

# Postgraduate Certificate

## Trauma in Special Situations





## Postgraduate Certificate Trauma in Special Situations

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

Website: [www.techtute.com/us/medicine/postgraduate-certificate/trauma-special-situations](http://www.techtute.com/us/medicine/postgraduate-certificate/trauma-special-situations)

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# 01

# Introduction

Unfortunately, severe trauma continues to be one of the main reasons for mortality in the general population. Therefore, any professional who cares for this type of patients needs to receive a specialized update in Trauma, since this will allow them to be qualified, with scientific criteria and a high level of knowledge, to deal effectively with Trauma situations in special populations. Considering these aspects, TECH offers a comprehensive academic program that guarantees the mastery of the latest trends in diagnosis and treatment of Trauma in Special Situations. Taught by an outstanding faculty in Intensive Care Medicine, this academic program allows the graduate to take it 100% online, from the perspective of an innovative methodology: Relearning.





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*The best Postgraduate Certificate to update you in Trauma in Special Situations is available at TECH. Don't miss this opportunity and enroll now!”*

Trauma in Special Situations represents a real challenge in the healthcare setting, as it involves the care of patients who have experienced critical events in out-of-the-ordinary circumstances. These situations can range from natural disasters and accidents to man-made incidents such as acts of violence.

The program will focus on the management of traumatic injuries in particular and challenging contexts. In this way, the specialist will look at special populations such as children, the elderly, pregnant women and chronically ill patients to ensure equitable and sensitive care. In addition, it will address specific protocols for critical situations, such as natural disasters, armed conflicts and massive traffic accidents.

In this context, the role of the professional will be to respond to trauma events in vulnerable communities and health systems. In this way, they will delve into triage strategies, resource coordination and interdisciplinary collaboration. Likewise, the specialist will acquire advanced skills in the management of trauma in particular contexts, improving the capacity of response and care in challenging and unique situations.

Therefore, it will be essential to recognize the complexity of physiological and psychological responses to traumatic events in special situations. In fact, the medical personnel who will respond to these cases must be prepared to manage not only the immediate physical injuries, but also the long-term mental health implications for those affected.

With this in mind, the Postgraduate Certificate in Trauma in Special Situations will provide the graduate with a solid theoretical foundation, accompanied by its application in critical real-world situations. With the leadership and support of a distinguished faculty of experts in Internal Medicine, the best academic results are guaranteed. TECH offers exclusive access to the most advanced learning methodology: Relearning, an innovative pedagogical technique based on the repetition of key concepts, thus facilitating an effective assimilation of all knowledge.

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

- ♦ Case studies presented by experts in Trauma in Special Situations
- ♦ 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 the self-assessment process can be carried out to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*You will analyze a comprehensive approach to Trauma in Special Situations, which considers both medical and psychosocial aspects"*

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*You will delve into the special case of Trauma in the anticoagulated patient, all thanks to the most innovative multimedia content"*

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

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive education programmed to learn in real situations.

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

*You will explore Trauma in the pregnant woman and the most common non-obstetric causes of death, such as car accidents and gender violence.*

*You will address how emergency medical care is organized to care for multiple disaster victims. And in only 6 weeks!*





# 02 Objectives

This academic program's main objective is to provide the physician with a deep and specialized understanding in the management of Trauma in Special Situations, such as natural disasters, man-made events or conflict situations. In this way, the specialist will acquire specific skills to address the medical and psychosocial complexities in these contexts. In addition, they will develop skills to adapt to changing circumstances and respond effectively to unique traumatic events. Not to mention the practical application of what has been learned through the Case Method, pioneered at Harvard University, thanks to which the graduate will be able to analyze in detail real clinical cases.





