

Hybrid Professional Master's Degree

Cardiac Arrhythmias





Hybrid Professional Master's Degree Cardiac Arrhythmias

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Website: www.techtitute.com/us/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-cardiac-arrhythmias

Index

01

Introduction

p. 4

02

Why Study this Hybrid
Professional Master's Degree?

p. 8

03

Objectives

p. 12

04

Skills

p. 18

05

Course Management

p. 22

06

Educational Plan

p. 30

07

Clinical Internship

p. 38

08

Where Can I Do the Clinical
Internship?

p. 44

09

Methodology

p. 50

10

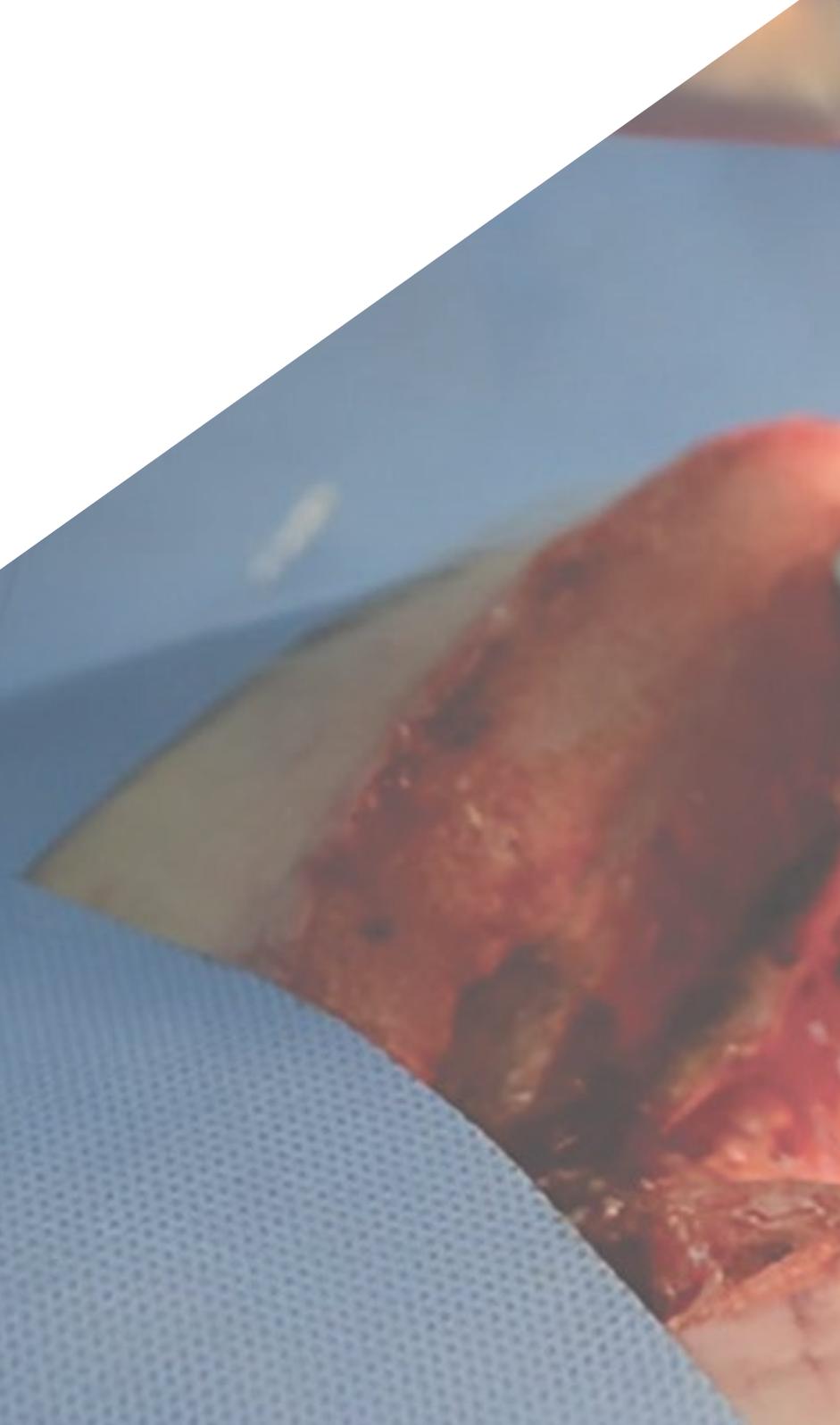
Certificate

p. 58

01

Introduction

Nowadays, a significant number of citizens suffer from heart functioning alterations. Many people take shortness of breath, weakness or discomfort in the chest as normal, ascribing it to a specific moment of stress or extreme tiredness. The truth is that it may be some type of cardiac arrhythmia that needs to be studied in depth to rule out any more serious pathology. This program contains an academic itinerary of 1,500 hours of updated and complete theoretical content that includes the most advanced therapeutic and diagnostic methods in the different types of Cardiac Arrhythmias. Moreover, it has a period of practice that will allow the specialist to check in situ all the mechanisms studied, with a team of experts in Cardiology.





“

This Hybrid Professional Master's Degree will show you all the advances in implantation techniques of devices such as pacemakers, ICDs and resynchronizers"

The latest studies reflect the importance of scientific advances such as genetic tests that allow the prevention of sudden cardiac death in population groups at high risk of arrhythmia. Their purpose is to identify the possible causes and probabilities of suffering from the disease, therefore facilitating the work of the specialist and improving the quality of life of individuals. That is why it is so important for the professional to be up to date with all the news and latest scientific findings.

In this program the professional will delve into the different studies and new diagnostic techniques in Bradyarrhythmias, Supraventricular Tachyarrhythmias, Ventricular Tachyarrhythmias, as well as Arrhythmias in other clinical contexts. Thanks to the development of a very complete academic itinerary, the specialist will be able to update on the mechanisms and clinical presentation of the patient, with the performance of complementary tests, therapeutic maneuvers and pharmacological treatment according to each case and the results of previous evaluations, in order to advance to the treatment at discharge.

It will undoubtedly be a unique experience, where during 1,500 hours of updating, the specialist will review 100% online the 10 theoretical modules that contain the most useful and common topics in daily practice to detect and treat Cardiac Arrhythmias. You will be able to complete this part from wherever you are thanks to the compatibility of the Virtual Campus with any device with Internet connection, and to the fact that the Relearning methodology provides flexibility and agility to the study and adjusts to your current dynamics.

In the same way, you will advance to the Internship once you finish this theoretical stage. There, the specialist will be able to work for 120 hours under the guidance of experts in Cardiology and share their knowledge in the care of real patients, applying the latest scientific evidence. Undoubtedly a unique opportunity for expansion and improvement of daily clinical practice.

This **Hybrid Professional Master's Degree in Cardiac Arrhythmias** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ More than 100 clinical cases presented by the health professional 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
- ♦ Knowledge of all that is involved in the assessment process, in order to be able to carry out the most effective specialized intervention as effectively as possible
- ♦ Development of practical activities on the most advanced and up-to-date diagnostic and therapeutic techniques
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Practical clinical guides on approaching different therapies
- ♦ With a special emphasis on evidence-based medicine and research methodologies in Cardiac Arrhythmias
- ♦ 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
- ♦ Furthermore, you will be able to carry out a clinical internship in one of the best medical centers

“

You will apply the most diverse procedures in cases of Cardiac Arrhythmias in a personalized way and with a team of experienced specialists”

In this proposed Hybrid Professional Master's Degree, of professionalizing character and blended learning modality, the program is aimed at updating medical professionals who develop their functions in the area of Cardiology and who require a high level of qualification. Thanks to its multimedia content elaborated with the latest educational technology, they will allow the health professional to obtain a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations.

Thanks to its multimedia content elaborated with the latest educational technology, they will allow the health professional to obtain a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real 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. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

This program will allow you to develop in modern environments and will provide you with the means to update your knowledge in the diagnosis and treatment of the different types of Cardiac Arrhythmias.

Update your knowledge through the Hybrid Professional Master's Degree in Cardiac Arrhythmias, in a practical way and adapted to your needs.



02

Why Study this Hybrid Professional Master's Degree?

The health professional must be constantly updated on the latest scientific evidence to treat their patients in a modern and effective way. This Hybrid Professional Master's Degree offers the opportunity to interact with excellent physicians specialized in Cardiology and with extensive experience in the treatment and diagnosis of Tachycardias, Bradyarrhythmias, Arrhythmic Syndromes, Sudden Death and Canalopathies. During 1,620 hours, including 3 weeks of internship, he will develop the most specialized concepts and mechanisms regarding Arrhythmia, Bradyarrhythmia, Arrhythmic Syndromes and mechanisms regarding Cardiac Arrhythmias.



“

You won't get a refresher program like this one. TECH brings together the most efficient methods to catch up with the latest scientific evidence on Cardiac Arrhythmias"

1. Updating from the latest technology available

The diagnosis and treatment of cardiac arrhythmias has advanced markedly in recent years. People are increasingly aware of the need to use diagnostic methods for signs and symptoms related to heart rate. In this sense, patients demand more effective and efficient methods that provide an accurate assessment. Thanks to this Hybrid Professional Master's Degree, the specialist will develop his maximum potential and will be updated on the procedures by a team of experienced professionals.

