

# Postgraduate Diploma

## Polytraumatized Patient Care



## Postgraduate Diploma

### Polytraumatized Patient Care

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 17 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-polytraumatized-patient-care](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-polytraumatized-patient-care)

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# 01

# Introduction

Traumatism is a common occurrence in our professional and domestic environment, and is also frequent in traffic accidents. In cases where the trauma is severe and the patient's life is endangered, urgent medical assistance is essential. Adequate training allows the physician to keep up to date in the care of severe trauma patients, and provide quality care.





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*Increase your knowledge in the management of severe trauma patients through this program, where you will find the best didactic material, high definition images and real clinical cases. Learn here about the latest advances in Polytraumatized Patient Care to be able to perform quality medical practice”*

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 all deaths occur in the first two hours after the traumatic event, it becomes evident that there is a need to strengthen the processes oriented to emergency care of severely traumatized patients and the up-to-date training of professionals to meet this demand in order to reduce mortality and improve the prognosis of patients.

The program of this Postgraduate Diploma has been designed with the aim of updating physicians' knowledge in the care of patients with severe trauma, oriented to specific training for those physicians who are interested in knowing and incorporating the latest advances in emergency care into their daily practice.

With proper training, the professional will be able to increase the quality of medical care by improving the quality of medical practice in severe trauma and improving the patient's prognosis.

This **Postgraduate Diploma in Polytraumatized Patient Care** contains the most complete and up-to-date scientific program on the market. The most important features include: Clinical cases presented by experts in advanced life support and polytraumatized patient care

- The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice.
- It contains exercises where the self-assessment process can be carried out to improve learning
- 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.
- Availability of content from any fixed or portable device with internet connection



*Seize the opportunity and take the step to get up to date on the latest developments in Polytraumatized Patient Care”*

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*This Postgraduate Diploma is the best investment you can make when selecting an up-to-date program for two reasons: in addition to updating your knowledge in Polytraumatized Patient Care, you will obtain a Postgraduate Diploma from TECH Technological University"*

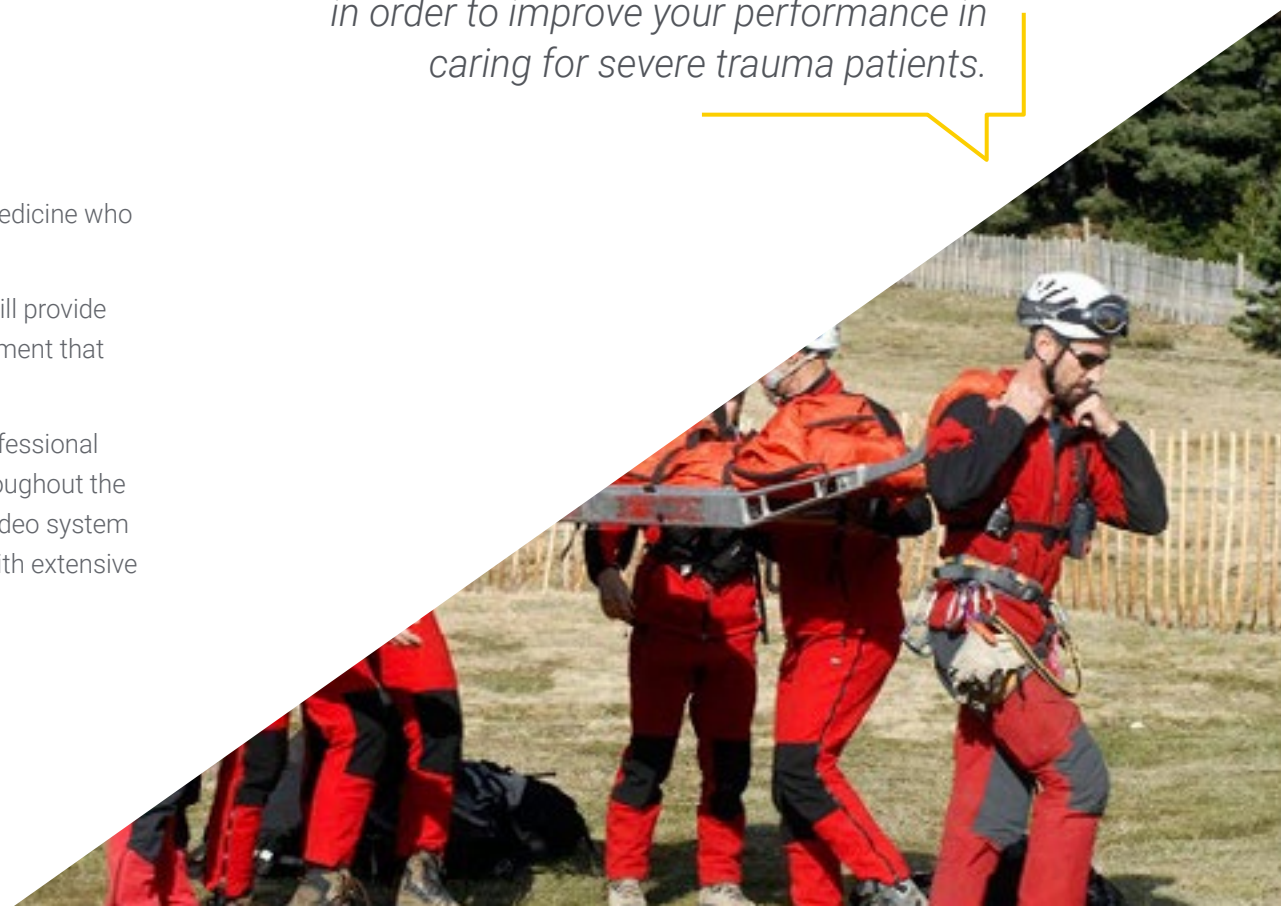
*Increase your decision-making confidence by updating your knowledge with this University Expert course.*

