## Postgraduate Certificate Arrhythmias and Atrial Fibrillation



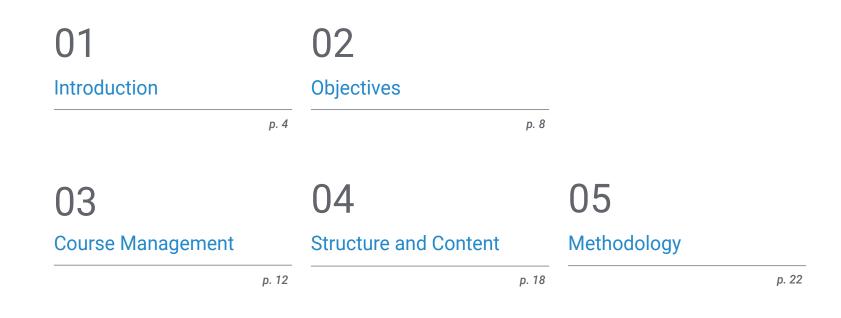


## **Postgraduate Certificate** Arrhythmias and Atrial Fibrillation

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

Website: www.techtitute.com/us/medicine/postgraduate-certificate/arrhythmias-atrial-fibrillation

## Index



06 Certificate

## 01 Introduction

Atrial fibrillation is the most common arrhythmia in the world. The seriousness of its diagnosis is of concern to patients, but also to cardiologists, since lack of knowledge of the most effective techniques or the treatments with the best results could lead to a fatal outcome. That is why TECH has prepared this complete program with which, in a short time, the specialist will be able to review, revise and delve into the main clinical aspects to be taken into account when diagnosing Atrial Fibrillation. In addition, its online format will allow you to combine your work life with the completion of this program.

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Review the particularities of Atrial Fibrillation from wherever and whenever you want, and update in detail the treatment of this arrhythmia from prevention to clinical management"

## tech 06 | Presentation

Among the different types of arrhythmias that exist, Atrial Fibrillation tops the list of cases of all diseases in most countries around the world. The high mortality linked to the possibility of suffering a cerebral infarction makes diagnosing and treating this pathology a complex task for cardiologists. Fortunately, every year more and more advances are being made in the cardiac field, bringing new techniques and treatments and allowing specialists to extend the life of their patients.

Due to the amount of information available today, and the limited time available to specialists, TECH has decided to launch this Postgraduate Certificate which not only synthesizes the most relevant ideas related to Atrial Fibrillation, but also allows the graduate to review and delve deeper into concepts such as the approach to the initial diagnosis and recognition of major clinical aspects.

With a program designed by cardiologists with extensive experience in the sector, this program will provide specialists with a real vision, in line with the cases they will have to work with in their practice. In other words, this is a unique opportunity to broaden your knowledge under the guidance of experts in the sector, who will accompany and guide you through the process.

Through an innovative pedagogy TECH offers this Postgraduate Certificate as a tool with which specialists can improve their professional career. With a 100% online, practical, modern and quality format, graduates will have access to the entire content from the first moment, which will allow them to set their own study guidelines.

This **Postgraduate Certificate in Arrhythmias and Atrial Fibrillation** 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

Among the additional content offered by TECH, you will find real clinical cases that will provide you with a complete professional perspective"

### Introduction | 07 tech

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Find in this Postgraduate Certificate the answer to all your questions about Atrial Fibrillation. Because if it does not appear in the syllabus, the teaching team will help you to solve your doubts"

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.

180 hours of quality content, designed by experts in Cardiology and adapted to the best teaching methodology.

> A review from the prevention of thromboembolism to the treatment strategy.

# 02 **Objectives**

Since Atrial Fibrillation is the most frequent arrhythmia, it was necessary for it to be included in TECH's academic offerings. Based on this, the objective of this program is to serve as a guide for the specialist in the process of updating concepts and expanding knowledge. Over 6 weeks, we will go through the general aspects related to Atrial Fibrillation and will proceed to delve into the most important concepts and the particularities of each section.

