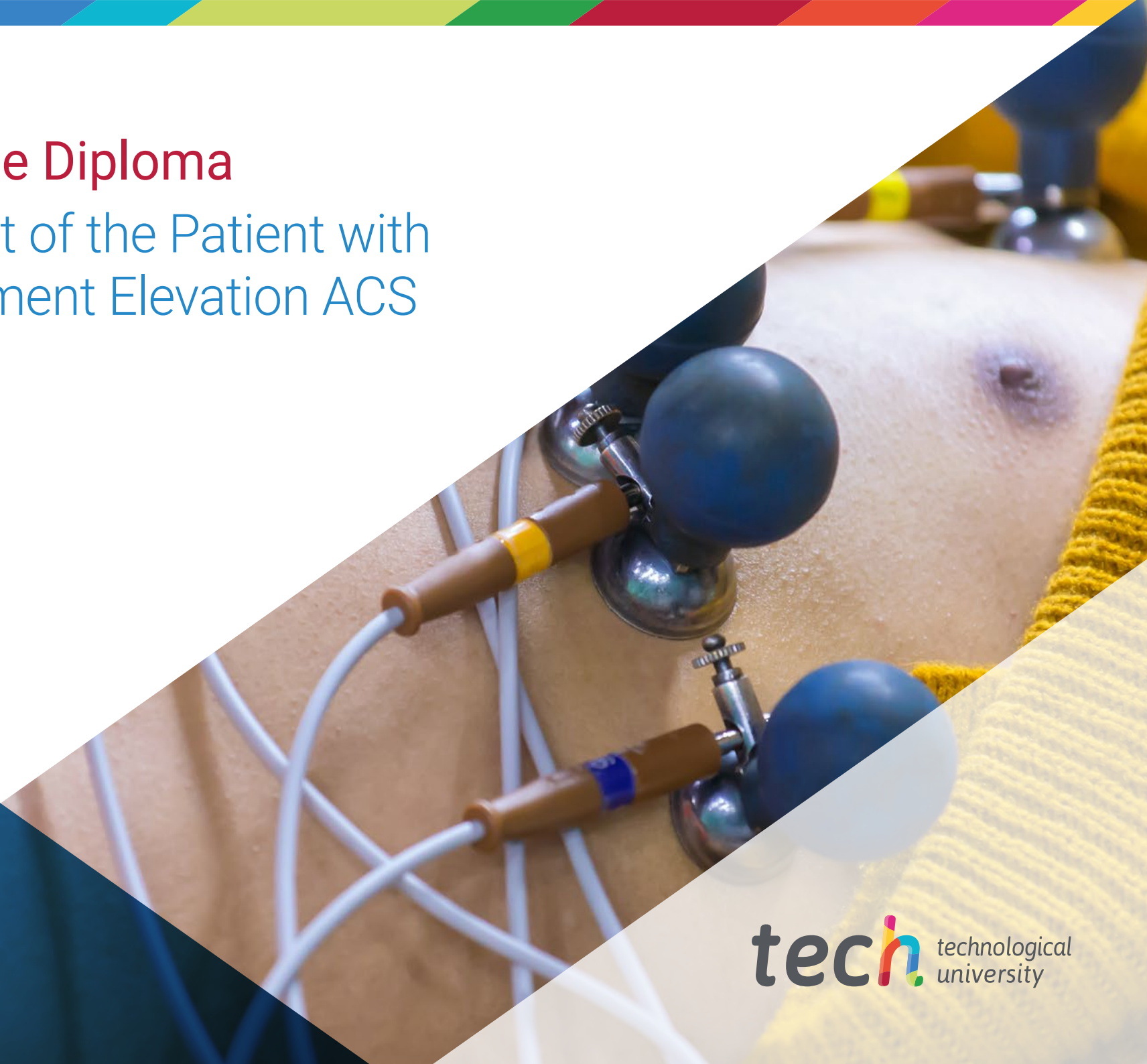


# Postgraduate Diploma

## Management of the Patient with Non-ST-Segment Elevation ACS





## Postgraduate Diploma Management of the Patient with Non-ST-Segment Elevation ACS

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

Website: [www.techtute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-management-patient-non-st-segment-elevation-ac](http://www.techtute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-management-patient-non-st-segment-elevation-ac)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Diploma

