

Postgraduate Diploma

Heart Failure, Cardiogenic Shock,
and Acute Coronary Syndrome

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Postgraduate Diploma

Heart Failure, Cardiogenic Shock, and Acute Coronary Syndrome

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 21 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-heart-failure-cardiogenic-shock-acute-coronary-syndrome



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Introduction

Acute cardiovascular pathology comprises a group of diseases that often require complex, urgent decision-making with significant implications for the patient's prognosis. The management of patients with cardiovascular conditions in critical situations is common in emergency departments, coronary units, intensive care units, and post-surgical wards with underlying heart conditions.





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This training will generate a sense of confidence when practicing medicine, which will help you grow personally and professionally”

This Postgraduate Diploma in the field of cardiology is one of the areas of great research activity, which leads to the frequent emergence of new studies, reviews, clinical practice guidelines, etc. that modify or should modify patient management for acute heart disease. Staying up-to-date in this field is essential for non-cardiologist physicians who work in environments where they must treat patients with acute heart conditions, for cardiologists who are not in daily contact with acute patients but need to be competent in this area, and for cardiologists interested in developing specialized training in this field.

The program structure for this Postgraduate Diploma is clearly laid out, which provides students with an orderly approach to each topic. The modules are divided in a simple way, focusing on each one of the main groups of acute heart disease. They are taught by professionals who combine their high academic skill level with their teaching experience and their dealings with critical cardiology patients. The learning tools and texts available to the student are fully up to date and are designed to develop skills which are directly applicable to clinical practice. The program structure compiles more theoretical content and the latest developments in diagnosis and medical management, with other content that is focused on students acquiring more practical skills as well. One of the modules is entirely devoted to developing practical skills and mastering the essential techniques for dealing with critical cardiovascular patients. A second module is focused on developing the essential skills for performing and interpreting echocardiograms (ECG), and their correlation with the patient's clinical situation, to make decisions on the treatment and management of the patient.

The program is aimed at encouraging and enabling the development of essential skills in the management of a patient with acute heart disease. The ideal candidate for this program is someone who requires training or an update on the management of such patients, primarily intensivists or anesthesiologists who handle patients with heart disease, cardiologists who do not have daily contact with acute patients but need to stay current due to on-call duties, or cardiologists interested in deepening and refining their skills in the management of critically ill cardiac patients.

This **Postgraduate Diploma in Heart Failure, Cardiogenic Shock, and Acute Coronary Syndrome** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ Development of more than 75 clinical cases presented by experts in heart failure, cardiogenic shock, and acute coronary syndrome. The graphic, schematic, and practical contents of which they are composed provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Latest updates on heart failure, cardiogenic shock, and acute coronary syndrome
- ♦ It contains practical exercises where the self-evaluation process can be carried out to improve learning
- ♦ Algorithm-based interactive learning system for decision-making in the presented clinical situations
- ♦ With a particular emphasis on evidence-based medicine and research methodologies in heart failure, cardiogenic shock, and acute coronary syndrome
- ♦ All 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



*Update your knowledge with the
Postgraduate Diploma in Heart
Failure, Cardiogenic Shock, and
Acute Coronary Syndrome”*

“

This Postgraduate Diploma can be the best investment you can make in selecting a professional development program for two reasons: in addition to updating your knowledge in heart failure, cardiogenic shock, and acute coronary syndrome, you will earn a diploma of completion for the Postgraduate Diploma awarded by TECH Global University”