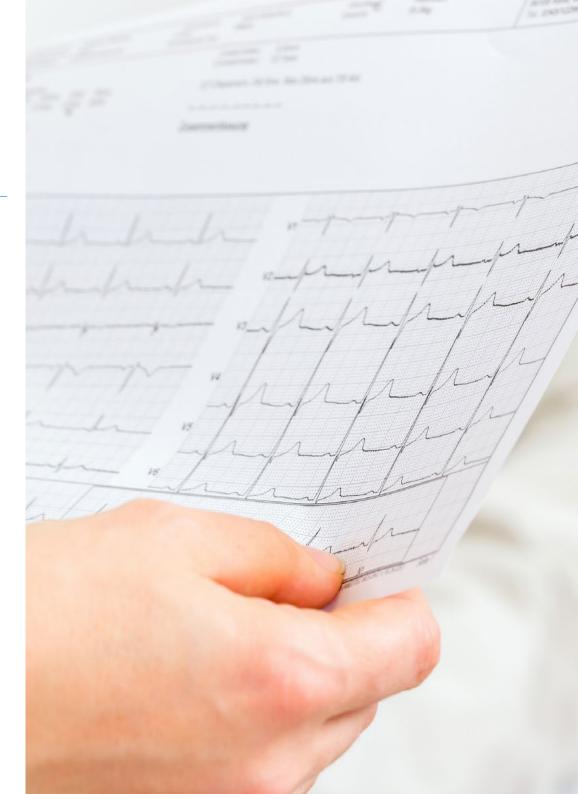
Don't miss the opportunity you've been waiting for. With TECH, achieving your academic goals is not difficult. You will have the tools you need to excel every day"

## tech 10 | Objectives



#### **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



## Objectives | 11 tech





### **Specific Objectives**

- Review the importance of Atrial Fibrillation: epidemiology and socioeconomic impact
- Review the main clinical aspects and initial diagnostic approach
- A detailed update on the complete management of Atrial Fibrillation, starting with the prevention of thromboembolism and continuing with the clinical management strategy
- Delve into the Atrial Fibrillation ablation technique: indication, evidence, technique and expected results. Review the future of this technique
- Review the particularities of AF in other specific contexts and anticoagulation therapy in the patient with ischemic heart disease



Delving into Atrial Fibrillation will strengthen your knowledge and add prestige to your career as a Cardiology specialist"

## 03 Course Management

Both the management and the teaching staff of this Postgraduate Certificate have been selected on the basis of three criteria: demonstrable experience in the sector, high communication and teaching skills and references from other expert specialists in Cardiology. That is why we present a group of highly qualified professionals who bring to this program more quality and prestige. They will be available to resolve any doubts that may arise during the training and will give their attention to the graduate whenever necessary.

With a teaching team like TECH's, quality is guaranteed. Their experience in the Cardiology sector makes this program an opportunity to update your knowledge with professionals and experts"

## tech 14 | Course Management

#### **International Guest Director**

Awarded the "Outstanding Patient Experience Award" on multiple occasions for his excellence in patient care, Dr. Konstantinos Aronis has become a prestigious **Cardiac Electrophysiologist**. In this sense, his clinical specialty is based on the **Invasive Management of Arrhythmias** in patients suffering from **Adult Congenital Heart Disease**.

He has developed his professional work in health institutions of international reference, including the Johns Hopkins Hospital in Maryland or the Beth Israel Deaconess Medical Center in Massachusetts. In this way, he has contributed to optimizing the quality of life of numerous individuals suffering from diseases ranging from Atrial Fibrillation or Ventricular Tachycardia to Structural Malformations of the heart. To do so, he has employed a variety of advanced technological tools such as Computational Modeling, Holder Monitors and even Magnetic Resonance Imaging.

Among his main contributions, he has promoted the **Complex Ablation Program for Congenital Heart Diseases**. This has consisted in the use of **computed tomography** images to create **3D printed models** of hearts with complicated anatomies, which has made it possible to plan medical interventions with greater precision and efficiency. It has also carried out the first **intraoperative excision** for **Atrial Tachycardia**, performing the procedure in real time during cardiac surgery. This innovation made it possible to address cardiac rhythm disturbances that could not be treated conventionally without damaging nearby critical structures.

On the other hand, he balances this work with his role as a **Clinical Researcher** in Cardiac Electrophysiology. In fact, he has published numerous **scientific articles** in high-impact specialized journals. His clinical findings have contributed to the advancement of the knowledge of health professionals in areas such as **Atrial Fibrillation**, **Resynchronization** therapies or personalized **Cardiac Prototypes**.



