# Postgraduate Diploma

## Out-of-Hospital Emergency Care

tech global university

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# Postgraduate Diploma
## Out-of-Hospital Emergency Care

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **25 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-out-of-hospital-emergency-care

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# Introduction

A recent report from the World Health Organization reveals that 540 million medical emergencies occur worldwide each year, with 20% of these cases resulting in fatalities or permanent disabilities. These emergencies encompass a wide range of clinical conditions, from traumatic accidents or acute cardiovascular events to natural disasters. In light of this situation, the organization urges healthcare professionals to update their knowledge in Out-of-Hospital Emergency Care in order to integrate the most advanced therapeutic approaches into their daily clinical practice for comprehensive assessments and the implementation of appropriate pharmacological treatments. For this reason, TECH presents a revolutionary, 100% online university program focused on managing patients in critical situations.

*Thanks to this 100% online Postgraduate Diploma, you will master the most innovative Advanced Life Support techniques and contribute to stabilizing patients in critical condition"*

With the increase in urbanization and global mobility, Out-of-Hospital Emergencies represent an ever-growing challenge for healthcare systems. In this context, the ability to provide medical care outside the hospital setting is a fundamental pillar to mitigate the impact of catastrophic events. However, to optimize patient outcomes, doctors need to acquire advanced competencies to handle the most innovative technological tools for more precise diagnostics, thus enabling more effective interventions.

In this scenario, TECH develops a pioneering Postgraduate Diploma in Out-of-Hospital Emergency Care. Designed by experts in this field, the academic program will delve into multiple therapeutic techniques such as the introduction of catheters, central venous cannulation, and non-invasive mechanical ventilation. At the same time, the curriculum will provide graduates with the keys to perform Cardiovascular Support Procedures effectively in cases of abnormal heart rate acceleration. In line with this, the teaching materials will focus on the management of critical neurological, digestive, and toxicological events. As such, professionals will be prepared to face any acute medical situation outside the hospital environment.

Moreover, the program's methodology is based on TECH's innovative Relearning method, which guarantees the progressive and natural assimilation of complex concepts. In this same line, all physicians need is an electronic device with internet access to enter the Virtual Campus. There, they will find numerous resources in different multimedia formats (such as interactive summaries, case studies or specialized readings) to enjoy a didactic and entertaining update. Undoubtedly, this is a top-tier academic experience that will allow medical professionals to stay at the forefront of the latest advancements in the field of Out-of-Hospital Emergency Care.

This **Postgraduate Diploma in Out-of-Hospital Emergency Care** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Medical Emergencies and Urgent Care in the Out-of-Hospital Setting
- The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

*A comprehensive university qualification that will allow you to update your medical competencies without interrupting your daily responsibilities"*

*You will delve into the most advanced techniques for monitoring hemodynamic status, enabling you to assess heart function in real-time"*

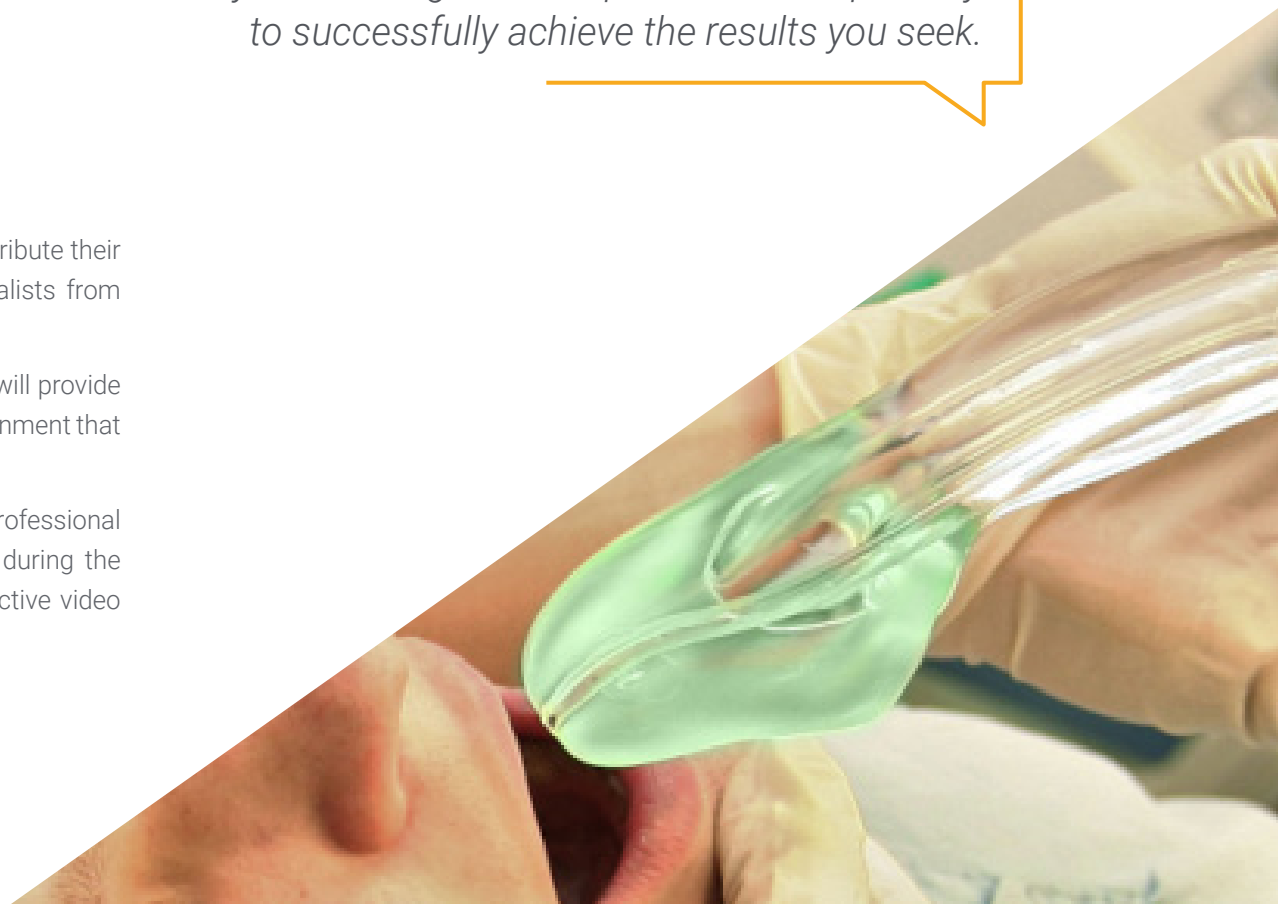
*Are you looking to train in Pediatric Emergency Care? Achieve this through this comprehensive university program.*

