Postgraduate Certificate
Vital Emergencies

tech technological university

Postgraduate Certificate
Vital Emergencies

- » Modality: **online**
- » Duration: **2 months**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/us/medicine/postgraduate-certificate/vital-emergencies**

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01
Introduction

Life-threatening emergencies are time-dependent processes that require professionals in this area to undergo constant training and keep their knowledge up to date in order to approach these situations with assurance from a clinical point of view. This Postgraduate Certificate is designed to update the professional, in a practical way, in the urgent pathological processes of the vital systems, in order to act with quality and confidence to help patients in a life-threatening emergency situation.

This course deals with clinical procedures in the face of life-threatening emergencies, so that you will be able to deal with situations that may compromise the patient's life. Learn how to identify, initially treat and transfer a patient in a life-threatening emergency situation"

Medical emergencies require specialized care to ensure that the person's life support is maintained while acting on potential problems in the body's vital systems to prevent future complications to the person's health.

The Postgraduate Certificate in Vital Emergencies is designed to update the physician's knowledge in cardiac, respiratory, neurological, digestive, endocrinometabolic and hydroelectrolytic emergency care, in order to provide quality medical care to patients with pathologies and health problems affecting the organs and vital systems.

After completing the course, the professional will be able to prioritize situations, solve problems and make decisions in the care of patients in emergency medical situations, both in adult and pediatric patients.

This **Postgraduate Certificate in Vital 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 how to deal with situations of cardiovascular and respiratory emergencies
- 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

Expand your knowledge through the Postgraduate Certificate in Vital Emergencies in a practical way and adapted to your needs"

"This Postgraduate Certificate is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Vital Emergencies, you will obtain a qualification from TECH Technological University"

This online methodology allows you to practice in a simulated environment through clinical cases.

Make the most of the opportunity to update your knowlegde in how to act in Vital Emergencies.
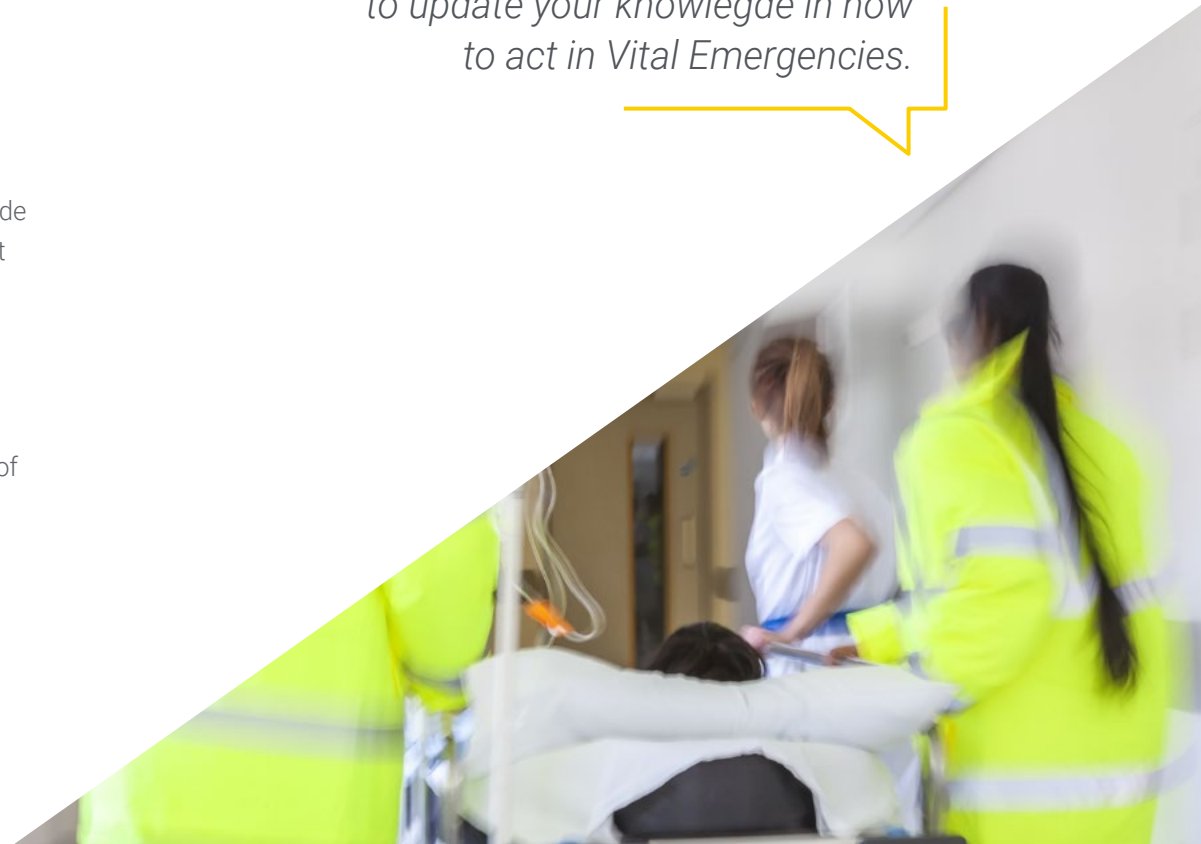
Forming part of the teaching staff is a group of professionals from the field of emergencies, who bring to this training their work experience, as well as a group of renowned specialists, recognized by esteemed scientific communities.