*Don't miss this opportunity and choose the best way to keep yourself up to date in order to improve your performance in caring for severe trauma patients.*

Its teaching staff includes renowned specialists in the field of Emergency Medicine who bring the experience of their work to this training.

The multimedia content developed with the latest educational technology will provide the physician with situated and contextual learning, i.e., a simulated environment that will provide immersive training 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, 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.



# 02 Objectives

The main objective of the Postgraduate Diploma in Polytraumatized Patient Care is to update the physician's knowledge of the procedures for treating patients with severe trauma, in order to be able to provide adequate medical care in each case, based on the latest scientific evidence.







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*This program is designed to help you update your knowledge of Polytraumatized Patient Care, with the use of the latest educational technology, to contribute with quality and confidence to your decision making skills"*



## General Objective

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- Gain the necessary up-to-date knowledge of caring for a patient in a serious condition, with the aim of improving the quality and security of your health practice in accident, emergency and disaster situations.

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*Train for success with the help of this Postgraduate Diploma in Polytraumatized Patient Care.. Your achievements will also be the achievements of your patients”*





## Specific Objectives

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### Module 1. General Aspects

- ♦ Differentiate between the concepts of accidents, emergencies and disasters.
- ♦ Identify the fundamentals of emergency health care.
- ♦ Apply clinical and non-clinical professional skills in emergencies.
- ♦ Define the structure and organization of the accident and emergency services.
- ♦ 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.

### Module 2. Major Trauma Care

- ♦ 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.
- ♦ Use general procedures and techniques applied to critical patients in emergency situations.

### Module 3. Diagnostic and Therapeutic Techniques

- ♦ Know the main consequences and initial handling of CBRN (Chemical Biological Radiological Nuclear) risk situations.
- ♦ Explain new forms of bioterrorism.
- ♦ Implement techniques for teamwork, motivation, leadership and dealing with uncertainty in 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 Polytraumatized Patient Care from leading professionals”*

