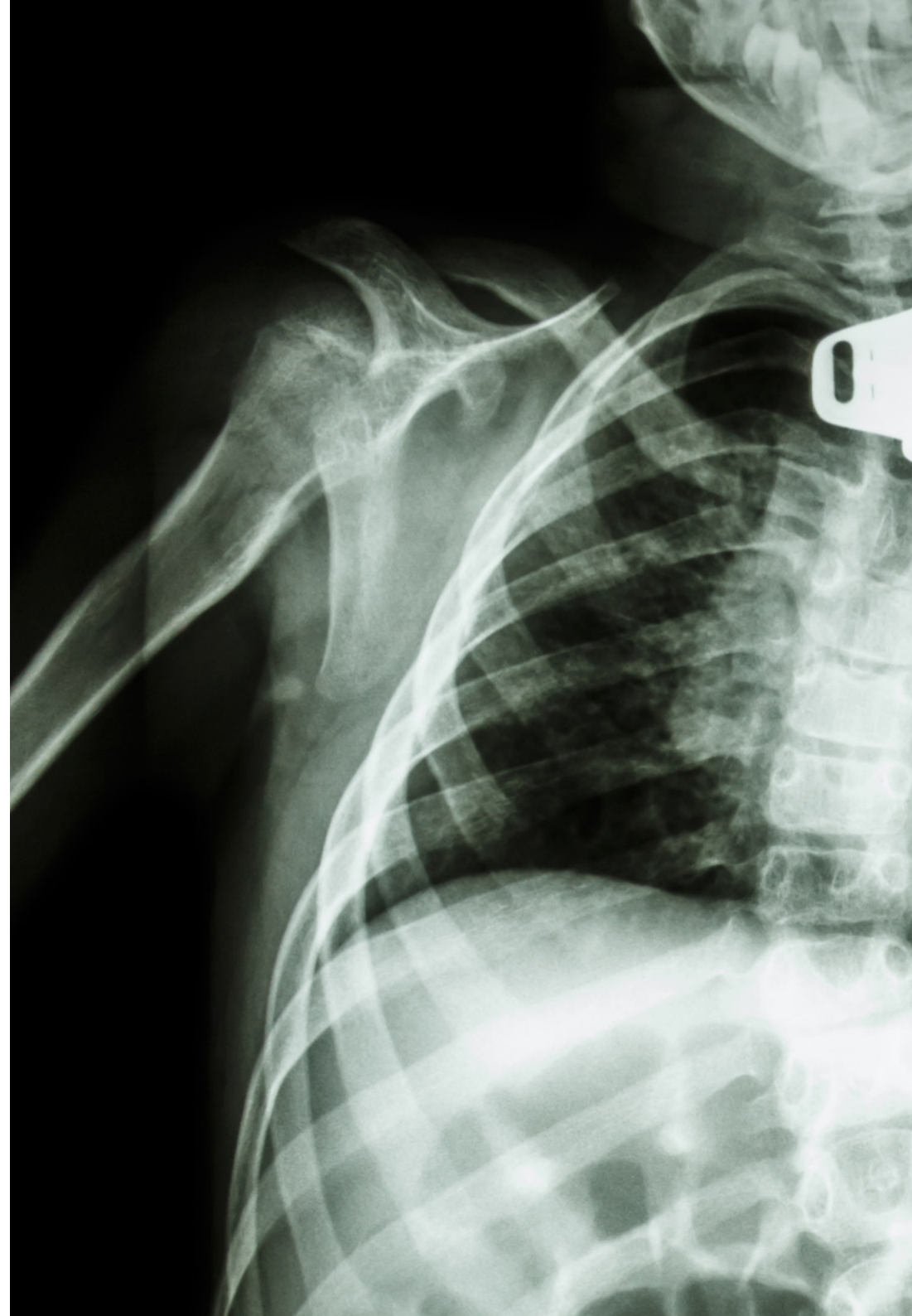
### General Objective

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- Provide an update on the necessary expertise in Pediatric Emergency Nursing, in order to enhance the quality and safety of practice when approaching different techniques and nursing procedures for the most frequent pediatric emergencies



*Make the most of this opportunity and take the leap to get up to date on the latest developments in Pediatric Emergency Nursing”*





## Specific Objectives

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### Module 1. Health Care Organization for Common Pediatric Emergencies

- ♦ Describe the procedures that nurses can perform to safely resolve potentially dangerous situations