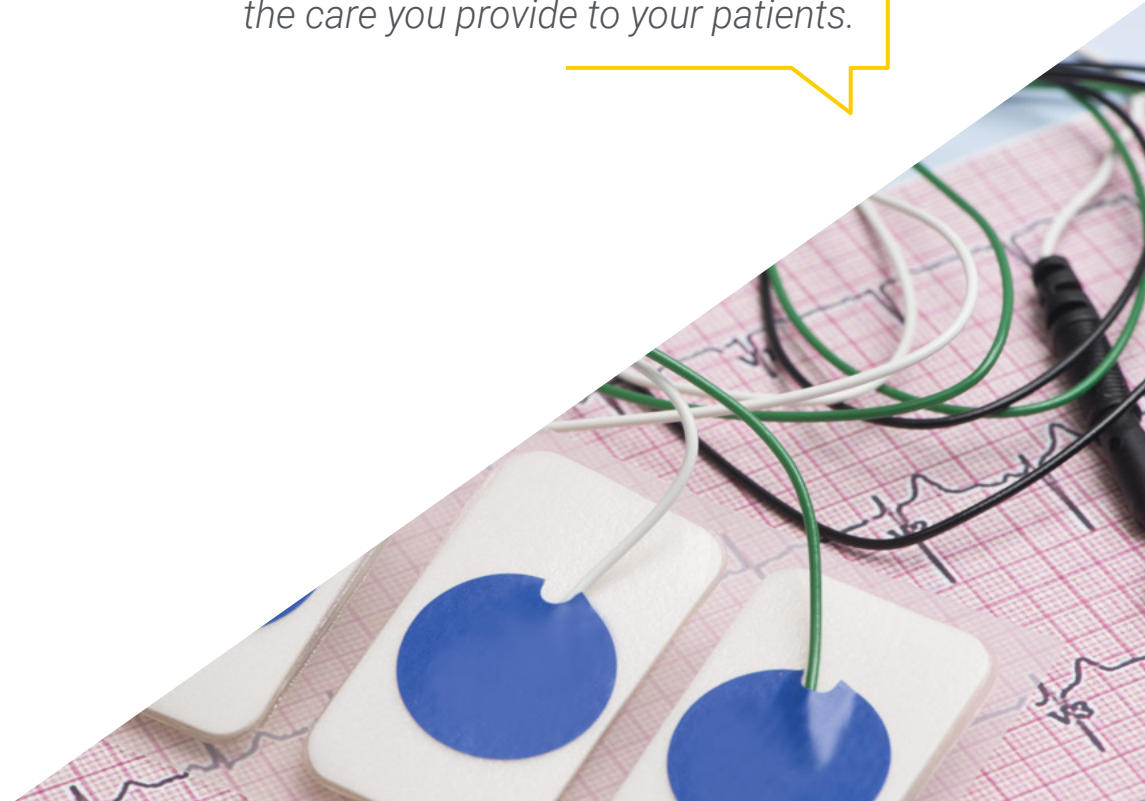
The program features a faculty of professionals from the fields of heart failure, cardiogenic shock, and acute coronary syndrome, who share their professional experience in this training, along with renowned specialists from leading scientific societies.

Thanks to its multimedia content, developed with the latest educational technology, professionals will benefit from situated and contextual learning—simulated environments designed to provide immersive learning experiences that prepare them for real-life situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. To support this, the physician will benefit from an innovative interactive video system developed by recognized experts in the field of heart failure, cardiogenic shock, and acute coronary syndrome, all with significant teaching experience.

Increase your decision-making confidence by updating your knowledge through this specialist course.

Take advantage of the opportunity to learn about the latest advancements in heart failure, cardiogenic shock, and acute coronary syndrome, and improve the care you provide to your patients.



02 Objectives

The main objective of the Postgraduate Diploma in Heart Failure, Cardiogenic Shock, and Acute Coronary Syndrome is to facilitate the physician's approach to all types of patients at risk of severe toxicological conditions or acute poisoning.



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This Postgraduate Diploma is designed to help you update your knowledge in heart failure, cardiogenic shock, and acute coronary syndrome, using the latest educational technology to contribute to quality and safety in decision-making”



General Objectives

- Handle with ease the diagnostic arsenal available in a tertiary center for the management of critically ill cardiovascular patients
- Identify patients in a serious or potentially serious short-term situation due to cardiovascular problems
- Explain the treatment indications and the therapy options in critical cardiovascular patients
- Lead a group attending to urgent or emergency situations caused by acute cardiovascular problems and guide fellow colleagues in the treatment of critical patients





Specific Objectives

Module 1. Heart Failure and Cardiogenic Shock

- ♦ Explain the anatomical and functional alterations present in heart failure
- ♦ Explain the echocardiographic manifestations corresponding to these pathophysiological alterations
- ♦ Correlate the metabolic alterations produced in heart failure and the influence that medical treatment has on them

