

# Postgraduate Certificate

## Arrhythmic Syndromes, Sudden Death and Channelopathies





## Postgraduate Certificate Arrhythmic Syndromes, Sudden Death and Channelopathies

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/arrhythmic-syndromes-sudden-death-channelopathies](http://www.techtute.com/us/medicine/postgraduate-certificate/arrhythmic-syndromes-sudden-death-channelopathies)

# 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

Certificate

---

*p. 28*

# 01

# Introduction

The early risk, especially in the young population, of suffering fatal consequences derived from sudden death is an issue of great relevance in the field of Cardiology. The fact that this syndrome is hereditary has a great impact on families. With this program, specialists will be able to delve into the advances in pathophysiology, arrhythmic management and genetic involvement in its appearance, which will allow them to work more in the prevention and treatment of this pathology. In a comfortable 100% online format, a complete program is presented with which you will expand your knowledge about this syndrome, from the hand of a group of experts in the sector.

06:35:07

06:35:08



“

*With this 100% online course, led by experts in Cardiology, you will learn more about sudden death and channelopathies"*

Sudden death is one of the cardiac problems that most worries specialists and family members. Its low probability of prevention and control causes many deaths around the world every year, being more shocking its occurrence in young and healthy population. As they show no previous symptoms and occur suddenly, in many cases, despite immediate medical attention, the fatal outcome occurs quickly and with no margin for action by specialists.

Continuing advances in pathophysiology and arrhythmic management have determined that there is a genetic implication in its appearance, allowing cardiologists to work increasingly better and with greater probability of success in the prevention and treatment of this pathology.

This Postgraduate Certificate in Arrhythmic Syndromes, Sudden Death and Channelopathies responds to the demand from specialists for a program focused on the most relevant aspects related to this cardiac disease. During program, the cardiologist will be able to delve into the concept of channelopathy, focusing on the most frequent and its syndromes, although another section will also be dedicated to those that are less likely to appear. Finally, it will delve into the important role of genetics in this area and describe the indications and characteristics of a family study.

The entire program will be accompanied by extra audiovisual material, which will not only allow the graduates to better contextualize the information, but will also give them the possibility to further expand their knowledge. All this in a convenient online format and with the best and most up-to-date content, selected by a group of experts in the sector who will also be available to the specialist to tutor this academic experience.

This **Postgraduate Certificate in Arrhythmic Syndromes, Sudden Death and Channelopathies** 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



*An up-to-date program in cardiology medicine, designed and tutored by experts in the specialty"*

“

*Review the indications when carrying out a family study with this Postgraduate Certificate and update the concepts to carry it out”*

*Learn in depth about sudden cardiac death and expand your knowledge of its clinical management.*

*You will have all the content from the first day, so you can organize yourself at your own pace.*

The program includes, in its teaching staff, professionals from the sector who bring to this education the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning. In other words, a simulated environment that will provide immersive education programmed to prepare for real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



# 02 Objectives

Dealing with any subject related to medicine is complex and delicate. For that reason, in its commitment to offer the best education, TECH's main objective is to guarantee the quality and thoroughness of its syllabus. The university guarantees the graduates that complete this Diploma will not only provide them with the necessary concepts to perform with total confidence in terms of Arrhythmic Syndromes, Sudden Death and Chanelopathies, but will also develop a more critical and professional aptitude.







“

*If your goal is to be able to handle the terms that allow you to better understand sudden death, this Postgraduate Certificate is the solution”*



## General Objectives

- ◆ Update general knowledge as well as the most innovative aspects of cardiological processes involving cardiac rhythm disorders
- ◆ Delve into the clinical management and indications of the different procedures performed for the diagnosis and treatment of these cardiac conditions
- ◆ Delve into the diagnosis and treatment of arrhythmias based on clinical and electrocardiographic aspects, as well as invasive techniques and electrophysiological studies
- ◆ Broaden knowledge in the operation, monitoring and implantation technique of the main implantable devices used for the treatment of arrhythmias
- ◆ Delve deeper into the problems in cardiac rhythm disorder that can arise across the spectrum of patients
- ◆ Achieve a mastery of the rhythm disorder problems present in the various scenarios faced by the cardiologists in their routine clinical practice