### Module 2. Common Advanced Pediatric and Neonatal Cardiovascular Support

- ♦ Identify newborn patients and heart condition
- ♦ Know how to provide first aid in the event of a complication in pediatric patients
- ♦ Develop an action plan for cardiovascular emergencies

### Module 3. Invasive Techniques in Common Critically Ill Pediatric Patients

- ♦ Define a guide with the first aid and treat them in the most prudent way possible
- ♦ Perform emergency medical examinations
- ♦ Identify the main invasive techniques

### Module 4. Cardiologic Emergencies

- ♦ Perform a quick general check of the patient's condition
- ♦ Identify the implements involved in cardiac processes
- ♦ Know the steps to follow in an emergency of this magnitude

### Module 5. Respiratory Emergencies

- ♦ Carry out the correct sequence of basic cardiopulmonary resuscitation maneuvers
- ♦ Carry out advanced cardiopulmonary resuscitation maneuvers according to the latest life support recommendations



### **Module 6. Pediatric Trauma and Osteoarticular Injuries**

- ♦ Define the main unintentional injuries
- ♦ Identify the injury and possible treatment
- ♦ Develop a preventive guide to the most frequently occurring injuries
- ♦ Indicate the management and treatment methods for wounds and burns

### **Module 7. Unintentional Injuries. Child Accidents**

- ♦ Identify the main osteoarticular injuries
- ♦ Check joints that are most prone to injury
- ♦ Specify evaluation and treatment priorities in traumatized children and the characteristics of pediatric patients in general

### **Module 8. Neurological Emergencies**

- ♦ Recognize the main neurological diseases
- ♦ Develop a preventive guide to identify good care to prevent neurological disease
- ♦ Perform periodic evaluations to know the patient's diagnosis
- ♦ Establish the correlation between the different types of brain damage and their clinical manifestations
- ♦ Describe the diagnostic process, assessment and care of pediatric patients with traumatic brain injury

### **Module 9. Digestive Emergencies**

- ♦ Identify the main digestive emergencies
- ♦ Review the patient's diet
- ♦ Increase the ability to manage the acutely intoxicated child or adolescent.
- ♦ Identify the most risky foods that lead to digestive pathologies



**Module 10. Endocrinometabolic Emergencies**

- ♦ Know the patient's age and assess their development to date
- ♦ Identify the main treatments for proper endocrine development
- ♦ Identify the main problems affecting the patient's metabolism

**Module 11. Infectious Emergencies**

- ♦ Identify the main infections and their occurrence in young patients
- ♦ Identify the main tools that counteract infections when they are produced
- ♦ Develop an action guide to treat infections
- ♦ Analyze the specific action protocols by age for pediatric patients with a fever

**Module 12. Ophthalmologic and Otorhinolaryngologic Emergencies**

- ♦ Know the main ophthalmologic complications that a patient may present
- ♦ Perform a correct diagnosis of the otorhinolaryngological system
- ♦ Define the most common prevention techniques and treatments

**Module 13. Pediatric Skin Emergencies**

- ♦ Identify the main problems of the nephrourological system
- ♦ Develop a preventive plan for the renal system

**Module 14. Nephrourological Emergencies**

- ♦ Establish the differential organizational and management characteristics of pediatric emergency departments
- ♦ Describe sedoanalgesia procedure preparation and performance

**Module 15. Special Situations in Pediatric Emergencies**

- ♦ Define the concept of pain, its types and methods of evaluation
- ♦ Recognize from major to minor emergencies that occur in patients

**Module 16. Update on Coronavirus Infections**

- ♦ Identify the severity of and their presence in the young patient
- ♦ Develop techniques to treat coronavirus emergencies

# 03 Skills

After passing the assessments of the Professional Master's Degree in Pediatric Emergency Nursing, the nursing professional will have acquired the professional skills necessary for quality pediatric nursing, and up-to-date expertise based on the latest scientific evidence.