Module 2. Acute Coronary Syndrome (ACS) in Emergencies

- ♦ Describe the pathophysiological and anatomical alterations in coronary circulation which leads to the appearance and clinical manifestation of ischemic heart disease
- ♦ Explain the recommendations collected in clinical practice guides in relation to the treatment of acute coronary syndrome
- ♦ Use the available resources in a way that guarantees continuous self-learning and periodically bringing knowledge in this area up to date
- ♦ Identify the possible complications in the context of acute coronary syndrome



Take advantage of the opportunity and take the step to update yourself on the latest advancements in heart failure, cardiogenic shock, and acute coronary syndrome"

03

Course Management

The program features a faculty of leading specialists in heart failure, cardiogenic shock, acute coronary syndrome, and other related fields, who contribute their professional experience to this training. Additionally, other highly respected experts contribute to the design and development of the program, providing an interdisciplinary approach.





“

*Learn from renowned professionals
about the latest advancements in
heart failure, cardiogenic shock,
and acute coronary syndrome”*

Management



Dr. Rodríguez Muñoz, Daniel

- Specialist Cardiologist in Electrophysiology and Arrhythmias at Ramón y Cajal University Hospital
- PhD in Health Sciences, University of Alcalá
- Master's Degree in Pacemakers, Defibrillators and Resynchronization
- Master's Degree in Medical Education
- Master's Degree in Diagnostic and Therapeutic Cardiac Electrophysiology
- Fellow of the European Society of Cardiology (FESC)
- Member of the European Heart Rhythmia Association (EHRA)
- Member of the Spanish Society of Cardiology (SEC)
- Member of the Arrhythmia and Electrophysiology Section of the SEC



Dr. Zamorano Gómez, José Luis

- ♦ Head of the Cardiology Services. Ramón y Cajal University Hospital. Madrid
- ♦ Doctor of Medicine- Cum Laude
- ♦ Executive Management and Health Resources (ESADE, Madrid)
- ♦ National Qualification Professor of Medicine
- ♦ Member of the First European Echocardiography Accreditation Committee of the European Association of Echocardiography
- ♦ Honorary Fellow American Society of Echocardiography
- ♦ Chairman of the Clinical Guidelines Committee of the European Society of Cardiology
- ♦ Chairman National Cardiovascular Panel FIS, Instituto Carlos III
- ♦ Member of the Editorial Board of the Spanish Society of Cardiology Journal
- ♦ Member of the Editorial Board of the Journal of Echocardiography
- ♦ Member of the Editorial Board of the American Society of Echocardiography
- ♦ Member of International Relations Task Force of the American Society of Echocardiography
- ♦ Associate Editor of the European Heart Journal Cardiovascular Imaging
- ♦ Author of more than 20 books, more than 500 articles in scientific journals and more than 400 communication in National and International Conferences
- ♦ Impact Factor > 1500. IH 84. Citations > 40000

Faculty

Dr. Castillo Orive, Miguel

- ♦ Cardiology Specialist in the Hospitalization Unit and Cardio-Diabetes Unit at the Ramón y Cajal University Hospital

