

# Professional Master's Degree

Emergency, Urgent Care,  
and Disaster Medicine





## Professional Master's Degree Emergency, Urgent Care, and Disaster Medicine

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

Website: [www.techtitude.com/us/medicine/profesional-master-degree/master-emergency-urgent-care-disaster-medicine](http://www.techtitude.com/us/medicine/profesional-master-degree/master-emergency-urgent-care-disaster-medicine)

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# 01

# Introduction to the Program

Emergency, Urgent Care, and Disaster Medicine is a fundamental pillar of healthcare, as it allows for rapid and efficient intervention in critical situations that can compromise patients' lives. For this reason, its relevance lies in the need for highly trained professionals capable of applying advanced protocols. In fact, according to a report by the World Health Organization, up to 45% of deaths from medical emergencies could be prevented with adequate and well-organized pre-hospital care. In response to this opportunity for improvement, TECH has designed an innovative academic program that, thanks to its flexible and up-to-date methodology, provides access to specialized knowledge and strengthens performance in clinical practice.





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*Thanks to this 100% online Professional Master's Degree, you will achieve a high level of specialization, mastering protocols for action in critical situations”*

The field of Urgent Care, Emergency Care, and Disaster Management is a fundamental pillar of healthcare, given its crucial role in preserving life and reducing complications in critical situations. The growing demand for highly trained professionals in this field responds to the need for immediate and effective intervention in high-risk scenarios, such as accidents, natural disasters, and rapidly evolving medical conditions. In addition, the optimization of response systems and the constant updating of knowledge are essential to ensure comprehensive, quality care in any healthcare context.

In this regard, TECH University offers a comprehensive syllabus that addresses key and essential topics through structured modules ranging from basic definitions and concepts to advanced life support strategies. Consequently, the inclusion of bioethical and legislative aspects allows for an understanding of the regulatory framework in which medical actions are carried out, while the organization of emergency and medical transport systems facilitates the efficient coordination of available resources. Specific content on advanced cardiovascular support in adults and children is also included, along with the management of cardiovascular and respiratory emergencies, which promotes comprehensive training in the identification and treatment of critical conditions.

To ensure a flexible and effective experience, TECH offers an innovative model based on a 100% online methodology that allows access to content at any time and from any device with an Internet connection. Thanks to the Relearning system, the progressive assimilation of knowledge is optimized, facilitating the development of essential skills in Emergency care.

In addition, the university program will feature the participation of a prestigious International Guest Director who will deliver 10 exclusive Masterclasses, providing an up-to-date and expert perspective in this field.

This **Professional Master's Degree in Emergency, Urgent Care, and Disaster Medicine** 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 medicine
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where self-assessment can be used 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 renowned International Guest Director will offer 10 intensive Masterclasses on the latest advances in Emergency, Urgent Care, and Disaster Medicine"*

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*You will develop the ability to apply up-to-date pre-hospital care protocols, optimizing the response to critical situations”*

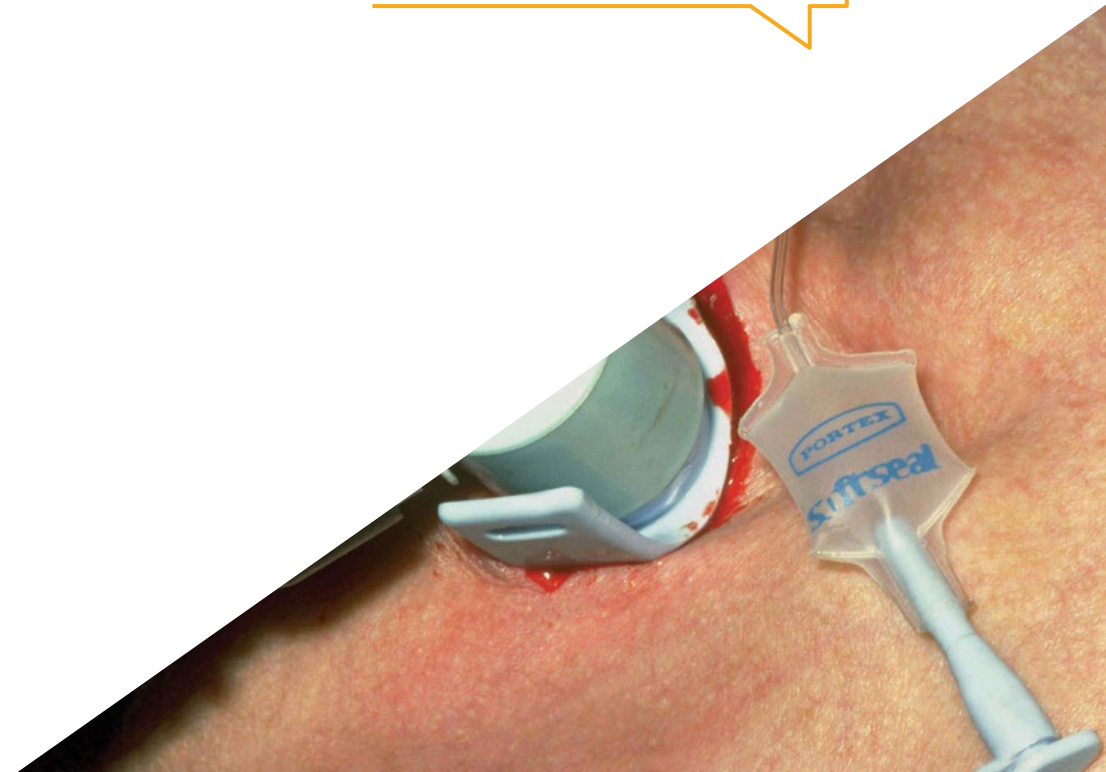
The teaching staff includes professionals from the field of Medicine, who bring their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive learning experience designed to prepare for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will understand the bioethical and legislative framework that regulates emergency response, ensuring responsible professional practice.*

*Thanks to the Relearning system used by TECH, you will reduce the long hours of study and memorization.*





02

# Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it relies on an enormous faculty of more than 6,000 professors of the highest international renown.





