





Hybrid Professional Master's Degree

Pediatric Emergency Nursing

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

60 + 5 ECTS Credits

We bsite: www.techtitute.com/us/nursing/hybrid-professional-master-degree-pediatric-emergency-nursing with the professional of the control of the control

Index

02 03 Why Study this Hybrid Introduction Objectives Competencies Professional Master's Degree? p. 4 p. 8 p. 12 p. 16 05 06 **Course Management Clinical Internship Educational Plan** p. 20 p. 28 p. 36 80 Methodology Where Can I Do the Clinical Certificate Internship? p. 42 p. 46 p. 54





tech 06 | Introduction

The purpose of Pediatric Emergency Nursing is to attend especially to the care required during childhood and adolescence due to pathologies and conditions that may occur in an emergency context. Indeed, child health care has undergone a clear improvement in recent decades as a result of the effectiveness of treatment and quality of care and of activities related to health promotion and disease prevention.

Like in other of health specialties and subspecialties, pediatric emergencies have reached a development of progressive specialization in recent years. Nurse working in pediatric emergency care services must be able to provide comprehensive initial care to pediatric patients, basing their actions on the latest scientific evidence. For this reason knowledge must be constantly updated through programs aimed at reinforcing their functions, both in recognizing and initially resolving the emergency, and in focusing, orienting and correctly directing situations in the face of pathologies that can be delayed.

For this reason, and with the aim of bringing the professional the latest developments in Pediatric Nursing, TECH has designed this program in which the professional will be able to develop their maximum potential and growth through the face-to-face approach of patients with complex pathologies in a practical stay of 3 weeks duration. It is an academic experience of 1,620 hours that combines 1,500 hours of theoretical and additional content developed by experts in the field with 3 weeks of practical stay in a clinical center of international reference.

Therefore, the nurse will be able to update his or her practice in a comprehensive manner, delving into the health organization of common pediatric emergencies, as well as the basic support to be provided to each case. All this accompanied during the 12 months by a team of the highest level from different sectors of child and adolescent care, but with a wide and extensive experience in the effective management of this type of contexts. For this reason, the graduate will learn about the different perspectives that make up current nursing practice, updating their practice in a dynamic, exhaustive and detailed manner.

This **Hybrid Professional Master's Degree in Home Hospitalization for Nursing** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- Development of more than 100 clinical cases presented by nursing professionals with For Nursing in Emergencies care and university professors with extensive experience in the Infant patient
- Assessment and monitoring of the pediatric patient, the latest international recommendations for life support maneuvers, critical care in emergency situations, etc
- Comprehensive systematized action plans for the main pathologies in the intensive care unit, in the intensive care unit
- With a special emphasis on evidence-based medicine and research methodologies in Intensive Care Nursing
- All this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is available from any fixed or portable device with an Internet connection
- Furthermore, you will be able to carry out a clinical internship in one of the best hospital centers



In addition to having access to the best theoretical content, you will be able to carry out a prestigious internship in one of the best hospitals in the country"

Introduction | 07 tech

66

Enjoy an intensive 3-week stay in a reputable center and get up to date on the latest procedures to achieve personal and professional growth"

In this proposal for a Master's Degree, of a professionalizing nature and blended learning modality, the program is aimed at updating nursing professionals who perform their functions in pediatric units, and who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge into nursing practice, and the theoretical-practical elements will facilitate the up-to-date of knowledge and allow decision making in patient management.

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 education program to learn 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. This will be done with the help of an innovative interactive video system developed by renowned experts in pediatric care units with extensive teaching experience.

This program will allow you to practice not only in a simulated environment, but also in a real one because you will be able to enjoy an internship in a prestigious hospital.

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







tech 10 | Why Study this Hybrid Professional Master's Degree?

1. Updating from the Latest Technology Available

When TECH refers to the use of the latest technology available, it does not only refer to what the graduate will encounter during the practical stay. The theoretical program will also include the most innovative and cutting-edge academic tools, as well as the best and most sophisticated multimedia resources to make this Hybrid Professional Master's Degree course a comprehensive experience.

