



## Postgraduate Diploma

## Severe Trauma Care for Nurses

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/nursing/postgraduate-diploma/severe-trauma-care-nurses

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## tech 06 | Introduction

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, the 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 is evident.

The Postgraduate Diploma in Severe Trauma Care for Nurses is designed to facilitate the updating of nursing professionals. At the end of this course, the graduate will be able to make an initial assessment of the severity of the trauma to guide the selection of the most appropriate health care resource in the shortest possible time, stratify the risk of death and severely disabling sequelae in order to identify which patients require referral to a hospital and describe the specialized nursing care and attention these patients need.

complete and up-to-date scientific program on the market. The most important features of the program include:

• Clinical cases presented by experts in advanced life support and polytraumatized

 Clinical cases presented by experts in advanced life support and polytraumatized patient care. The graphic, schematic and eminently practical contents of the course are designed to provide all the essential specialization required for professional practice.

This **Postgraduate Diploma in Severe Trauma Care for Nurses** contains the most

- It contains exercises where the self-assessment process can be carried out to improve learning.
- Diagnostic and therapeutic novelties in pathologies associated with severe trauma.
- Algorithm-based Interactive Learning system for decision-making for patients with severe trauma.
- 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.



Through this postgraduate diploma you will be able to update your knowledge in the care of patients with severe trauma, improve the prognosis and reduce the sequelae and complications"

## Introduction | 07 tech



This Postgraduate Diploma may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in severe trauma patient care, you will obtain a diploma from TECH Technological University"

This program offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

It includes clinical cases to bring the program's degree as close as possible to the reality of care in Nursing.

Its teaching staff includes leading nursing professionals, who bring to this specialization the experience of their work, as well as other professionals who specialize in the various fields of emergency medical care.

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 immersive training program to train in real situations.

The design of the program is based on Problem-Based Learning, by means of which the nursing 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 emergencies and with extensive teaching experience.







## tech 10 | Objectives



## **General Objective**

 Update the nursing professional in the procedures for patient care in medical emergencies, based on the latest scientific evidence, in order to try to reduce mortality and improve prognosis.



## **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 catastrophe medicine.
- Understand the importance of 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.
- 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.





#### Directeur invité international

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 BIMC Medical Havard 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"

## tech 16 | Direction de la formation

#### **Guest Directors**



#### Ruiz López, Daniel

- Nursing Supervisor in the Adult Emergency Department of the Hospital Universitario La Paz (Madrid).
- University Diploma in Nursing (D.U.E.), University School of Nursing, Cordoba.
- Master's Degree in Nursing Management. Cardenal Herrera University.
- University Expert in Nursing in the Hospital Emergency Department. Cardenal Herrera University.
- University Expert in Management Skills for Nursing. Cardenal Herrera University.
- University Expert in Quality Management for Nursing. Cardenal Herrera University.
- · University Expert in Management and Services Supervision for Nursing, Cardenal Herrera University.
- University Expert in Direction and Management of Health Services for Nurses. Cardenal Herrera University.
- Training Course for Trainers and Auditors in Triage Manchester. Spanish Triaje Group.
- Triaje System Training Course. Spanish Triaje Group.



#### Souto Novas, Ana Ma

- Emergency Supervisor at La Paz University Hospital.
- University Diploma in Nursing from the Universidad Pontificia of Salamanca.
- Master's Degree in Integration and Critical Problem Solving in Nursing from the University of Alcalá.
- Degree in Social and Cultural Anthropology from the Autonomous University of Madrid.
- Advanced specialization in Dialysis Techniques for Nursing.
- University Expert in Accidents and Emergencies from the Complutense University of Madrid.
- Training Course on Out-of-Hospital Emergencies from the Complutense University of Madrid.
- University Expert in Management and Services Leadership for Nursing.
- Priority Triage in the Emergency Department. Manchester System.
- Specialization in emergency planning and self-protection.