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*You will transform your ability to respond in exceptional Trauma situations and act as a trusted leader at crucial moments"*



## General Objectives

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- ◆ Delve into a thorough understanding of the anatomophysiological, pathophysiological, and clinical basis of severe traumatic injuries, as well as associated complications and comorbidities
- ◆ Effectively communicate injury prevention information to different audiences and utilize health promotion strategies
- ◆ Integrate quality and safety practices in the management of trauma patients, minimizing risks and optimizing outcomes
- ◆ Implement triage protocols in mass trauma situations and prioritize care

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*You will update your skills in an agile and simple way in the urgent attention of critical situations thanks to this Postgraduate Certificate"*







## Specific Objectives

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- Understand how traumatic injuries affect special populations such as children, the elderly and pregnant women
- Manage trauma situations in contexts of natural disasters, mass accidents and armed conflicts
- Implement triage protocols in mass trauma situations and prioritize care
- Coordinate medical resources and trauma response teams in vulnerable communities
- Develop effective communication skills with patients, families and other professionals in trauma and emergency situations
- Delve into specific protocols and procedures for trauma management in special contexts



# 03

## Course Management

In the Postgraduate Certificate in Trauma in Special Situations, the specialist will find a distinguished faculty committed to excellence, innovation and preparation for emergency medical care. They are passionate and experienced professionals, who not only have a deep academic experience, but have faced and overcome the challenges of trauma in exceptional situations. In conclusion, they are recognized leaders in their respective fields, who are committed to educational innovation, and who will provide the graduate with not only theoretical knowledge, but also valuable practical experience applicable to real-world situations.



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*You will be kept up to date through the guidance of experts who have extensive experience and are committed to your academic and professional success”*

## Management



### Dr. Bustamante Munguira, Elena

- ♦ Head of the Intensive Care Medicine Department of the Clinical Hospital of Valladolid
- ♦ Medical Director of the Health Area of Ibiza and Formentera
- ♦ Specialist in Intensive Care Medicine
- ♦ Teacher of refresher courses and workshops
- ♦ Illustrious Official College of Physicians of Salamanca Award
- ♦ Ramón Llul Award of the Patient Safety Unit
- ♦ PhD in Medicine and Surgery
- ♦ Master's Degree in Management
- ♦ Medical and Healthcare Management
- ♦ Master's Degree in Patient Safety





# 04

## Structure and Content

The program has been meticulously structured into specific topics that address critical aspects of Trauma in Special Situations. From natural disasters to man-made incidents, the curriculum is designed to provide an in-depth and applied understanding of the field. In addition, this Postgraduate Certificate will not only provide the specialist with advanced theoretical knowledge, but will also equip them with the practical skills necessary to lead with confidence at crucial times. All this through a pioneering learning methodology in TECH, Relearning, consisting of the repetition of key concepts to ensure optimal assimilation of the content.



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*You will renew your daily clinical practice thanks to the Case Method, which focuses on the analysis of real medical cases”*



## Module 1. Trauma in Special Situations

- 1.1. Recommendations for Child Trauma Care
  - 1.1.1. Introduction
  - 1.1.2. Types and Patterns of Injury
  - 1.1.3. Unique Characteristics of the Pediatric Patient
  - 1.1.4. Airway
  - 1.1.5. Breathing
  - 1.1.6. Circulation and Shock
  - 1.1.7. Cardiopulmonary resuscitation
  - 1.1.8. Thoracic Trauma
  - 1.1.9. Abdominal Trauma
  - 1.1.10. TBI
  - 1.1.11. Spinal cord injury
  - 1.1.12. Musculoskeletal trauma
  - 1.1.13. Abdominal trauma
  - 1.1.14. Child Abuse
- 1.2. Trauma in the Elderly
  - 1.2.1. Introduction
  - 1.2.2. Effects of Aging and Impact of Prevalent Diseases
  - 1.2.3. Mechanisms of Injury
  - 1.2.4. Primary Screening and Resuscitation
  - 1.2.5. Specific injuries
  - 1.2.6. Specific Circumstances
- 1.3. Trauma in the Anticoagulated Patient
  - 1.3.1. Introduction
  - 1.3.2. Patient with Antiplatelet Therapy
  - 1.3.3. Patient with Warfarin Treatment
  - 1.3.4. Patient with Heparin Treatment
  - 1.3.5. Patient with Treatment with Low Molecular Weight Heparin
  - 1.3.6. Patient Treated with Direct Thrombin Inhibitors (Dabigatran Etexilate)
  - 1.3.7. Patient with Treatment with Rivaroxaban





