



### Postgraduate Certificate

### Prehospital Evaluation of Acute Coronary Syndrome

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/in/medicine/postgraduate-certificate/prehospital-evaluation-acute-coronary-syndrome

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### tech 06 | Introduction

Acute Coronary Syndrome affects millions of people worldwide.

This is why the context in which specialists have to act varies and with it the methodology to be followed in terms of the initial assessment and treatment in the prehospital phase. The rapid but effective diagnosis of these patients at home, in health centers or emergency rooms and depending on their clinical presentation is essential for their evolution, so the physician has to handle the most complete and innovative information.

In its commitment to provide an academic degree that allows specialists to update and expand their knowledge while continuing their work, this Postgraduate Certificate in Prehospital Evaluation of Acute Coronary Syndrome has been created. TECH thus fulfills its objective of offering a program at the forefront of medicine, more specifically in this branch of cardiology, with which the graduate will be up to date with the latest advances and which will allow them, based on their own demand, to continue expanding concepts.

A program that covers in detail, from the main clinical presentations and possible electrocardiographic manifestations of ACS and their appropriate evaluation in different contexts, to the measures to be taken before the patient's arrival at the hospital and those to be avoided. It also discusses in depth the initial antithrombotic treatments and the importance of the decision of coronary reperfusion and activation of the Infarction Code programs.

All of this is distributed in 150 teaching hours, which also include complementary didactic material to expand on each section. A 100% online degree that will allow the specialist to access the virtual classroom from wherever and whenever they want and organize their academic calendar based on their own availability.

This **Postgraduate Certificate in Prehospital Evaluation of Acute Coronary Syndrome** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Cardiology
- 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 self-assessment can be used 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



Learn about the latest developments in antithrombotic treatment in the prehospital phase and the importance of coronary reperfusion"



With this Postgraduate Certificate you will delve into the evolutionary pattern of the electrocardiogram and the differential diagnosis based on its results"

The program's teaching staff includes professionals from sector 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 provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

Expand your knowledge of the clinical presentations of ACS and the most appropriate course of action in each case.

Which are the causes of sudden outof-hospital death? You will delve into each of them and their prognosis.





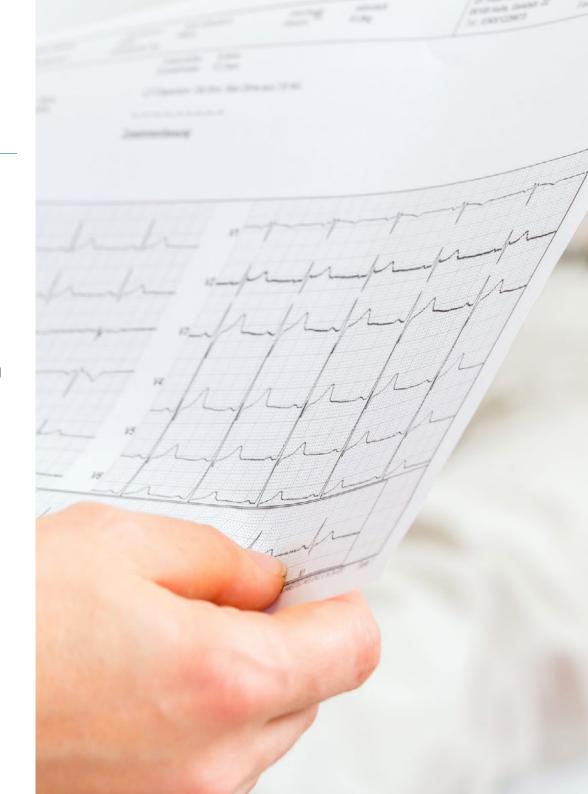


### tech 10 | Objectives



### **General Objectives**

- Develop an in-depth knowledge of Acute Coronary Syndrome (ACS) starting with its pathophysiology and its importance as one of the main causes of death in civilized countries
- Professionalize skills in the assessment and differential diagnosis of chest pain in the emergency department, understanding the value of the different complementary techniques available
- Adequately classify the patient's initial risk and the most appropriate prehospital treatment and monitor measures in the prehospital phase
- Internalize reperfusion therapies, their limitations, advantages and protocols, understand the great importance of ischemia time
- Diagnose and manage the mechanical and arrhythmic complications that can occur in this syndrome
- Implement appropriate treatment measures during the hospital phase and the value of Coronary Units
- Develop the value and structure of Cardiac Rehabilitation programs
- Understand the treatments that have provided value in secondary prevention of these patients





### Objectives | 11 tech



### **Specific Objectives**

- Develop knowledge in the different clinical presentations of NSTEACS
- Assess the patient with NSTEACS in the phase prior to arrival at the hospital
- Understand the electrocardiographic manifestations of this condition, its possible differential diagnoses and the evolutionary pattern over time
- Assess general treatment measures and initial monitoring and pharmacological treatment, as well as which treatments should not be used
- Internalize the importance of the decision of coronary reperfusion and activation of infarction code programs and the importance of timing and delays in this process



Make a difference among specialists with a Postgraduate Certificate that will put you at the forefront in Prehospital ACS Assessment"





### tech 14 | Course Management

#### Management



#### Dr. Botas Rodríguez, Javier

- Head of Cardiology Service, Alcorcón Foundation of the HU
- · Director of the Cardiac Catheterization Laboratory at the Alcorcón Foundation. University Hospital
- Director of the Cardiac Catheterization Laboratory at the Alcorcón Foundation. University Hospital
- Associate Professor of Cardiology of the Degree in Medicine at the Rey Juan Carlos University
- Doctorate in Medicine (Magna Cum Laude) from the Faculty of Medicine at the Autonomous University of Madrid
- Residency and specialization in Cardiology at the Gregorio Marañón University Hospital
- Postdoctorate in Interventional Cardiology from Stanford University