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*Through this program, you will learn about the most frequent pediatric patient emergency situations, and you will be able to perform interventions and provide appropriate nursing care for each case"*



## General Skills

- ♦ Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
- ♦ Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study
- ♦ Integrate knowledge and face the complexity of making judgements based on incomplete or limited information, including reflections on the social and ethical responsibilities related to the application of their knowledge and judgements
- ♦ Know how to communicate conclusions, knowledge, and supporting arguments to specialized and non-specialized audiences in a clear and unambiguous way
- ♦ Acquire the learning skills that will enable further studying in a largely self-directed or autonomous manner
- ♦ Develop within the profession in terms of working with other health professionals, acquiring skills to work as a team
- ♦ Recognize the need to maintain your professional skills and keep them up to date, with special emphasis on autonomous and continuous learning of new information
- ♦ Develop the capacity for critical analysis and research in your professional field







## Specific Skills

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- ♦ Perform the different procedures nurses can carry out to safely resolve potentially dangerous situations in pediatric emergencies
  - ♦ Perform basic and advanced cardiopulmonary resuscitation on children
  - ♦ Describe the procedure to completely clear the upper airway due to foreign body obstruction
  - ♦ Perform nursing care on children with endocrinometabolic emergencies
  - ♦ Assess the degree of pain in the pediatric patient
  - ♦ Explain the sedoanalgesia procedure and know how to prepare the drugs required for it
  - ♦ Apply the specific protocols of action for pediatric patients with fever
  - ♦ Connect the different types of brain damage and their clinical manifestations
  - ♦ Perform initial assessment of traumatic brain injury
  - ♦ Identify characteristics of the traumatized child and priorities for assessment and treatment
  - ♦ State and describe the differences between viral and bacterial meningitis
  - ♦ Manage pediatric patients with acute intoxication
  - ♦ Respond to emergencies in special needs children
  - ♦ Explain and identify the most frequent causes of an apparently lethal episode
- ♦ Define anaphylaxis and its clinical manifestations to guide the diagnosis
  - ♦ List the situations where child abuse is suspect
  - ♦ Describe burn care, including cleanup, phlyctenas management, draping and analgesia and prophylaxis
  - ♦ Identify the differential organizational and management characteristics of pediatric emergency departments
  - ♦ Adapt their decision-making to the current situation, environment, time, and available resources



*Make the most of this opportunity and take the step to get up to date on the latest developments in pediatric patient care in emergency situations"*



04

# Course Management

The materials have been created by a team of pediatric nurses and leading pediatricians, who carry out their professional activity in the main hospitals and primary care units in the country. Bringing to the program the experience they have gained throughout their careers.





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*Learn the latest advances in pediatric emergency care from leading professionals"*

## 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

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- 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



### 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)



05

# Structure and Content

The syllabus has been designed by a team of professionals aware of the importance of nursing updates on the management of pediatric patients with urgent pathology, and committed to quality teaching through new educational technologies.





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*This Professional Master's Degree in Pediatric  
Emergency Nursing contains 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. Common Advanced Pediatric and Neonatal Cardiovascular Support

- 2.1. Apparently Lethal Syndromes
  - 2.1.1. Sudden Infant Death
  - 2.1.2. Treatment
  - 2.1.3. Home Monitoring
- 2.2. Recognition and Management of Critically Ill Children
  - 2.2.1. Epidemiology, Etiology and Prevention of CRP in Childhood
  - 2.2.2. Pediatric Assessment Triangle (PAT) and its Utility
  - 2.2.3. Pediatric ABCDE Assessment
- 2.3. Basic Pediatric Cardiopulmonary Resuscitation
- 2.4. Advanced Pediatric Cardiopulmonary Resuscitation. Advanced Airway Management
- 2.5. Basic Concepts of Mechanical Ventilation
- 2.6. Infusion Routes and Drugs
- 2.7. Pediatric AVS Algorithms and Treatment of Arrhythmias
- 2.8. Neonatal Resuscitation
- 2.9. Stabilization, Post-Resuscitation and Neonatal Transportation





### Module 3. Invasive Techniques in the Common Critically Ill Pediatric Patient

- 3.1. Peripheral and Central Vein Access
  - 3.1.1. Peripheral Route
  - 3.1.2. Central Route
- 3.2. Intraosseous Puncture
- 3.3. Capnography. Pulse Oximetry
- 3.4. Oxygen Therapy
- 3.5. Analgesia and Sedation
  - 3.5.1. Approaching Pain
  - 3.5.2. Procedure
  - 3.5.3. Reference Drugs in Analgesia and Sedation
- 3.6. Rapid Intubation Sequence