*Thanks to TECH's Relearning methodology, you will integrate disruptive content optimally to successfully achieve the results you seek.*

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn 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 during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.



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# Objectives

This Postgraduate Diploma will provide doctors with a solid understanding of the most effective techniques for managing Out-of-Hospital Emergencies. In this regard, healthcare professionals will be highly qualified to perform advanced diagnostic techniques such as Invasive Mechanical Ventilation, Pleural Drainage, and Peripheral Venous Cannulation. Similarly, graduates will incorporate the most innovative pharmacological procedures into their practice to manage a wide range of critical conditions, with a focus on traumatic pathologies. Additionally, professionals will gain competencies in disaster management, including natural disasters, mass transport accidents, and structural collapses.

*You will integrate the most effective techniques for the initial management of severe trauma into your clinical practice, including hemorrhage control techniques and patient stabilization"*

## General Objectives

- Analyze the management of multiple-victim incidents and disasters
- Identify diagnostic and therapeutic techniques in emergency situations
- Explore the principles of pharmacology applied to medical emergencies
- Examine the most innovative protocols and procedures in emergencies



## Specific Objectives

### Module 1. General Overview

- Define the fundamental concepts related to emergencies and urgent care, including comprehensive care
- Outline the principles of bioethics applied to emergency and urgent care situations, evaluating their importance in medical decision-making
- Delve into the current legislation regarding emergency and urgent care, identifying key regulations and their impact on clinical practice
- Clarify bioethics and legislation knowledge through practical cases in emergencies and urgent care, ensuring ethical and legally appropriate care

### Module 2. Advanced Cardiovascular Support

- Identify essential techniques and procedures for basic and advanced life support in adults, including actions for bradyarrhythmias and tachyarrhythmias
- Describe the principles and methods of basic and advanced life support in pediatric and neonatal patients, focusing on recognizing and managing critically ill children and advanced airway management
- Analyze neonatal resuscitation strategies and advanced life support in severe trauma patients, emphasizing stabilization and neonatal transport
- Differentiate effective advanced life support interventions in special cases, applying acquired knowledge to provide timely and appropriate treatment

## Module 3. Multiple Victim Incidents (MVI) and Disasters

- Differentiate general concepts related to multiple-victim incidents (MVI) and catastrophes, and understand the importance of effective management in these situations
- Address procedures for sectorization, deployment, and logistics necessary for an organized and efficient response to MVIs and catastrophes
- Define triage techniques and care for multiple victims, ensuring the proper prioritization of patients based on the severity of their conditions
- Evaluate emergency plans and evacuation strategies, and manage MVIs in a hospital setting, including responses to NBQR (Nuclear, Biological, Chemical, and Radiological) incidents

## Module 4. Diagnostic and Therapeutic Techniques (Out-of-Hospital Emergencies and Disasters)

- Analyze invasive and non-invasive procedures such as catheterizations, peripheral and central venous cannulation, intraosseous access, and advanced airway management techniques (intubation and difficult airway)
- Evaluate invasive and non-invasive mechanical ventilation techniques, as well as critical interventions such as pericardiocentesis and thoracocentesis, ensuring their correct application in emergency situations
- Identify diagnostic tools such as emergency ultrasound, hemodynamic monitoring, electrocardiography, capnography, and pulse oximetry to properly assess and manage the patient's condition
- Determine the neurological and sedoanalgesic status, applying electrical therapies and oxygen therapy, and collecting analytical samples using scales and physiological parameters for comprehensive care in emergencies and urgent care for both adults and children

