

# Postgraduate Certificate Medical-Surgical Emergencies





## Postgraduate Certificate Medical-Surgical Emergencies

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Credits: 10 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/medical-surgical-emergencies](http://www.techtute.com/us/medicine/postgraduate-certificate/medical-surgical-emergencies)

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# 01

# Introduction

Medical-surgical emergencies require a rapid and effective response to prevent the patient's condition from worsening. The professionalization of the emergency corps allows a high level of quality to be achieved in health care. This Postgraduate Certificate is designed so that the medical professional can update their knowledge of the procedures of medical-surgical emergency care in a practical way and adapted to their needs.



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*This Postgraduate Certificate deals with medical procedures in medical-surgical emergencies, so that you will be able to deal with situations that may compromise the patient's life. Learn how to identify, initially care and transfer a patient in an emergency situation"*

Medical-surgical emergencies require specialized care to ensure the maintenance of life support and avoid possible complications that may compromise the health of the person.

The Postgraduate Certificate in Medical-Surgical Emergencies is designed to update the nursing professional's knowledge in emergency care in order to provide quality care to patients with pathologies that affect different organs and systems.

Thus, upon completion of the Postgraduate Certificate, the professional will be able to prioritize situations, solve problems and make decisions in the care of patients in nephrourological, hematological, immunological, infectious, psychiatric, ophthalmological, otorhinolaryngological and toxicological emergency situations.

This **Postgraduate Certificate in Medical-Surgical Emergencies** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- ♦ Clinical cases presented by experts in medical-surgical emergencies
- ♦ 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
- ♦ Diagnostic and therapeutic innovations on how to deal with situations of cardiovascular and respiratory emergencies
- ♦ An algorithm-based interactive learning system for decision-making in the different clinical situations presented throughout the course
- ♦ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- ♦ Availability of content from any fixed or portable device with internet connection



*Update your knowledge through the Postgraduate Certificate in Medical-Surgical Emergencies in a practical way and adapted to your needs"*

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*This Postgraduate Certificate is the best investment you can make when selecting a refresher program for two reasons: in addition to updating your knowledge in Medical-Surgical Emergencies, you will obtain a Postgraduate Certificate from TECH Global University”*

Forming part of the teaching staff is a group of professionals in the field of emergencies, who bring to this training their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

The multimedia content developed with the latest educational technology will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training program to train in real situations.

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

*This online methodology allows you to practice in a simulated environment through clinical cases.*

*Make the most of the opportunity to update your knowledge of how to deal with Medical-Surgical Emergencies”*



# 02 Objectives

The main objective of the program is the development of theoretical and practical learning, so that the physician can master in a practical and rigorous way the life support maneuvers and invasive emergency techniques.





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



### General Objective

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- Update the knowledge and skills necessary for the professional to face medical-surgical emergencies in the different systems of the organism that can compromise the patient's life

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*Make the most of the opportunity and take the step to get up to date in the latest innovations in patient care in emergency situations”*





## Specific Objectives

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- ◆ Differentiate between the concepts of accidents, emergencies and disasters
- ◆ Identify the fundamentals of emergency health care.
- ◆ Apply clinical and non-clinical professional skills in emergency and disaster medicine
- ◆ Use medical records in the emergency department and understand the most relevant legal and ethical aspects of health care in emergencies
- ◆ Prioritize, organize and manage patient care in the most efficient way through triage
- ◆ Understand the basic workings of an emergency coordination center
- ◆ Identify the equipment and the communication systems in an EMS
- ◆ Identify the life-threatening pathophysiological processes
- ◆ Identify the main immunological emergency pathologies and manage patients suffering from anaphylactic reactions
- ◆ Manage intoxicated patients and injuries caused by environmental agents
- ◆ Understand the medical-legal documents and how to act in situations of gender violence and child abuse
- ◆ Focus on the main acute ENT and ophthalmologic diseases
- ◆ Adequately resolve a psychomotor agitation crisis
- ◆ Categorize the risk of a self-harm attempt
- ◆ Handle drugs frequently used in emergency medicine
- ◆ Establish the priority actions in emergency pediatric situations

