



Reperfusion Therapies in Acute Coronary
Syndrome

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/us/medicine/postgraduate-certificate/reperfusion-therapies-acute-coronary-syndrome

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### tech 06 | Introduction

Cases of infarction and the complications derived from this Acute Coronary Syndrome (ACS) are quite frequent in all countries of the world. Thanks to the continuous research developed in the last decades, techniques have been determined that allow the specialists to limit the size of this heart disease, thus avoiding a worsening of the patient's health and even death. The most common reperfusion therapies with the best results are systemic fibrinolysis and primary angioplasty, so knowing the latest developments related to their technical requirements, protocols, advantages and disadvantages of each has become an essential task for physicians.

In order to facilitate this update of concepts, TECH, and its group of experts in Cardiology, has designed this Postgraduate Certificate in Reperfusion Therapies in Acute Coronary Syndrome, which not only delves into the mechanisms of restoration of blood supply, but also includes a tour of antithrombotic treatments during angioplasty and also the problem of antiplatelet therapy in the post-hospital phase in patients who also need anticoagulant therapy. It also delves into the methods of hemodynamic support that can be useful during angioplasty and the value of developing regional reperfusion networks for the treatment of infarction.

This program includes not only the best and most up-to-date content, but hours and hours of supplementary material in format, video and images, interactive abstracts, real clinical cases, recent research articles and much more. All in a convenient online format accessible from any electronic device with an internet connection and available from the beginning of the training.

This **Postgraduate Certificate in Reperfusion Therapies in Acute Coronary Syndrome** contains the most complete and up-to-date scientific program on the market. Its most outstanding features are:

- 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 electronic device with an Internet connection



Learn about the latest developments in fibrinolysis and primary angioplasty, their advantages, disadvantages and protocols, and apply the most innovative techniques to your patients"

### Introduction | 07 tech



This Postgraduate Certificate includes a section dedicated to the Infarction Code and Regional Reperfusion Networks, allowing you to be up to date with the most modern and effective protocols"

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 professionals must try to solve the different professional practice situations that are presented throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

It delves into the latest developments in stents and the expected results of their application.

The correct treatment of infarction based on the latest techniques and protocols is a necessity.

TECH provides you with all the knowledge you need to get up to date.





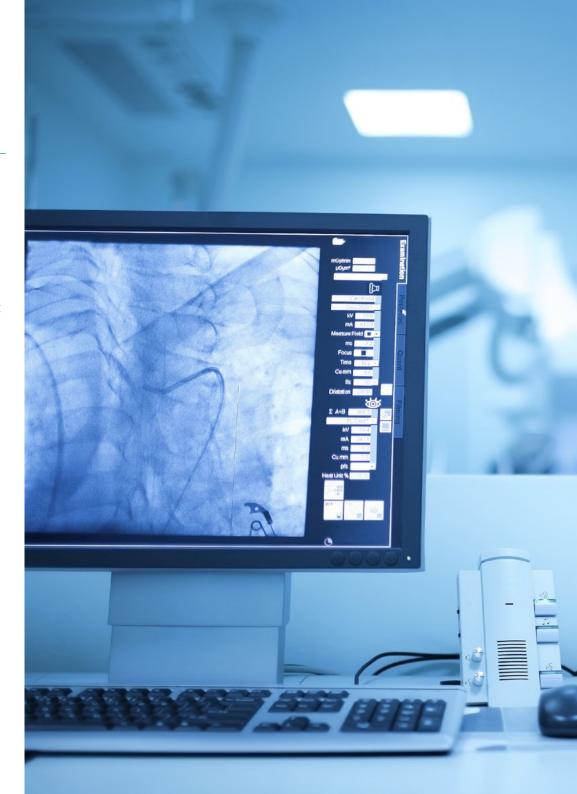


# tech 10 | Objectives



### **General Objectives**

- Delve into 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







### **Specific Objectives**

- Recognize the time course of myocardial ischemic necrosis and understand the problem of ischemia time
- Assess the available strategies for reperfusion, fibrinolysis and primary angioplasty, their advantages and disadvantages
- Control the necessary material and protocols to perform fibrinolysis or primary angioplasty
- Know in detail the anticoagulant and antiplatelet therapy in the catheterization laboratory
- Describe a protocol for antiplatelet treatment in patients who also need to take anticoagulant drugs
- Internalize hemodynamic support measures during primary angioplasty
- Control the usefulness of regional reperfusion networks in the treatment of infarction