2. Gaining In-Depth Knowledge from the Experience of Top Specialists

The specialist will share this experience with professionals of unparalleled stature who have chosen TECH to develop all the theoretical and practical material. Additionally, the practical period is an unprecedented updating process. Accompanied by a designated tutor, the student will be able to see real patients in a state-of-the-art environment, which will allow him to incorporate the most effective procedures and approaches in Cardiac Arrhythmias in his daily practice.

3. Entering First-Class Clinical Environments

For the study of the most updated concepts and mechanisms to treat Cardiac Arrhythmias at present, TECH has selected several prestigious centers in different parts of the world so that the professional can choose according to their interests and needs, the clinic in which the practices will take place, so they can check the day to day of a demanding, rigorous and extensive area of work, always applying the latest theses and scientific postulates in their work methodology.





4. Combining the Best Theory with State-of-the-Art Practice

This Hybrid Professional Master's Degree offers a divergent, innovative and eminently useful opportunity for your career. Thanks to the teaching method implemented, the specialist will be able to combine his daily life with this academic program. Additionally, it will allow him to choose the internship center according to his possibilities and interests where he will develop the intensive stay of 3 weeks.

5. Expanding the Boundaries of Knowledge

Thanks to the agreement made with the best specialized clinical centers, TECH offers the possibility of carrying out the Internship of this program not only in centers of national importance, but also internationally. In this way, the specialist will be able to expand his frontiers and get up to date with the best diagnostic and therapeutic methods of Cardiac Arrhythmias.

“

*You will have full practical immersion
at the center of your choice”*

03 Objectives

Thanks to this Hybrid Professional Master's Degree, the specialist will be updated on the most advanced therapeutic methods in Cardiac Arrhythmias. He will update the general knowledge, as well as the most innovative aspects of cardiological processes that involve a heart rhythm disorder in patients. Conditions that are present in a large number of people today, so specializing in the area is a unique opportunity for professional expansion and TECH provides with this program everything the specialist needs for it.





“

Update your knowledge in a real and advanced environment in terms of the technical resources used, under the highest scientific rigor to address the different types of Cardiac Arrhythmias"



General Objective

- Among the objectives proposed for this Hybrid Professional Master's Degree, the one that stands out is to deepen the understanding of the problems in cardiac rhythm disorders that may arise in the whole spectrum of patients so that the specialist can achieve a mastery of the problems of rhythm disorders present in the different scenarios he faces in his usual clinical practice. Therefore, the combination of the two most effective methods of study, the Relearning 100% online and the practical on site, in a prestigious health center, will provide the most suitable conditions for the professional to acquire the update he needs



During this program you will review the most common arrhythmias in the critically ill cardiac patient. Know their epidemiology, diagnosis and management"





Specific Objectives

Module 1. Arrhythmias. Fundamental Concepts

- ◆ Understand the fundamental mechanisms that produce arrhythmias, including cellular physiology, the conduction system, cardiac anatomy of arrhythmias (with the addition of a radiological approach) and the role of genetics
- ◆ Review the most common antiarrhythmic drugs, focusing on their most important indications, contraindications and common adverse effects
- ◆ Review basic diagnostic techniques and common procedures in the Electrophysiology Department

Module 2. Bradyarrhythmias

- ◆ Know the definition and types of Bradyarrhythmias, as well as their basic mechanisms
- ◆ Review the studies available for its diagnosis and characterization
- ◆ Study in depth the fundamental groups of Bradyarrhythmias (sinus node disease and AV block), with special emphasis on diagnosis and treatment
- ◆ Delve into the study of the patient with syncope from mechanisms and causes to diagnosis and treatment
- ◆ Review in detail the current indications for pacemaker implantation

x 740 VR-T DX

onitoring

11417

NIK

Germany

Module 3. Supraventricular Tachyarrhythmias

- ♦ Know the definition and types of Supraventricular Tachyarrhythmias. Understand the differential diagnosis between these types
- ♦ Understand the management of these arrhythmias in the acute (emergency) and chronic (consultation) setting
- ♦ Review the main aspects of the electrophysiological study of these arrhythmias
- ♦ In-depth study of the epidemiology, clinical presentation, characteristics of the electrophysiological study and ablation techniques in the 4 main types of supraventricular tachyarrhythmias (nodal reentrant tachycardia, AV reentrant tachycardia, common atrial flutter and focal atrial tachycardia)

Module 4. Ventricular Tachyarrhythmias

- ♦ Review the key aspects of its diagnostic process, with a clinical and electrocardiographic approach. Review the electrocardiographic differential diagnosis between wide QRS tachycardias
- ♦ Know the approach to these arrhythmias in the acute (emergency) and chronic (consultation) setting
- ♦ Review the pharmacological treatment of these arrhythmias
- ♦ In-depth study of the specific electrophysiological study of these arrhythmias, as well as the therapeutic approach using ablation techniques
- ♦ Review the knowledge of Ventricular Extrasystole, from its mechanisms and initial approach, to therapeutic strategies, including the specific electrophysiological study

Module 5. Devices (Pacemaker, ICD and Resynchronizer)

- ♦ Review in detail the indication of pacemakers, their implantation technique, their basic operation, as well as the modes of programming and other aspects of monitoring
- ♦ Review in detail the indication for ICD, as well as the particularities of the implantation technique, operation and programming/monitoring
- ♦ Know the differential aspects of the novel physiological pacing techniques, as well as their current indications and future perspectives
- ♦ Know other current implantable devices: Leadless pacemaker and subcutaneous ICD. Review their indications
- ♦ Update on the electrode extraction technique and its indications

Module 6. Atrial Fibrillation

- ♦ 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

Module 7. Arrhythmias and Heart Failure

- ♦ 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 on 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

Module 8. Arrhythmic Syndromes, Sudden Death and Channelopathies

- ♦ 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

Module 9. Mycardiopathies and Arrhythmias

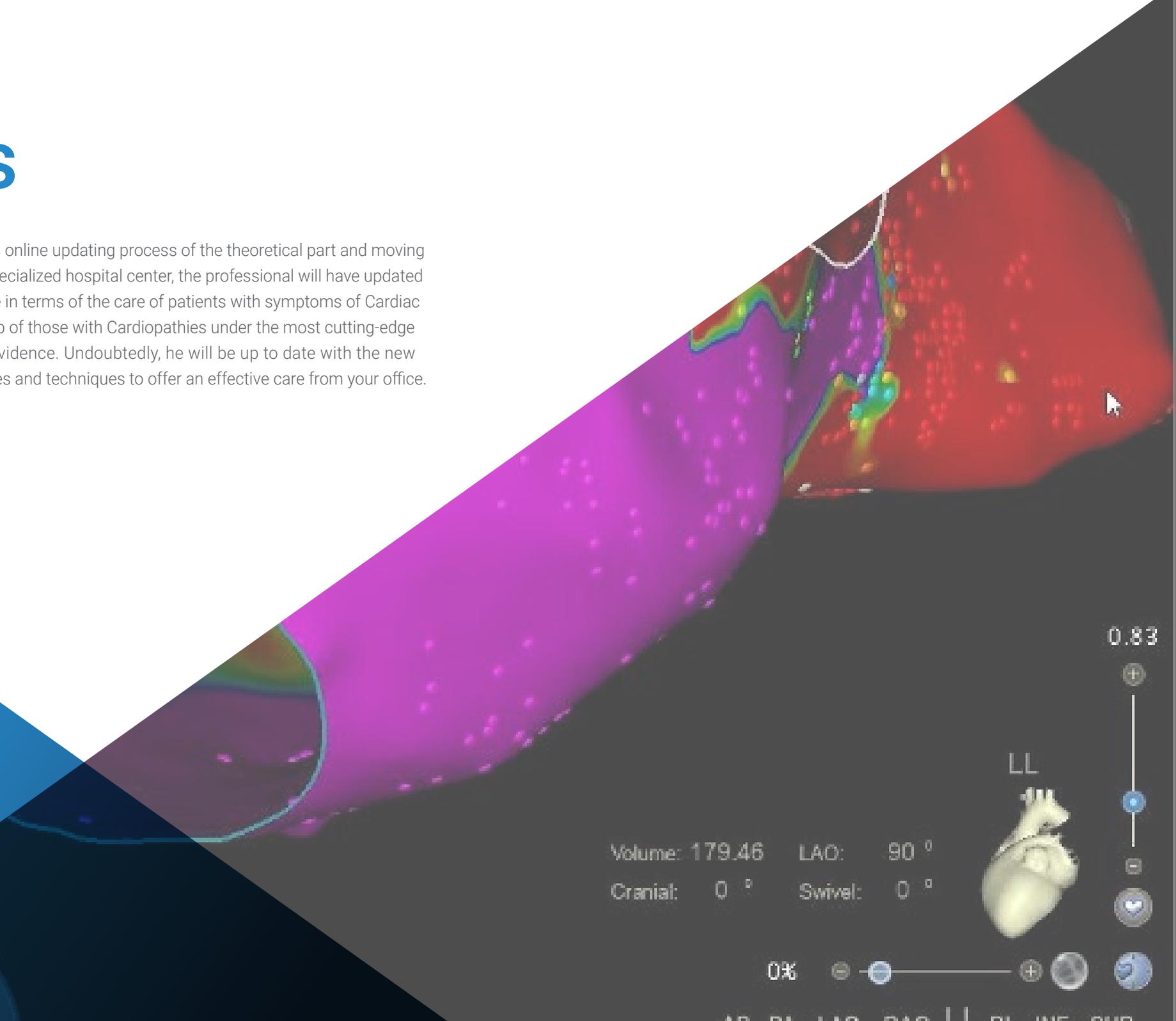
- ♦ Review the general aspects of arrhythmias associated with cardiomyopathies
- ♦ Review the characteristics of the most frequent arrhythmias in dilated cardiomyopathy and arrhythmogenic dysplasia
- ♦ Delve into the prevention and management of ventricular arrhythmias, reviewing the indications for ICDs in these pathologies
- ♦ Learn about the role of genetics in this context
- ♦ Review the rhythm disorders associated with other less frequent cardiomyopathies