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*Study at the world's largest online university  
and guarantee your professional success.  
The future starts at TECH”*

### The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

### The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

### The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



### The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

### A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

#### The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

#### Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



#### Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



#### The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



# 03 Syllabus

The approach to medical Emergencies requires professionals trained to act with precision in critical situations, where every second counts. For this reason, this program provides the necessary tools for the comprehensive management of cardiovascular, respiratory, neurological, digestive, and endocrine-metabolic emergencies, allowing you to quickly identify warning signs and apply advanced intervention protocols. It also strengthens decision-making in high-pressure scenarios, improving response to conditions such as arrhythmias, hypertensive crises, and severe neurological disorders.





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*You will apply your innovative knowledge  
in cardiovascular and respiratory  
Emergencies, reducing risks and  
improving patient prognoses”*

## Module 1. Overview

- 1.1. Definitions and Concepts
- 1.2. Comprehensive care for medical emergencies and emergencies
- 1.3. Bioethics in urgencies, emergencies and catastrophes

## Module 2. Emergency Services and Medical Transport

- 2.1. Organization of Emergency Medical Systems
- 2.2. Coordination and Health Regulation
- 2.3. Information and Record Systems
- 2.4. Types of Medical Transport
  - 2.4.1. Intrahospital Transport
  - 2.4.2. Interhospital Transport
  - 2.4.3. Ground Medical Transport
  - 2.4.4. Air Medical Transport
- 2.5. Pathophysiology of Medical Transport and Transfer Positions
- 2.6. Patient Transfer. Models

## Module 3. Advanced Cardiovascular Support

- 3.1. Basic Life Support in Adults
  - 3.1.1. Overview
- 3.2. Advanced Life Support in Adults
  - 3.2.1. Action in Response to Bradyarrhythmias
  - 3.2.2. Action in Response to Tachyarrhythmias
- 3.3. Basic Pediatric Life Support
- 3.4. Pediatric and Neonatal Advanced Life Support
  - 3.4.1. Recognition and Management of Critically Ill Children
  - 3.4.2. Advanced Airway Management
  - 3.4.3. Basics of Mechanical Ventilation in Pediatrics
  - 3.4.4. Infusion Routes and Drugs in Pediatric CPR
  - 3.4.5. Pediatric VAS Algorithms and Arrhythmia Treatment



- 3.5. Neonatal Resuscitation
  - 3.5.1. Post-resuscitation Stabilization and Neonatal Transport
- 3.6. Advanced Life Support in Serious Trauma Patients
- 3.7. Advanced Life Support in Special Cases

#### Module 4. Cardiovascular Emergencies

- 4.1. Arrhythmias
- 4.2. Syncope
- 4.3. Acute Chest Pain
- 4.4. Acute Coronary Syndrome. The Heart Attack Code
- 4.5. Pericarditis, Cardiac Tamponade
- 4.6. Heart Failure
- 4.7. Acute Pulmonary Edema
- 4.8. Deep Vein Thrombosis (DVT)
- 4.9. Pulmonary Thromboembolism (PTE)
- 4.10. Aortic Dissection
- 4.11. Hypertensive Emergencies
- 4.12. Shock

#### Module 5. Respiratory Emergencies

- 5.1. Respiratory Emergencies
- 5.2. Pneumonia
- 5.3. COPD Exacerbation
- 5.4. Pleuritis and Pleural Effusion
- 5.5. Pneumothorax
- 5.6. Hemoptysis

#### Module 6. Neurological Emergencies

- 6.1. Neurological Assessment of a Critically Ill Patient
- 6.2. Vascular Disorders, Ictus Code
- 6.3. Alterations in the Level of Consciousness
- 6.4. Intracranial Hypertension
- 6.5. Central Nervous System Infections
- 6.6. Seizures and Status Epilepticus
- 6.7. Headaches
- 6.8. Vertiginous Syndrome (Vertigo)

#### Module 7. Digestive Emergencies

- 7.1. Acute Abdominal Pain
- 7.2. Acute Gastrointestinal Hemorrhage and Vascular Disorders
- 7.3. Intestinal Obstruction
- 7.4. Acute Gastroenteritis
- 7.5. Acute Pancreatitis
- 7.6. Acute Biliary Disease
- 7.7. Acute Anal Disease

#### Module 8. Endocrinometabolic Emergencies

- 8.1. Glucose Metabolism Disorders
- 8.2. Thyroid Emergencies
- 8.3. Acid-Base Balance Disorders
- 8.4. Water Balance Disorders
- 8.5. Electrolyte Balance Disorders