#### **Professors**

#### Dr. Martínez Losas, Pedro

- FEA of the Cardiology Service, University Hospital Infanta Leonor Madrid
- Degree in Medicine from the University of Alcalá de Henares. Madrid
- Specialist in Cardiology at the San Carlos Clinical Hospital in Madrid
- Sub-specialty in Acute Cardiac Care with a training grant from the SEC in the Acute Cardiovascular Care Unit at La Paz University Hospital Madrid
- Expert in Atrial Fibrillation from the University of Santiago de Compostela. Galicia



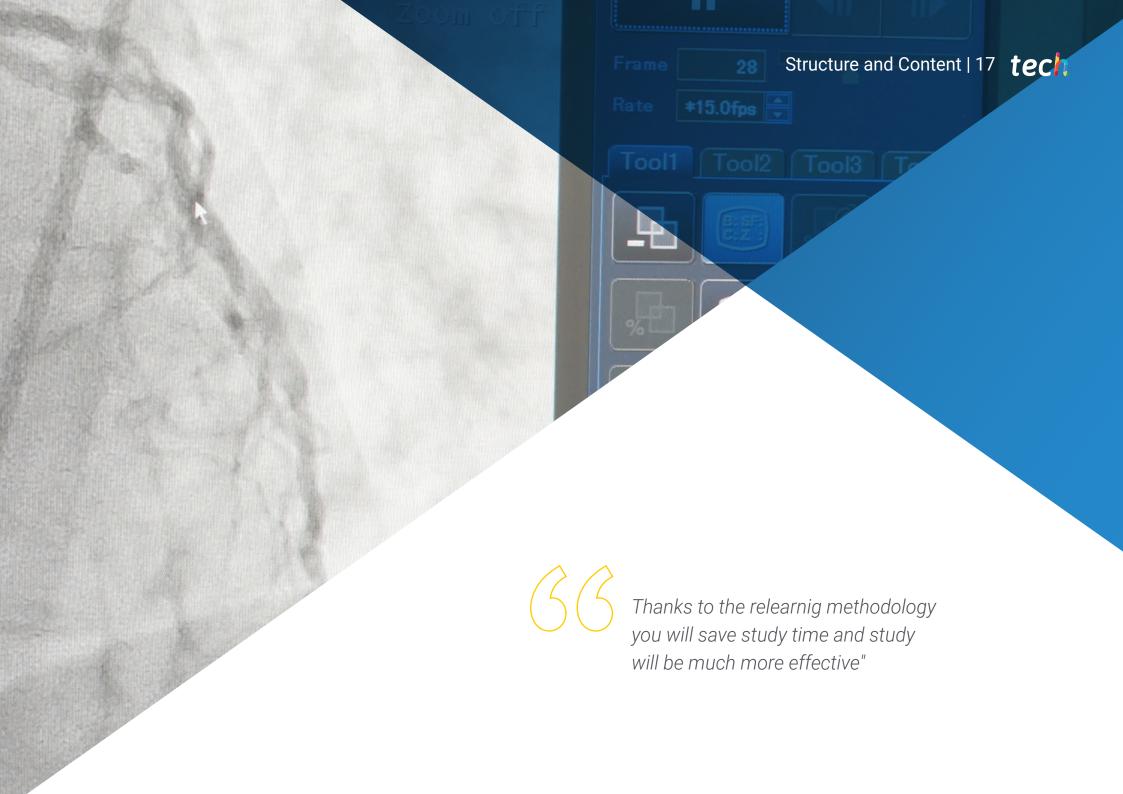
**Structure and Content** 

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Both the structure of the syllabus and its content have been designed by the teaching team based on the latest developments in the sector and following the strict pedagogical criteria imposed by TECH. This is why the physician will find in this degree a modern, dynamic and complete program that will address the key aspects of prehospital evaluation in patients with ACS, from the basic concepts, by way of contextualization, to the most developed and effective ideas of the moment.



### tech 18 | Structure and Content

#### **Module 1.** NSTEACS 1. Clinical Picture, Presentation and Pre-Hospital and Emergency Assessment

- 1.1. Clinical Presentations of NSTEACS
- 1.2. Out-of-Hospital Sudden Death Causes and Prognosis
- 1.3. Assessment of the Patient with NSTEACS in the Pre-Hospital Phase and in the Emergency Department (Clinical and Physical Examination) Initial Risk Stratification
- 1.4. ECG in the Acute Phase of NSTEACS and Correlation with Coronary Anatomy
- 1.5. ECG with ST Elevation. Differential Diagnosis
- 1.6. Evolving ECG Pattern in NSTEACS
- 1.7. General Treatment Measures and Initial Monitoring, Why Is It Important?
- 1.8. Initial Pharmacological Treatment of NSTEACS: Oxygen Therapy, Nitrates, Beta-Blockers
- 1.9. Pre-Hospital Antithrombotic Therapy: When and with What?
- 1.10. Indications for Coronary Reperfusion: The Problem of Timing



### Structure and Content | 19 tech





By choosing TECH you will be investing your time in quality content, in commitment to your future, in the best academic programs and in the security provided by its extensive academic experience with one of the best Technological Universities in the world"





### tech 22 | Methodology

#### 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:

- 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.



### Methodology | 25 tech

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.

### tech 26 | Methodology

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.









### tech 30 | Certificate

This **Postgraduate Certificate in Prehospital Evaluation of Acute Coronary Syndrome** contains the most complete and up-to-date scientific program 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 certificate 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 Prehospital Evaluation of Acute Coronary Syndrome Official N° of Hours: 150 h.



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