

# Postgraduate Certificate

## Imaging Tests in Acute Coronary Syndrome



## Postgraduate Certificate Imaging Tests in Acute Coronary Syndrome

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

Website: [www.techtute.com/in/medicine/postgraduate-certificate/imaging-test-acute-coronary-syndrome](http://www.techtute.com/in/medicine/postgraduate-certificate/imaging-test-acute-coronary-syndrome)

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# 01

# Introduction

The evolution and development of technology has provided medical practitioners with increasingly sophisticated and accurate tools for the diagnosis and management of patients with conditions such as Acute Coronary Syndrome. In addition, the techniques and tests recommended in each case have been evolving in line with advances in cardiac disease research. That is why TECH presents this program that will serve the specialists as a guide to learn about the latest developments in the area and that will allow them to expand their knowledge of imaging tests in ACS. A 100% online program in which, not only will you have the support of experts in the field, but in which you will find the perfect additional content to deepen your knowledge on each topic.





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*This Postgraduate Certificate will introduce you to the latest concepts related to Imaging Tests in Acute Coronary Syndrome"*

Chest pain can occur due to different causes. However, a clinical picture that indicates an Acute Coronary Syndrome can have serious consequences for the patient. The differential diagnosis of this condition in the emergency department increases the chances of success of a possible treatment, so physicians must follow with total and absolute diligence the protocols of action, which include imaging tests among the most effective methods.

The Postgraduate Certificate highlights the value of these tests and goes into the use of transthoracic ultrasound at the bedside and stress ultrasound in the evaluation of the patient with STE-ACS. It also details the importance of electrocardiographic and isotope stress tests in the evaluation of patients with chest pain without a clear diagnosis and delves into the important role of the scanner in the triple rule-out of chest pain in these cases, as well as the relevance of magnetic resonance imaging.

Therefore, this program will provide the graduates with the necessary knowledge that will allow them to get up to date in imaging tests in ACS, through the most up-to-date and complete content and from the hand of a group of experts in cardiology who will be available to the specialists from the beginning of the program. Moreover, in the virtual classroom, you will find all the necessary additional content that will allow you to delve into each section.

This **Postgraduate Certificate in Imaging Tests in 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 electronic device with an Internet connection



*The long-term follow-up of ACS patients using imaging techniques is very important. Implement the latest and most current techniques in your daily life with this Postgraduate Certificate”*



“

*This program will allow you to delve into the most innovative aspects of isotopic perfusion tests, their indications and techniques”*

*Delve into the differential diagnosis of chest pain in the emergency department and update your skills in the evaluation and algorithm of imaging tests.*

*You will have access to clinical cases of real patients that will bring a practical and realistic aspect to your learning.*

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.