03

# Course Management

The materials have been created by a team of renowned professionals, both in the area of hospital and out-of-hospital emergency care, who carry out their professional work in the main hospital centers and emergency care units in the country. Bringing to the program the experience they have gained throughout their careers





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*Learn about the latest advances  
in Medical-Surgical Emergencies  
from leading professionals”*

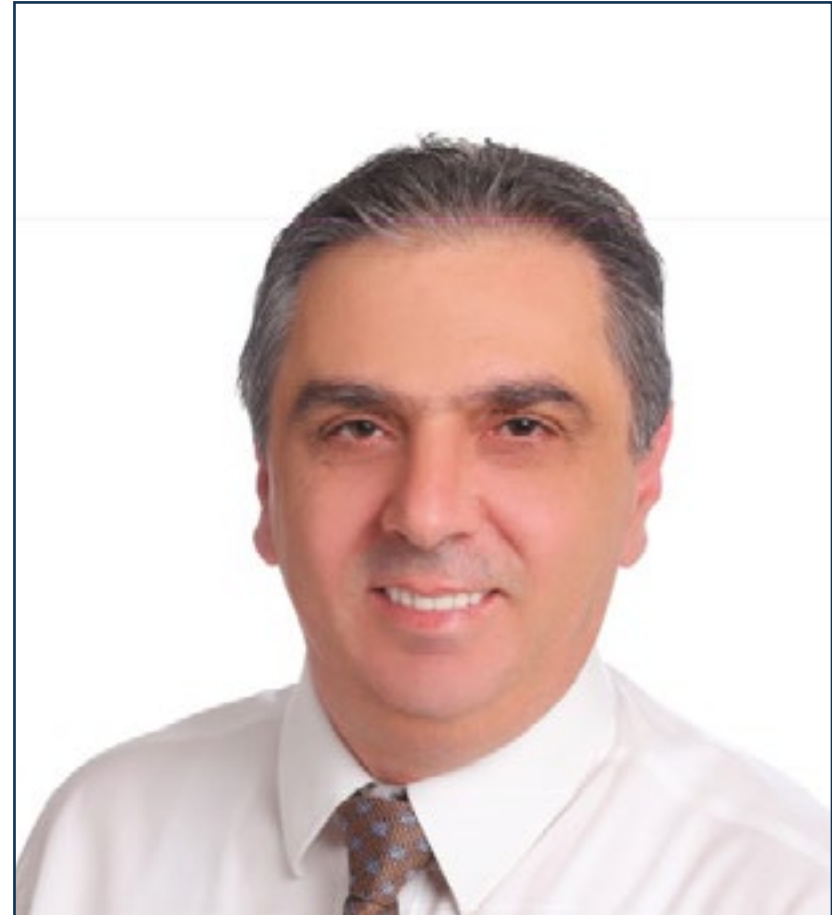
## International Guest Director

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 this subspecialty of **Urgencies and Emergencies**.

A work that starts from his performance as an emergency physician at the **King Faisal Specialist Hospital & Research Centre**, where he implemented a new system and rapid care facility that reduced waiting times for patients. This allowed him to improve care and more efficiently handle complex cases of oncology, transplant patients and congenital diseases. Thanks to his deep interest in providing the best healthcare 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 BMC Medical Harvard Medical 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 health workers. In addition, his concern for humanitarian work has led him to become involved in the **World Association of Disaster and Emergency Medicine (WADEM)**, where he serves as 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 face 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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- ♦ Emergency Physician specialized in Emergency Medicine
- ♦ Co-supervisor of the European Disaster Medicine Thesis Board at the University of Eastern Piedmont
- ♦ Director of Education for the BIMC Disaster Medicine Fellowship at Harvard Medical School BIMC Physicians
- ♦ Director of Disaster Preparedness Education Initiatives at Harvard Medical School BIDMC Physicians
- ♦ Research Fellowship in Disaster Medicine at Harvard Medical School
- ♦ Emergency Physician at King Faisal Especialist Hospital & Research Centre
- ♦ Team Leader and Emergency Physician at Armed Forces Hospitals-Southern Region, Khamis Mushayt, KSA
- ♦ Bachelor of Medicine and Surgery, University of Medicine and Pharmacology, 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, Italy
- ♦ Chairman of the Counterterrorism Special Interest Group of the World Association of Disaster and Emergency Medicine (WADEM)
- ♦ Fellow of the Academy of Harvard Medical School