#### Codirector



#### 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

## tech 18 | Direction de la formation

#### **Professors**

#### Gómez Lage, Laura

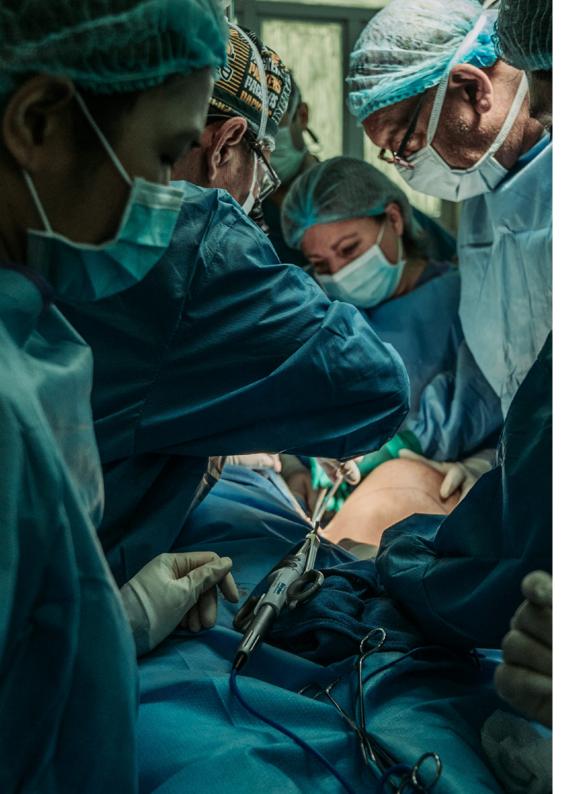
- · Adult Emergency Supervisor at La Paz University Hospital.
- Degree in Nursing from the Complutense University of Madrid.
- University Expert in the Nursing Processes and Interventions of Pediatric Patients in Life Threatening Situations.
- University Expert in the Emotional Development and Upbringing of a Child.
- Pharmacology Residency in Emergency Medicine.
- · Nursing Basics in Emergencies.

#### Chamizo Alberto, Leticia

- Nurse in the Emergency Services of H.U La Paz.
- Diploma in Nursing from the Red Cross School, Autonomous University of Madrid.
- Expert in Out-of-Hospital Emergency Care at the School of Health Sciences, Complutense University, Madrid.
- Qualifying certificate for Manchester Triage at HU La Paz.
- Basic Life Support and Advanced Life Support Course.
- Course on Initial care of the polytraumatized patient; Nursing action before the main traumatisms of a polytraumatized patient and Monitoring of the critical patient.

#### Vega Vega, Luis

- Nurse in the Emergency Services of HU La Paz
- Degree in Nursing from the Red Cross School.
- Expert in out-of-hospital care and Master of Nursing in Emergency and Critical Care at the European University of Madrid.
- University Expert in Comprehensive Management of Adults in Infectious Diseases
   Care Processes.
- Instructor of Basic Life Support and First Aid.
- Manchester Triage Enabling Course.
- Active member of the Red Cross ERIE Health Care.



## Direction de la formation | 19 tech

#### Dña. Forés Rivas, Ana

- Member of the Intensive Care Unit of the Dr. Peset University Hospital.
- University Diploma in Nursing.
- Diploma in Corporate Nursing.
- Master's Degree in the Prevention and Treatment of Addictive Behaviors.
- Technical Specialist in a Laboratory.
- Certificate of Pedagogical Aptitude (CAP)
- Health and Community Foundation. July 2006 May 2012 and June 2017 until present.

#### 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.





## tech 22 | Structure and Content

#### Module 1. General aspects

- 1.1. Definitions and Concepts
- 1.2. Comprehensive Study of Health Emergencies
- 1.3. Functions of an Emergency Nurse
- 1.4. Bioethics in Accidents, Emergencies and Disasters

#### Module 2. Adult and Pediatric Severe Trauma Care

- 2.1. General Aspects
- 2.2. Biomechanics of Accidents
- 2.3. Primary and Secondary Assessment
- 2.4. TB
- 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. Injuries
- 2.10. Hypovolemic Shock
- 2.11. Pediatric Trauma
- 2.12. Trauma During Pregnancy
- 2.13. Special Traumas
  - 2.13.1. Crush Syndrome
  - 2.13.2. Shock or Blast Wave Injuries
- 2.14. Injuries due to Physical, Chemical and Environmental Agents
  - 2.14.1. Bites and Stings
  - 2.14.2. Dysbarism
- 2.15. Analgesia and Sedation
- 2.16. Mobilization and Immobilization. Materials and Techniques
- 2.17. Rescue and Medical Care in Confined and Remote Places