## Specific Objectives

---

- ◆ In-depth knowledge of sudden cardiac death: concept, epidemiology, causes, diagnostic study and clinical management
- ◆ Review the concept of channelopathies and their epidemiology
- ◆ Review the fundamental aspects of the most frequent channelopathies: Brugada Syndrome and Long QT Syndrome
- ◆ Learn the role of genetics in these entities. Review the indications for family studies and how to perform them

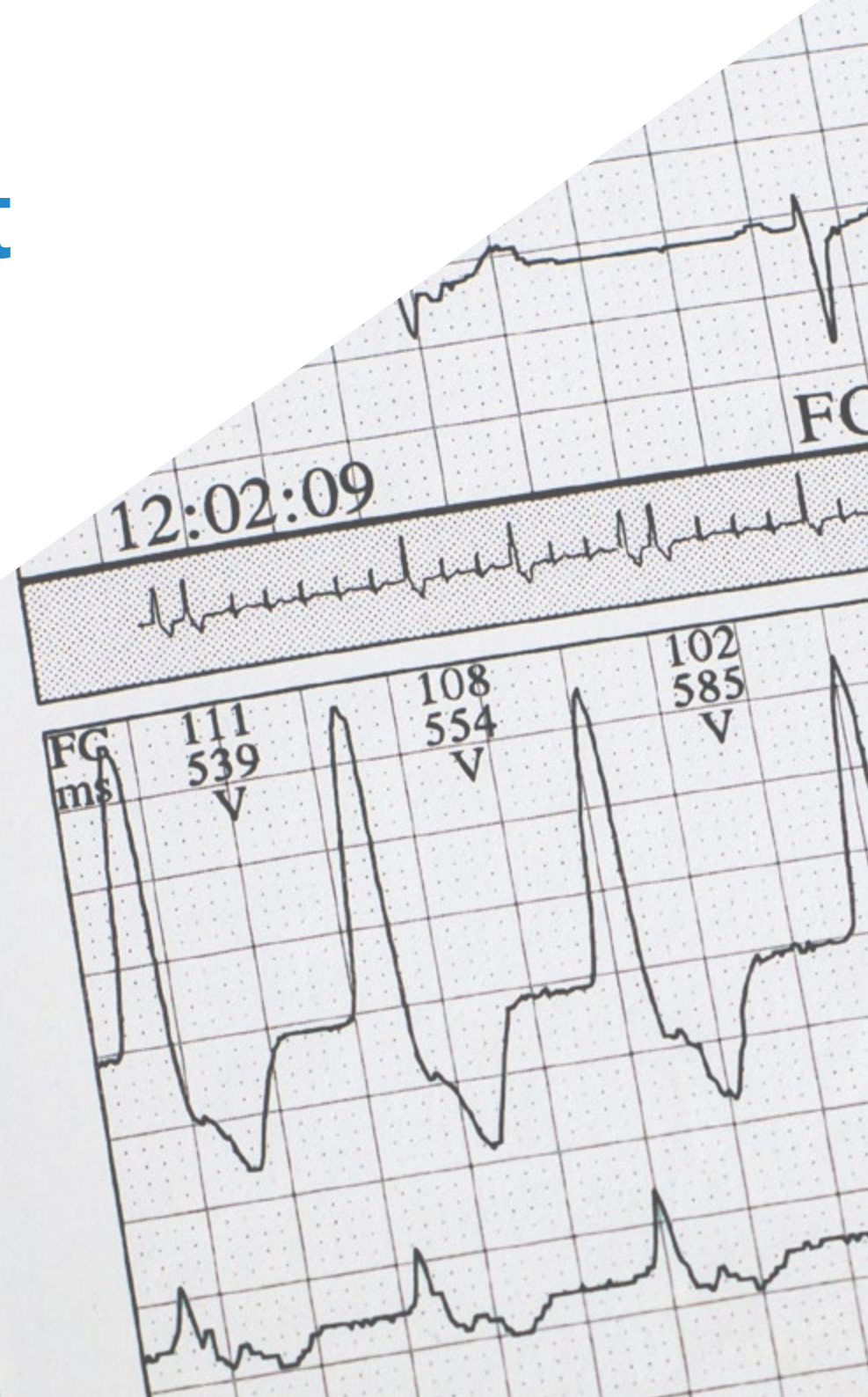


*In just 6 weeks you will see your own evolution and you will be able to recognize aspects of Brugada Syndrome and Long QT Syndrome without any problem”*