## Module 5. Emergency Pharmacology

- Define the basic concepts of pharmacology applied to emergency and urgent care situations, including the pharmacokinetics and pharmacodynamics of drugs used in these settings
- Identify the various drug administration routes in emergencies and urgent care, ensuring the appropriate selection based on the patient's condition and the urgency of the treatment
- Delve into safe practices for drug administration, emphasizing the importance of fluid therapy and precautions to avoid medical errors
- Explore drug dosage formulas and calculations for the most commonly used medications in emergencies and urgent care, ensuring precise and effective dosing in patient management

## Module 6. Cardiovascular Emergencies

- Define different arrhythmias, syncope, and acute chest pain, using the appropriate tools and methods to identify each condition
- Address the immediate treatment of severe cardiovascular emergencies, such as acute coronary syndrome (code infarction), pericarditis with cardiac tamponade, and heart failure, ensuring quick and effective intervention
- Delve into management protocols for critical conditions such as acute pulmonary edema, deep vein thrombosis (DVT), and pulmonary embolism (PE), based on updated clinical guidelines
- Analyze high-risk situations such as aortic dissection, hypertensive emergencies, and shock, applying best practices and therapeutic strategies to stabilize the patient and improve clinical outcomes

### Module 7. Respiratory Emergencies

- Define the main respiratory emergencies, understanding their clinical manifestations and diagnostic criteria for timely intervention
- Examine different approaches to pneumonia and COPD exacerbations, applying clinical guidelines to improve the prognosis and recovery of the patient
- Explore how to properly treat conditions such as pleuritis and pleural effusion, as well as pneumothorax, using specific techniques and procedures to relieve symptoms and prevent complications
- Analyze cases of hemoptysis, applying appropriate therapeutic strategies to control bleeding and stabilize the patient, ensuring safe and effective care

### Module 8. Neurological Emergencies

- Deepen the assessment of critically ill patients' neurological status, using evaluation tools and techniques to identify and monitor severe neurological conditions
- Define how to address neurological vascular disorders, applying the stroke code protocol to ensure rapid and effective intervention in cases of cerebrovascular accident (CVA)
- Identify consciousness level alterations and intracranial hypertension, using appropriate therapeutic strategies to stabilize the patient and prevent further neurological damage
- Address treatments for infections of the central nervous system, seizure crises, status epilepticus, headaches, and vertigo (dizziness), applying clinical guidelines and best practices to improve prognosis and quality of life

### Module 9. Gastrointestinal Emergencies

- Assess acute abdominal pain, using clinical evaluation techniques and diagnostic tools to identify the underlying cause and determine the appropriate treatment
- Identify emergencies such as acute gastrointestinal bleeding and vascular disorders, implementing quick and effective interventions to control blood loss and stabilize the patient
- Explore the management of intestinal obstruction and acute gastroenteritis, applying management protocols based on best practices to alleviate symptoms and prevent complications
- Delve into cases of acute pancreatitis, acute biliary pathology, and acute anal pathology, utilizing specific therapeutic approaches for each condition, ensuring comprehensive and effective patient care

### Module 10. Renal and Urological Emergencies

- Identify the main nephro-urological emergencies, understanding their clinical manifestations and diagnostic methods for early and effective intervention
- Address conditions such as renal and excretory system lithiasis and urinary retention, using appropriate techniques to alleviate symptoms and prevent complications
- Define urinary tract infections and acute renal failure, applying evidence-based treatment protocols to improve the patient's prognosis
- Analyze cases of hematuria, acute scrotal syndrome, and urethral pathology, implementing specific therapeutic strategies for each condition and ensuring comprehensive and effective care

### Module 11. Endocrine and Metabolic Emergencies

- Explore disorders of glucose metabolism, such as hypoglycemia and diabetic ketoacidosis, applying rapid and effective interventions to stabilize the patient
- Assess thyroid emergencies, such as thyroid crises and myxedema, using appropriate clinical protocols to control symptoms and prevent complications
- Evaluate acid-base imbalances, identifying underlying causes and applying specific therapies to restore physiological balance
- Define disorders of fluid and electrolyte balance, applying therapeutic strategies to adjust fluid and electrolyte levels, ensuring homeostasis and patient stability

### Module 12. Psychiatric Emergencies

- Recognize the main psychopathologies that may arise in emergency situations, using diagnostic tools to identify and differentiate various mental disorders
- Delve into psychomotor agitation and anxiety crises, applying appropriate therapeutic and containment interventions to ensure the safety of the patient and healthcare staff
- Explore acute alcoholic pathology and suicide attempts, implementing detoxification, stabilization, and emotional support protocols to prevent relapses and complications
- Assess neuroleptic malignant syndrome, applying necessary therapeutic measures to control symptoms and stabilize the patient effectively