Module 10. Arrhythmias in Other Clinical Contexts

- ♦ Review the most common arrhythmias in patients without heart disease and in athletes
- ♦ Review the most common arrhythmias in the critically ill cardiac patient. Know their epidemiology, diagnosis and management
- ♦ Know in detail the therapeutic algorithm of Arrhythmic Storm
- ♦ Review the indications and technique of transient pacemaker implantation
- ♦ Review the most frequent arrhythmias in the non-cardiac critical patient, after cardiac surgery and after TAVI, with special attention to their management
- ♦ Review, in general, the most prevalent arrhythmias in patients with congenital heart disease, as well as their fundamental implications and particularities of management

04 Skills

By completing the 100% online updating process of the theoretical part and moving towards practice in a specialized hospital center, the professional will have updated his daily clinical practice in terms of the care of patients with symptoms of Cardiac Arrhythmias or follow-up of those with Cardiopathies under the most cutting-edge scientific and clinical evidence. Undoubtedly, he will be up to date with the new advances and techniques and techniques to offer an effective care from your office.





0.83



LL



Vol

“

Among the skills that this program will provide you with is the ability to handle the latest advances in electroanatomical mapping systems and device implants”



General Skills

- Master the cardiac rhythm disorders that can occur, both in a consultation and in a cardiology emergency, from the healthy patient to patients with different types of heart disease
- Manage the latest advances in electroanatomical mapping systems
- Manage all types of devices, from conventional pacemakers, to novel physiological pacing, to leadless pacemakers and subcutaneous ICDs
- Master patient management, both in the emergency and ward environment, and in the office setting up to the patient with specific pathologies such as Heart Failure, Cardiomyopathies or Arrhythmic Syndromes



You will be able to perform quality care of the patient with clinical cardiological symptoms, based on the latest scientific evidence"





Specific Skills

- ◆ Understand the organization and operation of the Arrhythmia Units
- ◆ Know the role of electrophysiological study in the diagnosis and management of Bradyarrhythmias
- ◆ Know the techniques and procedures used in the diagnosis of Supraventricular Tachyarrhythmias, as well as the drugs indicated for their treatment
- ◆ Understand the concept of ventricular tachycardia, from the mechanism to the most frequent types
- ◆ Manage the theoretical foundations on which resynchronization therapy is based and review its current indications. Review the particularities of its implantation and the modes of programming and follow-up
- ◆ Review current knowledge on the implications and management of AHREs and subclinical AF
- ◆ Know the fundamental aspects of ventricular dysfunction due to pacing and the relationship between LBBB and ventricular dysfunction
- ◆ Know the most prevalent tachyarrhythmias and conduction disorders in cardiac amyloidosis, as well as the particularities of their management
- ◆ Manage the current algorithms for out-of-hospital cardiac arrest care

05

Course Management

TECH in its interest to provide training of a high academic level, joins the most versed specialists in their area of study. This is how professional experience is combined with academic updating and pedagogical skills to develop this Hybrid Professional Master's Degree in an avant-garde way. Experts in Cardiology have come together in this section to design the most complete program in Cardiac Arrhythmias.



“

Leading specialists in the field of Cardiology will provide you with the most relevant technological and scientific advances in this highly demanded area of medicine"

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
- Cardiology Specialist Milenium Las Rozas Medical Center
- 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
- Master's degree 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
- ♦ Author of the Arrhythmia Action Guide for Primary Care
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Research Proficiency in medicine from the Autonomous University of Madrid. UAM Spain
- ♦ Specialist in Cardiology by the MIR system. Puerta de Hierro Hospital of Madrid Spain
- ♦ Fellowship in electrophysiology at the University Hospital UZB of Brussels. Belgium
- ♦ Fellowship in diagnostic and therapeutic cardiac electrophysiology. Puerta de Hierro University Hospital from Madrid. Spain
- ♦ Master's Degree in Diagnostic and Therapeutic Cardiac Electrophysiology.. Gregorio Marañón Hospital. Complutense University of Madrid. UCM. Spain
- ♦ Accreditation in specific training for the practice of interventional cardiac electrophysiology by the Section of Electrophysiology and Arrhythmias of the Spanish Society of Cardiology. Spain
- ♦ Invasive cardiac electrophysiology accreditation awarded by the European Heart Rhythm Association. EHRA

Professors

Dr. Domínguez Rodríguez, Fernando

- ♦ Cardiologist in the Heart Failure and Familial Cardiopathies Unit, HU Puerta de Hierro, Madrid
- ♦ Postdoctoral Researcher at the National Center for Cardiovascular Research (CNIC)
- ♦ Resident Cardiology Intern at Hospital Clínica Puerta de Hierro, Madrid
- ♦ Doctor of Medicine Cum Laude, Autonomous University of Madrid
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ♦ Visiting Physician, Cardiomyopathy Unit, Charité Hospital, Berlin, Germany
- ♦ Fellowship in Familial Cardiomyopathies at the Familial Cardiomyopathies Unit of the Puerta de Hierro University Hospital
- ♦ Member of: European Society of Cardiology and Spanish Society of Cardiology

Dr. García Magallón, Belén

- ♦ Cardiology Specialist
- ♦ 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

- ♦ Cardiologist specializing in Electrophysiology and Arrhythmias
- ♦ Senior Consultant. Electrophysiology and Arrhythmia Unit of the Cardiology Service. Puerta de Hierro University Hospital
- ♦ Assistant Specialist in the Arrhythmia Unit of the Cardiology Service of the Puerta de Hierro Hospital
- ♦ Member of the Teaching Commission. Puerta de Hierro University Hospital
- ♦ Clinical teaching collaborator. Autonomous University of Madrid
- ♦ Doctor "cum laude" in Medicine from the Autonomous University of Madrid
- ♦ Graduate in Medicine and Surgery from the University of Valladolid
- ♦ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ♦ Fellowship in Clinical Electrophysiology at the Arrhythmia Unit of the Cardiovascular Center of OLV Aalst Hospital, Belgium
- ♦ Master in Diagnostic and Therapeutic Cardiac Electrophysiology at the Gregorio Marañón Hospital and Complutense University of Madrid

Dr. Vilches Soria, Silvia

- ♦ Associate Specialist at the Family Cardiopathies Unit of the Gregorio Marañón University Hospital
- ♦ Graduate 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 Familial Heart Disease at the Familial Heart Disease Unit of the University Hospital Puerta de Hierro
- ♦ Doctor in Medicine and Surgery at the Autonomous University of Madrid
- ♦ Member of the European Society of Cardiology

Dr. García-Izquierdo Jaén, Eusebio

- ♦ Assistant Specialist in the Arrhythmia Unit of the Cardiology Service of the Puerta de Hierro Hospital
- ♦ Clinical researcher of the AORTASANA Project
- ♦ Fellowship in electrophysiology at the Arrhythmia Unit of Puerta de Hierro University Hospital
- ♦ University Master in Diagnostic and Therapeutic Cardiac Electrophysiology at San Pablo CEU University
- ♦ Graduated in Medicine at the Complutense University of Madrid
- ♦ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ♦ Member of the European Society of Cardiology

Dr. Aguilera Agudo, Cristina

- ♦ Assistant Specialist Physician in the Cardiology Service of the Puerta de Hierro Hospital
- ♦ Personal Physician of Continuous Care at the University Hospital of Guadalajara
- ♦ Degree in Medicine and Surgery at the University of Granada
- ♦ Diploma in Statistics in Health Sciences at the Autonomous University of Barcelona
- ♦ Master's Degree in Diagnostic and Therapeutic Cardiac Electrophysiology at San Pablo CEU University
- ♦ Specialization in Cardiology at the University Hospital Puerta de Hierro Majadahonda
- ♦ Member of the Spanish Society of Cardiology