### Module 4. Cardiologic Emergencies

- 4.1. Arrhythmias and Syncope
  - 4.1.1. Bradyarrhythmias. Diagnosis and Treatment
  - 4.1.2. Tachyarrhythmias. Diagnosis and Treatment
- 4.2. Congenital Heart Disease
  - 4.2.1. Cyanotic Congenital Heart Disease
  - 4.2.2. Non-Cyanotic Congenital Heart Disease
  - 4.2.3. Diagnostic Approach
  - 4.2.4. Treatment
- 4.3. Hypertensive Crisis
  - 4.3.1. Diagnostic Guidance for Hypertension in Children and Adolescents
  - 4.3.2. Therapeutic Guidance for Hypertension in Children and Adolescents
- 4.4. Heart Failure
  - 4.4.1. Etiology
  - 4.4.2. Diagnosis
  - 4.4.3. Treatment. Mechanical Ventricular Assistance Techniques Extracorporeal Membrane Oxygenation (ECMO)
- 4.5. Quick Reading of an ECG
- 4.6. Management of Tachyarrhythmias and Bradyarrhythmias: Electrical Cardioversion and Transcutaneous Pacing
- 4.7. Management of Defibrillable Arrhythmias: Defibrillation

### Module 5. Respiratory Emergencies

- 5.1. Respiratory Pathology in Recent Newborns
  - 5.1.1. Incomplete Pulmonary Fluid Reabsorption Syndrome
  - 5.1.2. Meconium Aspiration Syndrome
  - 5.1.3. Hyaline Membrane Disease
  - 5.1.4. Pneumothorax
  - 5.1.5. Pneumonia
  - 5.1.6. Apnea in Newborns
- 5.2. Airway Diseases
  - 5.2.1. Acute Pharyngotonsillitis
  - 5.2.2. Laryngitis or Croup
  - 5.2.3. Spasmodic Croup
  - 5.2.4. Otitis
  - 5.2.5. Sinusitis
- 5.3. Community-Acquired Pneumonia (CAP)
  - 5.3.1. Diagnosis
  - 5.3.2. Hospital Admission Criteria
  - 5.3.3. Latest Advances in Treatment
- 5.4. Managing a Child with a Persistent Cough. Chronic Cough
  - 5.4.1. Etiology
    - 5.4.1.1. Persistent Bacterial Bronchitis
    - 5.4.1.2. Asthma
    - 5.4.1.3. Gastroesophageal Reflux, etc.
  - 5.4.2. Treatment
- 5.5. Caring for Asthmatic Children
  - 5.5.1. Clinical Diagnosis. Diagnosis Functions
  - 5.5.2. Pharmacological Treatment. Non-Pharmacological Treatment
  - 5.5.3. Health Education
- 5.6. Inhalation Techniques. Oxygen Therapy
- 5.7. Thoracentesis and Chest Tube Placement
- 5.8. Forced Spirometry. Bronchodynamic Tests. FEM

## Module 6. Pediatric Trauma and Osteoarticular Injuries

- 6.1. Initial Pediatric Trauma Care
  - 6.1.1. Types and Patterns of Injury in Pediatrics
  - 6.1.2. Primary and Secondary Assessment
  - 6.1.3. Spinal Cord Injuries
- 6.2. Head Trauma in Children
- 6.3. Lower Extremity Trauma
- 6.4. Upper Limb Trauma
- 6.5. Thoracic Trauma. Rib Fractures and Contusions
- 6.6. Limping
  - 6.6.1. Types of Lameness
  - 6.6.2. Treatment
  - 6.6.3. Referral Criteria
- 6.7. Classification of Pediatric Fractures
- 6.8. Mobilization and Immobilization Workshop
- 6.9. Active Mobilization Stimulation
- 6.10. Hyperpronation
- 6.11. Supination-Flexion
- 6.12. Radial Head Subluxation

## Module 7. Unintentional Injuries. Child Accidents

- 7.1. Injuries.
- 7.2. Burns
- 7.3. Drowning
- 7.4. Stings and Bites
- 7.5. Drug and Non-Drug Intoxications
- 7.6. Anaphylaxis
  - 7.6.1. Classification of Severity
  - 7.6.2. Diagnostic Procedures
  - 7.6.3. Treatment and Discharge Recommendations
- 7.7. Extraction of Foreign Body from the Ear
- 7.8. Extraction of Foreign Bodies from the Nose

- 7.9. Freeing of Trapped Penis or Scrotum
- 7.10. Incarcerated Inguinal Hernia Reduction
- 7.11. Reduction of Paraphimosis

## Module 8. Neurological Emergencies

- 8.1. Acute Ataxia
- 8.2. Alterations of Consciousness
- 8.3. Acute Headache
  - 8.3.1. Migraine
  - 8.3.2. Tension Headache
  - 8.3.3. Periodic Syndromes of Childhood
- 8.4. Epilepsies and Non-Epileptic Seizure Disorders in Childhood
  - 8.4.1. Epileptic Syndromes in Childhood and Adolescence
  - 8.4.2. General Treatment of Epilepsies
- 8.5. Bacterial and Viral Meningitis
- 8.6. Febrile Seizures
- 8.7. Puncture of the Ventriculoperitoneal Shunt Reservoir
- 8.8. Lumbar Puncture