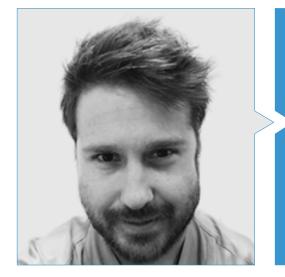
## Dr. Aronis, Konstantinos

- Physician at Johns Hopkins Hospital of Maryland, United States
- Cardiovascular Disease and Clinical Cardiac Electrophysiology Investigator at Johns Hopkins Hospital
- Translational Investigator at Beth Israel Deaconess Medical Center, Massachusetts
- Internal Medicine Residency at Boston University Medical Center, Massachusetts
- Internship in Computational Electrophysiology at the Institute of Computational Medicine at Johns Hopkins Hospital
- Doctorate in Internal Medicine, University of Patras
- Degree in Medical Sciences from the University of Patras
- Member of:
- American College of Cardiology
- American Heart Association
- Heart Rhythm Society



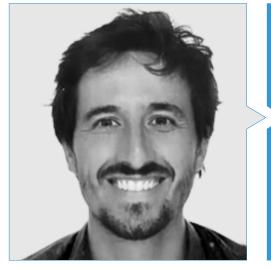
## tech 16 | Course Management

#### 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

### Course Management | 17 tech



#### 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. Sánchez García, Manuel

- Area Specialist in the Electrophysiology and Cardiac Stimulation Unit of the Cardiology Service of Salamanca University Health Care Complex
- Degree in Medicine and Surgery from the Complutense University of Madrid
- Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- Fellowship in Electrophysiology and Arrhythmias at the Arrhythmia Unit of the Puerta de Hierro University Hospital
- University Master in Diagnostic and Therapeutic Cardiac Electrophysiology at San Pablo CEU University

## 04 Structure and Content

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TECH has designed the content and structure of this course based on the most complete and up-to-date information available on Atrial Fibrillation. Behind each syllabus there is an exhaustive search and contrast process by the teaching team, which, in its commitment to offer the best educational program, has created a quality program, with theoretical content at the forefront and with real clinical cases taken from their own practices.



### tech 20 | Structure and Content

#### Module 1. Atrial Fibrillation

- 1.1. Importance of Atrial Fibrillation
  - 1.1.1. Epidemiology of Atrial Fibrillation
  - 1.1.2. Socioeconomic Impact of Atrial Fibrillation
- 1.2. Atrial Fibrillation in the Clinic
  - 1.2.1. Clinical Presentation and Symptomatology
  - 1.2.2. Initial Diagnostic Study
- 1.3. Assessment of Thromboembolic and Hemorrhagic Risk
  - 1.3.1. Anticoagulant Treatment. Clinical Evidence
  - 1.3.2. Direct Acting Anticoagulants
  - 1.3.3. Vitamin K Antagonists
  - 1.3.4. Auricle Closure
- 1.4. Clinical Management of Atrial Fibrillation
  - 1.4.1. Rate Control Strategy
  - 1.4.2. Rhythm Control Strategy
- 1.5. Atrial Fibrillation Ablation
  - 1.5.1. Indications
  - 1.5.2. Evidence of Efficacy
- 1.6. Atrial Fibrillation Ablation
  - 1.6.1. Atrial Fibrillation Ablation Techniques
  - 1.6.2. AF Ablation Results
  - 1.6.3. Possible Complications of AF Ablation
- 1.7. Monitoring after Atrial Fibrillation Ablation
- 1.8. Future Prospects for Atrial Fibrillation Ablation
- 1.9. AF in Specific Contexts: Postoperative Period, Intracranial Hemorrhage, Pregnancy, Athletes
- 1.10. Anticoagulant Therapy in Patients with Ischemic Heart Disease
- 1.11. Implications and Management of AHREs and Subclinical AF





## Structure and Content | 21 tech

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This qualification will give you the knowledge you need to keep up to date. All you have to do is decide when to start and how to organize yourself. We'll take care of the rest"

# 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.

Methodology | 23 ttech

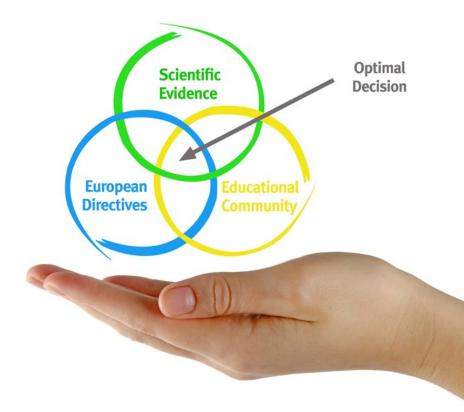
Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

## tech 24 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.

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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"

