

Postgraduate Certificate Arrhythmias and Heart Failure



Postgraduate Certificate Arrhythmias and Heart Failure

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

Website: www.techtute.com/us/medicine/postgraduate-certificate/arrhythmias-heart-failure

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01

Introduction

The social and health impact of arrhythmias and heart failure is nowadays one of the main concerns of specialists in this branch of cardiology. However, the scientific and technical development in the diagnosis and approach to these pathologies has been significant in recent decades. In that sense, specialists who closely follow these advances have a better chance of success when diagnosing their patients, and that is the reason for this program. The program, designed with the best content, the most up-to-date and modern information and with the ease of being 100% online, will allow you to keep up with the professional demand.



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Delve into the importance of the relationship between atrial fibrillation and heart failure, from its epidemiology to its prognostic implication"

This TECH Postgraduate Certificate aims to enable medical specialists to combine their professional and academic careers, so that they can keep abreast of advances in the field of arrhythmias and heart failure. The program, prepared by cardiology specialists with extensive experience in the field, stands out for its innovative content that includes not only a review of the most important aspects of cardiac rhythm disorders, but also includes a study of physiological stimulation therapies.

During the course of this program, the graduate will learn more about the relationship between atrial fibrillation and heart failure, from its epidemiology to its prognostic implication, and the importance of the choice of antiarrhythmic drugs and especially ablation. The program will also provide an update on the assessment of ventricular arrhythmias, with special emphasis on the role of genetics and nuclear magnetic resonance.

With this and all the information you will find in this educational program, the specialist will be able to define a new line of action, based on techniques that will increase their chances of success in the treatment of arrhythmias and heart failure. All this will allow you to update and expand your knowledge with the help of the best specialists, which will provide you with a different and possibly more effective vision of the subject.

A specific, complete, rigorous and quality online program with which you will be able to organize your own schedule. In addition, you will have the support of the teaching staff, who will be available to resolve any doubts and discuss the different issues that arise during the academic process.

This **Postgraduate Certificate in Arrhythmias and Heart Failure** 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



Make a difference with current and innovative knowledge. Stand out in the cardiology sector with this Postgraduate Certificate"

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Study this program from home, from the office or from wherever you want and whenever you want. Remember that TECH provides the content, but you set the time"

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.

Review, in 6 weeks, the importance of rhythm disorders in heart failure and update your personal vade mecum.

Learn more about the concept of Tachycardiomyopathy and learn about its diagnosis and pharmacological and electrophysiological treatment.



02 Objectives

Arrhythmias and heart failure are on cardiologists' agendas on a daily basis. The frequency with which these disorders appear, and the evolution of their treatment, obliges specialists to be constantly learning and updating their knowledge. Given that sometimes the professional's working life makes it difficult to fulfill this task, TECH's main objective is to offer the opportunity to study a program that meets the requirements of the specialty, with the convenience of being able to do so from anywhere and adapted to the needs of the student.



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Visualize your goals and trust TECH's methodology. You will be able to exceed your own expectations thanks to the reference content you will find in this program"



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

- ◆ Review the importance of rhythm disorders in heart failure
- ◆ Know in depth the importance of the AF-Heart Failure relationship, from its epidemiology to its prognostic implication
- ◆ Review the role of antiarrhythmic drugs, especially ablation, in the management of AF in patients with heart failure
- ◆ Update in the assessment of ventricular arrhythmias in heart failure, delving into the role of genetics and MRI
- ◆ Review the current indications for CRS therapy and other devices in HF
- ◆ Learn about the novel aspects of physiological stimulation therapies
- ◆ Review the concept of Tachycardiomyopathy with a broad approach, including its epidemiology, diagnosis and treatment, both pharmacological and electrophysiological



This TECH Postgraduate Certificate will not only allow you to update your knowledge, but you will be able to expand your knowledge in less time than you expect"

03

Course Management

This program will be directed by a group of cardiology specialists with extensive experience in leading centers. As could not be otherwise, the teaching staff will also be formed by professionals from the sector committed to teaching. Its commitment to sharing its knowledge and experience makes this program the perfect environment for the graduate to improve and broaden their skills, taking as a reference active physicians who are faced daily with the treatment of cardiac diseases.





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With TECH you are not only choosing the best online university in the world, but also the best teachers specialized in cardiology”

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, 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
- American College of Cardiology
- American Heart Association
- Heart Rhythm Society

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Thanks to TECH, you will be able to learn with the best professionals in the world”

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 in Diagnostic and Therapeutic Cardiac Electrophysiology at the Complutense University of Madrid

Professors**Dr. Cobo Marcos, Marta**

- ◆ 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
- ◆ Promoter and coordinator of the working group on Cardiorenal Syndrome and Treatment of Congestion in Heart Failure of the Heart Failure Association of the Spanish Society of Cardiology

Dr. García Magallón, Belén

- ◆ Fellow of the Heart Failure Unit in the Cardiology Service of the University Hospital Puerta de Hierro
- ◆ Residency in the specialty of Cardiology at the University Hospital of Guadalajara
- ◆ Graduated in Medicine at the Catholic University of Valencia San Vicente Mártir
- ◆ Master's Degree in Diagnostic Imaging in Cardiology at the Catholic University of Murcia