### Module 13. Pediatric Emergencies and Urgencies

- Address infant colic and febrile syndrome, applying appropriate strategies to relieve symptoms and ensure the pediatric patient's well-being
- Define seizures in children, using rapid and effective interventions to prevent complications and stabilize the patient
- Identify respiratory tract pathologies and exanthematous diseases in the pediatric setting, applying treatment protocols based on best clinical practices
- Evaluate cases of child abuse, ensuring a comprehensive approach that includes patient protection, emotional support, and the safe transport of critically ill pediatric patients for specialized care

### Module 14. Toxicological Emergencies

- Assess the general aspects of the intoxicated patient, including identifying signs and symptoms of poisoning and applying appropriate diagnostic methods to determine the toxic substance involved
- Identify initial management and stabilization protocols for the intoxicated patient, ensuring the administration of appropriate treatments such as antidotes and advanced life support
- Prevent long-term complications in intoxicated patients by providing education on poisoning prevention and the safe handling of toxic substances in both hospital and home settings

### Module 15. Severe Trauma Care (Catastrophes or Out-of-Hospital Emergencies)

- Understand the general concepts and biomechanics of accidents, analyzing how different types of trauma affect the human body to apply a comprehensive approach to their management
- Delve into effective primary and secondary assessments in patients with severe trauma, quickly identifying critical injuries and establishing priorities in care
- Address various mobilization and immobilization techniques using appropriate materials and methods, ensuring proper analgesia and sedation
- Define the foundations of healthcare assistance in special situations, such as confined and remote areas, as well as in pediatric and pregnant patients

### Module 16. Other Important Aspects in Emergencies and Urgencies

- Differentiate practices and patient safety protocols, identifying and minimizing risks to ensure a safe and efficient environment in urgent and emergency situations
- Integrate new technologies into the management of urgencies and emergencies, evaluating their impact and applicability to improve diagnostic accuracy, operational efficiency, and clinical outcomes

### Module 17. Other Emergencies

- Address urgent complications in terminal patients, applying interventions that alleviate suffering and improve quality of life in critical situations
- Analyze dermatological emergencies in the urgent care setting, using specific dermatology knowledge to address acute and severe skin conditions
- Delve into the process of organ and tissue donation, understanding the ethical, legal, and clinical aspects involved, and coordinating with the appropriate teams to ensure a successful and respectful procedure

*The academic itinerary will include real-life cases in simulated learning environments to elevate your clinical competencies to the highest level"*

03

# Course Management

The philosophy of TECH is based on offering the most comprehensive and up-to-date university programs in the academic landscape. For this reason, it conducts a meticulous process to form its faculty teams. Thanks to this effort, the present Postgraduate Diploma includes the participation of true experts in the field of Out-of-Hospital Emergency Care. These specialists bring with them a vast professional background, having contributed to improving the quality of life of numerous patients affected by different emergency situations. As such, graduates are assured the guarantees they need to access an immersive experience that will significantly optimize their daily clinical practice.


*You will have a specialized teaching team in the field of Out-of-Hospital Emergency Care, who will provide you with personalized guidance"*

## Management

### Dr. Sendra Más, Juan Amaro

- Attending Physician in the Emergency Department at Vega Baja Hospital. Alicante, Spain
- Emergency Physician of the Medicalized Emergency Unit (UME 1)
- Physician in the Medical Emergency Service (SAMU)
- Helicopter Medicalized Physician
- Degree in Medicine and Surgery from the University of Alicante
- Specialist in Family and Community Medicine
- Accredited Professor for the Spanish Society of Emergency Medicine
- Member of the Spanish Society of Emergency Medicine

## Teachers

### Dr. Perales Cano, Raquel

- Specialist in Family and Community Medicine
- Primary Care Physician at La Loma Health Center
- Specialist in the Emergency Department at Vega Baja Hospital
- Physician of the Medicalized Emergency Unit 1 of the Murcia Health Service
- SAMU Health Professional

### Dr. Zazo Menargues, Juan Manuel

- Medical Coordinator at El Raval Health Center, Elche
- Primary Care Physician at San Fermín Health Center
- Researcher at the Department of Clinical Medicine, CEU Cardenal Herrera University

### Dr. Pérez Marín, Estefanía

- Specialist in Mental Health
- Specialist in Psychiatry at the General University Hospital of Elche
- Degree in Medicine and Surgery from the Miguel Hernández University of Elche
- Expert in Mental Health Emergencies

### Dr. Gavilán Martín, Cristina

- Pediatric Emergency Physician at the General University Hospital of Elche
- Specialist in Family and Community Medicine
- Doctor of Medicine from the Miguel Hernández University of Elche
- Degree in Medicine and Surgery from the University of Alicante
- APLS credential from the American Academy of Pediatrics and the American College of Emergency Physicians
- Professor in University Master's Programs and Postgraduate Courses.
- Member of: Spanish Society of Pediatric Emergencies (SEUP)