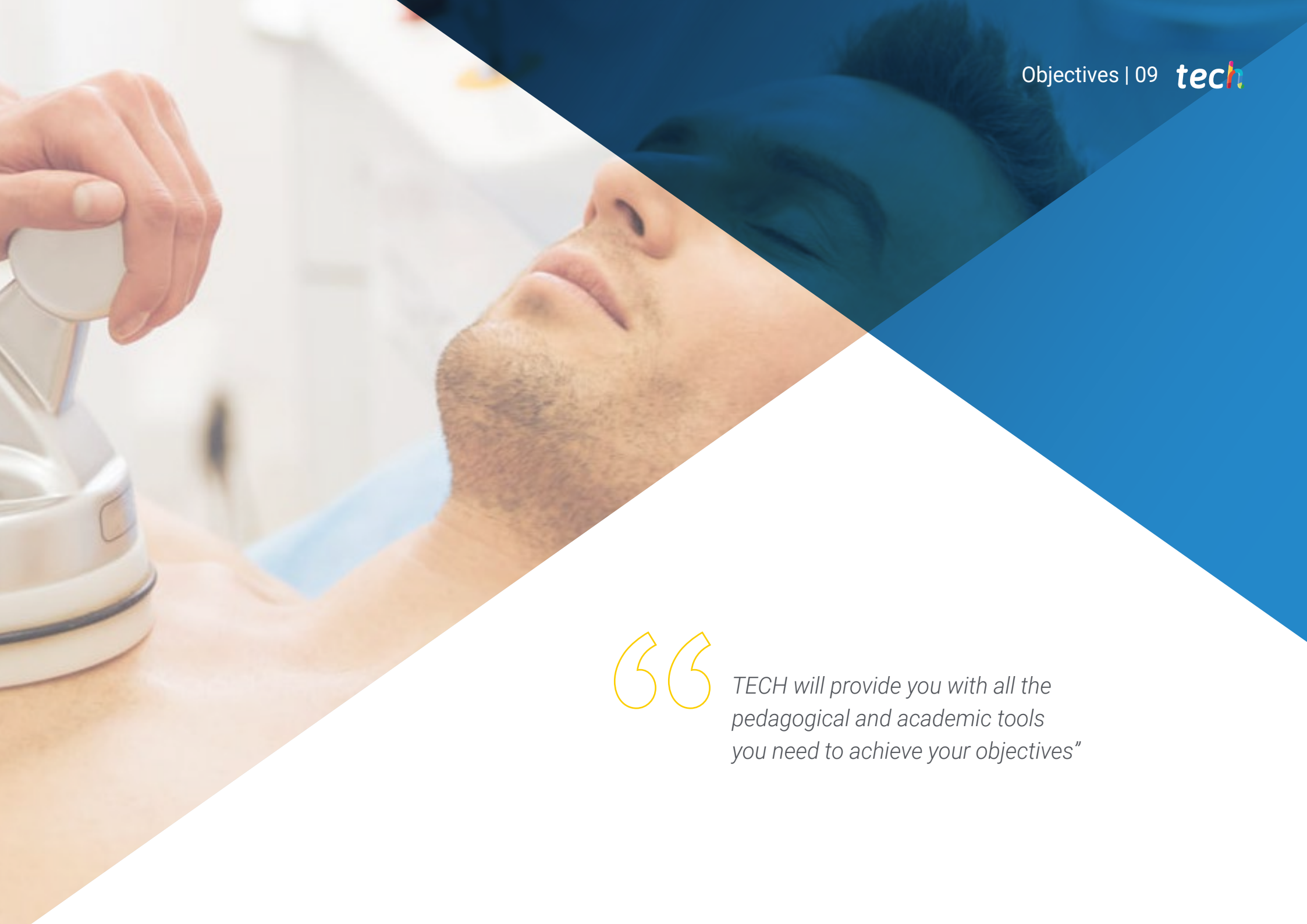


# 02 Objectives

Given the variety of imaging tests that exist around the diagnosis of Acute Coronary Syndrome, the objective of this Postgraduate Certificate is to delve into each of them, providing the graduates with the most important latest developments that need to be implemented to their diagnoses and allowing them to get up to date on the subject. With a modern and complete syllabus, the specialists will be able to refresh their knowledge and will have the possibility to choose whether to delve into certain aspects thanks to the additional material contained in the virtual classroom.







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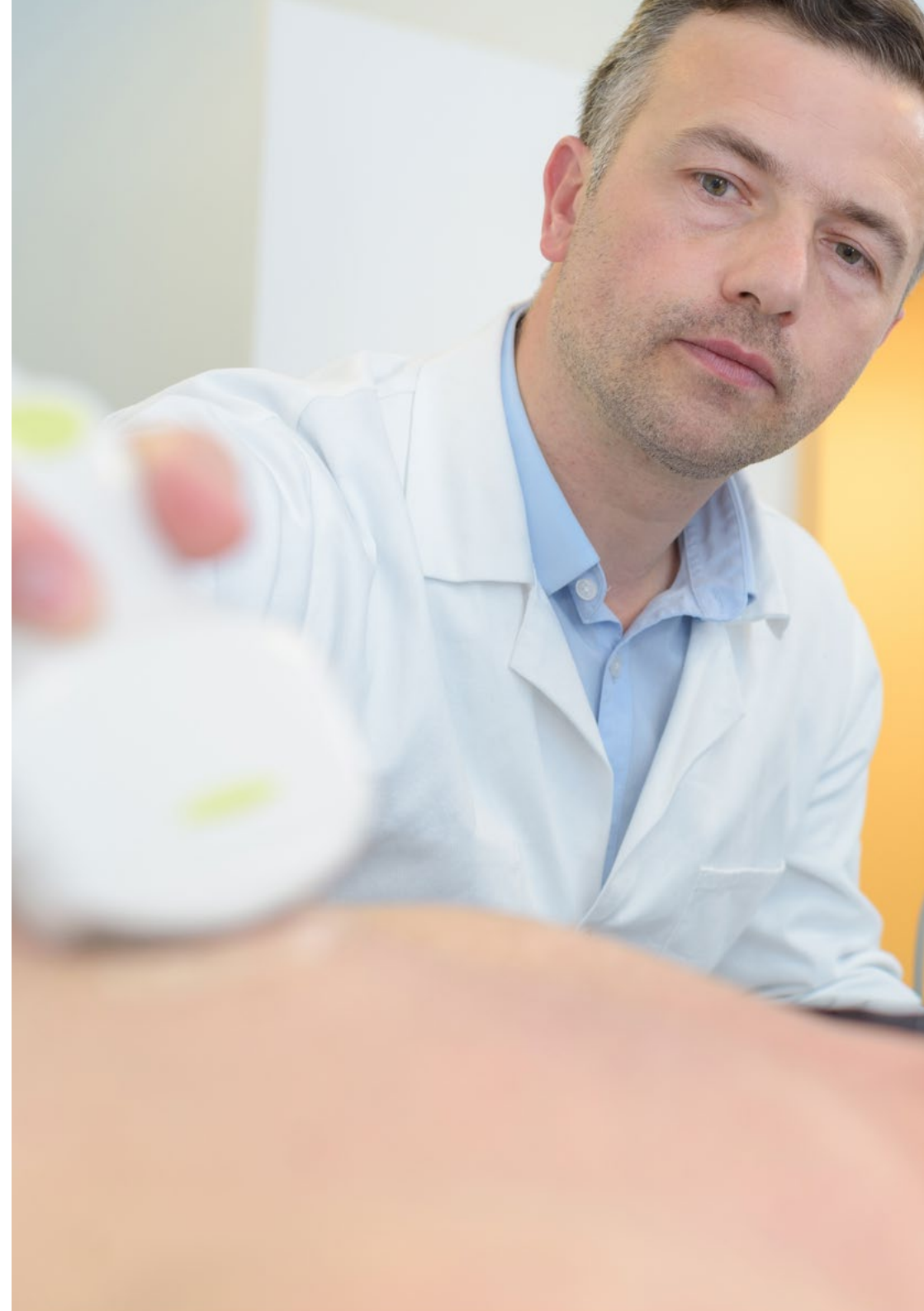
*TECH will provide you with all the pedagogical and academic tools you need to achieve your objectives”*