2. Gaining In-depth Knowledge from the Experience of Top Specialists

The fact of having the support of a team versed in Nursing, which also has a wide and extensive work experience in the field of pediatric emergency care, is an asset that the graduate can take advantage of to get even more out of this Hybrid Professional Master's Degree. You can use your experience to implement the best clinical strategies in your practice to raise the quality of your service to the highest clinical level in less than 12 months.

3. Entering First-Class Clinical Environments

Thanks to TECH's meticulous selection of centers, it is possible to offer practical experiences of the highest level in which, without a doubt, the graduate will have access to an endless number of cases in which they will have the opportunity to intervene through the most innovative diagnostic and therapeutic strategies that they will learn during the theoretical period.





Why Study this Hybrid Professional | 11 tech Master's Degree?

4. Combining the Best Theory with State-of-the-Art Practice

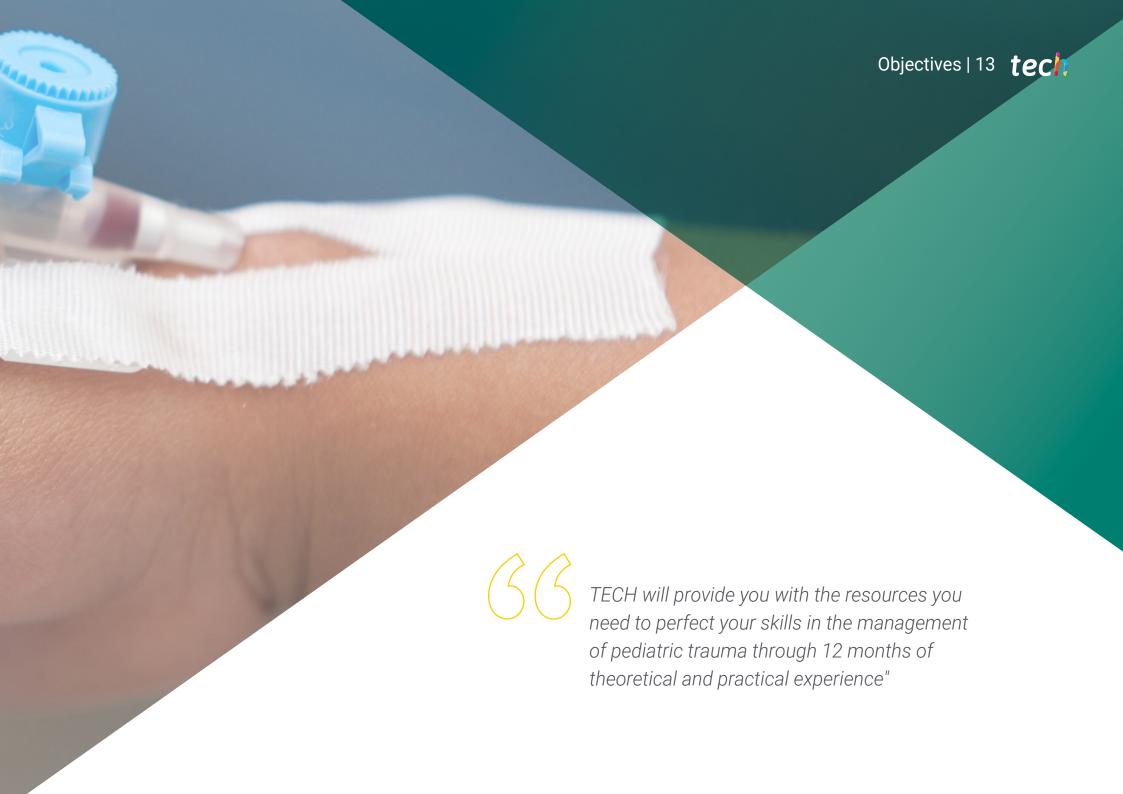
The versatile design that has been used in shaping the structure of the curriculum of this Hybrid Professional Master's Degree perfectly combines the 1,500 hours of theoretical period with the 3 weeks of practical stay for a complete and comprehensive up-to-date of the graduate's knowledge in just 12 months of the best academic experience.