### Dr. Medina Martínez, Mª Ángeles

- Medical Director and Co-Founder of Healthy Blue Bits
- Specialist in Family and Community Medicine, Ministry of Health, Generalitat Valenciana
- Universal at the Generalitat of Valencia
- Co-Founder of Toubabs Team
- Degree in Medicine from the Miguel Hernández University of Elche
- Postgraduate in Clinical Management from the Open University of Catalonia
- Postgraduate in Public Health and Community Health from the University of Murcia
- Member of: ASD (Vocal), SoVaMFiC (President), the Forum of Primary Care Physicians of the Valencian Community

### Dr. López Llames, Aurora

- Specialist in Otorhinolaryngology
- Head of the Otorhinolaryngology Department at Torrevieja University Hospital
- Specialist Physician at Menorca Ib-Salut
- Otorhinolaryngologist at the Central University Hospital of Asturias
- Master's in Clinical Management from the Open University of Catalonia
- Degree in Medicine and Surgery from the University of Oviedo

### Dr. Fernández Martínez, María Ángeles

- Biochemist-Nutritionist-Phytotherapist, Head of the Natural Life Nutrition Center
- Manager of Parapharmacy, Dermopharmacy, Nutricosmetics, and Phytotherapy
- Bachelor's degree in Biochemistry from the University of Valencia
- University Expert in Nutrition, Dietetics, and Dietotherapy
- Expert in Microbiological Analysis of Food
- Expert in Prevention and Treatment with Nutrition, Diet, and Cancer
- Expert in Clinical and Sports Vegetarian Nutrition
- Specialist in Food Intolerances and Study of the Gut Microbiota
- Numerous courses in Gut Microbiota, Analytical Methods, and Applications
- Diploma in Natural and Orthomolecular Medicine
- Expert in Current Use of Nutricosmetics and Nutraceuticals
- Expert in Point of Sale Management in Pharmacies and Parapharmacies
- Member of: Spanish Society of Probiotics and Prebiotics (SEPyP), Spanish, Society of Dietetics (SEDCA), Spanish Society of Nutrition (SEÑ).
- Professional teaching experience in University Master's Degrees and Postgraduate Courses

04

# Structure and Content

Through this university qualification, healthcare professionals will gain comprehensive knowledge of the fastest and most accurate techniques to assess the severity of patients in emergency situations. To achieve this, the syllabus will delve into clinical procedures ranging from Cardiovascular Support and drug administration to the management of respiratory conditions. In this way, graduates will acquire advanced competencies to stabilize their patients' condition and significantly optimize their recovery. Furthermore, the syllabus will provide the essential tools for specialists to manage various Multiple Victim Incidents and Disasters, utilizing therapeutic methods such as catheterization.

*You will master the most advanced Advanced Life Support techniques for adult patients and optimize both their blood circulation and cardiac function"*

## **Module 1.** General Overview

1.1. Definitions and Concepts
1.2. Comprehensive Care
1.3. Bioethics and Legislation in Emergency Medicine
1.4. Bioethics
1.5. Legislation

## **Module 2.** Advanced Cardiovascular Support

2.1. Basic Life Support in Adults
  2.1.1. General Aspects
2.2. Advanced Life Support in Adults
  2.2.1. Action in Case of Bradyarrhythmia
  2.2.2. Action in Response to Tachyarrhythmias
2.3. Basic Pediatric Life Support
2.4. Pediatric and Neonatal Advanced Life Support
  2.4.1. Recognition and Management of Critically Ill Children
  2.4.2. Advanced Airway Management
  2.4.3. Basics of Mechanical Ventilation in Pediatrics
  2.4.4. Infusion Routes and Drugs in Pediatric CPR
  2.4.5. Pediatric VAS Algorithms and Arrhythmia Treatment
2.5. Neonatal Resuscitation
  2.5.1. Post-resuscitation Stabilization and Neonatal Transport
2.6. Advanced Life Support in Serious Trauma Patients
2.7. Advanced Life Support in Special Cases

## **Module 3.** Multiple Victim Incidents (MVI) and Disasters

3.1. General Aspects
3.2. MVI and Disaster Management
3.3. Sectorization
3.4. Deployment and Logistics
3.5. Triage
3.6. Multiple Victim Care
3.7. Evacuation
3.8. MVI Management in a Hospital
3.9. CBRN Incidents
3.10. Emergency Planning