Dr. Sanmartín Fernández, Marcelo

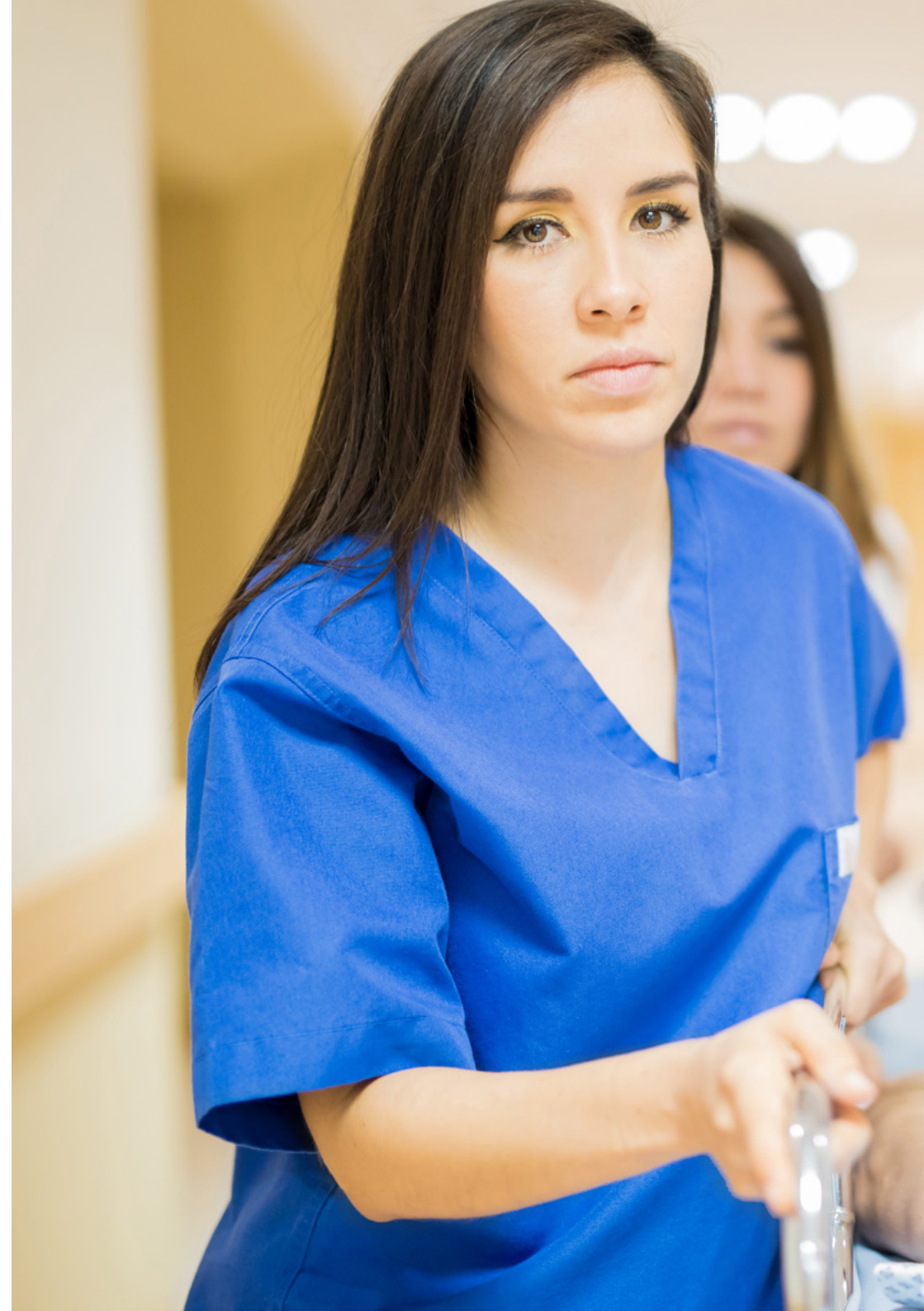
- ♦ Head of Acute Coronary Syndrome Section, Ramon and Cajal University Hospital, Madrid

Dr. Sionis Green, Alessandro

- ♦ Director of the Cardiac Intensive Care Unit, Cardiology Department, La Santa Creu and Sant Pau Hospital Barcelona

Dr. Fernández-Golfín Lobán, Covadonga

- ♦ Coordinator of the Cardiac Imaging Unit, Ramon y Cajal University Hospital. Madrid