## General Objectives

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- ♦ 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

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- ♦ Correctly evaluate patients with chest pain in the emergency department and the value of chest pain units
- ♦ Assess the use of transthoracic ultrasound at the bedside in patients with chest pain
- ♦ Master the use of ergometry and stress echo in the assessment of the patient with chest pain
- ♦ Internalize the use of CT in the triple rule-out (coronary artery disease, aortic dissection and coronary artery disease) of chest pain
- ♦ Recognize the usefulness of MRI in patients with chest pain and the value of imaging tests in general in the long-term follow-up of these patients



*If your goal is to handle the latest developments in Imaging Tests in the SCA this Postgraduate Certificate is perfect for you"*

# 03

# Course Management

To develop the teaching staff of this Postgraduate Certificate in Imaging Tests in ACS, TECH has assembled a team of physicians specialized in various fields of cardiology, with extensive experience in dealing with cardiac pathologies. This is intended to ensure the highest quality of the contents and the adequacy of the syllabus to the most modern scientific postulates. Their professional perspective and human qualities add to the quality of this program and are yet another example of the program's commitment to its graduates.







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*The teaching team will be at your disposal to guide you to achieve the objectives you set at the beginning of this Postgraduate Certificate”*



## 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
- ♦ Plant Cardiologist at the Gregorio Marañón 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
- ♦ Post Doctorate in Interventional Cardiology from Stanford University

## Professors

### Dr. González Mansilla, Ana

- ♦ Attending Physician in Cardiology at the Gregorio Marañón General University Hospital
- ♦ Medical Specialist, 12 de Octubre University Hospital
- ♦ PhD in Medicine and Surgery from the Complutense University of Madrid
- ♦ Member of: Cardiovascular Research Network of Gregorio Marañón  
Biomedical Research Foundation, Cardiovascular Research Network of the  
Carlos III Health Institute



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D/G 100/6  
GN 133  
I/P 1/30  
PWR 80  
FRQ 2.6- 5  
D 16.4cm

PRF 1.0  
WF 75  
GN 18  
C/P 1/50  
PWR 70  
FRQ 2.4



# 04

## Structure and Content

In order to facilitate the completion of this Postgraduate Certificate in a more productive and complete way, TECH and its teaching staff have designed the content of this program following the guidelines of Relearning, a methodology in which this university is a pioneer. In this way, the specialists will see how the most important concepts are reiterated throughout the syllabus, favoring the updating and expansion of concepts in a more natural and progressive way. Thus, the teaching load is reduced, which will save time, which can be invested in continuing to delve into certain aspects thanks to the additional material found in the virtual classroom.







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*In addition to the syllabus, you will have video in detail on each topic, interactive summaries, research articles and much more!”*

## Module 1. NSTEMACS 2. Imaging and Ischemia Detection Tests

- 1.1. Differential Diagnosis of TD in the Emergency Department
- 1.2. Imaging Protocols in Emergency Department TD Units Assessment and Algorithm for the Diagnosis of Patients with TD in the Emergency Department
- 1.3. Value of Transthoracic Echocardiography in the Assessment of the Patient with Suspected NSTEMACS. Use of POCUS
- 1.4. Ergometry and Effort Echo/Stress Echo in the Patient with TD in the Emergency Department. Indications and Technique
- 1.5. Isotopic Perfusion Tests. Indications and Technique
- 1.6. Coronary CT in the ED patient with TD Indications and Technique
- 1.7. Role of MRI in NSTEMACS and Patients with Chest Pain. Indications and Technique
- 1.8. Anatomical Approach vs. Functional in the Diagnostic Assessment of the Patient with Chest Pain
- 1.9. Long-Term Follow-Up Using Imaging Techniques







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*Choose TECH and do not miss the opportunity to get up to date with the largest technological university in the world and with a group of experts in cardiology”*

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

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.*



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.





#### 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 Imaging Tests in Acute Coronary Syndrome guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.





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*Successfully complete this program and receive your Postgraduate Certificate without having to travel or fill out laborious paperwork”*

This **Postgraduate Certificate in Imaging Tests in 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 Imaging Tests in Acute Coronary Syndrome**

Official N° of Hours: **150 h.**



\*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.

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



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- » Dedication: 16h/week
- » Schedule: at your own pace
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