---

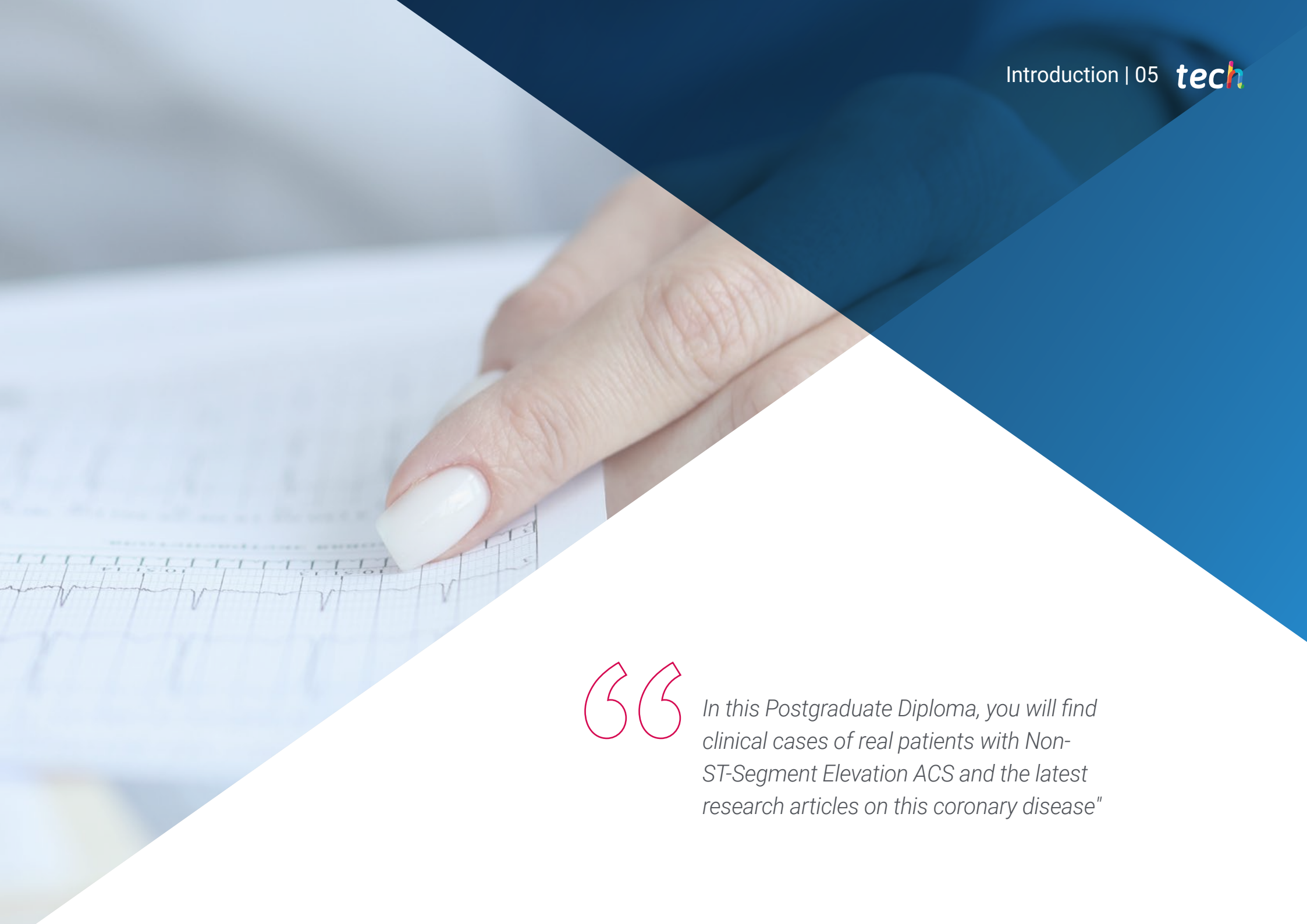
*p. 28*

# 01

# Introduction

Chest pain is a common complaint in both the emergency department and primary care. Within the different clinical pictures, the chances that the patient is suffering an acute coronary syndrome with non-ST-elevation are very high and that is why the specialist must handle all the information that allows him, in a few minutes, to act accordingly to the most effective techniques and treatments. This program includes the most up-to-date concepts in the diagnosis and medical treatment of patients with NSTEMACS, so that the graduates can not only keep up to date with the latest criteria, but also expand his or her knowledge in a short period of time. An online program, led by industry experts and endorsed by the world's largest Digital University.