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

## Guest Directors



### Dr. Rivera Núñez, María Angélica

- ♦ Assistant Coordinator of the Emergency Department La Paz University Hospital
- ♦ Medical Surgeon Specialist in Internal Medicine
- ♦ Degree in Medicine and Surgery from the Autonomous University of Madrid
- ♦ 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
- ♦ Instructor of Advanced Life Support National Cardiopulmonary Resuscitation Plan of the Spanish Society of Intensive Care Medicine, Critical Care and Coronary Units
- ♦ Director of Patient Safety in the Emergency Department of La Paz University Hospital



### Dr. Torres Santos-Olmo, Rosario María

- ♦ Honorary Professor at the Autonomous University of Madrid
- ♦ Member of the Ethical Care Committee La Paz University Hospital
- ♦ Degree in Medicine and Surgery - University of Granada
- ♦ Specialist in Family and Community Medicine at La Paz University Hospital
- ♦ PhD in Medicine and Surgery from the Autonomous University of Madrid
- ♦ Master's Degree in Medical and Clinical Management
- ♦ Master's Degree in Patient Safety and Health Risk Management.
- ♦ Life Support Instructor (BLS, ALS, ILS, ATLS)
- ♦ Area Specialist of Adult Emergency Department at La Paz University Hospital (Madrid, Spain).
- ♦ Clinical Collaborator at the Autonomous University of Madrid



## Codirector



### Dr. Roig D'Cunha-Kamath, Francisco Vicente

- ♦ 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

04

# Structure and Content

The structure of the contents has been designed by a team of professionals who recognize the implications of training in daily medical practice for emergency care, aware of the relevance of current training to treat patients with emergency pathologies and who are committed to quality teaching using new educational technologies.



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*This Postgraduate Certificate in Medical-Surgical Emergencies contains the most complete and up-to-date scientific program on the market”*

## Module 1. General Aspects

- 1.1. Definitions and Concepts
- 1.2. Comprehensive Study of Health Emergencies
- 1.3. Bioethics in Emergencies and Disasters
  - 1.3.1. Bioethics
  - 1.3.2. Legislation

## Module 2. Medical-Surgical Emergencies in Adults

- 2.1. Nephrourological Emergencies
  - 2.1.1. Renal and Excretory System Lithiasis
  - 2.1.2. Urinary Retention
  - 2.1.3. Inflammatory/ Infectious Disorders
  - 2.1.4. Acute Renal Failure
  - 2.1.5. Hematuria
  - 2.1.6. Acute Scrotal Syndrome: Testicular Torsion
  - 2.1.7. Urethral Pathology
- 2.2. Endocrinometabolic and Hydroelectrolytic Emergencies
  - 2.2.1. Glucose Metabolism Disorders
  - 2.2.2. Thyroid Emergencies
  - 2.2.3. Acidbase Balance Disorders
- 2.3. Hematological, Immunological and Infectious Emergencies
  - 2.3.1. Hemotherapy
  - 2.3.2. Thrombopenia
  - 2.3.3. Anticoagulation and Thromboprophylaxis
  - 2.3.4. Allergies and Anaphylactic Reactions
  - 2.3.5. Risk Exposure and Exposure to Potentially Harmful Material
  - 2.3.6. Fever of Unknown Origin
  - 2.3.7. Sepsis and Septic Shock
- 2.4. Intoxications
  - 2.4.1. General Aspects of an Intoxicated Patient
  - 2.4.2. Most Common Intoxications
  - 2.4.3. Drugs
  - 2.4.4. Fungi