## Module 9. Digestive Emergencies

- 9.1. The Infant with Food Refusal
- 9.2. Acute Abdominal Pain
- 9.3. Gastrointestinal Disorders
- 9.4. Acute Dehydration
  - 9.4.1. Isonatremic Dehydration
  - 9.4.2. Hyponatremic Dehydration
  - 9.4.3. Hypernatremic Dehydration
- 9.5. Acid-base Balance Disorders
  - 9.5.1. Metabolic Acidosis. Respiratory Acidosis
  - 9.5.2. Metabolic Alkalosis. Respiratory Alkalosis
- 9.6. Celiac Disease
  - 9.6.1. Diagnostic Algorithm
  - 9.6.2. Treatment



- 9.7. Gastroesophageal Reflux (GER)
- 9.8. Constipation
- 9.9. Hepatitis
  - 9.9.1. HAV, HBV, HCV, HDV, HEV
  - 9.9.2. Autoimmune hepatitis
- 9.10. Gastrointestinal Bleeding
- 9.11. Jaundice

### Module 10. Nursing Care in Endocrinometabolic Emergencies

- 10.1. Emergencies in the Diabetic Patient
- 10.2. Hydroelectrolytic Alterations
- 10.3. Adrenal Insufficiency

### Module 11. Nursing Care in Infectious Emergencies

- 11.1. Exanthematous Diseases
- 11.2. Whooping Cough and Pertussis Syndrome
  - 11.2.1. Medical treatment
  - 11.2.2. Control Measures
- 11.3. Febrile Syndrome without Focus
- 11.4. Sepsis. Septic Shock
- 11.5. Osteoarticular Infections
- 11.6. Fever and Neutropenia



## Module 12. Ophthalmologic and Otorhinolaryngologic Emergencies

- 12.1. Conjunctivitis and Blepharitis. Pink Eye
  - 12.1.1. Most Frequent Infectious Pathology
  - 12.1.2. Non-Infectious Pathology
- 12.2. Eyelids and Lacrimal System
  - 12.2.1. Palpebral Alterations and Malformations
  - 12.2.2. Inflammatory Pathology
  - 12.2.3. Cysts and Tumors
  - 12.2.4. Lacrimal Pathology in Children
  - 12.2.5. Palpebral Traumatology in Infancy
- 12.3. Acute Pharyngotonsillitis. Acute Otitis Media. Sinusitis
- 12.4. Extraction of Foreign Bodies from the Eye
- 12.5. Ophthalmologic Examination with Fluorescein
- 12.6. Eversion of the Upper Eyelid

## Module 13. Pediatric Skin Emergencies

- 13.1. Bacterial Infections in Pediatrics
  - 13.1.1. Impetigo Contagiosa
  - 13.1.2. Folliculitis, Furunculosis and Carbuncles
  - 13.1.3. Perianal Streptococcal Dermatitis
- 13.2. Viral Infections in Pediatrics
  - 13.2.1. Human Papillomavirus
  - 13.2.2. Contagious Molusco
  - 13.2.3. Simple Herpes
  - 13.2.4. Shingles
- 13.3. Mycotic Infections in Pediatric Dermatology
  - 13.3.1. Tinea
  - 13.3.2. Candidiasis
  - 13.3.3. Pityriasis Versicolor
- 13.4. Infestations in Pediatric Dermatology
  - 13.4.1. Pediculosis
  - 13.4.2. Scabies
- 13.5. Eczema. Atopic Dermatitis

## Module 14. Nephrourological Emergencies

- 14.1. Urinary Infections
  - 14.1.1. Diagnostic Criteria
  - 14.1.2. Referral Indications
- 14.2. Hematuria
- 14.3. Renal Lithiasis and Renal Colic
- 14.4. Acute Scrotum
  - 14.4.1. Frequency in the Pediatric Age Group
- 14.5. Suprapubic Puncture
- 14.6. Bladder Catheterisation
- 14.7. Reduction of Paraphimosis