### Module 9. Nephrourological Emergencies

- 9.1. Nephrourological Emergencies
- 9.2. Renal and Excretory System Lithiasis
- 9.3. Urinary Retention
- 9.4. Urinary Tract Infections
- 9.5. Acute Renal Failure
- 9.6. Hematuria
- 9.7. Acute Scrotal Syndrome
- 9.8. Urethral Pathology

### Module 10. Hematological, Immunological and Infectious Emergencies

- 10.1. Hemotherapy
- 10.2. Thrombopenia
- 10.3. Anticoagulation and Thromboprophylaxis
- 10.4. Allergies and Anaphylactic Reactions
- 10.5. Risk Exposure and Exposure to Potentially Harmful Material
- 10.6. Fever of Unknown Origin
- 10.7. Sepsis and Septic Shock

### Module 11. Psychiatric Emergencies

- 11.1. Psychopathologies
- 11.2. Psychomotor Agitation
- 11.3. Acute Alcoholic Disease
- 11.4. Self-Harm Attempt.
- 11.5. Anxiety Attack
- 11.6. Neuroleptic Malignant Syndrome

### Module 12. Ophthalmologic Emergencies

- 12.1. Eyelid and Lacrimal System Diseases
- 12.2. Pink Eye
- 12.3. Sudden Loss of Vision
- 12.4. Eye Injuries

### Module 13. Otolaryngologic Emergencies

- 13.1. Infectious Processes in ENT
- 13.2. Foreign Objects in ENT
- 13.3. Epistaxis
- 13.4. Sudden Loss of Hearing

### Module 14. Toxicology Emergencies

- 14.1. General Aspects of an Intoxicated Patient
- 14.2. Most Common Intoxications

### Module 15. Terminally Ill Patients in the Emergency Department

- 15.1. Emergency Complications in Terminal Patients
- 15.2. Attention to the Situation in the Last Few Days of a Terminal Patient's Life
- 15.3. Dermatology in Emergencies

### Module 16. Obstetric Emergencies

- 16.1. Inflammatory, Infectious and Other Emergencies
- 16.2. Gynecological Bleeding
- 16.3. Pregnancy and Postpartum Emergencies
- 16.4. Emergency Delivery Assistance
- 16.5. Sexual Abuse

### Module 17. Pediatric Accidents and Emergencies

- 17.1. Infant Colic
- 17.2. Febrile Syndrome
- 17.3. Seizures
- 17.4. Airway Pathology
- 17.5. Exanthematous Diseases
- 17.6. Digestive Pathology
- 17.7. Child Abuse
- 17.8. Transport of Critical Pediatric Patients



**Module 18. Severe Trauma Care (Catastrophes or Out-of-Hospital Emergencies)**

- 18.1. Overview
- 18.2. Biomechanics of Accidents
- 18.3. Primary and Secondary Assessment
- 18.4. TBI
- 18.5. Thoracic Trauma
- 18.6. Abdominal Trauma
- 18.7. Vertebral Trauma and Spinal Cord Injury
- 18.8. Trauma of the Locomotor System
- 18.9. Injuries
- 18.10. Hypovolemic Shock
- 18.11. Pediatric Trauma
- 18.12. Trauma During Pregnancy
- 18.13. Special Traumas
- 18.14. Injuries due to Physical and Environmental Agents
- 18.15. Bites and Stings
- 18.16. Analgesia and Sedation
- 18.17. Mobilization and Immobilization. Materials and Techniques.
- 18.18. Rescue and Medical Care in Confined and Remote Places