Dr. Cobo Marcos, Marta

- ♦ Assistant Cardiology Specialist at the Heart Failure Unit of the Puerta de Hierro Hospital
- ♦ 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
- ♦ Cardiology Area Specialist, Heart Failure and Familial Cardiopathies Unit Puerta de Hierro University Hospital Majadahonda, Madrid
- ♦ Coordinator of the Day Hospital of the Heart Failure Unit. Puerta de Hierro University Hospital
- ♦ Adjunct Physician of the CSUR Unit of Familial Cardiopathies. Puerta de Hierro University Hospital
- ♦ Clinical Teaching Collaborator, Autonomous University of Madrid
- ♦ Co-researcher of FIS and SEC projects
- ♦ Cardiology Faculty Specialty at Fundación Hospital of Alcorcón
- ♦ Cardiology Faculty Area Specialist in Carlos III Hospital
- ♦ Visiting Physician, Familial Cardiopathies Unit, The Heart Hospital, University College London, London, United Kingdom
- ♦ Visiting Physician, Department of Cardiovascular Imaging, The Mount Sinai Hospital, New York, USA
- ♦ Resident Cardiology Intern at Hospital Clínica Puerta de Hierro, Madrid
- ♦ Degree in Medicine and Surgery from the Complutense University of Madrid
- ♦ Cardiology Specialist Puerta de Hierro Clinic, Madrid
- ♦ Postgraduate Certificate in: "Research Methodology: Design and Statistics in Health Sciences" Autonomous University of Barcelona
- ♦ Member of the Spanish Society of Cardiology

Dr. Parra Esteban, Carolina

- ♦ Assistant Cardiology Specialist at the Coronary Care Unit of the Puerta de Hierro Hospital
- ♦ Lecturer in the Simulation Course on the Comprehensive Management of the Patient in Cardiogenic Shock organized by the Cardiology Department of the Puerta de Hierro University Hospital and the Foundation for Biomedical Research of the Puerta de Hierro University Hospital
- ♦ Graduate in Medicine and Surgery from the Autonomous University of Madrid
- ♦ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital

Dr. Sánchez García, Manuel

- ♦ Area Specialist in the Electrophysiology and Cardiac Stimulation Unit of the Cardiology Service of Salamanca University Health Care Complex
- ♦ Cardiology Specialist HM Montepríncipe University 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
- ♦ Fellowship in Electrophysiology and Arrhythmias at the Arrhythmia Unit of the Puerta de Hierro University Hospital
- ♦ Master's Degree in Diagnostic and Therapeutic Cardiac Electrophysiology at San Pablo CEU University

Dr. García Rodríguez, Daniel

- ♦ Cardiology Specialist
- ♦ Fellow in Electrophysiology and Arrhythmias at the Arrhythmia Unit of the Puerta de Hierro University Hospital
- ♦ Graduated in Medicine at the Autonomous University of Madrid
- ♦ Residency in the specialty of Cardiology at the Puerta de Hierro University Hospital
- ♦ Master's degree in diagnostic and therapeutic cardiac electrophysiology at San Pablo CEU University





“

The most complete medical staff to share the most cutting-edge and practical academic expertise on Cardiac Arrhythmias is in this program”

06

Educational Plan

The academic itinerary chosen for this Hybrid Professional Master's Degree consists of 10 study modules, with numerous sections developed and related to each other. This will allow the dynamic study of the most advanced and updated diagnostic and therapeutic mechanisms according to the latest scientific evidence. In a period of 12 months, the specialist will obtain the degree that will certify its update in a field of medicine highly demanded by the population today.





“

This study plan will be developed 100% online through your favorite device and at your own pace”

Module 1. Arrhythmias. Fundamental Concepts

- 1.1. Physiology
 - 1.1.1. Special Features of Myocardial Cells
 - 1.1.2. Action Potential
 - 1.1.3. Main Ionic Currents Involved
- 1.2. Genetics of Arrhythmias
- 1.3. Cardiac Conduction System
 - 1.3.1. Sinoatrial Node and AV Node
 - 1.3.2. His-Purkinje System
- 1.4. Mechanisms of Arrhythmias
 - 1.4.1. Automatism
 - 1.4.2. Triggered Activity
 - 1.4.3. Reentry
 - 1.4.4. Micro-Entry
- 1.5. Antiarrhythmic Drugs
 - 1.5.1. Type I
 - 1.5.2. Type I
 - 1.5.3. Type III
 - 1.5.4. Type IV
- 1.6. Basic Diagnostic Techniques Used in Arrhythmias
 - 1.6.1. Holter
 - 1.6.2. Tilt Test
 - 1.6.3. Pharmacological Tests
 - 1.6.4. Implantable Holter
 - 1.6.5. Wearables and Other Devices
- 1.7. Common Procedures Performed for the Diagnosis and Treatment of Arrhythmias
 - 1.7.1. EPS and Ablation
 - 1.7.2. Electroanatomical Mapping Systems. Navigation Systems
- 1.8. Cardiac Anatomy Focused on Arrhythmias
- 1.9. Radiological Anatomy
- 1.10. Organization and Operation of Arrhythmia Units

Module 2. Bradyarrhythmias

- 2.1. Bradyarrhythmia
- 2.2. Types of Bradyarrhythmias
- 2.3. Mechanisms/Physiopathology of Bradyarrhythmias
- 2.4. Diagnostic Studies Aimed at Bradyarrhythmias
- 2.5. Sick Sinus Syndrome
- 2.6. AV Blocks
- 2.7. Syncope
 - 2.7.1. Causes of Syncope
 - 2.7.2. Mechanisms of Syncope
 - 2.7.3. Diagnostic Study and Differential Diagnosis
- 2.8. Indication for Pacemaker Implantation. Indications for Transient PM Implantation
 - 2.8.1. Sinus Dysfunction
 - 2.8.2. AV Blocks
- 2.9. EEF Study of Bradyarrhythmias

Module 3. Supraventricular Tachyarrhythmias

- 3.1. Supraventricular Tachycardia
- 3.2. Types of Supraventricular Tachyarrhythmias. Clinical Differential Diagnosis
- 3.3. Acute Management of Supraventricular Tachycardia. View from the Emergency Department
 - 3.3.1. Clinical Presentation
 - 3.3.2. Complementary Tests
 - 3.3.3. Therapeutic Maneuvers and Pharmacological Treatment
 - 3.3.4. Discharge Treatment
- 3.4. Chronic Management of Supraventricular Tachycardia. View From the Consultation Room
- 3.5. Pharmacological Treatment of Supraventricular Tachycardia
- 3.6. Electrophysiological Study of Supraventricular Tachycardia
 - 3.6.1. Indications
 - 3.6.2. Description and Maneuvers
- 3.7. Nodal Reentrant Tachycardia
 - 3.7.1. Epidemiology
 - 3.7.2. Clinical Peculiarities
 - 3.7.3. Findings in Electrophysiological Study
 - 3.7.4. Ablation

- 3.8. AV Reentrant Tachycardia (Accessory Pathway)
 - 3.8.1. Epidemiology
 - 3.8.2. Clinical Peculiarities
 - 3.8.3. Findings in Electrophysiological Study
 - 3.8.4. Ablation
- 3.9. Common Atrial Flutter
 - 3.9.1. Epidemiology
 - 3.9.2. Clinical Peculiarities
 - 3.9.3. Findings in Electrophysiological Study
 - 3.9.4. Ablation
- 3.10. Other Macroreentrant Tachycardias
- 3.11. Focal Atrial Tachycardia
 - 3.11.1. Epidemiology
 - 3.11.2. Clinical Peculiarities
 - 3.11.3. Findings in Electrophysiological Study
 - 3.11.4. Ablation

Module 4. Ventricular Tachyarrhythmias

- 4.1. Ventricular Tachycardias
 - 4.1.1. Mechanisms and Pathogenesis of Ventricular Tachycardias
 - 4.1.2. Types of Ventricular Tachycardias
- 4.2. Idiopathic Ventricular Tachycardia
- 4.3. Clinical and Electrocardiographic Diagnosis
- 4.4. Electrocardiographic Differential Diagnosis Between Wide QRS Tachycardias
- 4.5. Acute Management of Ventricular Tachycardia. Vision from the Emergency Department and the Critical Patient
 - 4.5.1. Clinical Presentation
 - 4.5.2. Complementary Tests
 - 4.5.3. Therapeutic Maneuvers and Pharmacological Treatment
 - 4.5.4. Discharge Treatment
- 4.6. Chronic Management of Supraventricular Tachycardia. View From the Consultation Room
- 4.7. Pharmacological Treatment in Ventricular Tachycardia

- 4.8. Electrophysiological Study and Ablation of Ventricular Tachycardia
- 4.9. Ventricular Extrasystole
 - 4.9.1. Mechanisms of Genesis of Ventricular Extrasystole
 - 4.9.2. Clinical Management
 - 4.9.3. Therapeutic Strategy
- 4.10. Ventricular Extrasystole. Study and Ablation