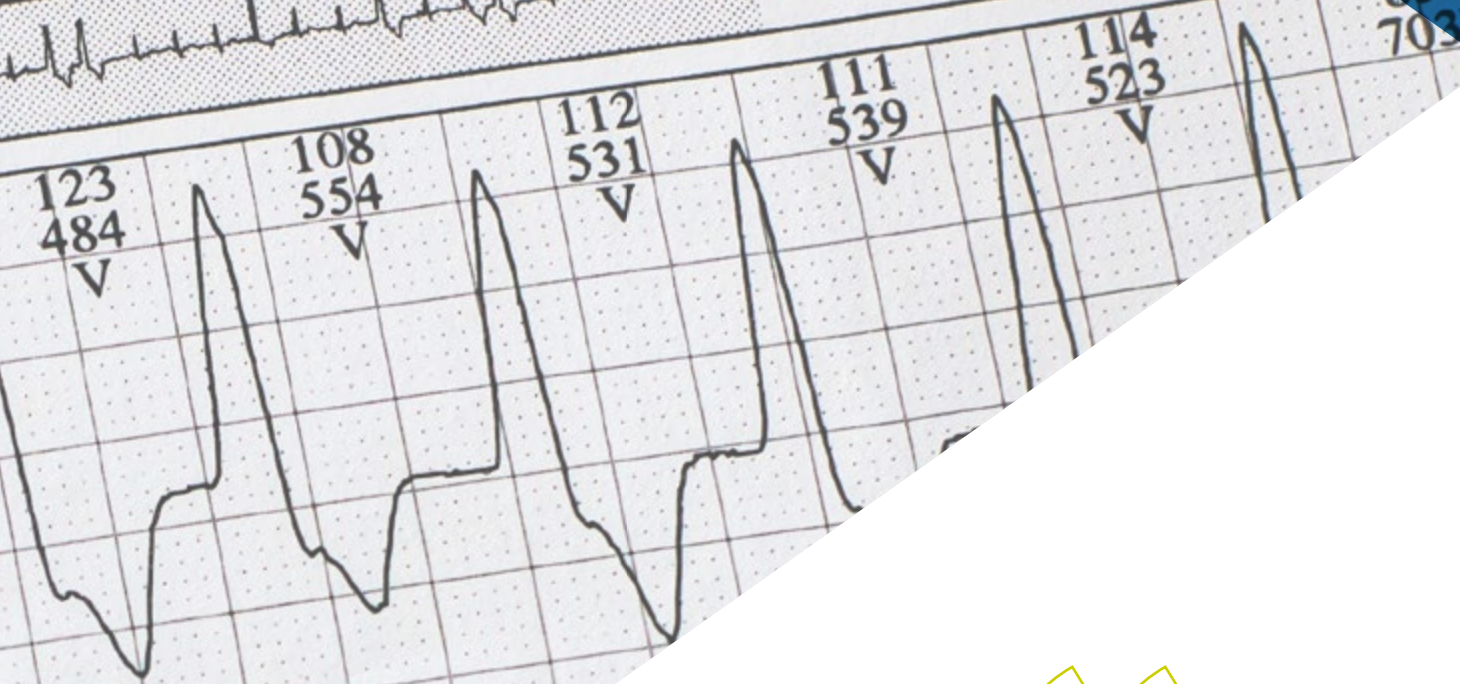
# 03

# Course Management

This Postgraduate Certificate arises not only from the demand of the sector, but also from the collaboration with a group of specialists and experts in Cardiology. During the 6 weeks of the program, graduates will have access to personalized tutorials that will not only allow them to resolve any doubts that may arise during the course, but also to discuss and share their own opinions. In order to offer the most enriching experience, the teaching staff will also provide real clinical cases that will allow the specialist to contrast all the information.