5. Expanding the Boundaries of Knowledge

TECH is an academic center of international stature and demonstrates this by offering its graduates the possibility of internships in clinical centers around the world. In this way, not only do they have the possibility to up-to-date their knowledge based on the latest developments in their country, but they can also keep up to date with the clinical guidelines and strategies that are setting the vanguard in pediatric emergency care in the best hospitals and clinics in Pediatric







tech 14 | Objectives



General Objective

• The general objective of the Hybrid Professional Master's Degree in Pediatric Emergencies for Nurses is to ensure that the professional updates the diagnostic and therapeutic procedures of the specialty in an exclusively practical way, through the most complete theoretical contents of the sector and a hospital stay designed with clinical and academic rigor, under the guidance of renowned professionals in a hospital center of the highest scientific quality and technological innovation. In this Hybrid Professional Master's Degree, the professional will address the main interventions of the specialist, which will allow him to improve and enhance his skills in the medical care of patients in emergency situations involving children and teenagers



A program designed to ensure that you perfect your skills in emergency intervention through the best and most innovative nursing strategies"



Specific Objectives

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 III 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
- Develop advanced cardiopulmonary resuscitation maneuvers according to the latest life support recommendations

Module 6. Pediatric Trauma and Osteoarticular Injuries

- 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 7. Unintentional Injuries Child Accidents

- Define a guide with the first aid and treat them in the most prudent way possible
- 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 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. Latest Information on COVID-19 Infections

- Identify the severity of and their presence in the young patient
- Developing techniques to treat COVID-19 emergencies





tech 18 | Skills



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 challenge of making judgements based on incomplete or limited information. In addition, include reflections on the social and ethical responsibilities linked to implementing this knowledge and judgement
- Know how to communicate their conclusions and the ultimate knowledge and rationale behind them to specialized and non-specialized audiences in a clear and unambiguous manner
- Acquire study skills that will enable further study 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





- To develop the different procedures that the nurse can carry out to solve potentially dangerous situations safely in the Pediatric Emergency Department.
- 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



An ideal program to work, for example, on perfecting your teamwork skills together with the best professionals in the industry"





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 24 | Course Management

Management



Ms. Roldán del Amo, Adela

- Specialist in Pediatric Nursing
- Pediatric Nurse in the Pediatric Hospitalization Unit at Vithas Nisa 9 de Octubre Hospita
- · University Professor in the areas of Neonatal Nursing and Neonatal Intensive Care, First Aid,
- · Cardiopulmonary and Emergency Situations
- · University Diploma in Nursing at the University School of Nursing "Nuestra Señora de los Desamparados in Valencia

Professors

Ms. Alfaro Ramírez, Concepción

- Specialist in Pediatric Nursing
- Nursing Supervisor for Pediatric Services at Vithas Valencia 9 Hospital in Octubre
- University Professor in the "Diploma in Neonatal Nursing and Neonatal Intensive Care" at the CEUCardenal Herrera University
- Erasmus Neonatal for the University CEU Cardenal Herrera
- * Lecturer in Child Nutrition Course at Fundación Hospitales Nisa
- Diploma in Nursing from the University Catholic of Valencia

D. Mora Rivero, Jorge

- Nurse specialized in Emergency Medicine
- Emergency Nurse at the General University Hospital of Elche
- University tutor for clinical training
- Professional teaching experience in University Masters and Postgraduate Courses
- Degree in Nursing from the University of Alicante
- Master's Degree in Nursing Sciences
- Postgraduate Diploma in Primary Care Emergencies
- Degree in Emergency Medical Transportation (SAMU)

