



## Postgraduate Certificate

## Emergency Pharmacology

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: techtitute.com/in/medicine/postgraduate-certificate/emergency-pharmacology

# Index

p. 28

Certificate





## tech 06 | Introduction

Medication-related errors are the cause of patient safety incidents. There are many reasons that contribute to these safety failures, hence the importance of constant updating of knowledge in pharmacology to improve the clinical safety dimension.

This Postgraduate Certificate in Emergency Pharmacology aims to update the knowledge and safe handling of the most commonly used medications in daily practice in the field of urgency and emergency. Based on the latest scientific evidence in the medical treatment of care processes with the aim of minimizing the risks of its administration.

Update your knowledge through the Postgraduate Certificate in Emergency Pharmacology, in a practical way and adapted to your needs"

This **Postgraduate Certificate in Emergency Pharmacology** has the most complete and up-to-date scientific program on the market. The most important features of the Postgraduate Certificate are:

- Development of clinical cases presented by experts in emergencies. Its graphic, schematic, and eminently practical contents, with which they are conceived, gather scientific and assistance information on those medical disciplines that are indispensable for professional practice.
- Diagnostic-therapeutic novelties on protocols for the use of pharmacology in emergency.
- Interactive learning system based on algorithms for decision making in different clinical situations.
- 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.



This Postgraduate Certificate may be the best investment you can make in the selection of an updating program for two reasons: in addition to updating your knowledge in Emergency Pharmacology, you will obtain a certificate issued by TECH Technological University"

Its teaching staff includes health professionals belonging to the field of emergencies, who contribute their work experience to this specialization, in addition to renowned specialists belonging to leading scientific societies.

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 this program is based on Problem-Based Learning, by means of which the physician will have to try to solve the different professional practice situations that will arise throughout the University Course. To do so, they will be assisted by an innovative interactive video system created by renowned experts in the field of emergencies with extensive teaching experience.

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

Take the opportunity to update your knowledge in the use of emergency pharmacology.







## tech 10 | Objectives



## **General Objective**

• To update the physician in the use of pharmacological therapeutics in urgent and emergency situations, in order to provide quality medical care to the critically ill patient.