**Module 19. Multiple Victims Incidents (MVI) and Disasters**

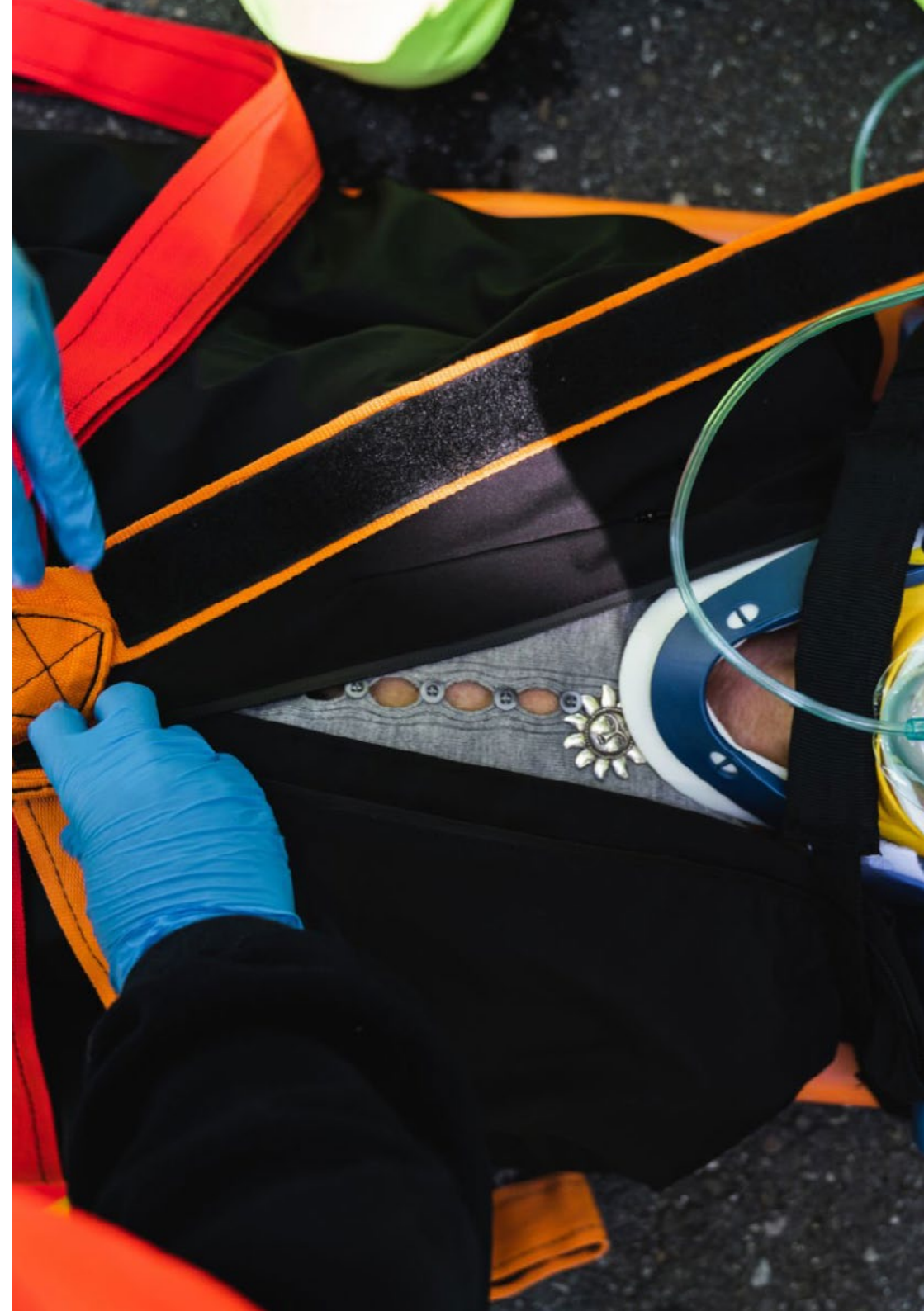
- 19.1. Overview
- 19.2. MVI and Disaster Management
- 19.3. Sectorization
- 19.4. Deployment and Logistics
- 19.5. Triage
- 19.6. Multiple Victim Care
- 19.7. Evacuation
- 19.8. MVI Management in a Hospital
- 19.9. CBRN Incidents
- 19.10. Emergency Planning

## Module 20. Diagnostic and Therapeutic Techniques (Humanitarian Emergency Evacuation (HEE) and Catastrophes)

- 20.1. Probes
- 20.2. Peripheral and Central Vein Cannulation
- 20.3. Intraosseous Route
- 20.4. Endotracheal Intubation (ETI)
- 20.5. Difficult Airway
- 20.6. Invasive Mechanical Ventilation
- 20.7. Use of Non-Invasive Mechanical Ventilation
- 20.8. Pericardiocentesis
- 20.9. Thoracocentesis and Pleural Drainage
- 20.10. Emergency Department Ultrasound
- 20.11. Electrical Therapy (MP, CV, DF)
- 20.12. Monitoring of Hemodynamic Status and Electrocardiography
- 20.13. Capnography and Pulse Oximetry
- 20.14. Oxygen Therapy
- 20.15. Monitoring of Neurological Status
- 20.16. Monitoring of Sedoanalgesia
- 20.17. Collecting Analytical Samples
- 20.18. Frequently Used Scales in Accident and Emergency Medicine
- 20.19. Physiological Parameters in Adults and Children

## Module 21. Pharmacology in Emergencies

- 21.1. Basic Concepts
- 21.2. Drug Administration Routes in Accidents and Emergencies
- 21.3. Drug Administration Safety
- 21.4. Fluid Therapy
- 21.5. Most Common Drugs Used in Accident and Emergency Care
- 21.6. Formulas and Dosage Calculation







### Module 22. Other Important Aspects in Accident and Emergency Care

- 22.1. Communication Skills in Emergencies
- 22.2. Patient Safety
- 22.3. New Professional Skills in Accident and Emergency Care
- 22.4. New Technologies in Accident and Emergency Care

### Module 23. Latest Information on Coronavirus Infections

- 23.1. Discovery and Evolution of Coronaviruses
- 23.2. Main Microbiological Characteristics and Members of the Coronavirus Family
- 23.3. Epidemiological Changes in Coronavirus Infections from Its Discovery to the Present
- 23.4. The Immune System and Coronavirus Infections
- 23.5. Pathogenesis and Pathophysiology of Coronavirus Infections
- 23.6. Risk Groups and Transmission Mechanisms of Coronaviruses
- 23.7. Natural History of Coronavirus Infections
- 23.8. Updated Microbiological Diagnosis of Coronavirus Infections
- 23.9. Current Biosafety Measures in Microbiology Laboratories for Coronavirus Sample Handling
- 23.10. Up-to-Date Management of Coronavirus Infections
- 23.11. Future Challenges in the Prevention, Diagnosis, and Treatment of Coronavirus

“You will master agility and gain exclusive experience with the scales frequently used in Emergency rooms to accurately assess the severity of a patient’s condition”

04

# Teaching Objectives

This university program aims to train professionals in the expert handling of medical emergencies, thereby strengthening their ability to make quick and accurate decisions in critical situations. To this end, through a strategic methodology, TECH University facilitates the assimilation of knowledge in a dynamic and efficient manner, allowing for the application of updated protocols with greater confidence. It also provides advanced tools for the comprehensive management of cardiovascular, neurological, respiratory, and toxicological Emergencies, among others, thereby optimizing response capacity in different clinical scenarios.