Ms. López Ruiz, María Amparo

- Doctor of Pediatric medicine
- Area Supervisor in Castilla y León Health Department (SACYL)
- Erasmus Coordinator for Medicine at the University CEU Cardenal Herrera
- University Professor of Nursing, Medicine and Pharmacy, specifically in the areas of: Pediatric Emergencies, Neonatal Nursing, Intensive Care, First Aid, Cardiopulmonary Resuscitation and Emergency Situations, and Advanced Aesthetic and Laser Techniques
- Coordinator of Medicine in Erasmus Internships for Medicine and at CEU Cardenal Herrera University
- Personal Tutor for international students of Medicine at CEU Cardenal Herrera University
- Entrepreneurship Tutor for Medicine at CEU Cardenal Herrera University
- Nestlé Award for Best Oral Communication at the XXIV National Congress of the Spanish Society of Outpatient and Primary Care Pediatrics, held in Murcia, for the paper: Analysis of the use of Analgesic-Antipyretics in pediatric patients attending an emergency department"
- Doctor Cum Laude in Medicine with honors by the University CEU Cardenal Herrera with the Thesis: Analysis of Medication in Pediatric Population Who Attend the Emergency Department
- Degree in Medicine and Surgery from the University of Valencia
- Expert in Neonatology: Premature Newborn Care

Ms. Antón García, Gema

- Obstetrics Service Nurse at La Paz General University Hospital, Madrid
- * Specialist in Obstetrics at the Elche General University Hospital
- University Diploma in Nursing (DUE) at the University School of Nursing. Alicante, Spain
- Professional experience in childbirth and neonatology

Ms. Balboa Navarro, Ana

- * Emergencies Service Nurse at La Paz General University Hospital, Madrid
- Teaching in academic institutions
- 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 by the Spanish Group of Pediatric and Neonatal CPR()
- APLS credential (American Academy of Pediatrics and American College of Emergency Physicians)
- Diploma in Nursing from the University of Alicante
- Master' Official in Nursing Sciences, University of Alicante

tech 26 | Course Management

Ms. Lospitao Gómez, Sara

- Intensive Care and Interventional Cardiology Nurse at the Hospital Universitario de Fuenlabrada (HUF)
- Nurse of the Post-Surgical Intensive Care Unit (PICU) of Cardiac Surgery at the Hospital Universitario 12 de Octubre
- Nurse Coronary Intensive Care Unit at university 12 de Octubre Hospital
- Interventional Cardiology Unit Nurse (Hemodynamics, EPS and Implants)
- Head of the #TEAyudamos program at HUF and Member of the #JuntosXEICáncer group
- Instructor in Advanced Life Support by the National CPR Plan of the Spanish Society of Intensive Care Medicine, Critical Care and Coronary Units (SEMICyUC)
- Member of the Care Subcommittee (HUF), Care Committee (HUF), Ulcer and Wound Working Group Secretariat (HUF)







Enroll now and advance in your field of work with a comprehensive program work with a comprehensive program that will allow you to put into practice everything you have learned"



Developing this Hybrid Professional Master's Degree has been a real challenge for TECH and its team of experts, who, despite being versed in Cardiology, have had to carry out an exhaustive research task to shape a complete, comprehensive, updated and adapted to the pedagogical criteria that define and differentiate this university. In addition, with an emphasis on the multidisciplinary factor that characterizes all the qualifications of this center, they have also included in their content hours of additional material in audiovisual format, research articles, dynamic summaries and complementary readings so that the graduate can take full advantage of this academic experience and delve into the most relevant aspects of the syllabus for their professional performance.



tech 30 | Educational Plan

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 III 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 Evaluation
- 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 Common Critically III Pediatric Patients

- 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. Protocol for Child Death
- 3.7. 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

tech 32 | Educational Plan

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 Inquinal 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. Coeliac Disease
 - 9.6.1. Diagnostic Algorithm
 - 9.6.2. Treatment
- .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. Endocrinometabolic Emergencies