(8-Segundos): 88



“

*What better way to expand your knowledge than with a group of faculty specialists in cardiac disorders?”*

## Management



### Dr. Jiménez Sánchez, Diego

- ◆ Assistant specialist in Cardiology at the University Hospital El Escorial
- ◆ Attending Doctor Specialist at Unit of the Puerta De Hierro University Hospital
- ◆ Degree in Medicine and Surgery from the Autonomous University of Madrid
- ◆ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ◆ Fellowship in electrophysiology at the Arrhythmia Unit of the Puerta de Hierro University Hospital
- ◆ University Master in Diagnostic and Therapeutic Cardiac Electrophysiology at San Pablo CEU University



### Dr. Vázquez López-Ibor, Jorge

- ◆ Assistant Cardiology Specialist at University Hospital El Escorial
- ◆ Assistant Cardiology Specialist at the Heart Failure Unit of the Puerta de Hierro Hospital
- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid
- ◆ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ◆ Theoretical and practical Master in Critical and Advanced Heart Failure (MICCA) at the Gregorio Marañón Hospital
- ◆ Theoretical and practical training in Cardiovascular Research at the National Center for Cardiovascular Research (CNIC)
- ◆ Fellowship in Advanced Heart Failure, Heart Transplantation and Pulmonary Hypertension at the Puerta de Hierro University Hospital

**Dr. Castro Urda, Víctor**

- ◆ Assistant Specialist in the Arrhythmia Unit of the Cardiology Service of the Puerta de Hierro Hospital
- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid
- ◆ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ◆ Internship at the Electrophysiology and Cardiology Department of the Hospital UZ Brussel, Belgium
- ◆ Master's Degree in Diagnostic and Therapeutic Cardiac Electrophysiology at the Complutense University of Madrid

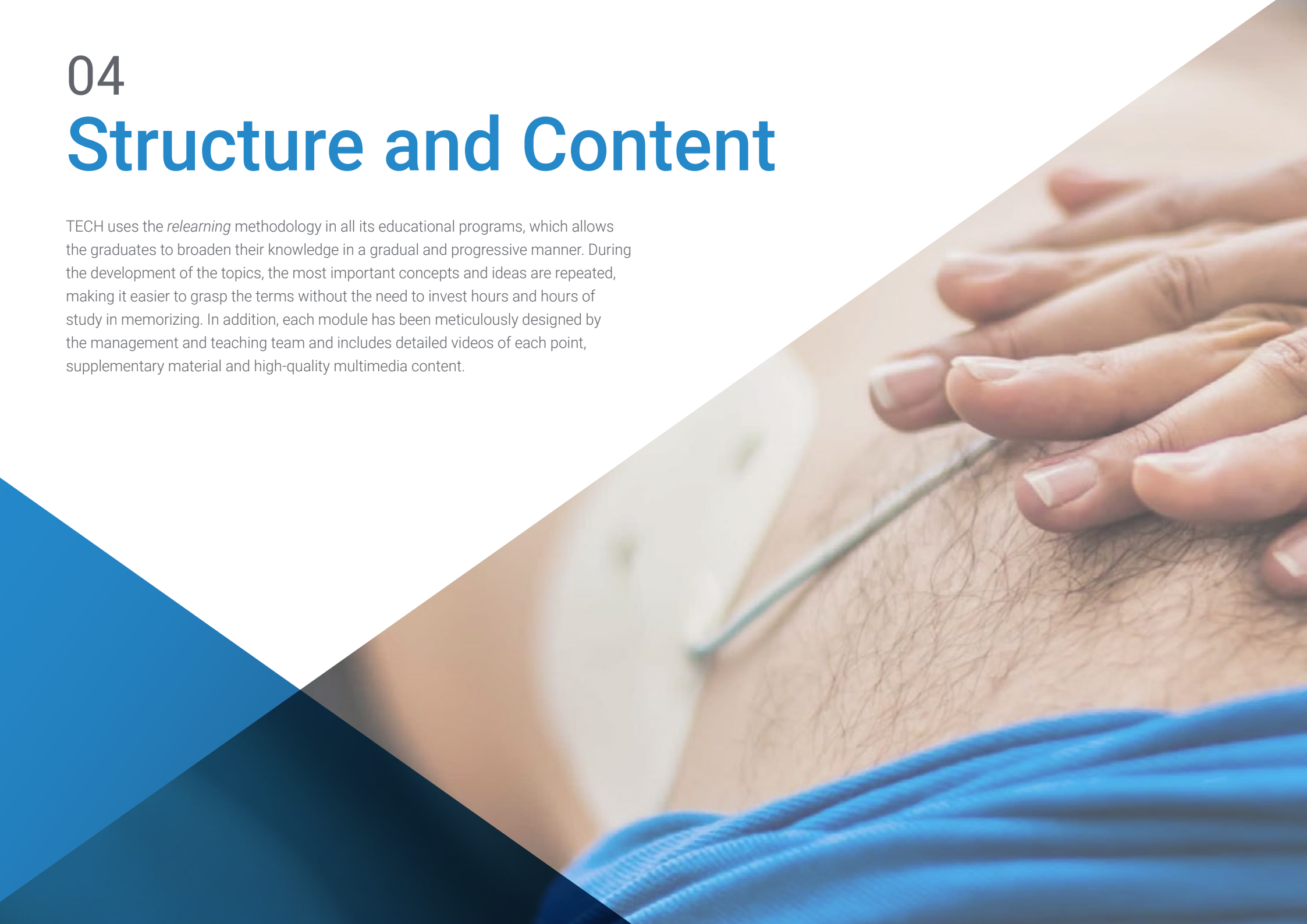
**Professors****Dr. Toquero Ramos, Jorge**