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*You will apply specialized protocols to control hypertensive crises and prevent complications such as Pulmonary Edema, Stroke, or Acute Renal Failure”*



## General Objectives

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- ♦ Develop advanced skills in the assessment, diagnosis, and management of medical emergencies in various areas
- ♦ Optimize decision-making in critical situations, applying updated protocols for the management of critically ill patients, from severe trauma to psychiatric emergencies
- ♦ Strengthen knowledge of bioethics and legislation in the context of emergencies and critical care, ensuring responsible medical care in line with ethical and regulatory principles
- ♦ Improve the use of health information and coordination systems, including intra- and inter-hospital transport, to improve the efficiency of pre-hospital care
- ♦ Accurately manage emergency pharmacology, including dose calculation, routes of administration, and medication safety to ensure effective and safe treatment
- ♦ Integrate new technologies in urgent and emergency care, optimizing efficiency in patient monitoring and real-time data-driven decision-making
- ♦ Promote continuous updating and the acquisition of new skills, enabling professionals to adapt to changes in clinical practice and improve the quality of care in medical emergencies





## Specific Objectives

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### Module 1. Overview

- ♦ Understand the fundamental definitions and concepts in Emergency Medicine, establishing a solid foundation for decision-making in critical situations
- ♦ Apply a comprehensive care approach that includes clinical assessment, patient stabilization, and efficient coordination with other levels of care

### Module 2. Emergency Services and Medical Transport

- ♦ Examine coordination and health regulation protocols to ensure efficient management of available resources
- ♦ Differentiate between types of medical transport and their indications according to the patient's clinical condition and the logistics required

### Module 3. Advanced Cardiovascular Support

- ♦ Apply basic and advanced life support protocols in adults to improve response to cardiovascular emergencies
- ♦ Implement advanced airway management strategies in pediatric and neonatal patients, ensuring effective ventilation

### Module 4. Cardiovascular Emergencies

- ♦ Identify the signs and symptoms of major cardiovascular emergencies for timely and effective intervention
- ♦ Apply management protocols for acute coronary syndrome and other critical conditions, ensuring evidence-based care

### Module 5. Respiratory Emergencies

- ♦ Recognize the signs and symptoms of major respiratory emergencies for rapid and effective intervention
- ♦ Establish appropriate therapeutic strategies to ensure efficient ventilation and prevent complications in situations of acute respiratory failure

### Module 6. Neurological Emergencies

- ♦ Identify the clinical signs of major neurological emergencies to facilitate early and effective intervention
- ♦ Establish care protocols for central nervous system infections, headaches, and vertigo syndrome to reduce complications and improve prognosis

### Module 7. Digestive Emergencies

- ♦ Identify the signs and symptoms of the main digestive emergencies to facilitate timely diagnosis
- ♦ Determine the most effective interventions in cases of intestinal obstruction, pancreatitis, and acute gastroenteritis

### Module 8. Endocrinometabolic Emergencies

- ♦ Identify the most common endocrine and metabolic disorders in emergency situations to optimize clinical management
- ♦ Assess acid-base, fluid, and electrolyte imbalances in order to implement effective corrective strategies

### **Module 9. Nephrourological Emergencies**

- ♦ Identify the main nephro-urological emergencies to facilitate rapid and effective intervention
- ♦ Differentiate between the causes of urinary retention and urinary tract infections in order to select the most appropriate treatment

### **Module 10. Hematological, Immunological and Infectious Emergencies**

- ♦ Describe the principles of hemotherapy to ensure its safe application in emergencies
- ♦ Distinguish the signs and risks associated with thrombocytopenia and coagulation disorders to optimize their clinical management

### **Module 11. Psychiatric Emergencies**

- ♦ Identify the main psychopathologies in the emergency setting to facilitate adequate and timely care
- ♦ Recognize the manifestations of Neuroleptic Malignant Syndrome in order to prevent serious complications in the patient

### **Module 12. Ophthalmologic Emergencies**

- ♦ Identify the main causes of sudden vision loss in order to intervene promptly in emergency situations
- ♦ Assess eye injuries in order to determine the severity of the injury and apply the appropriate treatment

### **Module 13. Otolaryngologic Emergencies**

- ♦ Identify the main infectious processes in otolaryngology for effective emergency care
- ♦ Manage epistaxis and sudden deafness with appropriate strategies to avoid complications in the patient

### **Module 14. Toxicology Emergencies**

- ♦ Distinguish the signs and symptoms of common types of poisoning for timely intervention
- ♦ Differentiate between different types of poisoning and their specific approaches in the emergency setting

### **Module 15. Terminally Ill Patients in the Emergency Department**

- ♦ Identify urgent complications that may arise in terminal patients to optimize their management in the emergency department
- ♦ Distinguish specific care in the final days of life, ensuring a humanized approach