The multimedia content developed with the latest educational technology will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive training program to train in real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the Postgraduate Certificate. 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.

Objectives

The main objective of the program is to develop theoretical and practical learning, so that the physician can master in a practical and rigorous way the approach to the main vital emergencies in the patient.

"

This refresher program will provide you with the competencies to act safely in the performance of medical practice, which will help you to grow personally and professionally"

General Objective

- Update the knowledge and skills necessary for the professional to face vital emergencies in the different systems of the organism that can compromise the patient's life.

Specific Objectives

- Differentiate between the concepts of accidents, emergencies and disasters
- Identify the fundamentals of emergency health care.
- Apply clinical and non-clinical professional skills in emergency and disaster medicine
- Use medical records in the emergency department and understand the most relevant legal and ethical aspects of health care in emergencies
- Prioritize, organize and manage patient care in the most efficient way through triage
- Understand the basic workings of an accident and emergency coordination center
- Identify the equipment and the communication systems in an EMS
- Perform and interpret electrocardiograms in emergency situations
- Apply protocols for medical care in cases of heart rhythm alterations
- Identify the life-threatening pathophysiological processes

- Describe the different conditions that cause chest pain and apply the appropriate protocols in each case

- Recognize the different signs and symptoms typical of ischemic heart disease.

- Apply the specific procedures in Acute Coronary Syndrome and assess the possibility of prehospital fibrinolysis.

- Know how to address congestive heart failure and acute pulmonary edema

- Know how to address cardiac tamponade and pericardial effusion

- Identify the behavior of a patient with dyspnea in the emergency room.

- Handle patients with asthma, bronchospasm, and exacerbation of chronic obstructive pulmonary disease

- Identify the main emergency neurological disorders.

- Describe the out-of-hospital care for neurological vascular disorders and code stroke

- Learn the immediate action in cases of syncope, acute confusional syndrome, headache, coma and vertigo

- Differentiate the main causes of acute abdomen and how to manage acute abdominal pain.

- Recognize the principle pathologies of the gastrointestinal tract and the related consequences.

- Understand the fundamental alterations of glycemic metabolism.

- Understand the main consequences of electrolyte alterations.

Seize the opportunity and take the step to get up-to-date on the latest developments in care for patients in a life-threatening situation.