- 2.4.5. Domestics
- 2.4.6. Medication
- 2.5. Psychiatric Emergencies
  - 2.5.1. Psychopathologies
  - 2.5.2. Psychomotor Agitation
  - 2.5.3. Acute Alcoholic Disease
  - 2.5.4. Self-Harm Attempt
  - 2.5.5. Anxiety Attack
  - 2.5.6. Neuroleptic Malignant Syndrome
- 2.6. Ophthalmologic Emergencies
  - 2.6.1. Eyelid and Lacrimal System Diseases
  - 2.6.2. Pink Eye
  - 2.6.3. Sudden Loss of Vision
  - 2.6.4. Eye Injuries
- 2.7. Otolaryngological Emergencies
  - 2.7.1. Infectious Processes in ENT
  - 2.7.2. Foreign Objects in ENT
  - 2.7.3. Epistaxis
  - 2.7.4. Sudden Loss of Hearing

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

# 05 Methodology

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

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



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

## At TECH, we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.*



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



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*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method.*

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

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.



## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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



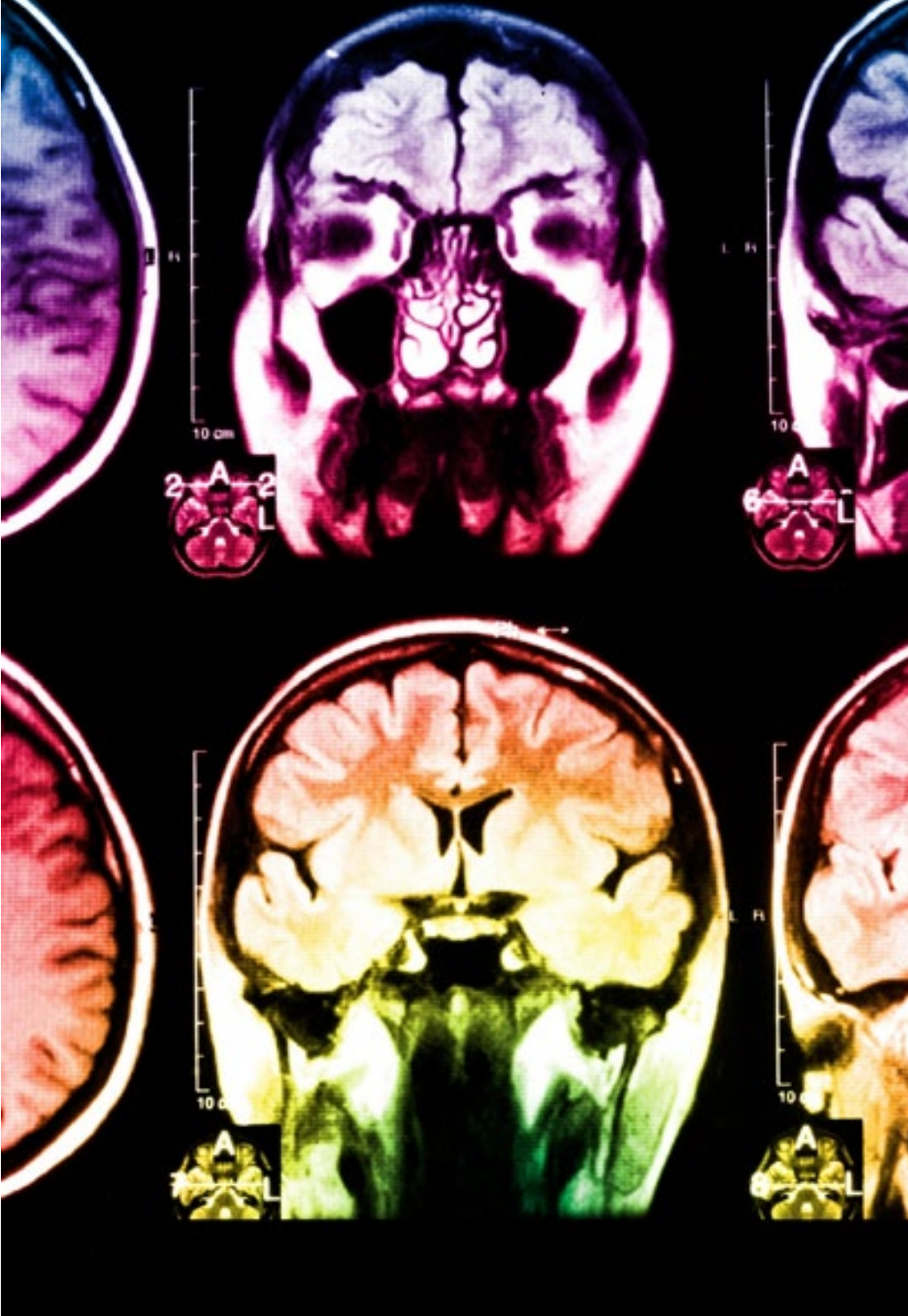
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. 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 highly specific and precise.