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

Module 11. 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
 - 12.1.3. Protocol for Pediatric Ophthalmologic Emergencies
- 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 Immunodeficiency Virus
 - 13.2.2. Contagious Molusco
 - 13.2.3. Simple Herpes
 - 13.2.4. Zoster Herpes
- 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

tech 34 | Educational Plan

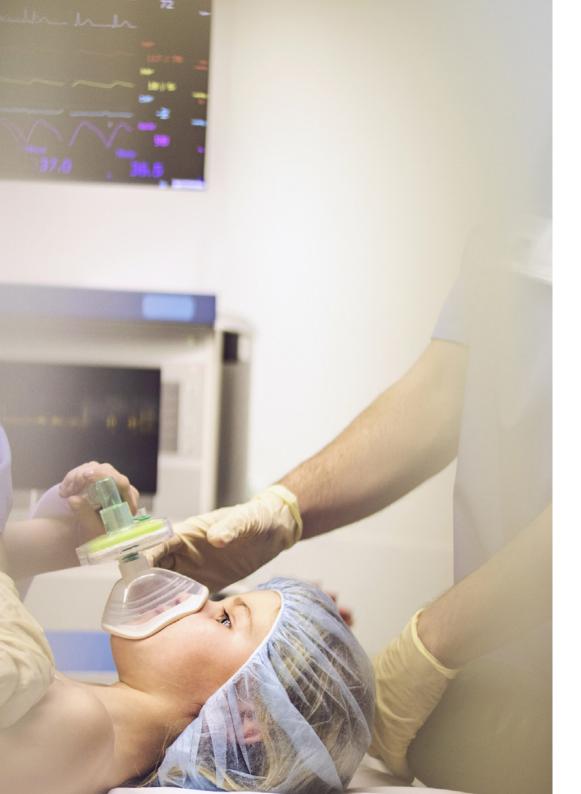
Module 15. Special Situations in Pediatric Emergencies

- 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. Latest Information on COVID-19 Infections

- 16.1. Discovery and Evolution of COVID-19
 - 16.1.1. Discovery of COVID-19
 - 16.1.2. Global Trends in COVID-19 Infections
- 16.2. Main Microbiological Characteristics and Members of the COVID-19 Family
 - 16.2.1. General Microbiological Characteristics of COVID-19
 - 16.2.2. Viral Genome
 - 16.2.3. Principal Virulence Factors
- 16.3. Epidemiological Changes in COVID-19 Infections since its Discovery to Present Day
 - 16.3.1. Morbidity and Mortality of COVID-19 Infections from their Emergence to the Present
- 16.4. The Immune System and COVID-19 Infections
 - 16.4.1. Immunological Mechanisms Involved in the Immune Response to COVID-19
 - 16.4.2. Cytokine Storm in COVID-19 Infections and Immunopathology
 - 16.4.3. Modulation of the Immune System in COVID-19 Infections





Educational Plan | 35 tech

- 16.5. Pathogenesis and Pathophysiology of COVID-19 Infections
 - 16.5.1. Pathophysiological and Pathogenic Alterations in COVID-19 Infections
 - 16.5.2. Clinical Implications of the Main Pathophysiological Alterations
- 16.6. Risk Groups and Transmission Mechanisms of COVID-19
 - 16.6.1. Main Sociodemographic and Epidemiological Characteristics of Risk Groups Affected by COVID-19
 - 16.6.2. COVID-19 Mechanisms of Transmission
- 16.7. Natural History of COVID-19 Infections
 - 16.7.1. Stages of COVID-19 Infection
- 16.8. Latest Information on Microbiological Diagnosis of COVID-19 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 COVID-19 Sample Handling
 - 16.9.1. Biosafety Measures for COVID-19 Sample Handling
- 16.10. Up-to-Date Management of COVID-19 Infections
 - 16.10.1. Prevention Measures
 - 16.10.2. Symptomatic Treatment
 - 16.10.3. Antiviral and Antimicrobial Treatment in COVID-19 Infections
 - 16.10.4. Treatment of Severe Clinical Forms
- 16.11. Future Challenges in the Prevention, Diagnosis and Treatment of COVID-19
 - 16.11.1. Global Challenges for the Development of Prevention, Diagnostic, and Treatment Strategies for Coronavirus Infections





The Practical Training period of this Pediatric Emergency Nursing program consists of a 3-week clinical practicum, Monday through Friday, with 8 consecutive hours of practical training with an attending specialist. This stay allow you to deal with real patients with a team of reference professionals in the of area, applying the most innovative diagnostic procedures and planning the latest generation Therapeutics in each pathology.