03
Course Management

The materials have been created by a team of leading professionals, in the field 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

Learn about the latest advances in Vital Emergencies from leading professionals"
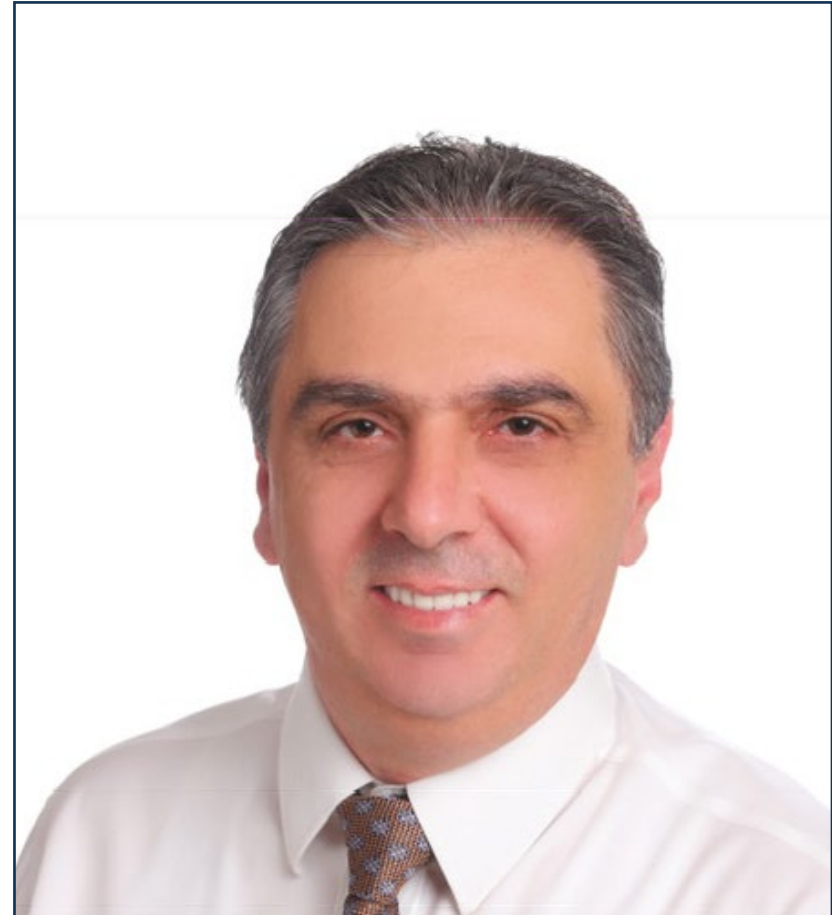
International Guest Director

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 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"

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

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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 care, aware of the relevance of current training to treat patients with emergency pathologies and who are committed to quality teaching using new educational technologies.

This Postgraduate Certificate in Vital 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
1.4. 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. Medical Emergencies in Adults I

2.1. Cardiovascular Emergencies.
    2.1.1. Reading and Interpreting an ECG
    2.1.2. Syncope
    2.1.3. Acute Chest Pain
    2.1.4. Acute Coronary Syndrome
        2.1.4.1. Non-ST-Elevation Acute Coronary Syndrome
        2.1.4.2. Acute Coronary Syndrome with ST Elevation
        2.1.4.3. The Heart Attack Code
    2.1.5. Pericarditis. Cardiac Tamponade
    2.1.6. Acute Heart Failure
    2.1.7. Acute Pulmonary Edema
    2.1.8. Deep Vein Thrombosis
    2.1.9. Pulmonary Embolism
    2.1.10. Aortic Dissection
2.2. Hypertensive Emergencies
    2.2.1. Shock
    2.2.2. Cardiac Arrhythmias I
    2.2.3. Cardiac Arrhythmias II
    2.2.4. Atrial Fibrillation

A unique, key, and decisive specialization to boost your professional development"

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.

"

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.

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

20%

15%

15%

3%

20%

17%

7%

3%

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 Vital Emergencies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

"*Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork*"

This **Postgraduate Certificate in Vital 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 reflect 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 Vital Emergencies**

N.º of Hours: **275 h.**

tech technological university

Awards the following
DIPLOMA
to
Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in

Vital Emergencies

This is a qualification awarded by this University, equivalent to 275 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.   Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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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