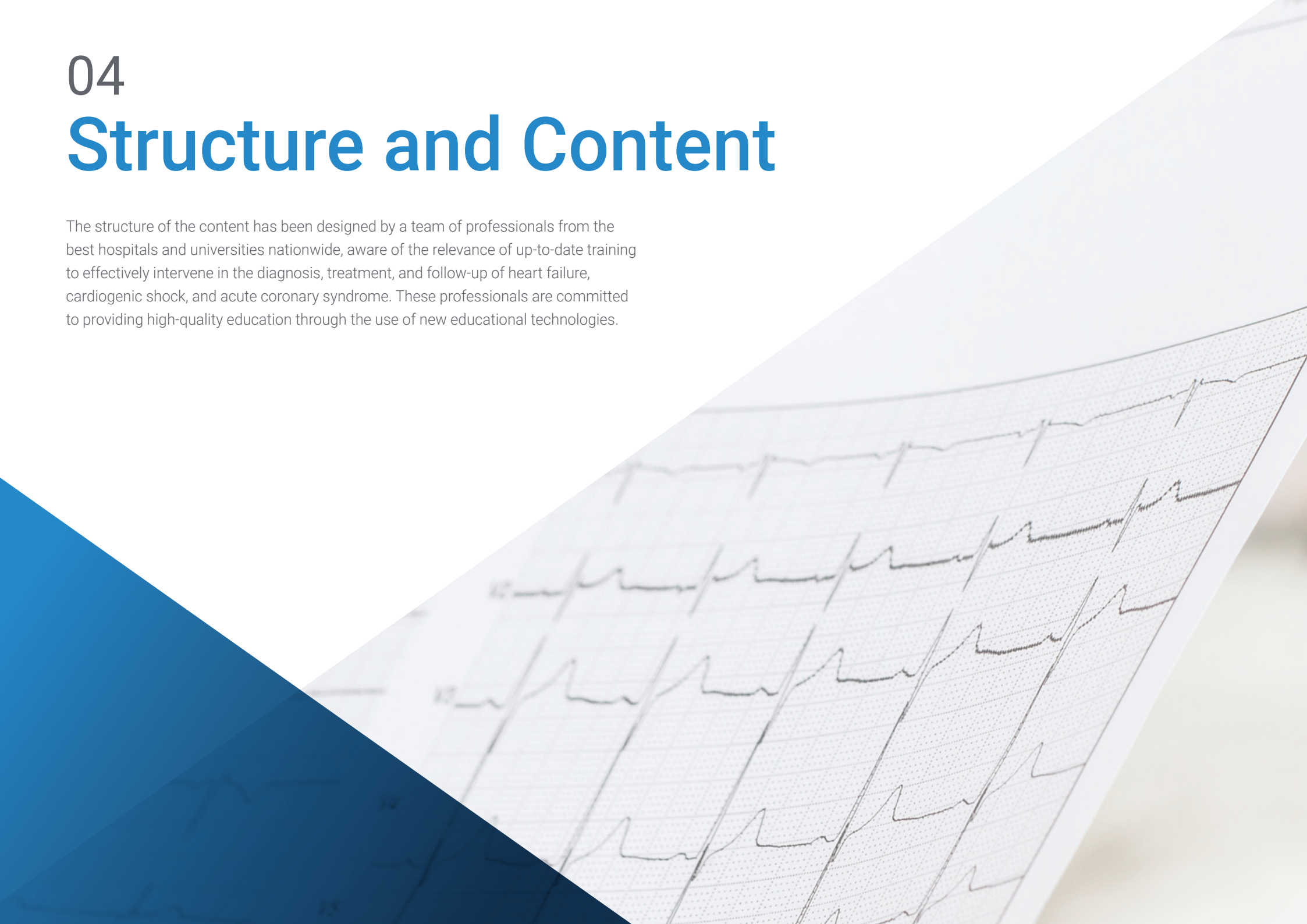
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Our teaching team will provide you with all their knowledge so that you are up to date with the latest information on the subject”

04

Structure and Content

The structure of the content has been designed by a team of professionals from the best hospitals and universities nationwide, aware of the relevance of up-to-date training to effectively intervene in the diagnosis, treatment, and follow-up of heart failure, cardiogenic shock, and acute coronary syndrome. These professionals are committed to providing high-quality education through the use of new educational technologies.