## Module 15. Special Situations in Pediatric Emergencies

- 15.1. Children with Special Needs
  - 15.1.1. Tracheostomy and Home Mechanical Ventilation
  - 15.1.2. Gastrostomies and Feeding Tubes
  - 15.1.3. Peritoneal Ventriculo-Peritoneal Shunt Valves
  - 15.1.4. Central Catheters and Prosthetic Vascular Accesses
- 15.2. Medication in Pediatrics
- 15.3. Psychiatry in the Emergency Department
  - 15.3.1. Assessment and Initial Treatment
  - 15.3.2. Psychomotor Agitation and Violence
  - 15.3.3. Suicidal Behavior
  - 15.3.4. Psychotic Disorders
- 15.4. Child Abuse
  - 15.4.1. Attitude in the Emergency Room
  - 15.4.2. Assistance in the Case of Abuse
- 15.5. Techniques and Procedures. Mechanical Restraint of the Agitated or Aggressive Child

**Module 16. Update on Coronavirus Infections**

- 16.1. Discovery and Evolution of Coronaviruses
  - 16.1.1. Discovery of Coronaviruses
  - 16.1.2. Global Trends in Coronavirus Infections
- 16.2. Main Microbiological Characteristics and Members of the Coronavirus Family
  - 16.2.1. General Microbiological Characteristics of Coronaviruses
  - 16.2.2. Viral Genome
  - 16.2.3. Principal Virulence Factors
- 16.3. Epidemiological Changes in Coronavirus Infections from its Discovery to the Present
  - 16.3.1. Morbidity and Mortality of Coronavirus Infections from their Emergence to the Present
- 16.4. The Immune System and Coronavirus Infections
  - 16.4.1. Immunological Mechanisms Involved in the Immune Response to Coronaviruses
  - 16.4.2. Cytokine Storm in Coronavirus Infections and Immunopathology
  - 16.4.3. Modulation of the Immune System in Coronavirus Infections
- 16.5. Pathogenesis and Pathophysiology of Coronavirus Infections
  - 16.5.1. Pathophysiological and Pathogenic Alterations in Coronavirus Infections
  - 16.5.2. Clinical Implications of the Main Pathophysiological Alterations
- 16.6. Risk Groups and Transmission Mechanisms of Coronaviruses
  - 16.6.1. Main Sociodemographic and Epidemiological Characteristics of Risk Groups Affected by Coronavirus
  - 16.6.2. Coronavirus Mechanisms of Transmission
- 16.7. Natural History of Coronavirus Infections
  - 16.7.1. Stages of Coronavirus Infection
- 16.8. Latest Information on Microbiological Diagnosis of Coronavirus Infections
  - 16.8.1. Sample Collection and Shipment
  - 16.8.2. PCR and Sequencing
  - 16.8.3. Serology Testing
  - 16.8.4. Virus Isolation
- 16.9. Current Biosafety Measures in Microbiology Laboratories for Coronavirus Sample Handling
  - 16.9.1. Biosafety Measures for Coronavirus Sample Handling
- 16.10. Up-to-Date Management of Coronavirus Infections
  - 16.10.1. Prevention Measures
  - 16.10.2. Symptomatic Treatment
  - 16.10.3. Antiviral and Antimicrobial Treatment in Coronavirus Infections
  - 16.10.4. Treatment of Severe Clinical Forms
- 16.11. Future Challenges in the Prevention, Diagnosis, and Treatment of Coronavirus
  - 16.11.1. Global Challenges for the Development of Prevention, Diagnostic, and Treatment Strategies for Coronavirus Infections



*A unique, key, and decisive experience to boost your professional development*

06

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

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.