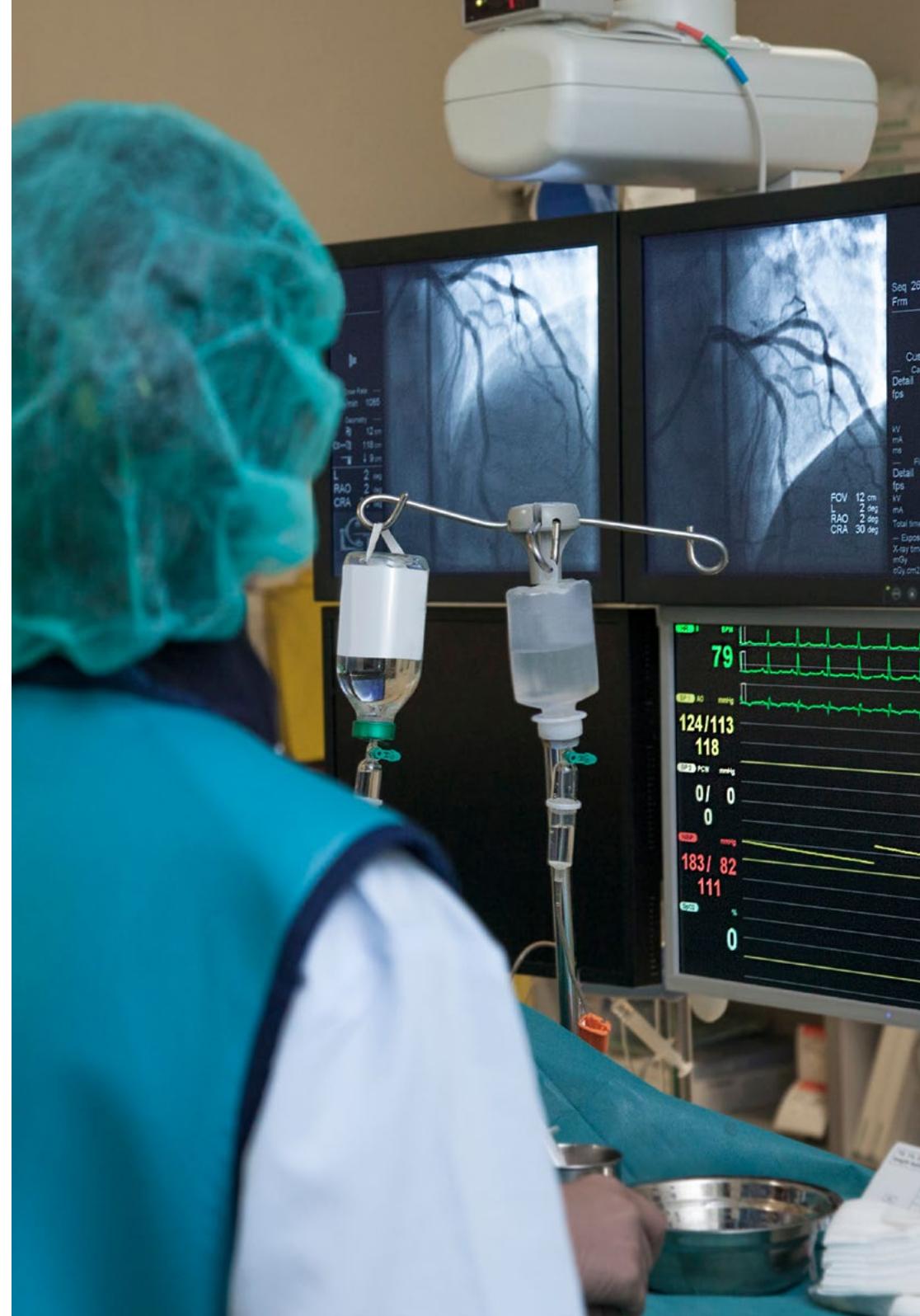
Module 5. Devices (Pacemaker, ICD and Resynchronizer)

- 5.1. Pacemaker
 - 5.1.1. Operation of a Pacemaker
 - 5.1.2. Indications for Pacemaker Implantation
- 5.2. Pacemaker Implantation Technique
 - 5.2.1. Venous Canalization
 - 5.2.2. Surgical Pocket Creation
 - 5.2.3. Ventricular Electrode Implantation
 - 5.2.4. Atrial Electrode Implantation
- 5.3. Basic Pacemaker Programming
 - 5.3.1. Programming at Discharge After Implantation
 - 5.3.2. Monitoring Protocol in the Consultation Room
- 5.4. ICD
 - 5.4.1. Operation of an ICD
 - 5.4.2. Indications for ICD Implantation
- 5.5. ICD II
 - 5.5.1. ICD Implantation Technique. Peculiarities with Respect to Pacemaker
 - 5.5.2. Programming at Discharge After Implantation
 - 5.5.3. Monitoring Protocol in the Consultation Room
- 5.6. Resynchronization Therapy
 - 5.6.1. Theoretical Basis
 - 5.6.2. Indications for Cardiac Resynchronization Device Implantation
- 5.7. Resynchronization Therapy II
 - 5.7.1. CRS Implantation Technique. Peculiarities with Respect to Other Devices
 - 5.7.2. Programming at Discharge After Implantation
 - 5.7.3. Monitoring Protocol in the Consultation Room

- 5.8. Physiological Stimulation
 - 5.8.1. Hisian Stimulation
 - 5.8.2. Left Bundle Branch Stimulation
- 5.9. Other Implantable Devices
 - 5.9.1. Wireless Pacemakers
 - 5.9.2. Subcutaneous ICD
- 5.10. Electrode Removal
 - 5.10.1. Indications for Electrode Extraction
 - 5.10.2. Extraction Procedure

Module 6. Atrial Fibrillation

- 6.1. Importance of Atrial Fibrillation
 - 6.1.1. Epidemiology of Atrial Fibrillation
 - 6.1.2. Socioeconomic Impact of Atrial Fibrillation
- 6.2. Atrial Fibrillation in the Clinic
 - 6.2.1. Clinical Presentation and Symptomatology
 - 6.2.2. Initial Diagnostic Study
- 6.3. Assessment of Thromboembolic and Hemorrhagic Risk
 - 6.3.1. Anticoagulant Treatment. Clinical Evidence
 - 6.3.2. Direct Acting Anticoagulants
 - 6.3.3. Vitamin K Antagonists
 - 6.3.4. Auricle Closure
- 6.4. Clinical Management of Atrial Fibrillation
 - 6.4.1. Rate Control Strategy
 - 6.4.2. Rhythm Control Strategy
- 6.5. Atrial Fibrillation Ablation
 - 6.5.1. Indications
 - 6.5.2. Evidence of Efficacy



- 6.6. Atrial Fibrillation Ablation
 - 6.6.1. Atrial Fibrillation Ablation Techniques
 - 6.6.2. AF Ablation Results
 - 6.6.3. Possible Complications of AF Ablation
- 6.7. Monitoring after Atrial Fibrillation Ablation
- 6.8. Future Prospects for Atrial Fibrillation Ablation
- 6.9. AF in Specific Contexts: Postoperative Period, Intracranial Hemorrhage, Pregnancy, Athletes
- 6.10. Anticoagulant Therapy in Patients with Ischemic Heart Disease

Module 7. Arrhythmias and Heart Failure

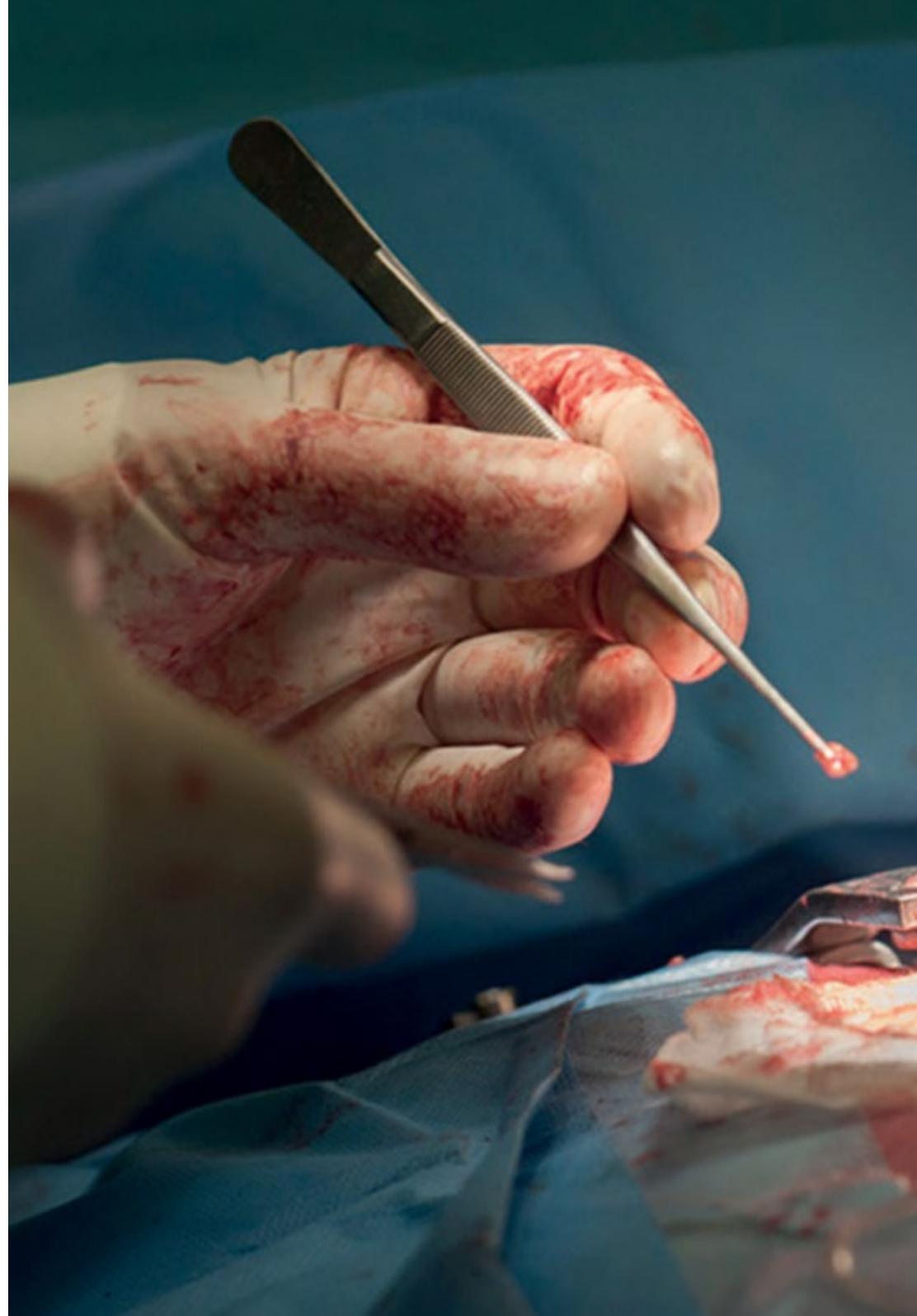
- 7.1. Importance of Rhythm Disorders in Heart Failure
- 7.2. AF and Heart Failure
 - 7.2.1. Epidemiology of AF in Heart Failure
 - 7.2.2. Prognostic Implication of the Presence of AF in Patients with Heart Failure
- 7.3. AF and Heart Failure. Role of Ablation and Antiarrhythmic Drugs
- 7.4. Risk Assessment of Ventricular Arrhythmias in HF
 - 7.4.1. Role of MRI
 - 7.4.2. Role of Genetics
- 7.5. Management of Ventricular Arrhythmias in Heart Failure
- 7.6. Indications for CRS Therapy and Other Devices in the Context of Heart Failure
 - 7.6.1. Conventional Resynchronizer
 - 7.6.2. Physiological Stimulation (Hisian and Left Bundle Branch)
- 7.7. Tachycardiomyopathy
 - 7.7.1. Concept and Epidemiology
 - 7.7.2. Diagnostic Study
- 7.8. Management of Patients with Tachycardiomyopathy
 - 7.8.1. Medical Treatment
 - 7.8.2. Indications and Ablation Approach
- 7.9. PM-Mediated Ventricular Dysfunction. Prevalence and Management
- 7.10. LBBB and Ventricular Dysfunction. Does Dyssynchronopathy Exist?