In this training proposal, completely practical in nature, the activities are aimed at developing and perfecting the skills necessary for the provision of healthcare in areas and conditions that require a high level of qualification, and which are oriented to the specific training for the exercise of the activity, in a safe environment for the patient and a high professional performance.

It is undoubtedly an opportunity to learn by working in the innovative hospital of the future where real-time health monitoring of patients is at the center of the digital culture of its professionals.

The practical education will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for Current nursing practice Care(learning to be and learning to relate).

The procedures described below will be the basis of the practical part of the training, and their implementation will be subject to the center's own availability and workload, the proposed activities being the following:





Clinical Internship | 39 **tech**

Module	Practical Activity
Health organization for pediatric emergencies and advanced cardiovascular support for children and/or adolescents	Participate in the different possible Pediatric Emergency services and the one available in the institution
	Perform cardiorespiratory resuscitation techniques for children in need of basic and advanced pediatric life support
	Perform the electrocardiography procedure in the pediatric patient and read the cardiographic tracing to identify possible cardiac pathologies
	Perform intraosseous line cannulation technique and nursing care
Pediatric cardiac and respiratory emergencies	Participate in cardiorespiratory resuscitation techniques for children in need of advanced pediatric life support
	Perform the reading and interpretation of vital signs in the pediatric patient with cardiac pediatric patients with cardiac emergencies
	Perform peripheral and central line nursing care in the critical pediatric patient in the critical pediatric patient
	Assess the clinical manifestations of respiratory pathology, manage severity scales and oxygenation indexes and provide nursing care to pediatric patients with severe pathology
	Participate in the evaluation of the risk situation of the pediatric patient with acute respiratory distress. with acute respiratory distress
	Perform nursing procedures in monitoring respiratory function and mechanical ventilation
	To know and assess the diagnostic imaging of severe thoracic pathology
Emergencies Pediatric neurological and digestive	Provide nursing care and protective techniques for the seizure patient
	Participate in clinical neurological examination in the emergency department and in the critically ill child
	Perform nursing care in the performance of invasive diagnostic procedures in pediatric patients such as: lumbar puncture and others
	Perform nursing care in acute abdominal pain in the pediatric patient
	Perform nursing care in the child with acute vomiting and diarrhea with dehydration
	Participate in how to manage complications in Diabetic ketoacidosis
Child Accidents	Identify risks and transmit to the pediatric patient's family preventive care at home to avoid accidents
	Participate in child abuse and unintentional injury counseling techniques
	Learn inhalation techniques and Nebulization in Emergencies patients
	Provide nursing care in the pediatric patient in need of noninvasive ventilation