“

The Postgraduate Diploma in Heart Failure, Cardiogenic Shock, and Acute Coronary Syndrome contains the most complete and up-to-date scientific program on the market”

Module 1. Heart Failure and Cardiogenic Shock

- 1.1. Underlying Pathology in Heart Failure
 - 1.1.1. Structural Alterations.
 - 1.1.1.1. From Anatomy to Echocardiography
- 1.2. Physiological Alterations
 - 1.2.1. The Reason for Chronic Treatment and its Effect on Prognosis
- 1.3. Acute Pulmonary Edema.
 - 1.3.1. Diagnostic and Prognostic Tools
 - 1.3.2. Acute Treatment and Adjustments
- 1.4. Cardiogenic Shock
 - 1.4.1. Diagnostic and Prognostic Tools
 - 1.4.1.1. Differential Diagnosis for Shock
 - 1.4.2. Indication and Management of Vasoactive Drugs
 - 1.4.3. Indication and Management of Circulatory Assistances

Module 2. Acute Coronary Syndrome (ACS) in Emergencies

- 2.1. The Underlying Pathology in Acute Coronary Syndrome
 - 2.1.1. Structural Alterations.
 - 2.1.1.1. Ischemic Heart Disease
 - 2.1.2. Acute Coronary Syndrome without Evidence of Coronary Lesions
 - 2.1.2.1. The Reason for Chronic Treatment and its Effect on Prognosis
- 2.2. Non-ST-Segment-Elevation in ACS
 - 2.2.1. Acute Management
 - 2.2.1.1. Diagnosis
 - 2.2.1.2. Treatment in the First 24 Hours
- 2.3. Expected Complications and Chronic Treatment in NSTEMI (Non-ST-Elevation Myocardial Infarction)
- 2.4. ST-Segment-Elevation Acute Coronary Syndrome (ST-Elevation ACS)
 - 2.4.1. Acute Management
 - 2.4.1.1. Diagnosis
 - 2.4.1.2. Treatment in the First 24 Hours
 - 2.4.2. Expected Complications and Chronic Treatment





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A unique, essential, and decisive learning experience to enhance your professional development”

05 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



“

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”

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 assess 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.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



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.

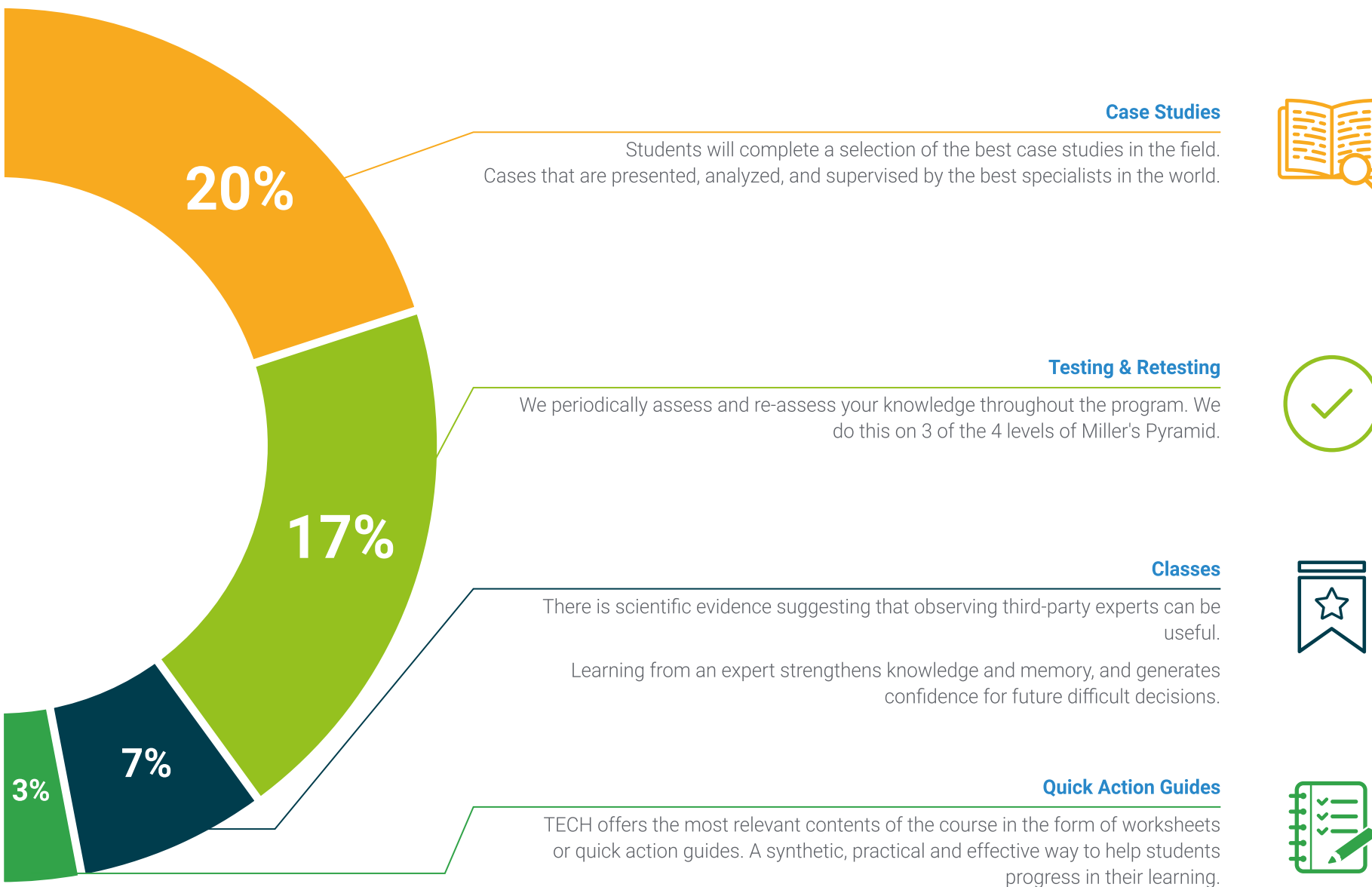
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