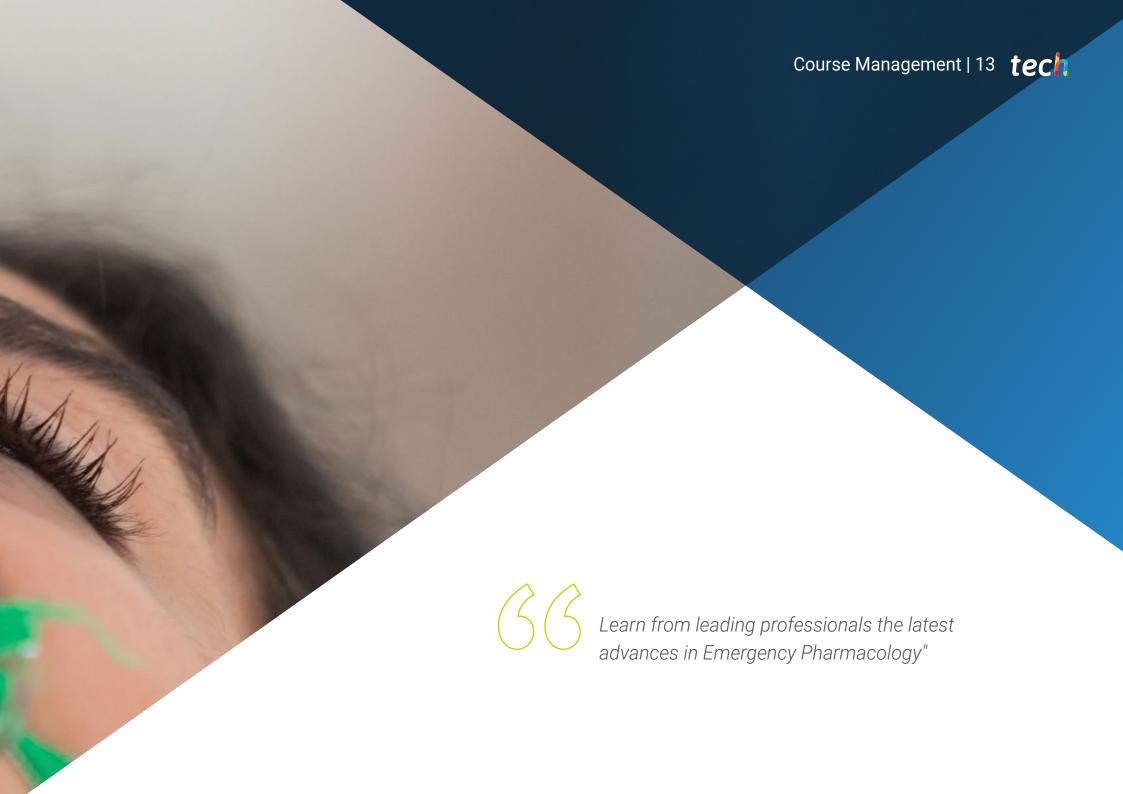
### **Specific Objectives**

- Differentiate between the concepts of accidents, emergencies, and disasters
- Identify the fundamentals of urgent and emergency health care.
- Apply the clinical and non-clinical skills of emergency and disaster medicine.
- Understand the basic operation of the emergency coordination center.
- Identify the equipment and the communication systems in an EMS.
- Describe the main routes of medicine administration used in different emergency departments.
- State the principles of safety in the handling of medications.
- Point out the most frequently used medications in the emergency department, indications and contraindications.
- Describe the formulas for dose calculation.
- Address the management of fluid therapy and the situations in which its use is indicated.

Take advantage of the opportunity and take the step to get up to date on the latest developments in emergency pharmacology.







## tech 14 | Course Management

### Management



### **Vicente Fco 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

### 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 18 | Structure and Content

#### Module 1. General aspects

- 1.1. Definitions and Concepts.
- 1.2. Comprehensive Study of Health Emergencies.
- 1.3. Bioethics in Accidents, Emergencies and Disasters.
- 1.4. Communication Skills in Emergencies.
- 1.5. Patient Safety.
- 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. Pharmacology in an Emergency.

- 2.1. Basic Concepts.
- 2.2. Drug Administration Routes in Accidents and Emergencies.
- 2.3. Drug Administration Security.
- 2.4. Fluid Therapy.
- 2.5. Most Common Medications Used in Accident and Emergency Care.
- 2.6. Formulas and Dosis Calculation.







A unique, key, and Postgraduate Certificate experience to boost your professional development"







## tech 22 | Methodology

#### At TECH we use the Case Method

In a given 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. Specialists learn better, faster, and more sustainably over time.

With TECH you can 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 potential 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 professional medical 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:

- Students 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 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.
- 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.





### **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 physician 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.



### Methodology | 25 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 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. 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.

## tech 26 | Methodology

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 highly 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.



#### **Latest Techniques and Procedures on Video**

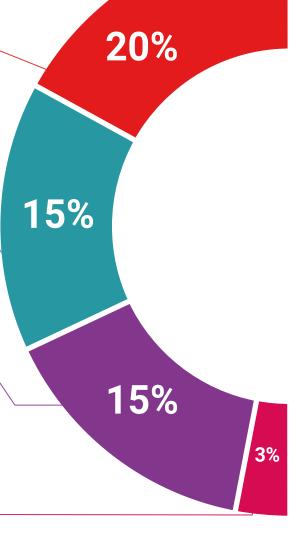
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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.

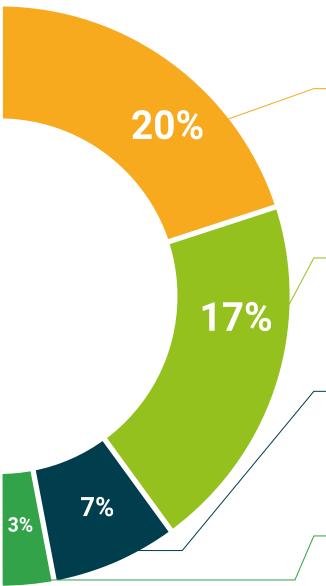
This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **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.





#### **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 30 | Certificate

This **Postgraduate Certificate in Emergency Pharmacology** has the most complete and up-to-date scientific program on the market.

After the student has passed the evaluations, they will receive by mail with acknowledgment of receipt his/her corresponding Postgraduate Certificate issued by **TECH Technological University.** 

The certificate issued by **TECH Technological University** will express the qualification obtained in the course, and meets the requirements commonly demanded by job exchanges, competitive examinations, and professional career evaluation committees.

Title: Postgraduate Certificate in Emergency Pharmacology

Nº Hours: 125



<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.

technological university

Postgraduate Certificate

Emergency Pharmacology

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