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

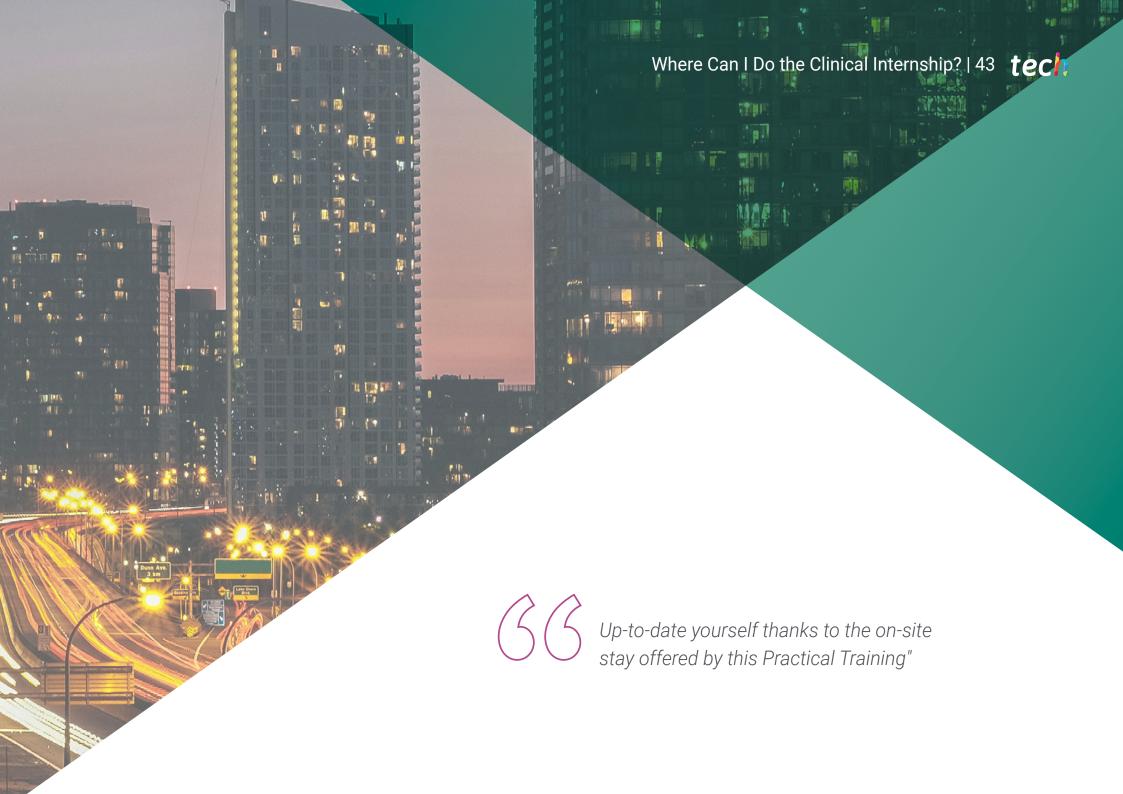
The general terms and conditions of the internship agreement for the program are as follows:

- 1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.
- **2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.
- 3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

- **4. CERTIFICATION**: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.
- **5. EMPLOYMENT RELATIONSHIP:** The Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.
- **6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.
- 7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

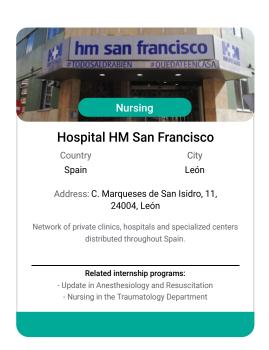
However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.





tech 44 | Where Can | Do the Clinical Internship?