- 1.4. Trauma in Pregnant Women
  - 1.4.1. Introduction
  - 1.4.2. Anatomical and Physiological Alterations during Pregnancy
  - 1.4.3. Anatomical Differences
  - 1.4.4. Mechanisms of Injury
  - 1.4.5. Injury Severity
  - 1.4.6. Assessment and Management
  - 1.4.7. Perimortem Cesarean Section
  - 1.4.8. Domestic Violence
- 1.5. Aggressions by External Agents. Immersion Accidents. Hypothermia. Electrocutation. Burns
  - 1.5.1. Thermal Injuries: Burns
    - 1.5.1.1. Primary Assessment and Resuscitation of the Burn Patient
      - 1.5.1.1.1. Stopping the Burn Process
      - 1.5.1.1.2. Establish Airway Control
      - 1.5.1.1.3. Ensure Adequate Ventilation
      - 1.5.1.1.4. Management of Circulation with Burn Shock Resuscitation
      - 1.5.1.1.5. Patient Assessment
      - 1.5.1.1.6. Secondary Assessment
        - 1.5.1.1.6.1. Documentation
        - 1.5.1.1.6.2. Baseline Determinations for the Severely Burned Patient
        - 1.5.1.1.6.3. Peripheral Circulation in Circumferential Burns of the Limbs
        - 1.5.1.1.6.4. Placement of Nasogastric Tube
        - 1.5.1.1.6.5. Narcotics, Analgesia and Sedatives
        - 1.5.1.1.6.6. Antibiotics
        - 1.5.1.1.6.7. Tetanus
  - 1.5.2. Specific Burn Injuries
    - 1.5.2.1. Chemical Burns
    - 1.5.2.2. Electrical Burns
    - 1.5.2.3. Tar burns

- 1.5.3. Cold Exposure Injuries: Local Tissue Effects
  - 1.5.3.1. Types of Cold Injuries
    - 1.5.3.3.1. Frostbite Injuries
    - 1.5.3.1.2. Non-freezing Injuries
    - 1.5.3.1.3. Systemic Hypothermia
- 1.6. Trauma due to Hanging
  - 1.6.1. Introduction
  - 1.6.2. Anatomical Recollection
  - 1.6.3. Mechanism of Injury
  - 1.6.4. Management
  - 1.6.5. Prognostic Factors and Associated Injuries
  - 1.6.6. Treatment
    - 1.6.6.1. Surgical Treatment
    - 1.6.6.2. Treatment by Organs
      - 1.6.6.2.1. Airway Injuries
      - 1.6.6.2.2. Esophageal Injuries
      - 1.6.6.2.3. Vascular Injuries
- 1.7. Injuries by Chemical and Biological Agents
  - 1.7.1. Introduction
  - 1.7.2. Explosion Injuries
  - 1.7.3. Chemical Injuries and Diseases
- 1.8. Disaster Management
  - 1.8.1. Mass Casualty Event Management
  - 1.8.2. Tools for Effective Mass Casualty Management
  - 1.8.3. Management Priorities
  - 1.8.4. Challenges
  - 1.8.5. Security and Communication
  - 1.8.6. War Wounds (Military Trauma)





- 1.9. Organization of Multiple Casualty and Disaster Assistance
  - 1.9.1. Introduction
  - 1.9.2. Casualty Triage Card: Approach and Preparation
  - 1.9.3. Patient Transport, Evacuation
  - 1.9.4. Destination
  - 1.9.5. Transfer
  - 1.9.6. Decontamination
- 1.10. Management of the Polytraumatized Patient as a Potential Organ Donor
  - 1.10.1. Introduction
  - 1.10.2. Etiopathogenesis, Most Frequent Causes
  - 1.10.3. Clinical
  - 1.10.4. Diagnosis
  - 1.10.5. Treatment

“*Bet on a unique educational experience designed to update your approach to emergency medical care in exceptional settings*”



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 in Special Situations 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 certification without traveling or complex paperwork”.*

This private qualification will allow you to obtain your **Postgraduate Certificate in Trauma in Special Situations** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Postgraduate Certificate in Trauma in Special Situations**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**







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