“

*In this Postgraduate Diploma, you will find clinical cases of real patients with Non-ST-Segment Elevation ACS and the latest research articles on this coronary disease”*

Although the causes of chest pain are varied, one of the main conditions to be ruled out by the physician is acute coronary syndrome with or without ST elevation. In the case of NSTEMACS with elevated troponins, the patient may require emergency catheterization. Acting diligently and managing all the necessary information could influence their recovery, so the specialist must be up to date in the best and most effective techniques for diagnosis and treatment of this cardiac pathology.

With this program in Management of the Patient with Non-ST-Segment Elevation ACS, the graduates will be able to learn about the latest scientific advances in this coronary area, which will allow them to update their knowledge and expand on new concepts such as recent drugs or cutting-edge techniques, but with a high degree of effectiveness.

First, the program will delve into the epidemiology, pathophysiology and classification of coronary syndromes, followed by the importance of imaging and ischemia detection tests. The last module will focus on the medical and revascularization treatment of NSTEMACS.

With a totally new syllabus, not only in its 100% online nature, but also in its content, designed by experts in Cardiology and following the most modern scientific advances, the graduates will find in this program an opportunity to get up to date. Among the facilities provided by this type of program is the possibility of downloading the syllabus and other additional material that you will find in the virtual classroom to be able to view it from any electronic device whenever you want.

This **Postgraduate Diploma in Management of the Patient with Non-ST-Segment Elevation ACS** 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

“*Learn about the latest advances in antianginal, antiplatelet and anticoagulant drugs and new developments in surgical and percutaneous revascularization techniques in the management of NSTEMACS*”

“

*You will have access to a variety of complementary material of the highest quality, which will allow you to continue to delve into the concepts you consider and improve as a specialist in cardiac medicine”*

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.

*Get up to date on the usefulness of magnetic resonance and imaging tests in general in patients with chest pain.*

*This program delves into the importance of stratifying patients by thrombotic and bleeding risk to individualize their treatment.*



# 02 Objectives

The objective pursued by TECH with this program is for the specialists to learn about the latest scientific advances in the Management of Patients with Non-ST-Segment-Elevation Acute Coronary Syndrome as well as to renew their knowledge of diagnostic and treatment techniques. In this way, you will have access to the most up-to-date information of the moment through a quality online program, which will provide you with all the tools and facilities at your disposal to help you become an expert.





“

*If your goal is to become an expert in NSTEACS, TECH is the best option and with this degree you will have the opportunity to achieve it”*



## 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





## Specific Objectives

---

### Module 1. Clinical Presentation of Coronary Syndromes and Classification

#### NSTEMACS 1. Epidemiology. Pathophysiology and Classification

- ♦ Recognize the various clinical manifestations of coronary artery disease
- ♦ Classify acute coronary syndromes and their reasons
- ♦ Adapt the epidemiology and the different clinical presentations of Non-ST Segment Elevation ACS (NSTEMACS)
- ♦ Delve into the different electrocardiographic manifestations of NSTEMACS
- ♦ Stratify patients by thrombotic and hemorrhagic risk to individualize their treatment
- ♦ Delve into variant angina and coronary vasospasm as a cause of ACS

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

- ♦ 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

### Module 3. NSTEMACS 3. Medical and Revascularization Treatment

- ♦ Delve into the different types of drugs used in the treatment of NSTEMACS, which ones to use and for how long, with the exception of lipid-lowering drugs, which are reviewed in the prevention module
- ♦ Advise on the indications for revascularization of the patient with NSTEMACS
- ♦ Control the different forms of revascularization possible and their respective advantages and disadvantages
- ♦ Master Percutaneous Revascularization Techniques
- ♦ Master the techniques of Surgical Revascularization



*The years of experience and its great team of teachers allow TECH to offer exactly what the graduates need"*

# 03

## Course Management

The direction and teaching of this Postgraduate Diploma is the responsibility of a large team of cardiologists with extensive professional experience in the hospital area of this specialty. Having a group like this provides the program with a practical character since each of the specialists will provide a unique vision of the topics taught based on their own experiences, although following, of course, the standards of quality and novelty imposed by TECH in each of its programs.