- ◆ Assistant Specialist in the Arrhythmia Unit of the Cardiology Service of the Puerta de Hierro Hospital
- ◆ Graduate in Medicine and Surgery from the University of Valladolid
- ◆ Doctor cum laude in Medicine from the Autonomous University of Madrid
- ◆ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ◆ Fellowship in Clinical Electrophysiology at the Arrhythmia Unit of the Center
- ◆ Cardiovascular at OLV Aalst Hospital, Belgium
- ◆ Master in Diagnostic and Therapeutic Cardiac Electrophysiology at the Gregorio Marañón Hospital and Complutense University of Madrid

# 04

## Structure and Content

TECH uses the *relearning* methodology in all its educational programs, which allows the graduates to broaden their knowledge in a gradual and progressive manner. During the development of the topics, the most important concepts and ideas are repeated, making it easier to grasp the terms without the need to invest hours and hours of study in memorizing. In addition, each module has been meticulously designed by the management and teaching team and includes detailed videos of each point, supplementary material and high-quality multimedia content.





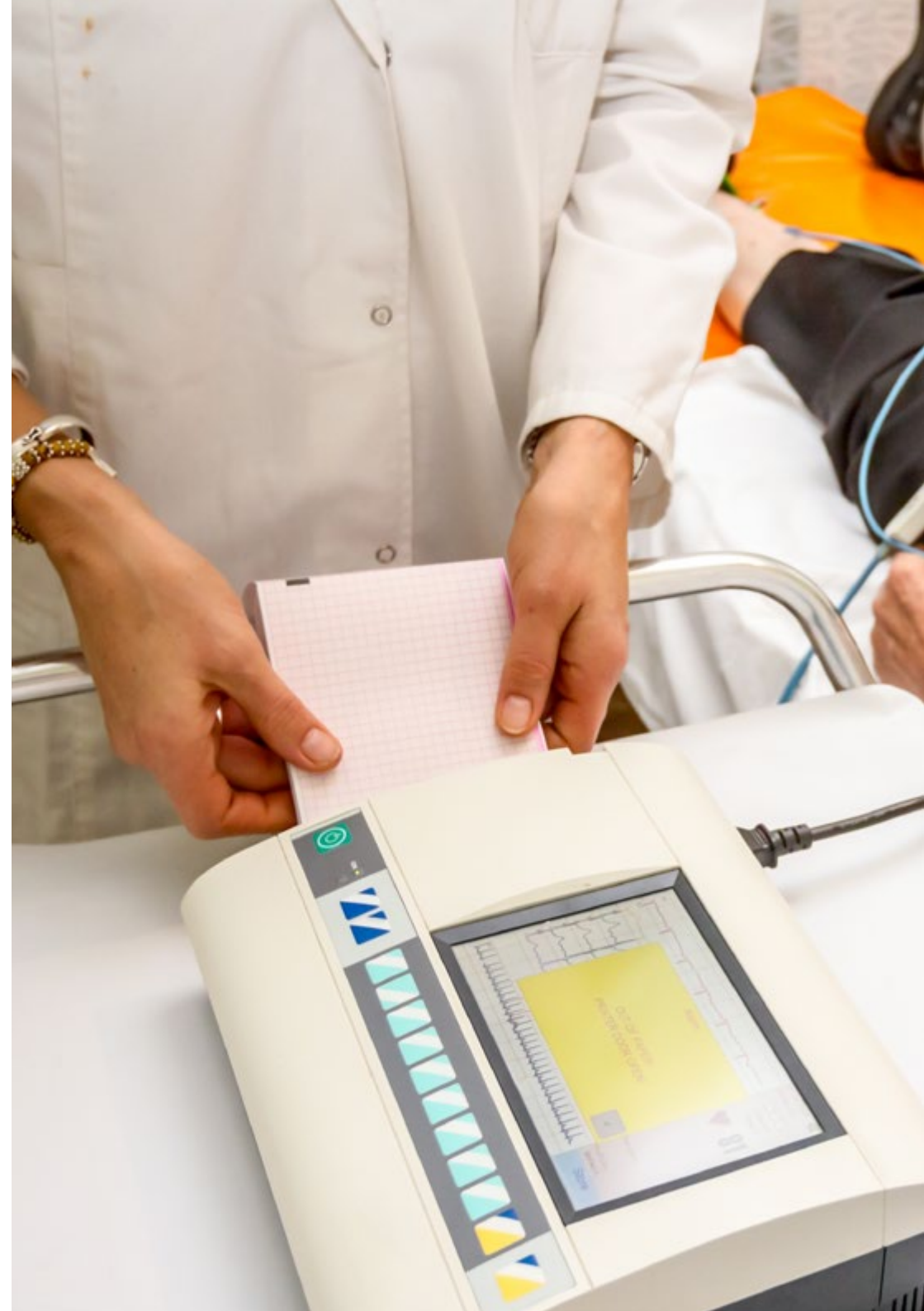


“

*Make a difference and extend each topic in a personalized way with the supplementary material included in each lesson"*

## Module 1. Arrhythmic Syndromes, Sudden Cardiac Death and Channelopathies

- 1.1. Sudden Cardiac Death
  - 1.1.1. Concept and Epidemiology of Sudden Cardiac Death.
  - 1.1.2. Causes of Sudden Cardiac Death
- 1.2. Sudden Cardiac Death
  - 1.2.1. Diagnostic Study after a Recovered Cardiac Arrest
  - 1.2.2. Clinical Management. Prevention
- 1.3. Concept of Canalopathy. Epidemiology
- 1.4. Brugada Syndrome.