### **Module 16. Obstetric Emergencies**

- ♦ Identify the main inflammatory and infectious disorders in obstetrics for timely intervention
- ♦ Differentiate between the causes and approaches to gynecological bleeding in emergency situations



**Module 17. Pediatric Accidents and Emergencies**

- ♦ Identify the signs and symptoms of the main pediatric emergencies for early intervention
- ♦ Specify the procedures for transporting critical pediatric patients, ensuring their stability during transfer

**Module 18. Severe Trauma Care (Catastrophes or Out-of-Hospital Emergencies)**

- ♦ Identify different types of trauma and their implications for emergency care
- ♦ Analyze the biomechanics of accidents and their relationship to the injuries observed in patients

**Module 19. Multiple Victims Incidents (MVI) and Disasters**

- ♦ Identify the key principles in managing incidents involving multiple victims and disasters
- ♦ Analyze the processes of sectorization, deployment, and logistics in mass emergency scenarios

**Module 20. Diagnostic and Therapeutic Techniques (Humanitarian Emergency Evacuation (HEE) and Catastrophes)**

- ♦ Identify the main diagnostic and therapeutic techniques used in emergencies and disasters
- ♦ Explain vascular access procedures, including peripheral and central venous catheterization and intraosseous access

**Module 21. Pharmacology in Emergencies**

- ♦ Detail the essential concepts of pharmacology in emergency situations
- ♦ Identify the different routes of drug administration in urgent and emergency situations

**Module 22. Other Important Aspects in Accident and Emergency Care**

- ♦ Explore the importance of communication skills in the emergency setting to improve patient care
- ♦ Examine strategies to ensure patient safety in critical situations

**Module 23. Latest Information on Coronavirus Infections**

- ♦ Investigate the evolution and discovery of coronaviruses to understand their impact on global health
- ♦ Identify the main microbiological characteristics and diversity of members of the coronavirus family

# 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.



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*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.

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*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.

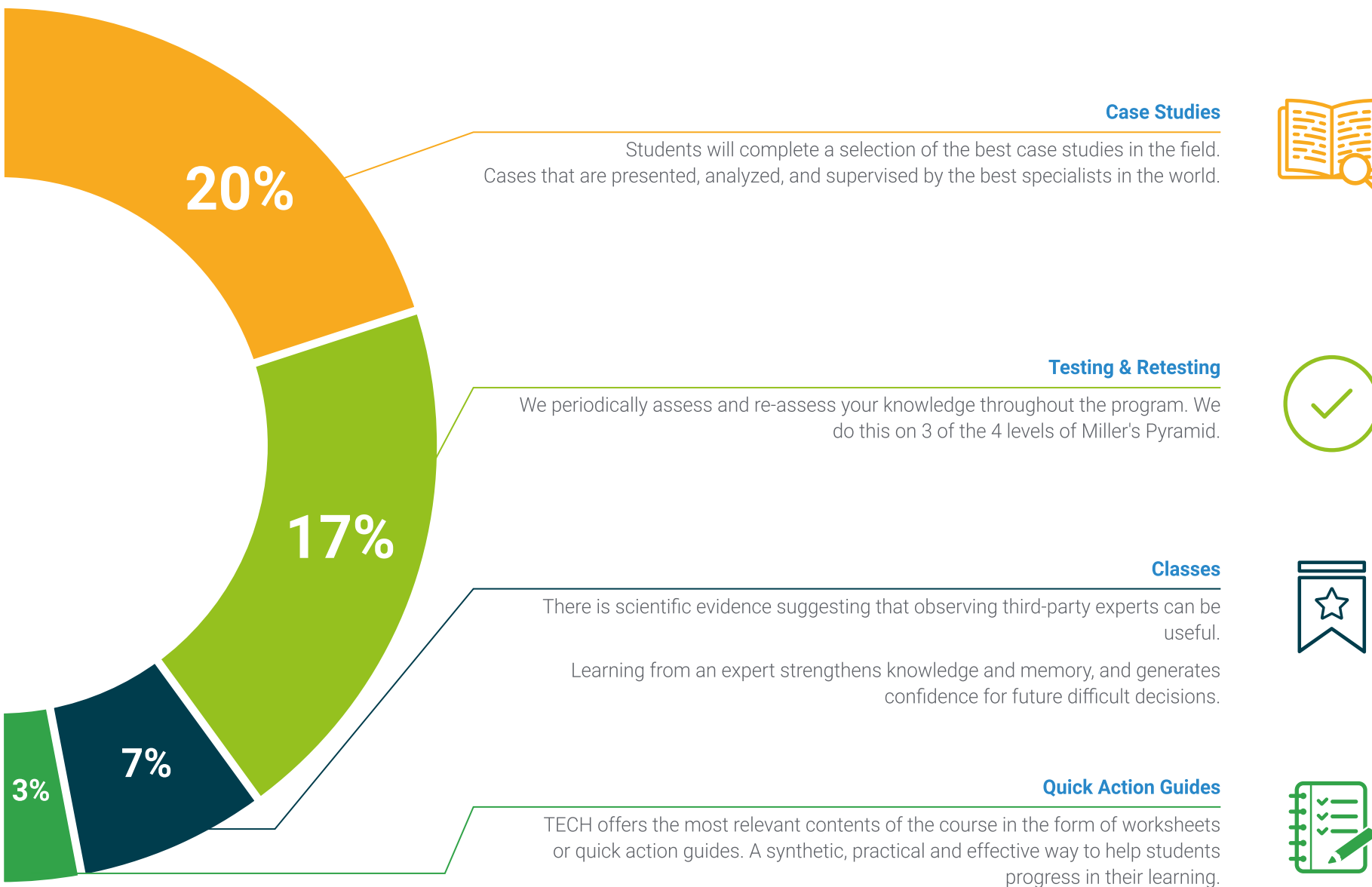
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