“

*The experience of the teaching team will guide you on the path that will make you the best expert”*

## 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. Vaqueriza Cubillo, David

- ♦ FEA of Clinical Cardiology and Multidisciplinary Unit of Heart Failure, Hospital Infanta Leonor Madrid
- ♦ Specialist of the Cardiology Unit, Beata María Ana de Jesús Hospital Madrid
- ♦ Degree in Medicine from the Complutense University of Madrid.
- ♦ Resident in Cardiology at 12 de Octubre University Hospital. Madrid
- ♦ Online Master's Degree in Cardiology "Professor in Cardiology" by the Miguel Hernández University. Valence

### Dr. Hernando Marrupe, Lorenzo

- ♦ Interventional Cardiologist at the Fundación Alcorcón University Hospital
- ♦ FEA in Cardiology at the Prince of Asturias Hospital
- ♦ FEA in Cardiology at the San Carlos Clinical Hospital
- ♦ Author and co-author of numerous scientific publications
- ♦ PhD in Medicine from the Complutense University of Madrid



**Dr. De Cortina Camarero, Cristina**

- ♦ Cardiology FEA, Hospital Infanta Leonor
- ♦ Assistant Physician at the Cardiology Service, Gregorio Marañón Hospital
- ♦ Assistant Cardiologist at Los Madroños Hospital
- ♦ Assistant Cardiologist at CECAM, San Rafael Hospital
- ♦ Dependent Researcher of the the Noninvasive Cardiology Department of the Cardiology Service, Gregorio Marañón Hospital
- ♦ Assistant Professor at the Complutense University of Madrid
- ♦ PhD in Cardiac Medicine from the Complutense University of Madrid.
- ♦ Specialization in Cardiology at the Gregorio Marañón General University Hospital
- ♦ Master's Degree in as Diagnostic Imaging from the San Antonio Catholic University of Murcia
- ♦ Master's Degree in Cardiology from the University of Miguel Hernández de Elche

# 04

## Structure and Content

The structure of this Postgraduate Diploma has been designed by the teaching team based on the latest information in the field of ACS with non ST-elevation and following the results of the most current research. In addition, the specialists have incorporated to the syllabus complementary material in the form of high-quality multimedia content, interactive summaries, clinical cases and videos in detail elaborated by themselves, with the aim of providing the graduates with all the necessary tools to obtain the best and most complete educational experience from this program.





“

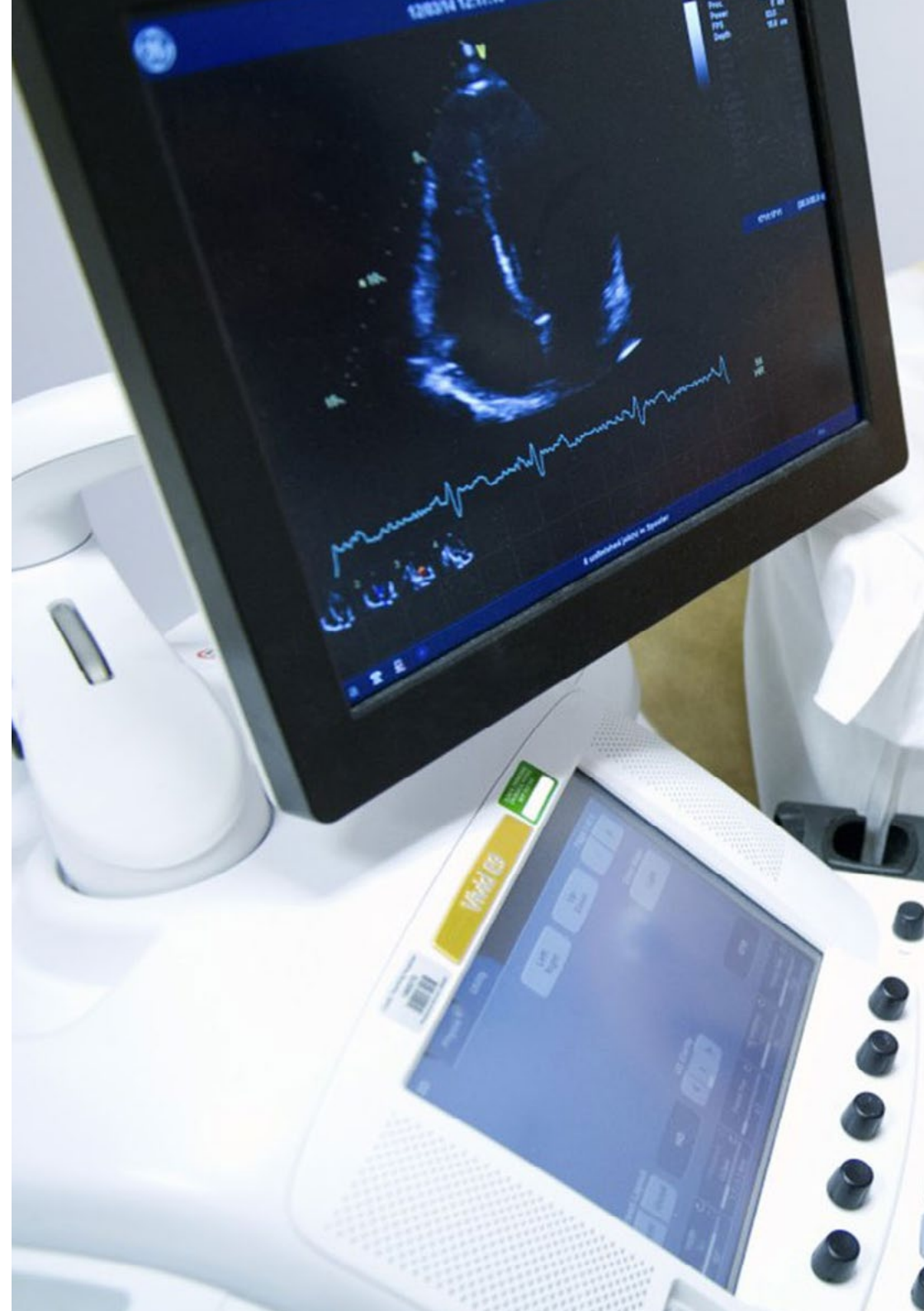
*The relearning methodology, together with the most dynamic, complete and modern syllabus will save you hours of study"*