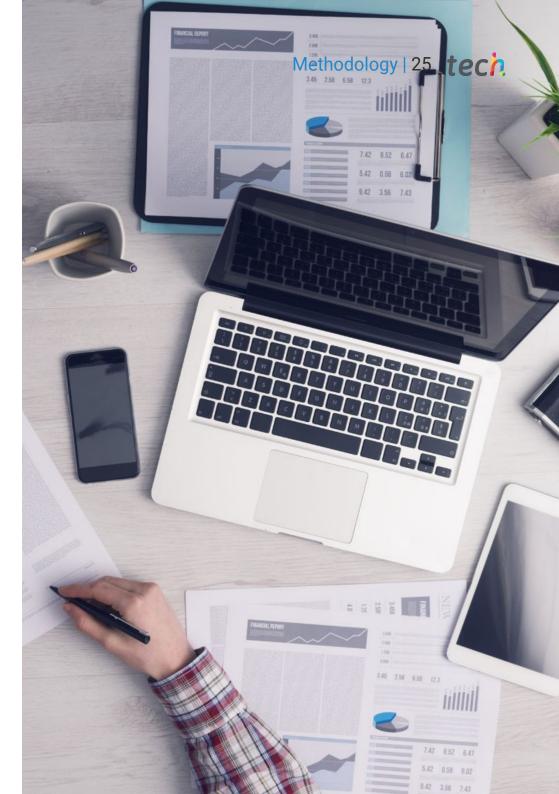
The effectiveness of the method is justified by four fundamental achievements:

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.



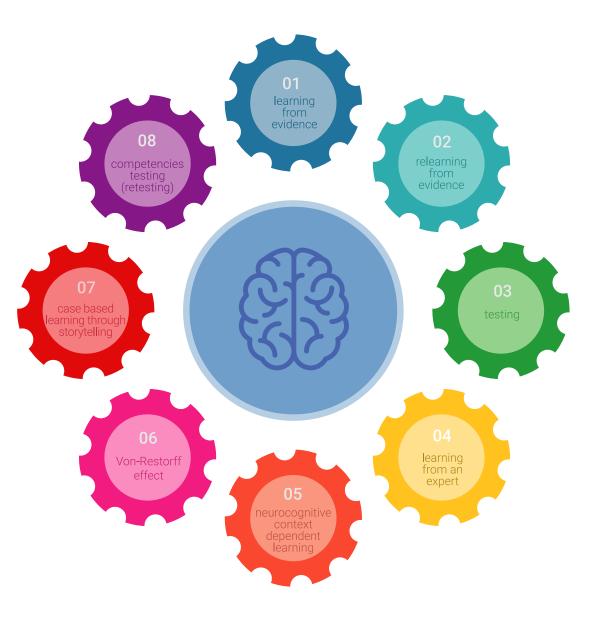
## tech 26 | Methodology

#### **Relearning Methodology**

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



### Methodology | 27 tech

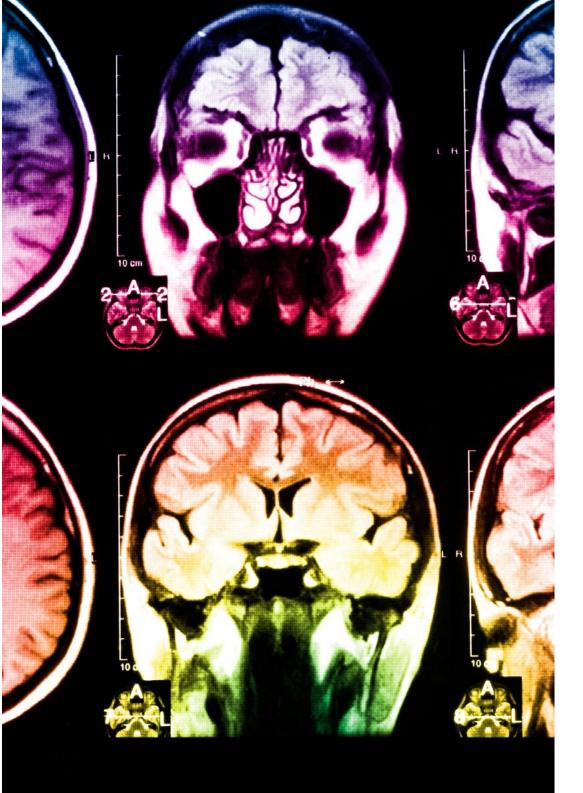
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



## tech 28 | Methodology

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

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These contents are then adapted in 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.

## Methodology | 29 tech



#### **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.

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#### **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.



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 Arrhythmias and Atrial Fibrillation 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"

## tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Arrhythmias and Atrial Fibrillation** 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 Arrhythmias and Atrial Fibrillation Modality: online Duration: 6 weeks Accreditation: 6 ECTS



tecn global university Postgraduate Certificate Arrhythmias and **Atrial Fibrillation** » Modality: online » Duration: 6 weeks » Certificate: TECH Global University » Credits: 6 ECTS » Schedule: at your own pace » Exams: online

## Postgraduate Certificate Arrhythmias and Atrial Fibrillation



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