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





06

# Teaching Staff

This comprehensive university program boasts a team of leading experts in Emergency, Urgent Care, and Disaster Medicine, who contribute their extensive experience and knowledge gained through professional practice. It also includes the participation of internationally renowned specialists, ensuring an interdisciplinary and up-to-date approach. Thanks to this outstanding team of specialists, the program offers a comprehensive and up-to-date overview, enabling professionals to achieve a level of excellence that is recognized worldwide.







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*The world's leading experts in Emergency, Urgent Care, and Disaster Medicine have come together in this university program to share their knowledge in this field”*

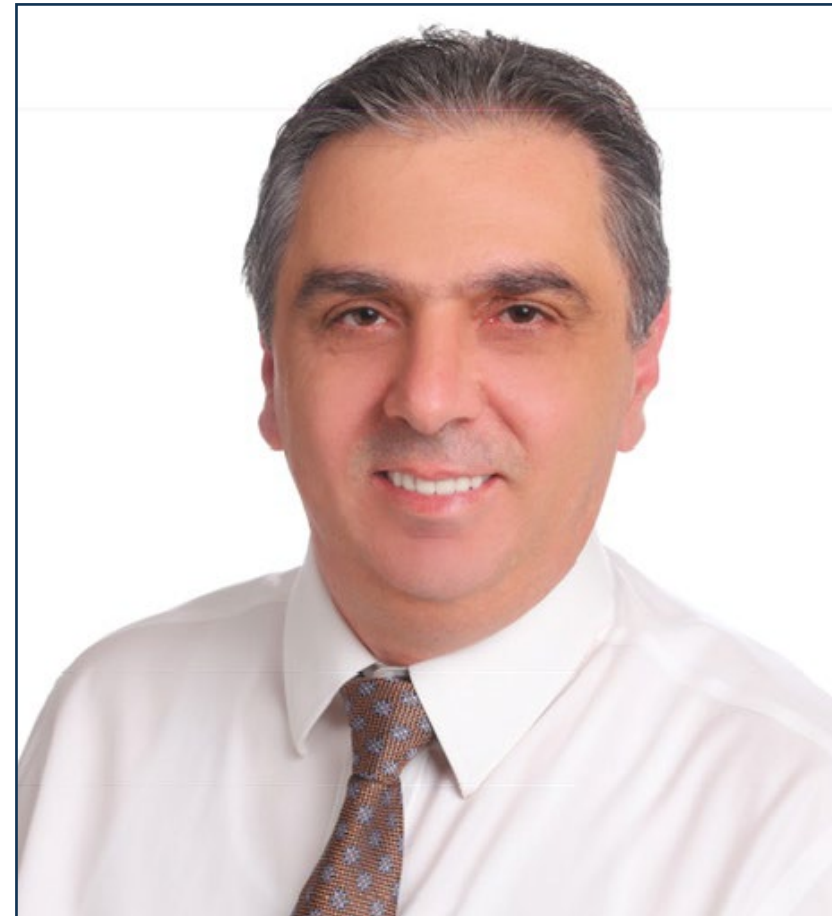
## International Guest Director

Dr. Fadi Salah Issa has become one of the world's leading experts in the field of **Emergency Medicine**. For more than 20 years he has developed a tireless work in the field of **Emergency Medicine**.

This work stems from his work as an emergency physician at the **King Faisal Specialist Hospital & Research Center**, where he implemented a new rapid care system and facility that reduced waiting times for patients. This allowed him to improve care and to attend more efficiently to complex cases of **Oncology, transplant patients and congenital diseases**. Thanks to his deep interest in providing the best health response to disaster situations, Salah Issa has turned his efforts to academia and research, promoting specialized and continuous education for medical professionals.

In this regard, he is the **Director of Education for the Disaster Medicine Fellowship** at the BIDMC Medical Harvard School. A role that joins the co-supervision of the European Disaster Medicine Thesis Board at the University of Eastern Piedmont. His impact in this area has been positive, contributing to the better preparation of healthcare workers. Additionally, his concern for humanitarian work has led him to become involved in the **World Association of Disaster and Emergency Medicine (WADEM)**, where he is chairman of the special interest group against terrorism.

In this line, his scientific studies also include his analysis of **attacks on educational institutions**, the prevention of post-traumatic stress and the promotion of the resilience of healthcare personnel in the event of COVID-19, **anti-terrorist medicine** and the analysis of variability in the training of expatriate pre-hospital providers in Bahrain.



