

Postgraduate Certificate

Emergency Medical Techniques





Postgraduate Certificate Emergency Medical Techniques

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 4 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-certificate/medical-techniques-emergencies

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01

Introduction

Trauma emergencies are time-dependent processes that require the professionals involved to constantly be training and updating their knowledge in order to approach such situations with rigor and guarantees from a medical point of view. This is especially the case when dealing with polytraumatized patients, where the internal organs may be affected or their life might be compromised. This Postgraduate Certificate is designed to update professionals' knowledge of the processes to care for patients with severe trauma.



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This Postgraduate Certificate deals with the medical procedures to be performed in trauma emergencies, so that you will be able to handle situations in which the patient suffers a serious trauma that can also compromise their life. Learn how to identify, initially treat and transfer a patient in a life-threatening emergency situation”

The goal of emergency medicine is to provide specialized and personalized medical care to patients with severe, or potentially severe, functional and/or structural organ or system problems. Most of these require diagnostic or therapeutic procedures that are usually performed on an emergency basis.

Many interventions are high-risk due to the severity or hemodynamic instability of these patients, and the superimposed complications that could result from the interventions could worsen their condition.

The Postgraduate Certificate in Emergency Medical Techniques addresses the main procedures performed in the emergency context in a practical way, the general and legislative aspects related to invasive techniques, general requirements, antisepsis measures, guidelines on sedation and the anesthesia procedures required, indications and contraindications, as well as the instruments and equipment required.

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

- Clinical cases presented by experts in 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 in the management of cardiovascular emergencies and invasive techniques in advanced life support and anesthesia of patients in a critical condition
- 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.
- Content that is accessible from any fixed or portable device with an Internet connection



Update your knowledge through the Postgraduate Certificate in Emergency Medical Techniques in a practical way and adapted to your needs"

“ *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 emergency medical techniques, you will obtain a qualification from TECH Technological University*”

Forming part of the teaching staff is a group of professionals from the field of emergencies, who bring to this training their work experience, as well as a group of renowned specialists, recognized 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 academic 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 those medical techniques most commonly used in emergencies.



02 Objectives

The main objective of the program is to develop theoretical and practical learning, so that the physician can rigorously and practically master the approach to patients in emergency situations.





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



General Objective

- Update the physician's knowledge in diagnostic and therapeutic techniques in emergency, disaster and rescue situations in order to provide quality medical care to patients in a critical condition





Specific Objectives

- ♦ 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
- ♦ Describe the general procedures and techniques applied to patients in emergency situations



Make the most of the opportunity and take the step to get up-to-date on the latest developments in medical techniques used in emergencies.

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. They contribute to the program the experience they have gained throughout their careers





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*Learn the latest advances in Emergency
Medical Techniques from leading professionals”*

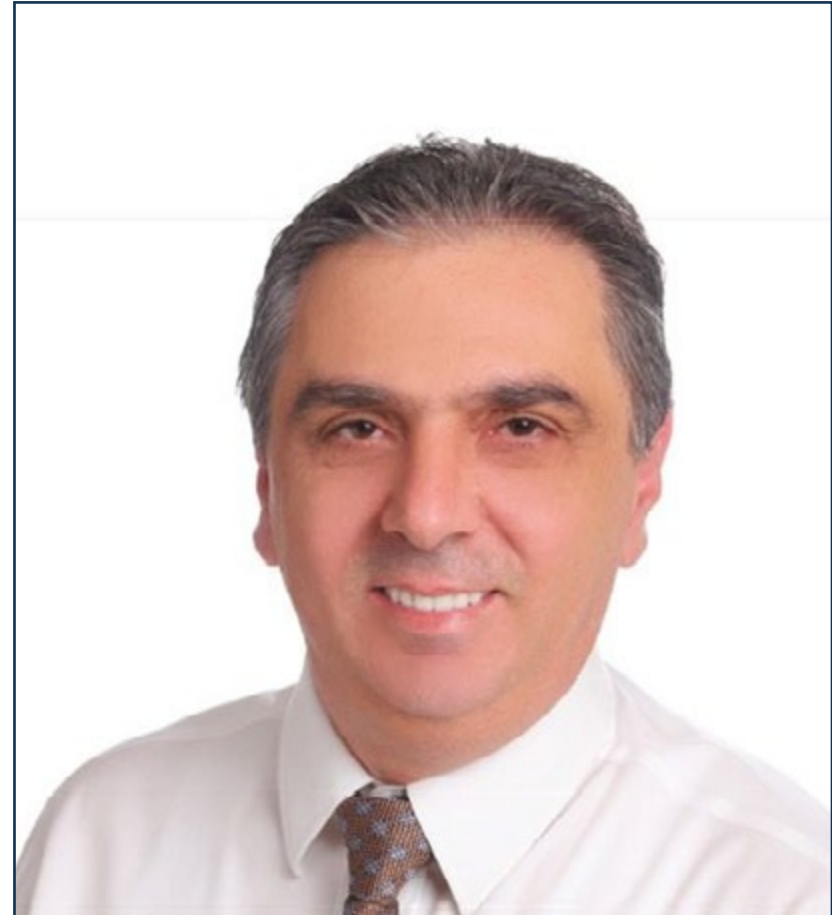
International Guest Director

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

- 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



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

Management



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

Professors

Dr. Brasó Aznar, José Vicente

- ♦ Hospital Emergency Physician
- ♦ Associate Professor of Emergency Medicine at the Faculty of Medicine of the University of Valencia.
- ♦ Head of Department Emergency Medicine. Ribera University Hospital



04

Structure and Content

The structure of the contents has been designed by a team of professionals who recognise the implications of training in daily medical praxis for emergency trauma 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 Emergency Medical Techniques 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 and Legislation in Accidents and Emergencies
 - 1.3.1. Bioethics
 - 1.3.2. Legislation

Module 2. Diagnostic and Therapeutic Techniques

- 2.1. Physiological Parameters in Adults and Children
- 2.2. Frequently Used Scales in Accident and Emergency Medicine
- 2.3. Monitoring of Hemodynamic Status
- 2.4. ECG and Monitoring
- 2.5. Monitoring of Neurological Status
- 2.6. Monitoring of Sedoanalgesia
- 2.7. Capnography and Pulse Oximetry
- 2.8. Oxygen Therapy
- 2.9. Orotracheal Intubation (OTI)
- 2.10. Advanced Airway Management
- 2.11. Mechanical Ventilation
- 2.12. Use of Non-invasive Mechanical Ventilation(CPAP BIPAP)
- 2.13. Peripheral and Central Vein Access
- 2.14. Intraosseous Vascular Access
- 2.15. Pericardiocentesis
- 2.16. Thoracentesis
- 2.17. Self-guided Techniques in an Emergency
- 2.18. Electrical Therapies (Transcutaneous Pacemaker, Electrical Cardioversion, Defibrillation)





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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

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

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

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



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 Emergency Medical Techniques guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological 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 Emergency Medical Techniques** 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 Emergency Medical Techniques**

Modality: **online**

Duration: **6 weeks**

Accreditation: **4 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.



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