  - 1.4.1. Indications for Electrophysiological Study
  - 1.4.2. Indications for ICD
  - 1.4.3. Medical treatment
- 1.5. Long QT Syndrome.
  - 1.5.1. Indications for ICD
  - 1.5.2. Medical treatment
- 1.6. Short QT Syndrome
  - 1.6.1. Indications for ICD
  - 1.6.2. Medical treatment
- 1.7. Early Repolarization and PTVC
  - 1.7.1. Indications for ICD
  - 1.7.2. Medical treatment
- 1.8. The Importance of Genetics
  - 1.8.1. Family Studies





“*By choosing TECH you will be investing in the best current curriculum and a program that will make you stand out among the specialists”*

# 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. 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:

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 Arrhythmic Syndromes, Sudden Death and Channelopathies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.





“

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

This program will allow you to obtain your **Postgraduate Certificate in Arrhythmic Syndromes, Sudden Death and Channelopathies** 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** title 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 Certificate in Arrhythmic Syndromes, Sudden Death and Channelopathies**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

personalized service innovation

knowledge present

online training

development languages

virtual classroom

**tech** global  
university

## Postgraduate Certificate

Arrhythmic Syndromes,  
Sudden Death and  
Channelopathies

- › Modality: online
- › Duration: 6 weeks
- › Certificate: TECH Global University
- › Credits: 6 ECTS
- › Schedule: at your own pace
- › Exams: online

# Postgraduate Certificate

Arrhythmic Syndromes, Sudden  
Death and Channelopathies