## Dr. Salah Issa, Fadi

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- Director of the BIDMC Disaster Medicine Fellowship at Harvard Medical School, Boston, United States
- Co-supervisor of the European Board of Disaster Medicine Thesis at the University of Eastern Piedmont
- Fellowship in Disaster Medicine Research at Harvard Medical School
- Emergency Physician at King Faisal Specialist Hospital & Research Center
- Team Leader and Emergency Physician at Armed Forces Hospitals-Southern Region, Khamis Mushayt, KSA
- Bachelor of Medicine and Surgery from the University of Medicine and Pharmacology at Cariova, Romania
- Disaster Medicine and Emergency Management from Harvard Medical School Medical Doctors in BIDMC
- Master's Degree in Disaster Medicine from the University of Piemonte Orientale
- Member of: Chairman of the Counterterrorism Special Interest Group of the World Association of Disaster and Emergency Medicine (WADEM) and Academia of the Faculty of Medicine of Harvard

“

*Thanks to TECH, you will be able to learn with the best professionals in the world”*

## Management



### **Ms. Rivera Núñez, María Angélica**

- Assistant Coordinator of the Emergency Department at La Paz University Hospital
- Director of Patient Safety in the Emergency Department at La Paz University Hospital
- Instructor of Advanced Life Support National Cardiopulmonary Resuscitation Plan of the Spanish Society of Intensive Care Medicine, Critical Care and Coronary Units
- Degree in Medicine and Surgery from the Autonomous University of Madrid
- Degree in Medicine and Surgery
- Surgeon Specialist in Internal Medicine
- Diploma in Clinical Teaching - Teacher Training Unit Pontificia Catholic University in Chile
- Certificate in Emergency Medicine (CME)
- Training in Thrombotic Pathology Faculty of Medicine, University of Navarra





### **Ms. Torres Santos-Olmo, Rosario María**

- ♦ Assistant Coordinator of the Emergency Department at La Paz University Hospital
- ♦ Director of Patient Safety in the Emergency Department at La Paz University Hospital
- ♦ Instructor of Advanced Life Support National Cardiopulmonary Resuscitation Plan of the Spanish Society of Intensive Care Medicine, Critical Care and Coronary Units
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- ♦ Certificate in Emergency Medicine (CME)
- ♦ Training in Thrombotic Pathology Faculty of Medicine, University of Navarra



### **Dr. Roig D´Cunha-Kamath, Francisco Vicente**

- Hospital Emergency Physician at Valencia University Clinical Hospital
- Degree in Medicine from the University of Valencia
- Specialist via MIR in Family and Community Medicine
- Assistant Physician of the Emergency Medicine Department at the Clinical University Hospital of Valencia.
- Professor of Human Anatomy at the European University of Valencia.
- Physician at the Valencia Health and Community Foundation.
- Doctor for the ASCIRES group

## **Professors**

### **Dr. Brasó Aznar, José Vicente**

- Chief of Section of the Emergency Medicine Department at the La Ribera University Hospital
- Hospital Emergency Physician
- Associate Professor of Emergency Medicine in the Faculty of Medicine of the University of Valencia







# 07 Certificate

The Professional Master's Degree in Emergency, Urgent Care, and Disaster Medicine guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Professional Master's Degree issued by TECH Global University.





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*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 **Professional Master's Degree in Emergency, Urgent Care, and Disaster Medicine** endorsed by TECH Global University, the world's largest online university.

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

researchers and academics.

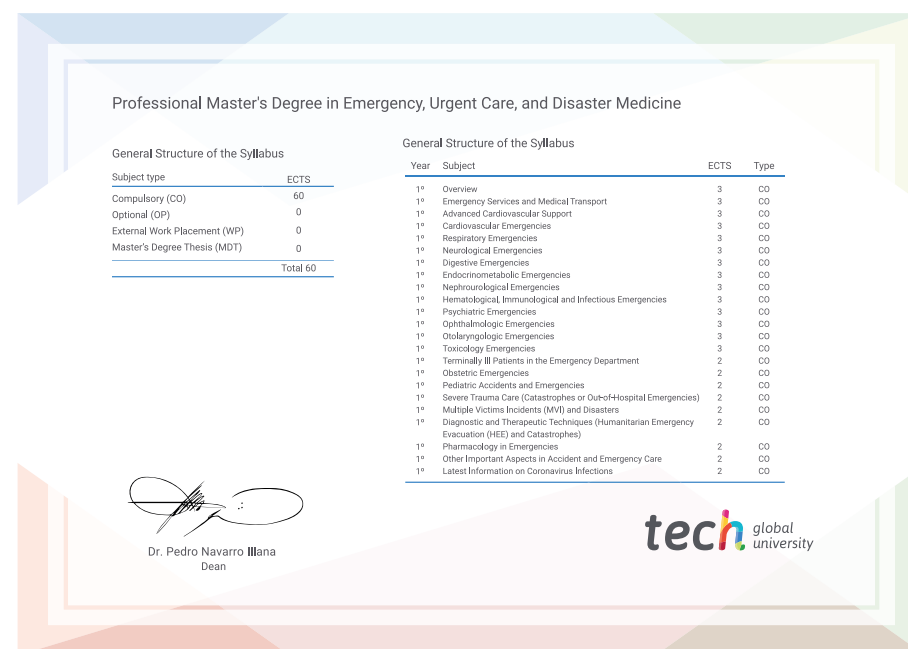
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Professional Master's Degree in Emergency, Urgent Care, and Disaster Medicine**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**





## Professional Master's Degree

Emergency, Urgent Care,  
and Disaster Medicine

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

# Professional Master's Degree

Emergency, Urgent Care,  
and Disaster Medicine