Module 8. Arrhythmic Syndromes, Sudden Death and Channelopathies

- 8.1. Sudden Cardiac Death
 - 8.1.1. Concept and Epidemiology of Sudden Cardiac Death
 - 8.1.2. Causes of Sudden Cardiac Death
- 8.2. Sudden Cardiac Death
 - 8.2.1. Diagnostic Study after a Recovered Cardiac Arrest
 - 8.2.2. Clinical Management. Prevention
- 8.3. Concept of Canalopathy. Epidemiology
- 8.4. Brugada Syndrome
 - 8.4.1. Indications for Electrophysiological Study
 - 8.4.2. Indications for ICD
 - 8.4.3. Medical Treatment
- 8.5. Long QT Syndrome
 - 8.5.1. Indications for ICD
 - 8.5.2. Medical Treatment
- 8.6. Short QT Syndrome
 - 8.6.1. Indications for ICD
 - 8.6.2. Medical Treatment
- 8.7. Early Repolarization and PTVc
 - 8.7.1. Indications for ICD
 - 8.7.2. Medical Treatment
- 8.8. The Importance of Genetics
 - 8.8.1. Family Studies

Module 9. Myocardopathies and Arrhythmias

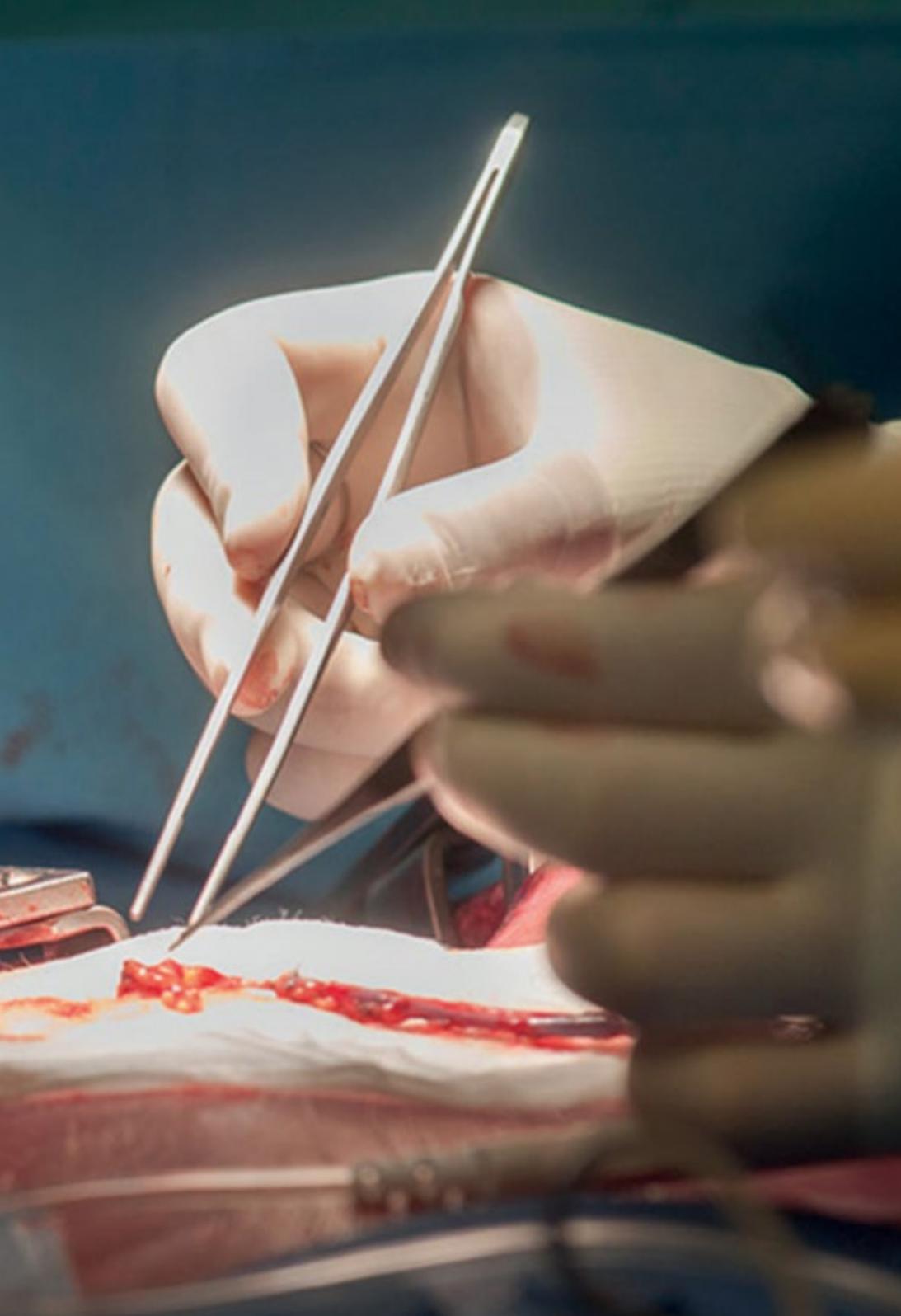
- 9.1. Association of Cardiomyopathies and Arrhythmias
- 9.2. Dilated Cardiomyopathy
 - 9.2.1. Atrial Arrhythmias
 - 9.2.2. Ventricular Arrhythmias
- 9.3. Prevention of Arrhythmias and Sudden Cardiac Death in Dilated Cardiomyopathy
 - 9.3.1. Indications for ICD
 - 9.3.2. Role of Genetics
- 9.4. Hypertrophic Cardiomyopathy Indications for ICD
 - 9.4.1. Atrial Arrhythmias
 - 9.4.2. Ventricular Arrhythmias
- 9.5. Prevention of Arrhythmias and Sudden Cardiac Death in Hypertrophic Cardiomyopathy
 - 9.5.1. Indications for ICD
- 9.6. Arrhythmogenic Cardiomyopathy
 - 9.6.1. Description
 - 9.6.2. Most Frequent Arrhythmias and Peculiarities in their Management
 - 9.6.3. Prevention of Sudden Death. Indications for ICD
- 9.7. Amyloidosis
 - 9.7.1. Description
 - 9.7.2. Most Frequent Arrhythmic Disorders and Peculiarities in their Management
 - 9.7.3. Indications for MP
- 9.8. Other Cardiomyopathies and their Association with Cardiac Rhythm Disorders
 - 9.8.1. Dystrophies and Neuromuscular Diseases. Indications for ICD and PM
- 9.9. Study of AVB in Young Patients
 - 9.9.1. Diagnostic and Therapeutic Algorithm



Module 10. Arrhythmias in Other Clinical Contexts

- 10.1. Arrhythmias in the Population without Heart Disease
- 10.2. Arrhythmias in Athletes
- 10.3. Arrhythmias in the Critically Ill Cardiac Patient
 - 10.3.1. Epidemiology
 - 10.3.2. Study and Clinical Management
 - 10.3.3. Management of Arrhythmic Storm
 - 10.3.4. Transient Pacemaker Indications and Implantation Technique
- 10.4. Out-of-Hospital Cardiac Arrest Care
- 10.5. Arrhythmias in the Non-Cardiac Critically Ill Patient
- 10.6. Arrhythmias in Patients Undergoing Cardiac Surgery and after TAVI
- 10.7. Arrhythmias in Infantile Congenital Cardiopathies
- 10.8. Arrhythmias in Adult Congenital Heart Diseases

“*Advance in a practical and comfortable way with the quality you deserve, thanks to the methodology and technology implemented by TECH in this program*”



07

Clinical Internship

After completing the 100% online and theoretical period, this high academic level program contemplates a 3-week Internship in a leading clinical center and reference in the specialty of study. In this way, the specialist will advance by an assigned tutor and will be integrated in a multidisciplinary team of health care experts who will accompany him throughout the process.