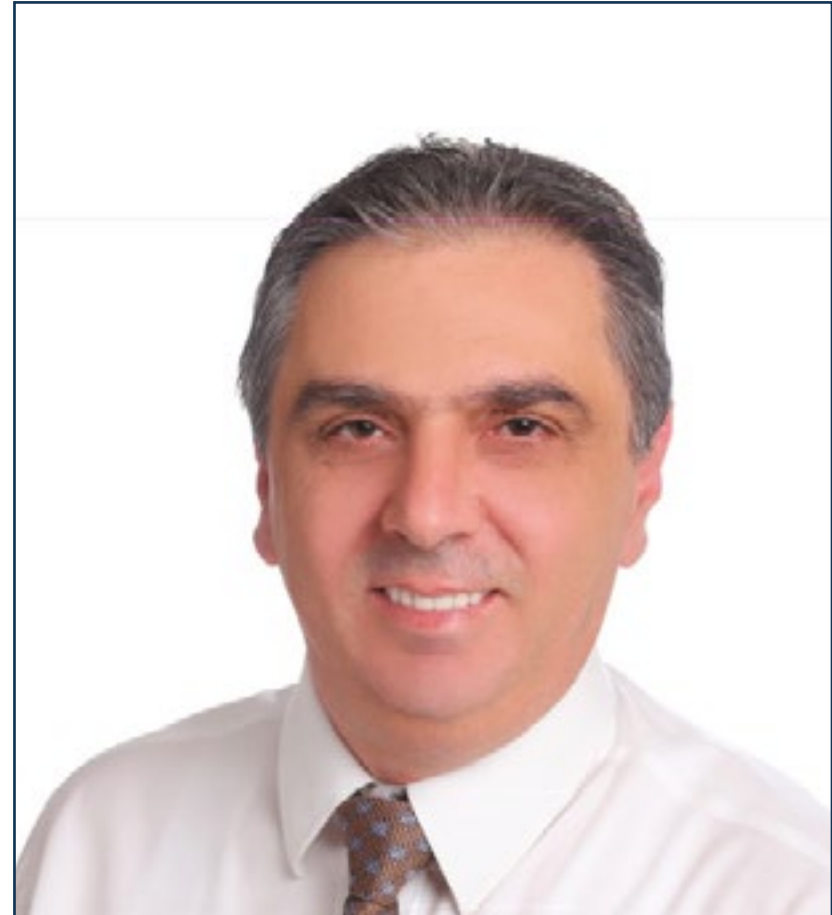
## International Guest Director

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 Specialist 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"*

## 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

## 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

### Dr. Martín Quirós, Alejandro

- ♦ Assistant Physician of the High Level Isolation Unit, La Paz University Hospital
- ♦ PhD in Medicine and Surgery from the Autonomous University of Madrid.
- ♦ Masters in Infectious Diseases and Antimicrobial Treatment
- ♦ Master's Degree in Research Methodology in Health Sciences
- ♦ Postgraduate Diploma in Emergency Medicine
- ♦ Postgraduate Diploma in Community-Acquired and Nosocomial Infections
- ♦ Course Teacher of Cardiopulmonary Resuscitation in the Spanish Society of Emergency Medicine (SEMES)
- ♦ Lecturer in Immediate Life Support Course at the Health Council of the Community of Madrid

### Dr. Maroun Eid, Charbel

- ♦ Collaborative Researcher in R&D Center of the Research Institute of the La Paz Hospital
- ♦ PhD in Biomedical Sciences from the UAM
- ♦ Executive MBA in the pharmaceutical industry and biotechnology
- ♦ Master's Degree in Cardiovascular Risk Prevention
- ♦ Assistant Emergency Physician at Infanta Sofia University Hospital
- ♦ Family and Community Medicine Resident Physician in San Carlos Clinical Hospital
- ♦ Lecturer of Critical Patients and Emergency Medicine course at Autonomous University of Madrid
- ♦ Lecturer of Emergency Medicine at La Paz Hospital



# 04

## Structure and Content

The structure of the syllabus has been designed by a team of professionals with knowledge of the implications of medical training in the approach to patients with severe trauma or in critical conditions, who are aware of the relevance of the up-to-date specialization, and are committed to quality teaching using new educational technologies.





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*This Postgraduate Diploma in Polytraumatized Patient Care is 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
- 1.4. Communication Skills in Emergencies
- 1.5. Patient Security
- 1.6. Biosafety. Dangerous Materials. Management of Waste Products
- 1.7. New Professional Skills in Accident and Emergency Care
  - 1.7.1. Teamwork. Communication and Leadership
  - 1.7.2. Personal and Professional Digital Skills
- 1.8. New Technologies in Accident and Emergency Care

### 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. Electrocutation
  - 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

### Module 3. Diagnostic and Therapeutic Techniques

- 3.1. Physiological Parameters in Adults and Children
- 3.2. Frequently Used Scales in Accident and Emergency Medicine
- 3.3. Monitoring of Hemodynamic Status
- 3.4. ECG and Monitoring
- 3.5. Monitoring of Neurological Status
- 3.6. Monitoring of Sedoanalgesia
- 3.7. Capnography and Pulse Oximetry
- 3.8. Oxygen Therapy
- 3.9. Orotracheal Intubation (OTI)
- 3.10. Advanced Airway Management
- 3.11. Mechanical Ventilation
- 3.12. Use of Non-invasive Mechanical Ventilation(CPAP BIPAP)
- 3.13. Peripheral and Central Vein Access
- 3.14. Intraosseous Vascular Access
- 3.15. Pericardiocentesis
- 3.16. Thoracentesis
- 3.17. Self-guided Techniques in an Emergency
- 3.18. Electrical Therapies (Transcutaneous Pacemaker, Electrical Cardioversion, Defibrillation)



*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.