## Structure and Content | 23 tech

#### Module 3. Diagnostic and Therapeutic Techniques in Accident and Emergency Care.

- Probes
- Peripheral and Central Vein Cannulation
- Intraosseous Route
- Orotracheal Intubation (OTI)
- Management of Difficult VA
- Mechanical Ventilation
- Use of Non-invasive Mechanical Ventilation
- Pericardiocentesis
- Thoracentesis
- Ultrasound for Nurses. Self-guided Techniques
- 3.11. Terapia eléctrica (MMP, CV)
- 3.12. Monitoring of Neurological Status
- 3.13. Monitoring of Sedoanalgesia
- Collecting Analytical Samples
- 3.15. Frequently Used Scales in Accident and Emergency Medicine
- 3.16. Physiological Parameters in Adults and Children



A unique, key, and decisive master's degree experience to boost your professional development"



This training provides you with a different way of learning. Our methodology uses a cyclical learning approach: Re-learning.

This teaching system is used 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.

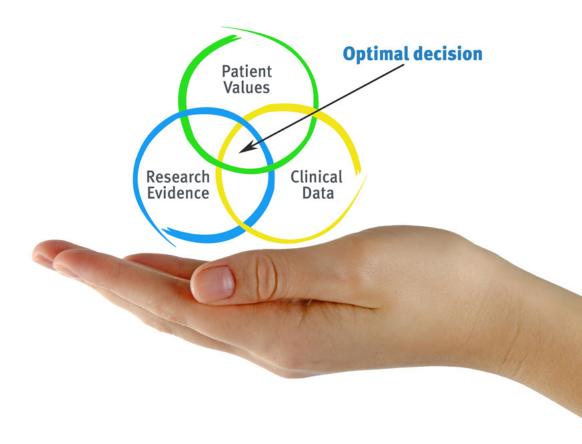


## tech 24 | Methodology

#### At TECH Nursing School we use the Case Method

In a given clinical situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Nurses learn better, faster, and more sustainably over time.

With TECH, nurses can experience a learning methodology 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, in an attempt to recreate the real conditions in professional nursing practice.



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:

- Nurses who follow this method not only grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on practical skills that allow the nursing professional to better integrate knowledge acquisition into the hospital setting or primary care.
- 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 university program.





### Re-Learning Methodology

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

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



### Metodology | 27 tech

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

With this methodology we have trained more than 175,000 nurses with unprecedented success, in all specialties regardless of from the workload. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards

In this program you will have access to the best educational material, prepared with you 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 really 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.



#### **Nursing Techniques and Procedures on Video**

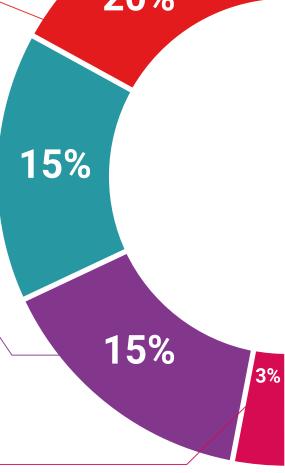
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current nursing procedures and techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

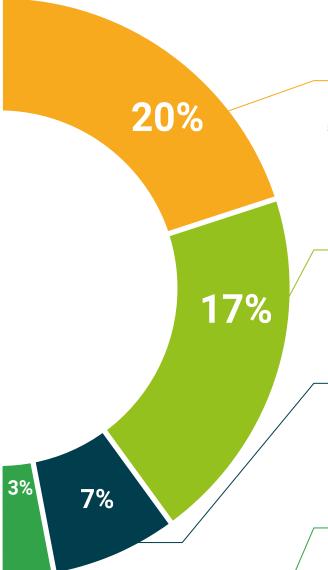
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

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



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

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **Testing & Re-testing**

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.



Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.

#### **Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







## tech 32 | Certificate

This **Postgraduate Diploma in Severe Trauma Care for Nurses** contains the most complete and up-to-date scientific program on the market.

Once the student has passed the evaluation, they will receive by post, with acknowledgement of receipt, their corresponding **Postgraduate Diploma** issued by **TECH Technological University.** 

The certificate issued by TECH Technological University will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Diploma in Severe Trauma Care for Nurses

Official Number of Hours: 400



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

health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning



## Postgraduate Diploma

# Severe Trauma Care for Nurses

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