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



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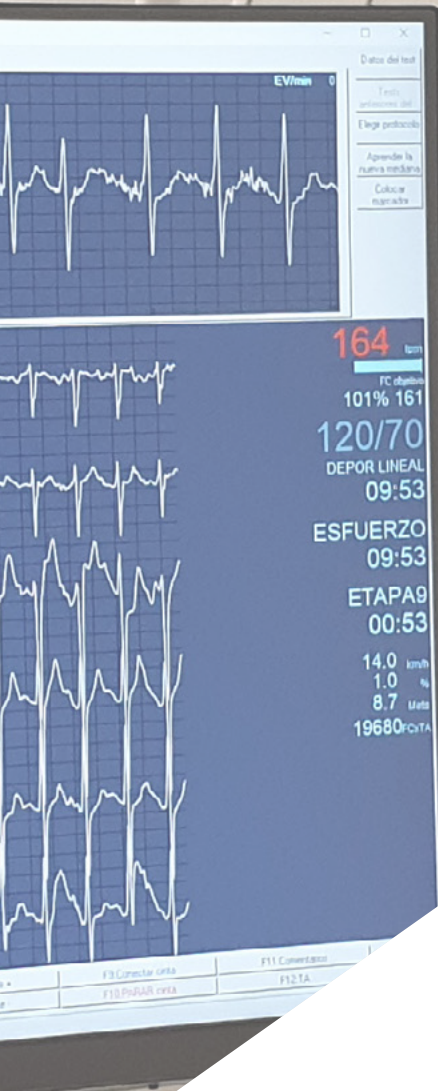
The leading professionals in the field have come together to offer you the most comprehensive knowledge in this field, so that you can develop with total guarantees of success"

04

Structure and Content

The structure of this Postgraduate Certificate has been designed based on the most up-to-date information on arrhythmias and heart failure. The teaching team itself has selected the content of the programming, adapting all the information to meet the standards of quality and commitment that characterize TECH. For this reason, students will find in this program a curriculum based on the importance of rhythm disorders in heart failure and in which they will not only have access to a complete theoretical content, but will also work with real practical cases throughout the course.





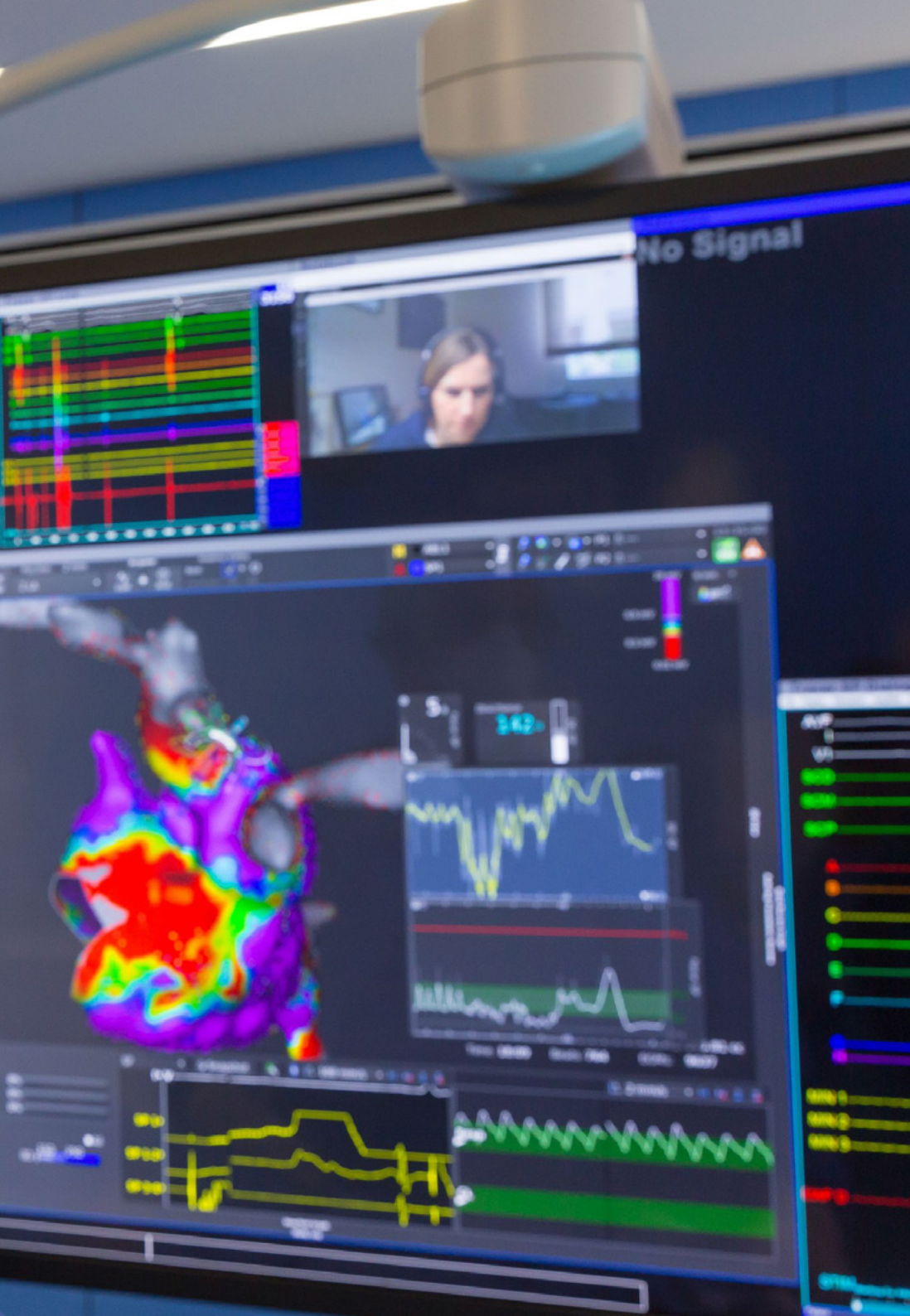
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Quality programming, designed by experts
and fully available from day one”