The best university program to update your knowledge in long-term antiplatelet treatment"





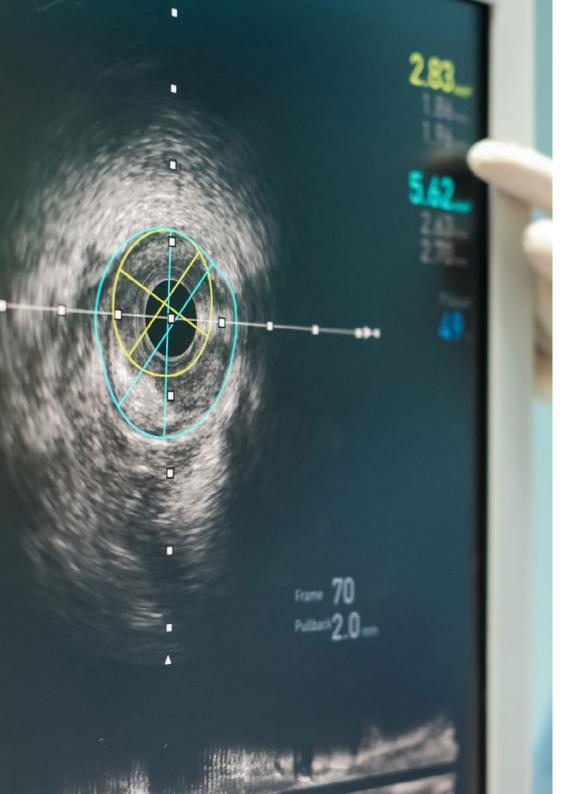
# tech 14 | Course Management

### 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 Hospita
- 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



### Course Management | 15 tech

### **Professors**

### Dr. Del Castillo Medina, Roberto

- Cardiologist Expert in Interventional Cardiology
- Specialist Doctor at Fundación Alcorcón University Hospital
- Researcher of the Infarction Code Working Group of the Interventional Cardiology Association
- Interventional Cardiologist at Sur Alcorcón Hospital of Quironsalud Group.
- Physician in the Acute Cardiac Care and Post-Surgical Recovery Unit.
- Interventional Cardiology Specialist at Montepríncipe Hospital
- Medical Specialist in Cardiology at San Rafael Hospital and Infanta Leonor University Hospital
- Master's Degree in Diagnostic and Therapeutic Electrophysiology, from the Complutense University of Madrid.
- Member of the Spanish Society of Cardiology



A unique, key, and decisive academic experience to boost your professional development





# tech 18 | Structure and Content

# **Module 1.** ACS with ST-Elevation 4 Limitation of Infarct Size. Reperfusion Therapies

- 1.1. Myocardial Necrosis and Ischemia, the Problem of Ischemia Time
- 1.2. Strategies to Decrease Infarct Size: Fibrinolysis vs Primary Angioplasty
- 1.3. Fibrinolysis, Advantages, Disadvantages and Protocols
- 1.4. Primary Angioplasty Technique and Requirements
- 1.5. Stents: Types and Results Thrombus Extractors?
- 1.6. Antiplatelet and Anticoagulation Treatment During PCI
- 1.7. Long-Term Anti-Aggregation Treatment
- 1.8. The Problem of Antiplatelet Treatment in Patients Who Also Take Anticoagulant Drugs Protocols
- 1.9. Hemodynamic Support During Primary Angioplasty Available Methods and Results
- 1.10. Infarction Code Programs and Regional Reperfusion Networks







You will see your progress from the beginning of the program and in as little as 6 weeks you will easily handle the most complete and up-to-date information on Reperfusion Therapy in Acute Coronary Syndrome"





# 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.









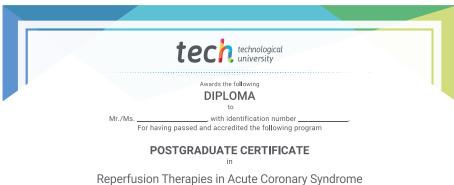
### tech 30 | Certificate

This Postgraduate Certificate in Reperfusion Therapies in Acute Coronary Syndrome contains the most complete and up-to-date scientific program on the market.

After the students 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.

Program: Postgraduate Certificate in Reperfusion Therapies in Acute Coronary Syndrome Official No. of Hours: 150 h.



This is a qualification awarded by this University, equivalent to 150 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

<sup>\*</sup>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.



# Postgraduate Certificate

# Reperfusion Therapies in Acute Coronary Syndrome

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