## Module 1. Clinical Presentation of Coronary Syndromes and Classification NSTEMACS 1. Epidemiology. Pathophysiology and Classification

- 1.1. Forms of Presentation of Coronary Artery Disease: Chronic and Acute Coronary Syndromes
- 1.2. Operational Classification of ACS Based on ECG, Non-ST Segment Elevation ACS Epidemiology
- 1.3. Pathophysiology and Correlation with Anatomic Pathology
- 1.4. Unstable Angina and Non-Q AMI, Clinical Features
- 1.5. ECG and Non-ST Segment Elevation ACS
- 1.6. Complementary Diagnostic Laboratory Tests and RXT in Non-ST Segment Elevation ACS
- 1.7. Risk Stratification, Thrombotic Risk Scales
- 1.8. Risk Stratification, Hemorrhagic Risk Scales
- 1.9. Variant Angina and Coronary Vasospasm Clinical Features
- 1.10. Vospasm Provocation Tests. Treatment and Prognosis of Vasospasm

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

- 2.1. Differential Diagnosis of TD in the Emergency Department
- 2.2. Imaging Protocols in Emergency Department TD Units Assessment and Algorithm for the Diagnosis of Patients with TD in the Emergency Department
- 2.3. Value of Transthoracic Echocardiography in the Assessment of the Patient with Suspected NSTEMACS Use of POCUS
- 2.4. Ergometry and Effort Echo/Stress Echo in the Patient with TD in the Emergency Department Indications and Technique
- 2.5. Isotopic Perfusion Tests Indications and Technique
- 2.6. Coronary CT in the ED patient with TD Indications and Technique
- 2.7. Role of MRI in NSTEMACS and Patients with Chest Pain Indications and Technique
- 2.8. Anatomical Approach vs. Functional in the Diagnostic Assessment of the Patient with Chest Pain
- 2.9. Long-Term Follow-Up Using Imaging Techniques





### Module 3. NSTEMI/ACS 3. Medical and Revascularization Treatment

- 3.1. General and Monitoring Measures
- 3.2. Anti-Anginal Drugs: Beta Blockers
- 3.3. Anti-Anginal Drugs: Nitrates and Calcium Antagonists
- 3.4. Platelet Antiaggregants. Which Ones and For How Long?
- 3.5. Anticoagulant Drugs. Which Ones, How Much and Why?
- 3.6. Indications for Coronary Angiography and Revascularization
- 3.7. When Is Surgical Revascularization Indicated, and When Is Percutaneous Revascularization Indicated?
- 3.8. Percutaneous Revascularization Techniques
- 3.9. Surgical Revascularization Techniques

“

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.



“

*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. Gervas, 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.*





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 Diploma

The Postgraduate Diploma in Management of the Patient with Non-ST-Segment Elevation ACS guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



“

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

This **Postgraduate Diploma in Management of the Patient with Non-ST-Segment Elevation ACS** 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 Diploma** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Management of the Patient with Non-ST-Segment Elevation ACS**

Official N° of Hours: **450 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

**tech** technological  
university

## Postgraduate Diploma

Management of the Patient with  
Non-ST-Segment Elevation ACS

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

# Postgraduate Diploma

Management of the Patient with  
Non-ST-Segment Elevation ACS