“

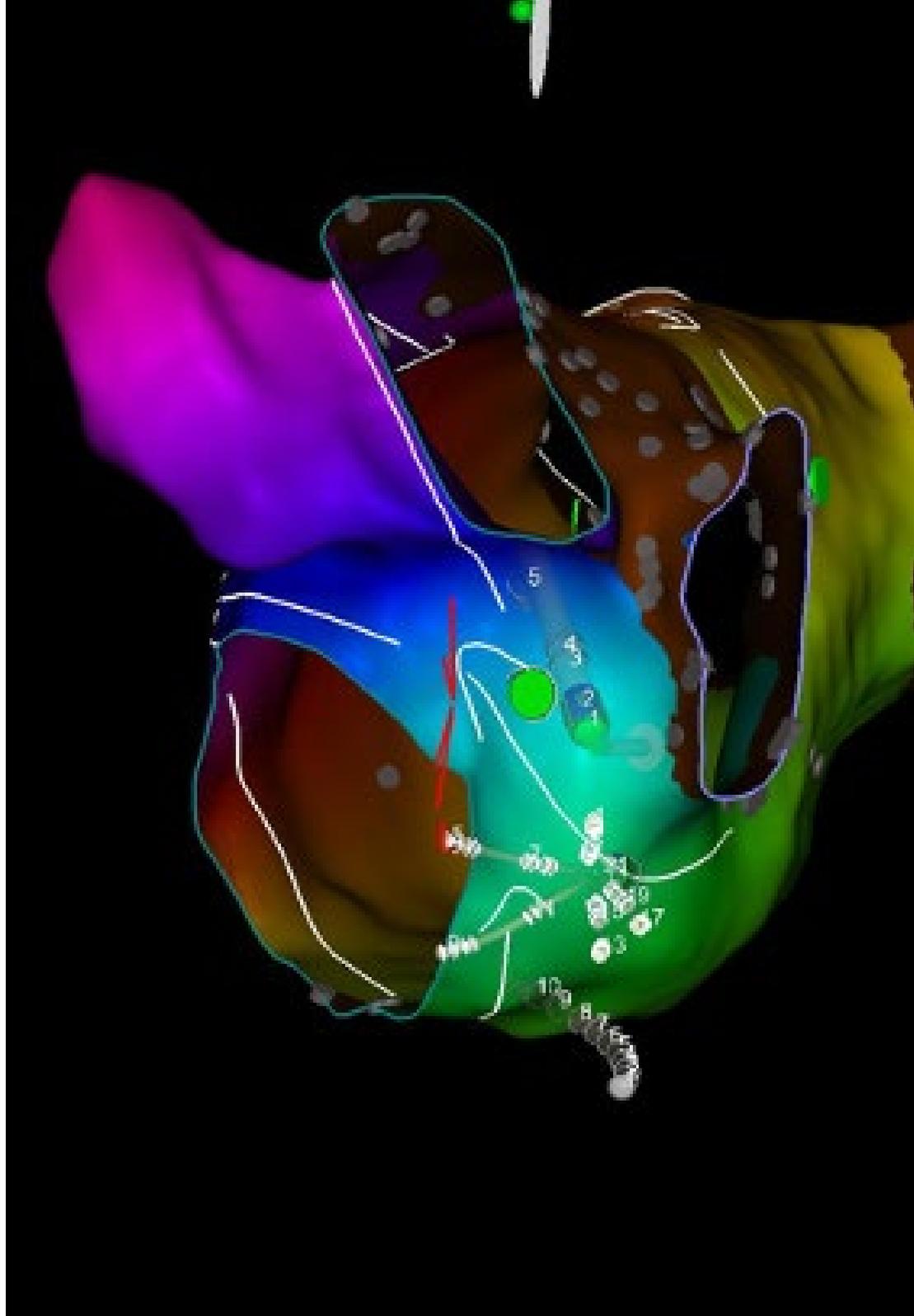
Do your clinical internship in one of the best hospitals specialized in cardiac pathologies with international character”

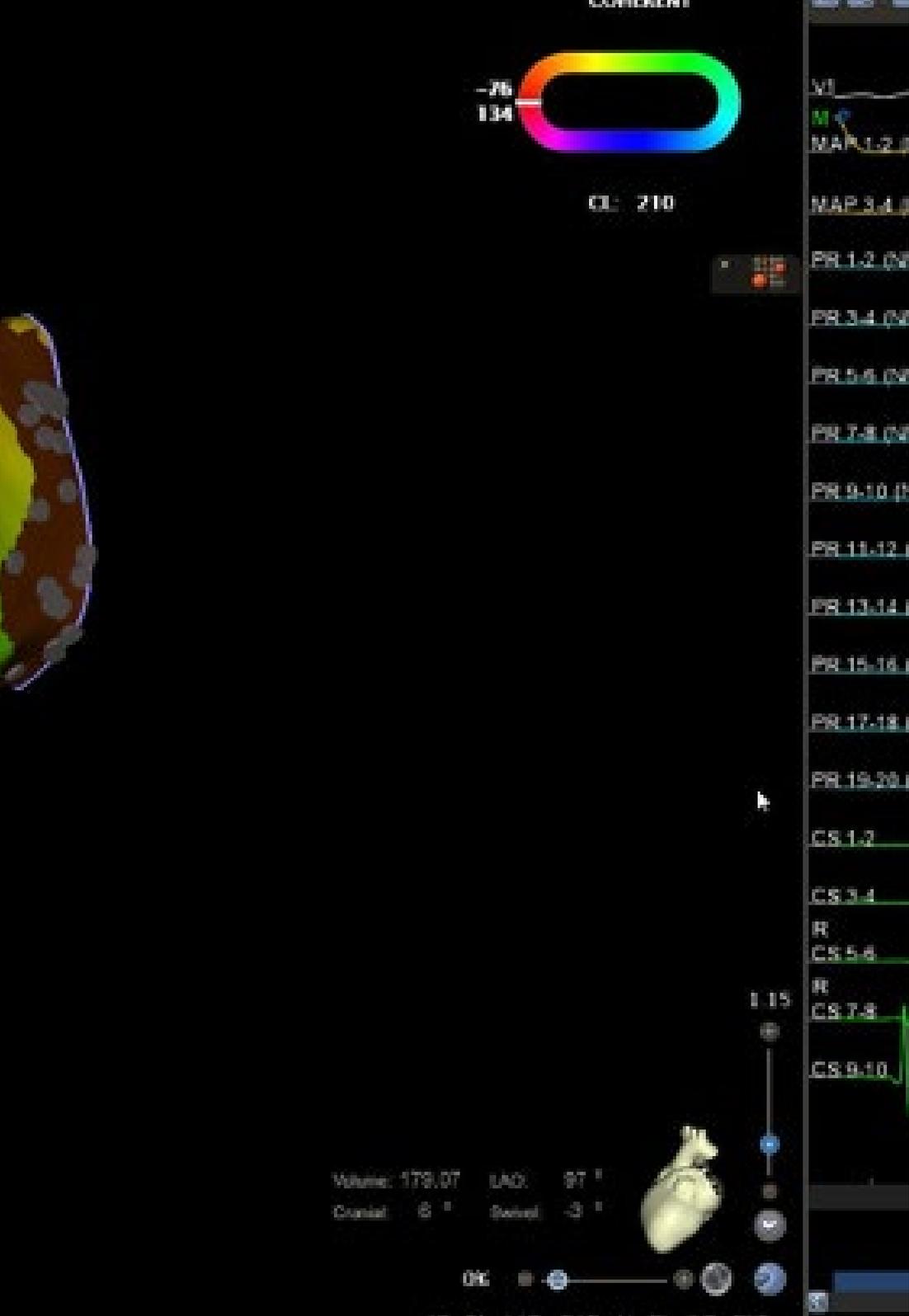
Thanks to the innovative study methodology offered by TECH in this program, the specialist will put into practice during 120 hours in a prestigious clinical center the mechanisms studied during the theoretical part. He will fulfill a series of activities and others that may be necessary during patient care.

For your faithful compliance and support, TECH will assign an expert tutor who will accompany you in each of the processes. In this way, the specialist will never be alone and will always work together with a team of experienced professionals who will add new techniques and perspectives to this experience. From the implementation of the diagnostic and therapeutic techniques used in Arrhythmias, such as the use of Devices in Cardiac Arrhythmias (Pacemakers, ICD and Resynchronizer) to the action against Arrhythmic Syndromes, Sudden Death and Canalopathies.