The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



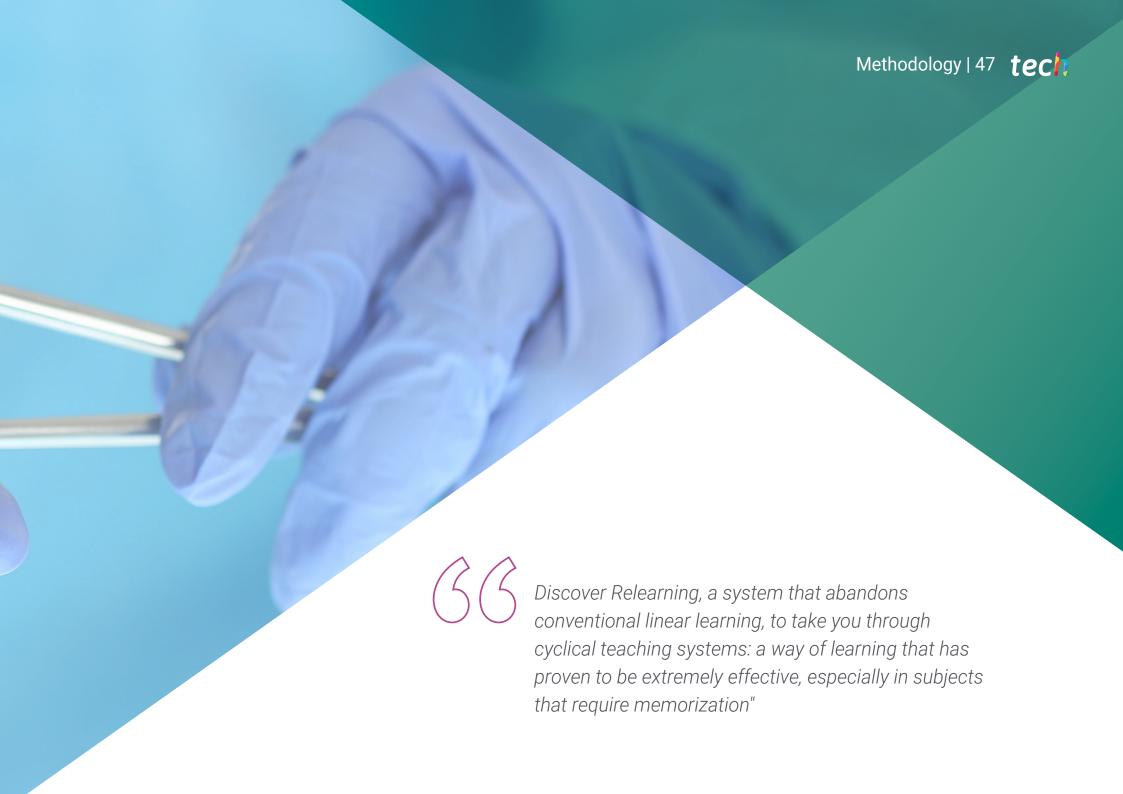






Take advantage of this opportunity to surround yourself with expert professionals and learn from their work methodology"



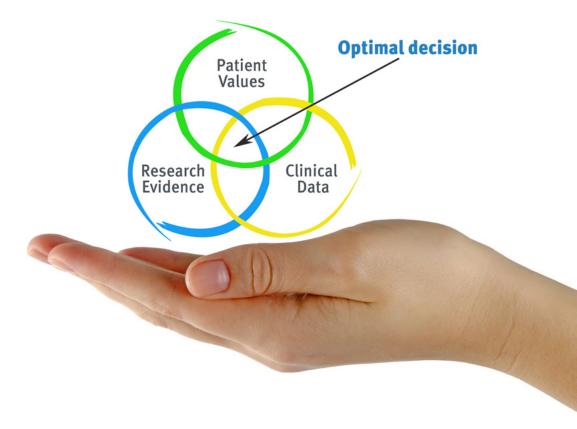


tech 48 | Methodology

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:

- 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.



Methodology | 51 tech

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

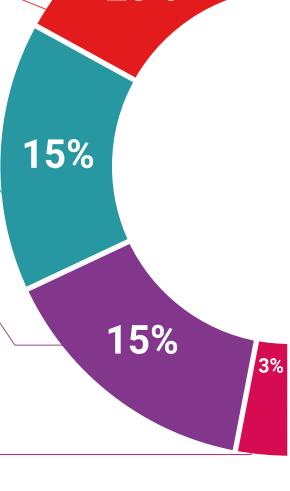
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch them as many times as you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



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

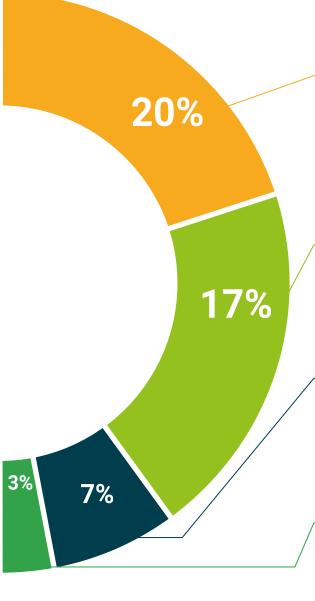
There is scientific evidence suggesting that observing third-party experts can be useful.



Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

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.







tech 56 | Certificate

This program will allow you to obtain your **Hybrid Professional Master's Degree diploma in Pediatric Emergency Medicine for 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** title 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: Hybrid Professional Master's Degree in Pediatric Emergency Medicine for Nursing

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

Recognition: **60 + 5 ECTS Credits**





^{*}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.



Hybrid Professional Master's Degree

Pediatric Emergency Nursing

Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: **TECH Global University**

60 + 5 ECTS Credits