## **Module 4.** Diagnostic and Therapeutic Techniques (Out-of-Hospital Emergencies and Disasters)

4.1. Catheters
4.2. Peripheral and Central Venous Access
4.3. Intraosseous Access
4.4. Endotracheal Intubation (ETI)
4.5. Difficult Airway
4.6. Invasive Mechanical Ventilation
4.7. Management of Non-Invasive Mechanical Ventilation
4.8. Pericardiocentesis
4.9. Thoracocentesis and Pleural Drainage
4.10. Emergency Ultrasound
4.11. Electrical Therapy (MP, CV, DF)
4.12. Hemodynamic Status Monitoring and Electrocardiography
4.13. Capnography and Pulse Oximetry
4.14. Oxygen Therapy
4.15. Neurological Status Monitoring
4.16. Sedation and Analgesia Monitoring
4.17. Collection of Analytical Samples
4.18. Common Scales in Emergency Care
4.19. Physiological Parameters in Adults and Children

## **Module 5.** Emergency Pharmacology

5.1. Basic Concepts
5.2. Routes of Drug Administration in Emergencies
5.3. Safety in Drug Administration
5.4. Fluid Therapy
5.5. Most Common Drugs in Emergencies
5.6. Dosage Formulas and Calculation

## **Module 6.** Cardiovascular Emergencies

6.1. Arrhythmias
6.2. Syncope
6.3. Acute Chest Pain
6.4. Acute Coronary Syndrome. The Heart Attack Code
6.5. Pericarditis, Cardiac Tamponade
6.6. Heart Failure
6.7. Acute Pulmonary Edema
6.8. Deep Vein Thrombosis (DVT)
6.9. Pulmonary Thromboembolism (PTE)
6.10. Aortic Dissection
6.11. Hypertensive Emergencies
6.12. Shock

## **Module 7.** Respiratory Emergencies

7.1. Respiratory Emergencies
7.2. Pneumonia
7.3. COPD Exacerbation
7.4. Pleuritis and Pleural Effusion
7.5. Pneumothorax
7.6. Hemoptysis

## **Module 8.** Neurological Emergencies

8.1. Neurological Assessment of the Critical Patient
8.2. Vascular Disorders, Stroke Protocol
8.3. Alterations in the Level of Consciousness
8.4. Intracranial Hypertension
8.5. Central Nervous System Infections
8.6. Seizures and Status Epilepticus
8.7. Headaches
8.8. Vertigo Syndrome (Dizziness)

## **Module 9.** Gastrointestinal Emergencies

9.1. Acute Abdominal Pain
9.2. Acute Gastrointestinal Hemorrhage and Vascular Disorders
9.3. Intestinal Obstruction
9.4. Acute Gastroenteritis
9.5. Acute Pancreatitis
9.6. Acute Biliary Disease
9.7. Acute Anal Disease

## **Module 10.** Renal and Urological Emergencies

10.1. Renal and Urological Emergencies
10.2. Renal and Excretory System Lithiasis
10.3. Urinary Retention
10.4. Urinary Tract Infections
10.5. Acute Renal Failure
10.6. Hematuria
10.7. Acute Scrotal Syndrome
10.8. Urethral Pathology

## **Module 11.** Endocrine and Metabolic Emergencies

11.1. Glucose Metabolism Disorders
11.2. Thyroid Emergencies
11.3. Acid-Base Balance Disorders
11.4. Water Balance Disorders
11.5. Electrolyte Balance Disorders

## **Module 12.** Psychiatric Emergencies

12.1. Psychopathologies
12.2. Psychomotor Agitation
12.3. Acute Alcoholic Pathology
12.4. Suicidal Attempt
12.5. Anxiety Crisis
12.6. Neuroleptic Malignant Syndrome

## **Module 13.** Pediatric Emergencies and Urgencies

13.1. Infantile Colic
13.2. Fever Syndrome
13.3. Seizures
13.4. Respiratory Tract Pathology
13.5. Exanthematous Diseases
13.6. Gastrointestinal Pathology
13.7. Child Abuse
13.8. Transport of the Pediatric Critically Ill Patient

## **Module 14.** Toxicological Emergencies

14.1. General Aspects of the Intoxicated Patient
14.2. Most Common Intoxications

## **Module 15.** Severe Trauma Care (Catastrophes or Out-of-Hospital Emergencies)

15.1. General Aspects
15.2. Biomechanics of Accidents
15.3. Primary and Secondary Assessment
15.4. Traumatic Brain Injury (TBI)
15.5. Thoracic Trauma
15.6. Abdominal Trauma
15.7. Vertebral Trauma and Spinal Cord Injury
15.8. Trauma of the Locomotor System
15.9. Wounds
15.10. Hypovolemic Shock
15.11. Pediatric Trauma
15.12. Trauma in Pregnant Women
15.13. Special Traumas
15.14. Trauma from Physical and Environmental Agents
15.15. Bites and Stings
15.16. Analgesia and Sedation
15.17. Mobilization and Immobilization. Materials and Techniques
15.18. Rescue and Medical Assistance in Confined and Remote Locations

## **Module 16.** Other Important Aspects in Emergencies and Urgencies

16.1. Communication Skills in Emergencies
16.2. Patient Safety
16.3. New Professional Skills in Accident and Emergency Care
16.4. New Technologies in Accident and Emergency Care

## **Module 17.** Other Emergencies

17.1. Urgent Complications in Terminal Patients
17.2. End-of-Life Care
17.3. Dermatology in Emergency Care
17.4. Organ and Tissue Donation

*You will be able to download all the content from this Postgraduate Diploma, including specialized readings or multimedia materials, even after the program has concluded. Enroll now!"*

05

# Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.