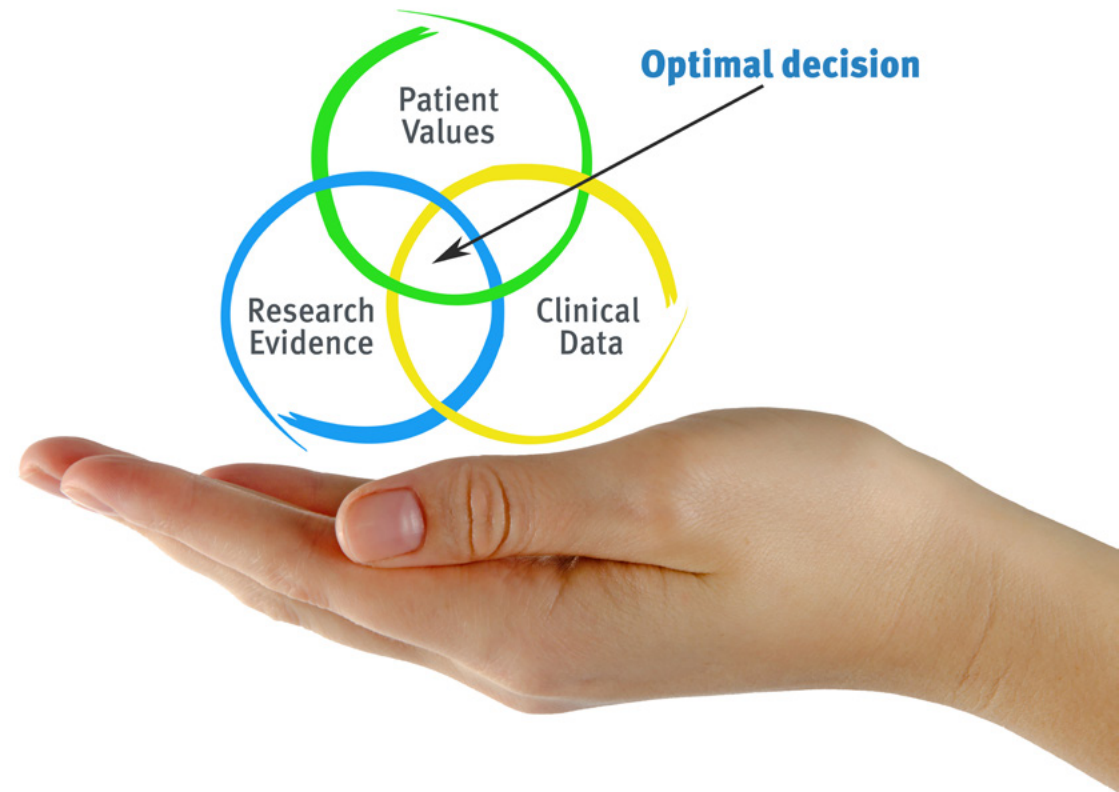
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*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH Nursing School we use the Case Method

In a given situation, what should a professional do? 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. 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:

1. Nurses who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.





## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine case studies with a 100% online learning system based on repetition combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

*The nurse will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 175,000 nurses with unprecedented success in all specialities regardless of practical workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*Relearning 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.



#### Nursing 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 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 them as many times as you want.



#### Interactive Summaries

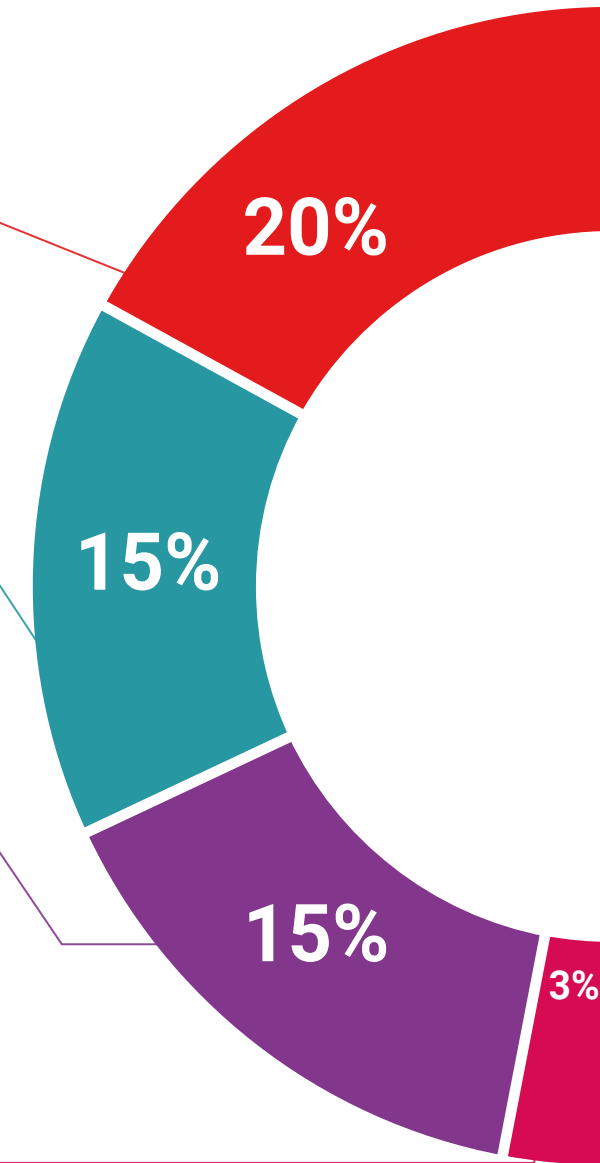
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