06 Certificate

The Postgraduate Diploma in Heart Failure, Cardiogenic Shock, and Acute Coronary Syndrome guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Diploma issued by TECH Global University.



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Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This private qualification will allow you to obtain a diploma for the **Postgraduate Diploma in Heart Failure, Cardiogenic Shock, and Acute Coronary Syndrome** endorsed by TECH Global University, the world's largest online university.

TECH Global University, is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

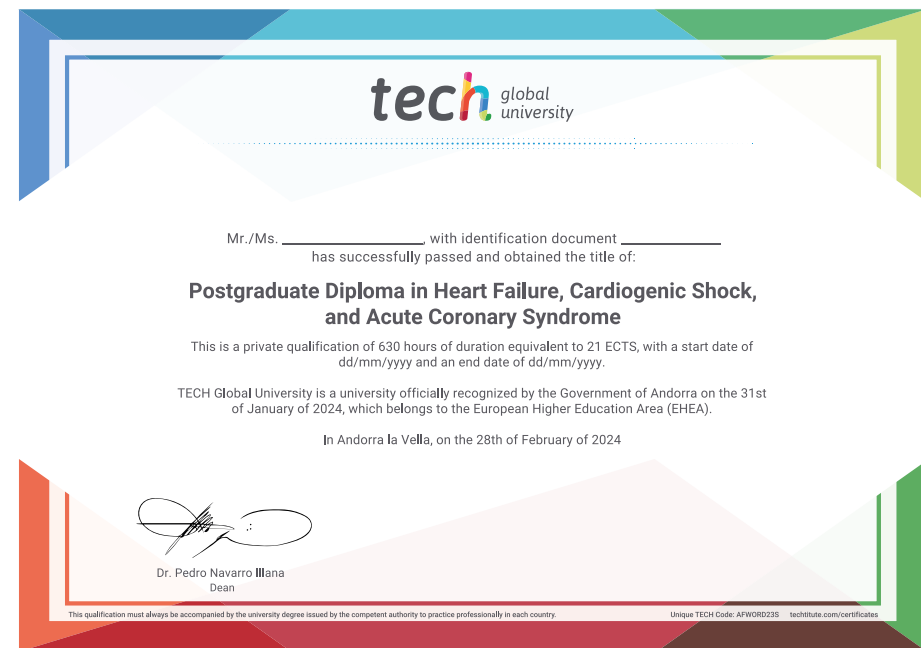
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Heart Failure, Cardiogenic Shock, and Acute Coronary Syndrome**

Modality: **online**

Duration: **6 months**

Accreditation: **21 ECTS**





Postgraduate Diploma
Heart Failure, Cardiogenic
Shock, and Acute
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- » Modality: online
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Postgraduate Diploma

Heart Failure, Cardiogenic Shock,
and Acute Coronary Syndrome