*TECH will prepare you to face new challenges in uncertain environments and achieve success in your career"*

## The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.
The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

*"At TECH you will NOT have live classes (which you might not be able to attend)"*

## The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

> *TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"*

## Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.

## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

*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.*

## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

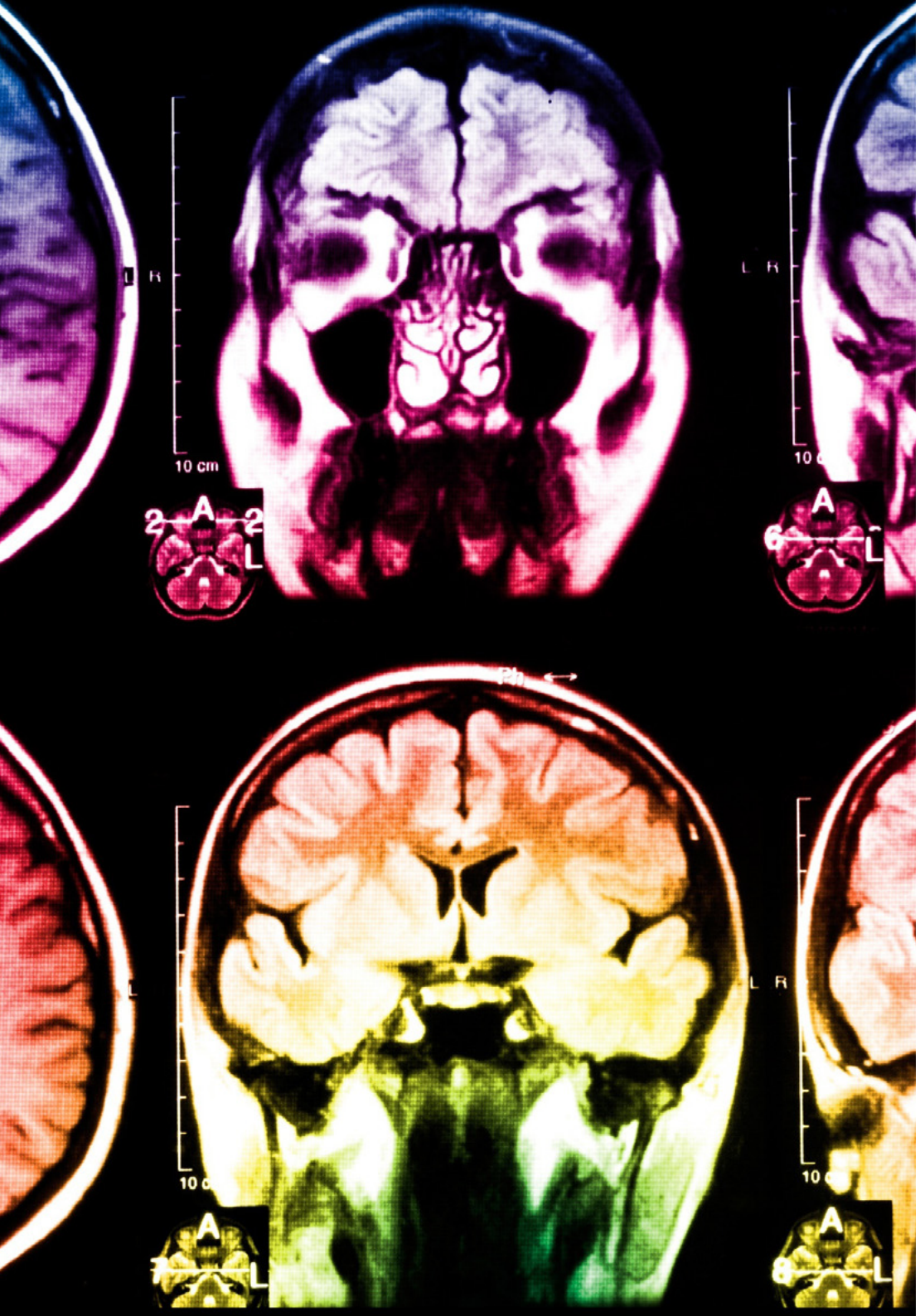
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.

*The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"*

**The effectiveness of the method is justified by four fundamental achievements:**

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

*Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.*

*You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.*

**As such, the best educational materials, thoroughly prepared, will be available in this program:**

### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

### Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.