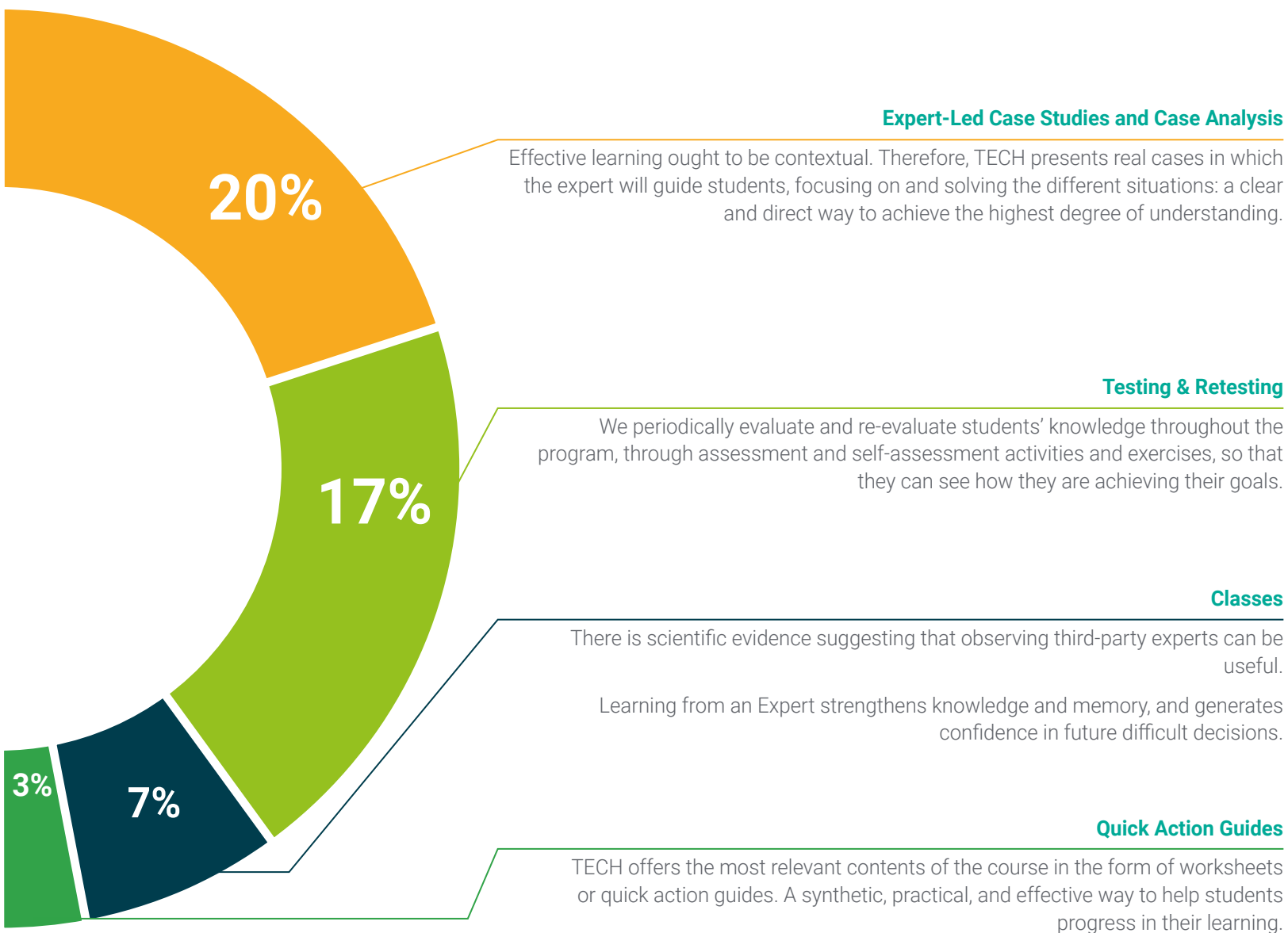
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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.







# 07 Certificate

This Professional Master's Degree in Pediatric Emergency Nursing guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree issued by TECH Global University.



“

*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”*

This private qualification will allow you to obtain a **Professional Master's Degree diploma in Pediatric Emergency Nursing** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.



This **TECH Global University** 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: **Professional Master's Degree in Pediatric Emergency Nursing**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**







## Professional Master's Degree Pediatric Emergency Nursing

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree

## Pediatric Emergency Nursing

