

# Postgraduate Certificate Trauma Emergencies





## Postgraduate Certificate Trauma Emergencies

- » Modality: online
- » Duration: 8 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/trauma-emergencies](http://www.techtute.com/us/medicine/postgraduate-certificate/trauma-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"*

Every year, a large number of deaths occur in our country as a result of traffic, occupational or domestic accidents. If we take into account that almost half of the mortality occurs in the first two hours after the trauma, it is evident that there is a need for a process focused on emergency care for the severely traumatized patient and for professionals trained to meet this demand in order to reduce mortality.

This program is designed to update medical procedures in trauma emergencies, and enables professionals to perform an initial assessment of the severity of the trauma, in order to guide the selection of the most appropriate health care resources in the shortest possible time, and to stratify the risk of death and severely disabling sequelae in order to identify which patients require referral to a hospital.

This **Postgraduate Certificate in Trauma Emergencies** 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 on acting before trauma emergencies
- It includes care procedures for the polytraumatized patient
- 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 Trauma 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 Trauma Emergencies 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 contribute their professional experience to this program, as well as a group of renowned specialists, recognized by esteemed scientific communities.

Thanks to its multimedia content developed with the latest educational technology, it will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed 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, they 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 in how to act in Trauma 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

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- Update the physician's knowledge in the procedures to be followed in the polytraumatized patient and in severe trauma emergencies, in order to provide quality medical care based on the latest scientific evidence.



## 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
- Handle drugs frequently used in emergency medicine
- Identify the different traumatology conditions in emergency situations
- Describe the action of health professionals in different types of traumas and their correct usage
- Specify the priority actions to be taken in polytraumatized patients
- Select the best option when mobilizing and immobilizing a trauma patient.
- Detail general procedures and techniques applied to patients in emergency situations for severe trauma
- Establish the criteria and guidelines for appropriate and efficient communication between the various agents involved in the emergency and critical patient care systems
- Implement techniques for teamwork, motivation, leadership and dealing with uncertainty in situations.



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*Seize the opportunity and take the step to get up-to-date on the latest developments in care for patients with severe trauma.*

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





*Learn the latest advances in Trauma  
Emergencies from leading professionals"*

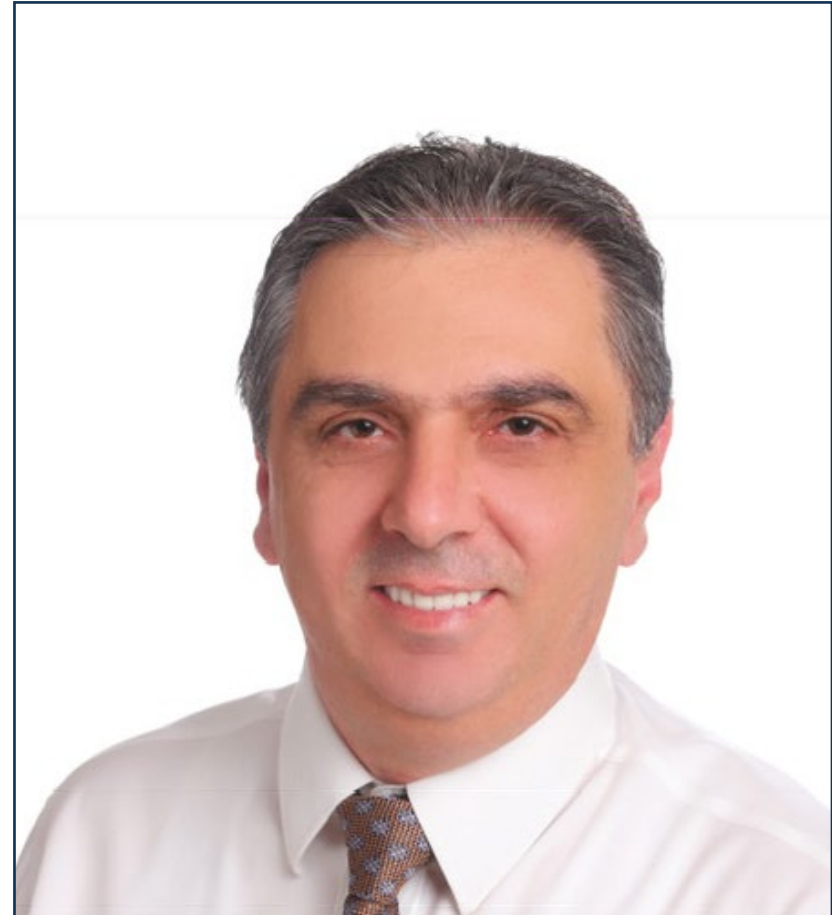
## International Guest Director

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



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

## Management



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

- ♦ 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 recognize the implications of training in daily medical practice for emergency and trauma care, who are 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 Trauma 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. Major Trauma Care

- 2.1. Biomechanics of Accidents or Kinematic Trauma Injuries
- 2.2. Out-of-Hospital Major Trauma Care. Polytrauma Code
- 2.3. Primary and Secondary Assessment
- 2.4. TBI
- 2.5. Thoracic Trauma
- 2.6. Abdominal Trauma
- 2.7. Vertebral Trauma and Spinal Cord Injury
- 2.8. Trauma of the Locomotor System
- 2.9. Hypovolemic Shock
- 2.10. Pediatric Trauma
- 2.11. Trauma During Pregnancy
- 2.12. Special Traumas
  - 2.12.1. Crush Syndrome
  - 2.12.2. Blast Syndrome
- 2.13. Injuries
- 2.14. Injuries due to Physical and Environmental Agents
  - 2.14.1. Burns
  - 2.14.2. Electrocution
  - 2.14.3. Hypothermia
  - 2.14.4. Heat-Related Pathologies
  - 2.14.5. Drowning
  - 2.14.6. Dysbarism
  - 2.14.7. Bites and Stings
- 2.15. Minor Surgery
- 2.16. Analgesia and Sedation
- 2.17. Mobilization and Immobilization. Materials and Techniques
- 2.18. Rescue and Medical Care in Confined and Remote Places



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*A unique, key, and decisive specialization 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 Trauma Emergencies 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 **Postgraduate Certificate in Trauma Emergencies** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery.

The diploma issued by **TECH Technological University** will express the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

**Title: Postgraduate Certificate in Trauma Emergencies**

Official N° of Hours: **275 h.**



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





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