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



### Surgical Techniques and Procedures on Video

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



### Interactive Summaries

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

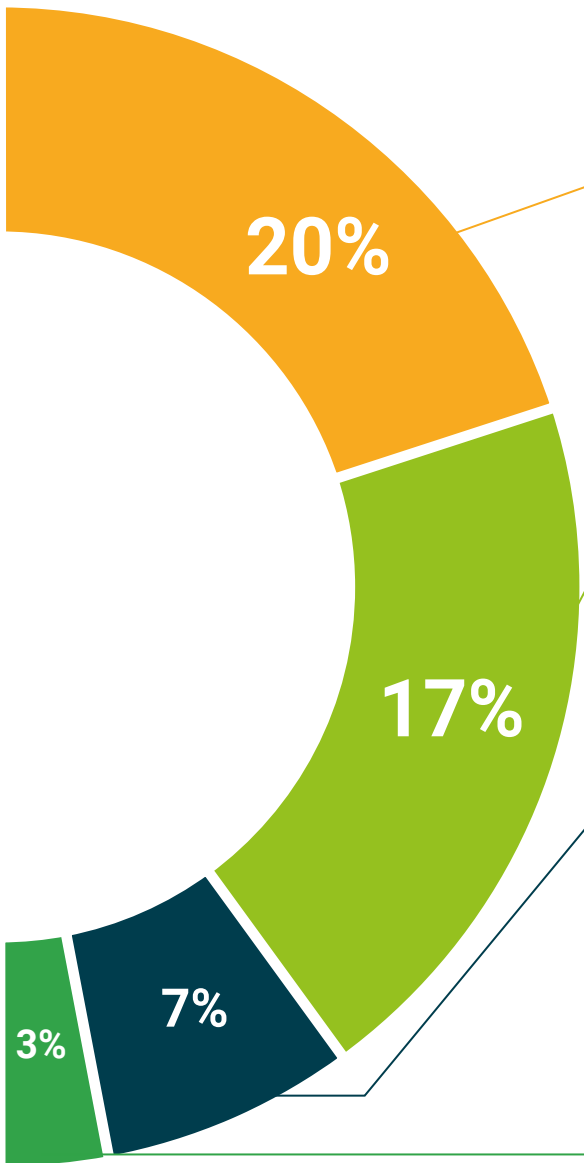
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



### 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.





#### Expert-Led Case Studies and Case Analysis

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



#### Testing & Retesting

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 on the usefulness of learning by observing experts. The system known as 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.



# 06 Certificate

The Postgraduate Certificate in Medical-Surgical Emergencies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 program will allow you to obtain your **Postgraduate Certificate in Medical-Surgical Emergencies** endorsed by **TECH Global University**, the world's largest online university.

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

This **TECH Global University** 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: **Postgraduate Certificate in Medical-Surgical Emergencies**

Modality: **online**

Duration: **12 weeks**

Accreditation: **10 ECTS**



\*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.



health future  
confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
online development languages  
virtual classroom



## Postgraduate Certificate Medical-Surgical Emergencies

- » Modality: online
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# Postgraduate Certificate

## Medical-Surgical Emergencies