Module 1. Arrhythmias and Heart Failure

- 1.1. Importance of Rhythm Disorders in Heart Failure
- 1.2. AF and Heart Failure
 - 1.2.1. Epidemiology of AF in Heart Failure
 - 1.2.2. Prognostic Implication of the Presence of AF in Patients with Heart Failure
- 1.3. AF and Heart Failure. Role of Ablation and Antiarrhythmic Drugs
- 1.4. Risk Assessment of Ventricular Arrhythmias in HF
 - 1.4.1. Role of MRI
 - 1.4.2. Role of Genetics
- 1.5. Management of Ventricular Arrhythmias in Heart Failure
- 1.6. Indications for CRS Therapy and Other Devices in the Context of Heart Failure
 - 1.6.1. Conventional Resynchronizer
 - 1.6.2. Physiological Stimulation (Hisian and Left Bundle Branch)
- 1.7. Tachycardiomyopathy
 - 1.7.1. Concept and Epidemiology
 - 1.7.2. Diagnostic Study
- 1.8. Management of Patients with Tachycardiomyopathy
 - 1.8.1. Medical Treatment
 - 1.8.2. Indications and Ablation Approach
- 1.9. PM-Mediated Ventricular Dysfunction. Prevalence and Management
- 1.10. LBBB and Ventricular Dysfunction. Does Dyssynchronopathy Exist?





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Put your education in the hands of TECH and its professionals and reach your goals in a faster and more effective way"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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

At TECH we use the Case Method

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

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



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

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Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

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

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

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

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

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



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

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

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

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

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



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



Study Material

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

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06 Certificate

The Postgraduate Certificate in Arrhythmias and Heart Failure guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 **Postgraduate Certificate in Arrhythmias and Heart Failure** 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.

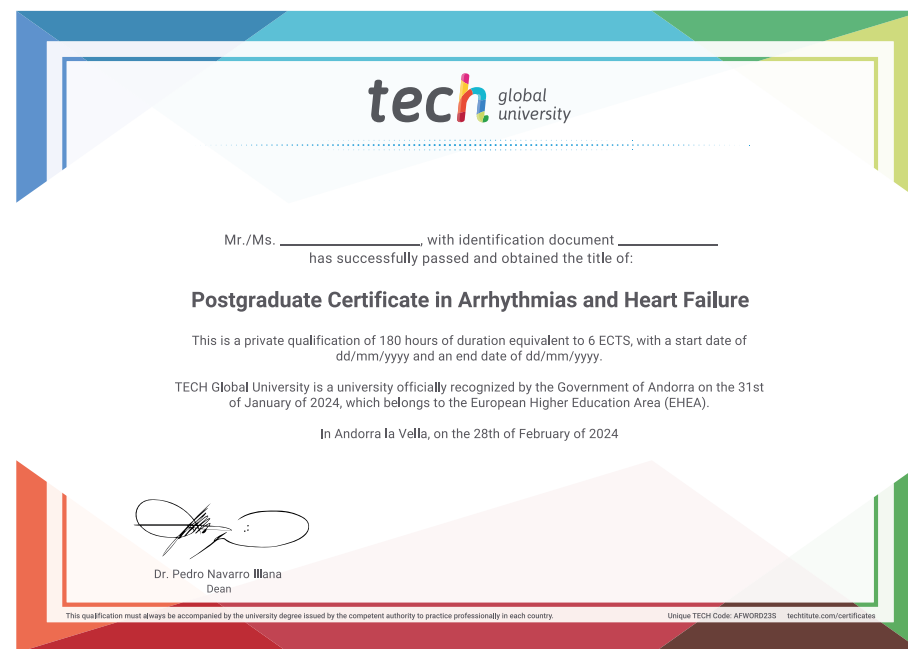
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Arrhythmias and Heart Failure**

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
development language
virtual classroom



Postgraduate Certificate
Arrhythmias and
Heart Failure

- » Modality: online
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- » Schedule: at your own pace
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Postgraduate Certificate Arrhythmias and Heart Failure