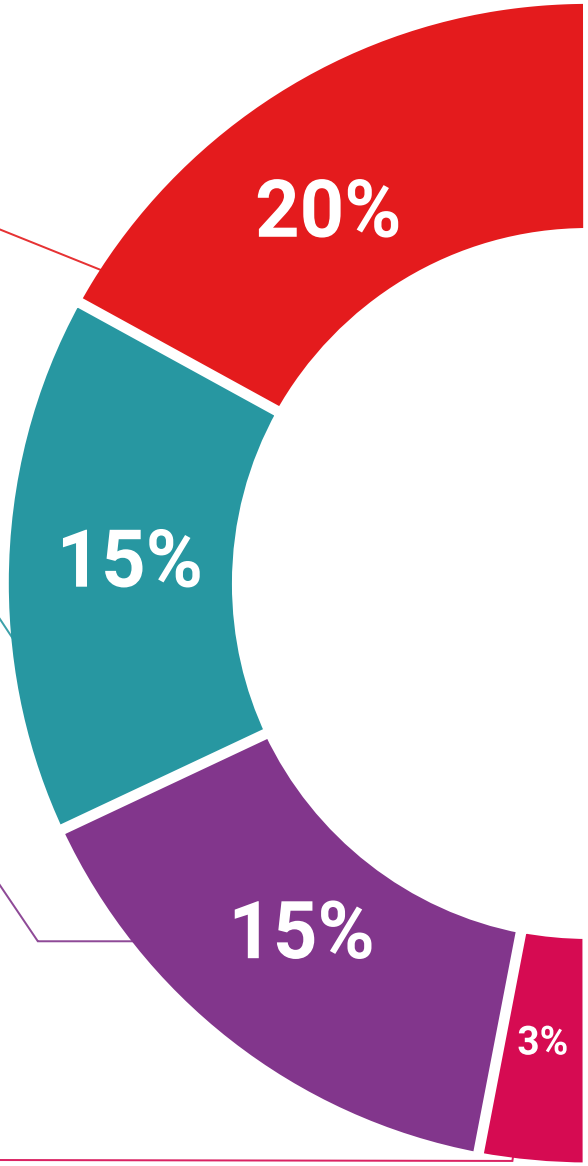
### Interactive Summaries

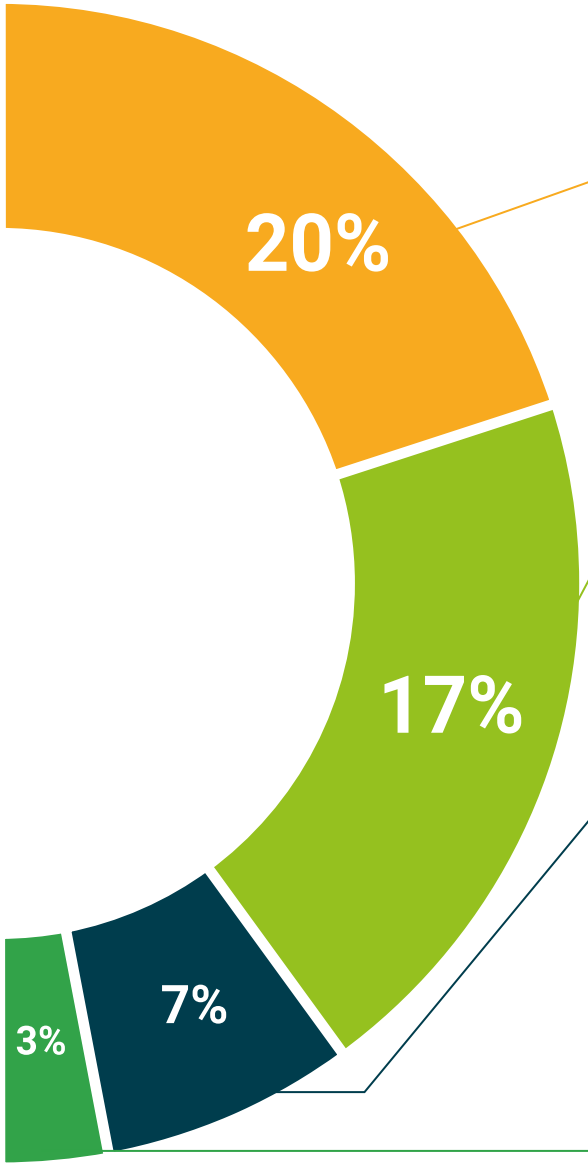
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

### Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.






### Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

### Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

### 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 for 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.

06

# Certificate

This Postgraduate Diploma in Out-of-Hospital Emergency Care guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Diploma 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 diploma for the **Postgraduate Diploma in Out-of-Hospital Emergency Care** endorsed by TECH Global University, the world's largest online university.

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

This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Out-of-Hospital Emergency Care**

Modality: **online**

Duration: **6 months**

Accreditation: **25 ECTS**


tech global university

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

**Postgraduate Diploma in Out-of-Hospital Emergency Care**

This is a private qualification of 750 hours of duration equivalent to 25 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Dean

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

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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# Postgraduate Diploma
## Out-of-Hospital Emergency Care

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Accreditation: **25 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

# Postgraduate Diploma

## Out-of-Hospital Emergency Care

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