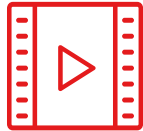
*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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

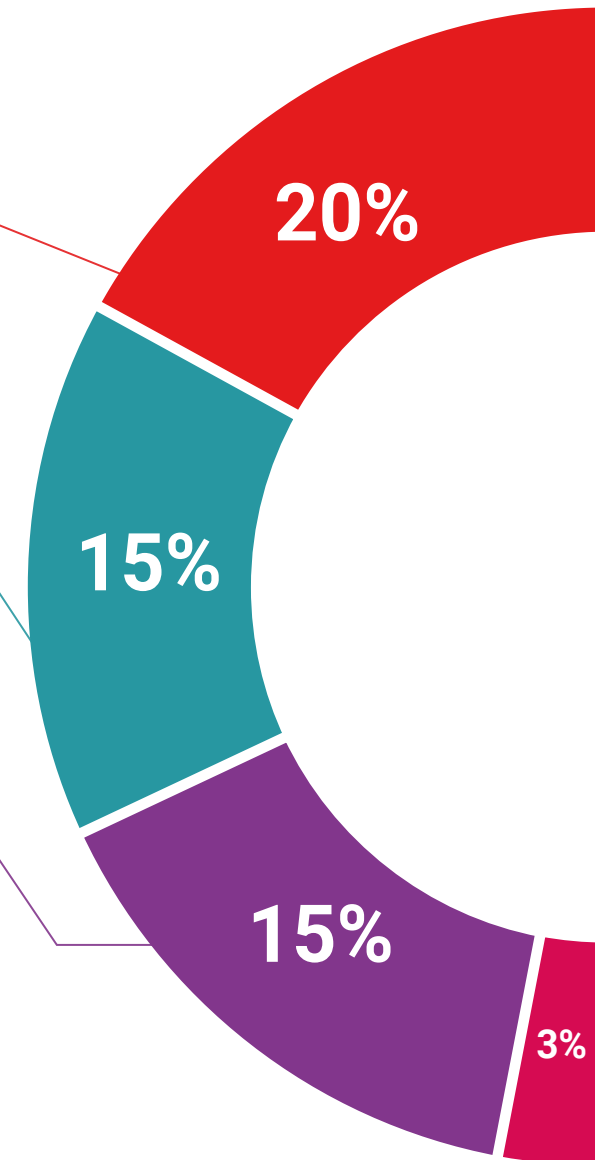
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

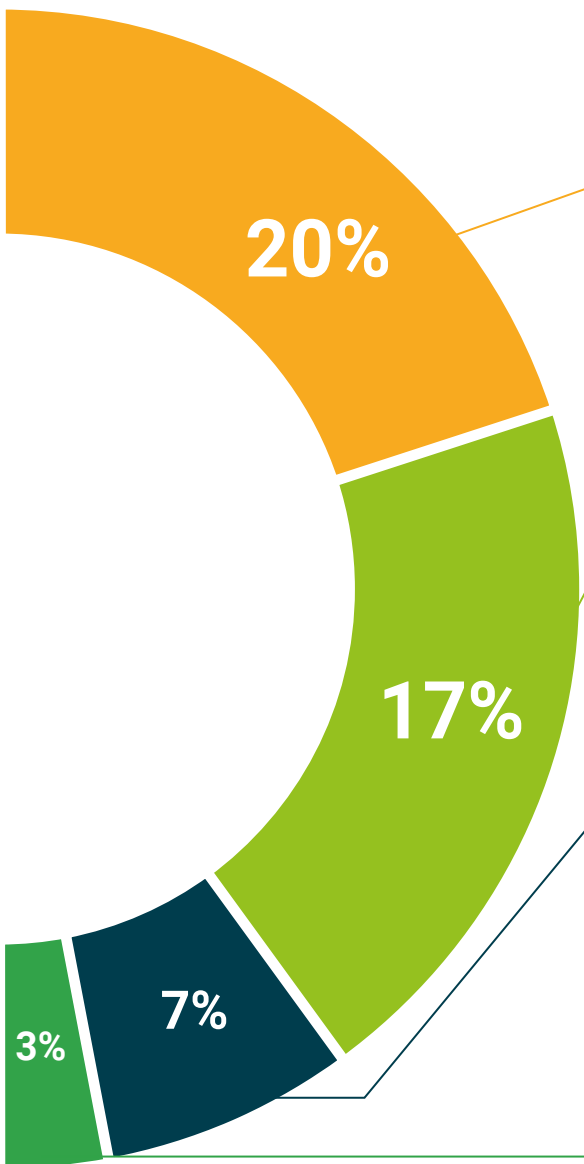
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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 Diploma in Polytraumatized Patient Care guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 private qualification will allow you to obtain a **Professional Master's Degree diploma in Polytraumatized Patient Care** 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 Diploma in Polytraumatized Patient Care**

Modality: **online**

Duration: **6 months**

Accreditation: **17 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.

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



## Postgraduate Diploma

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