The Internship will be performed with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competences for the praxis of Cardiology (learning to be and learning to relate).

The procedures described below will be the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its volume of work, the proposed activities being the following:





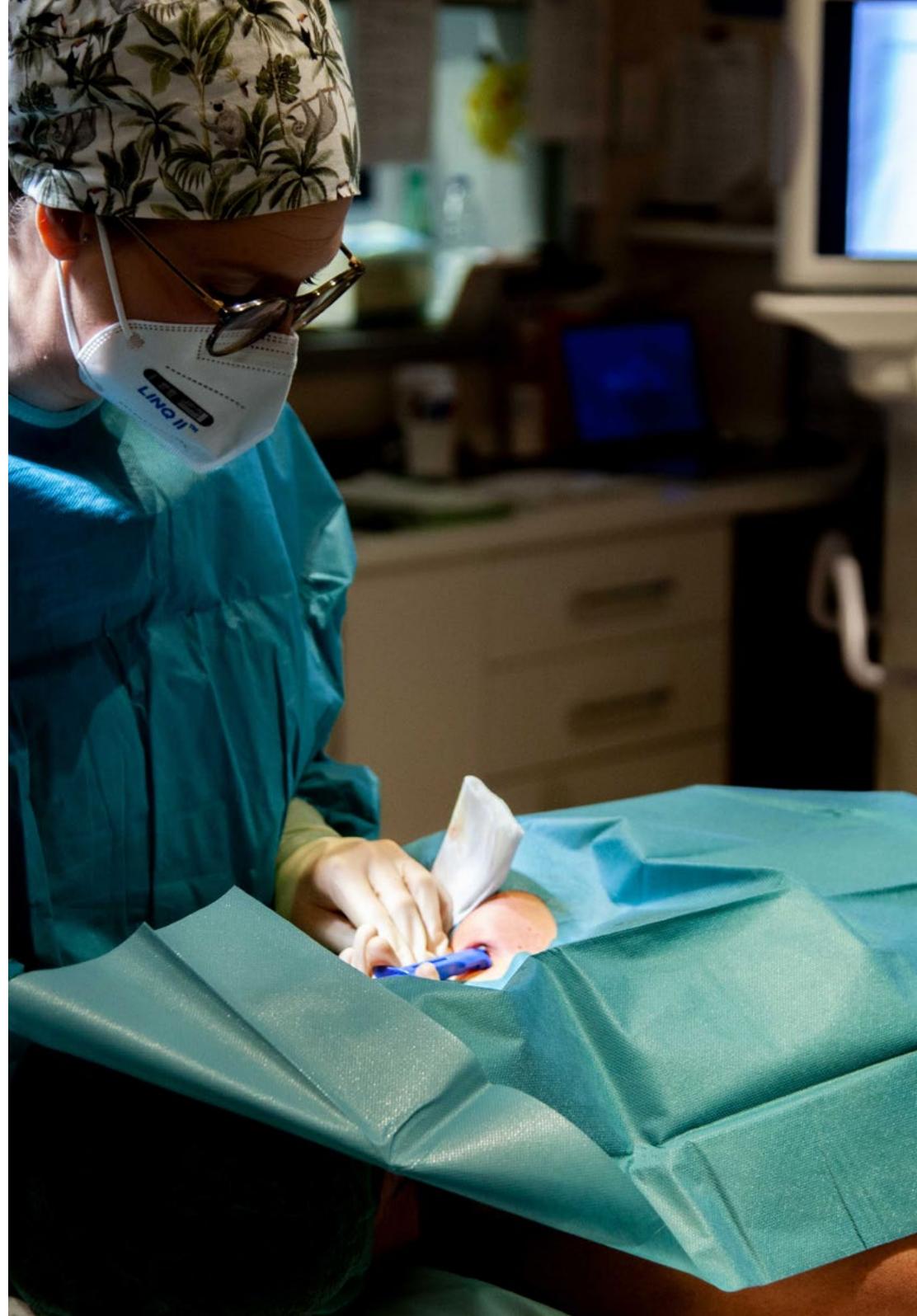
Module	Practical Activity
Diagnostic Techniques Used in Arrhythmias	Review the patient's physiology through basic tests such as electrocardiograms, stress tests, electrophysiologic tests and mapping
	Apply Holter in the patient to determine ambulatory electrocardiography
	Use the Tilt test for patients with frequent syncope or vertigo
	Apply the insertable Holter
	Use pharmacological tests
	Indicate and supervise the use of wearables and other devices for patient monitoring
Therapeutic Techniques in Arrhythmias and Heart Failure	Assessing the risk of ventricular arrhythmias in HF
	Prescribe drugs to control the heart rate and restore cardiac rhythm
	Recommend vagal maneuvers
	Perform cardioversion
	Indicate atrial fibrillation ablation when necessary
	Perform electrode removal
Use of devices in Cardiac Arrhythmias (Pacemaker, ICD and Resynchronizer)	Performing Pacemaker, ICD or Resynchronizer implantations
	Practice the Basic Pacemaker Programming
	Verify ICD, Resynchronizer or Pacemaker operation
	Program the discharge after implantation
	Comply with follow-up protocols in the office
Arrhythmic Syndromes, Sudden Death and Channelopathies	Perform electrocardiograms
	Administer Na channel blockers, such as Flecainide, Ajmaline or Procainamide to detect Brugada Syndrome
	Prescribe pharmacologic therapies with beta-blockers such as Propranolol and Nadolol for the prevention of Sudden Cardiac Death
	Prescribe the use of Implantable Cardioverter Defibrillator (ICD) in secondary prevention and in other cases
	Indicate the genetic studies necessary to complete the diagnosis of arrhythmic syndromes

Civil Liability Insurance

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this, is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



General Conditions of the Internship Program

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

3. ABSENCE: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

4. CERTIFICATION: Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: The Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

08

Where Can I Do the Clinical Internship?

In order for the specialist to put all his knowledge into practice immediately, this Hybrid Professional Master's Degree program includes a practical stay in a prestigious clinical center. There, the professional will be able to apply everything he has learned in terms of diagnostic advances and treatments for Cardiac Arrhythmias. For your convenience, you will be able to choose the reference center of your preference and therefore learn first-hand about the latest scientific evidence and cutting-edge technology implemented in these cases.





“

This Hybrid Professional Master's Degree is a unique opportunity where you can finally perform the Internship in any center according to your needs and expectations"



The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following



Medicine

Hospital HM Modelo

Country	City
Spain	La Coruña

Address: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

Hospital HM Rosaleda

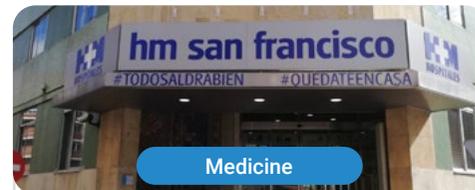
Country	City
Spain	La Coruña

Address: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Hair Transplantation
- Orthodontics and Dentofacial Orthopedics



Medicine

Hospital HM San Francisco

Country	City
Spain	León

Address: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Update in Anesthesiology and Resuscitation
- Trauma Nursing



Medicine

Hospital HM Regla

Country	City
Spain	León

Address: Calle Cardenal Landázuri, 2, 24003, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Update on Psychiatric Treatment in Minor Patients



Medicine

Hospital HM Nou Delfos

Country	City
Spain	Barcelona

Address: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Aesthetic Medicine
- Clinical Nutrition in Medicine



Medicine

Hospital HM Madrid

Country	City
Spain	Madrid

Address: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Palliative Care
- Anaesthesiology and Resuscitation



Medicine

Hospital HM Torrelodones

Country	City
Spain	Madrid

Address: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

Hospital HM Sanchinarro

Country	City
Spain	Madrid

Address: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Anaesthesiology and Resuscitation
- Palliative Care



Medicine

Hospital HM Puerta del Sur

Country	City
Spain	Madrid

Address: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Palliative Care
- Clinical Ophthalmology



Medicine

Hospital HM Vallés

Country	City
Spain	Madrid

Address: Calle Santiago, 14, 28801, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Gynecologic Oncology
- Clinical Ophthalmology



Medicine

HM CIEC - Centro Integral de Enfermedades Cardiovasculares

Country	City
Spain	Madrid

Address: Av. de Montepíncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Cardiac Surgery
- Acute Coronary Syndrome



Medicine

HM CIEC Barcelona

Country	City
Spain	Barcelona

Address: Avenida de Vallcarca, 151, 08023, Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:
- Cardiac Arrhythmias
- Cardiac Surgery



Medicine

Policlínico HM Arapiles

Country	City
Spain	Madrid

Address: C. de Arapiles, 8, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Anaesthesiology and Resuscitation
- Pediatric Dentistry



Medicine

Policlínico HM Distrito Telefónica

Country	City
Spain	Madrid

Address: Ronda de la Comunicación, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Optical Technologies and Clinical Optometry
- General and Digestive System Surgery



Medicine

Policlínico HM Gabinete Velázquez

Country	City
Spain	Madrid

Address: C. de Jorge Juan, 19, 1° 28001, 28001, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Clinical Nutrition in Medicine
- Aesthetic Plastic Surgery



Medicine

Policlínico HM La Paloma

Country	City
Spain	Madrid

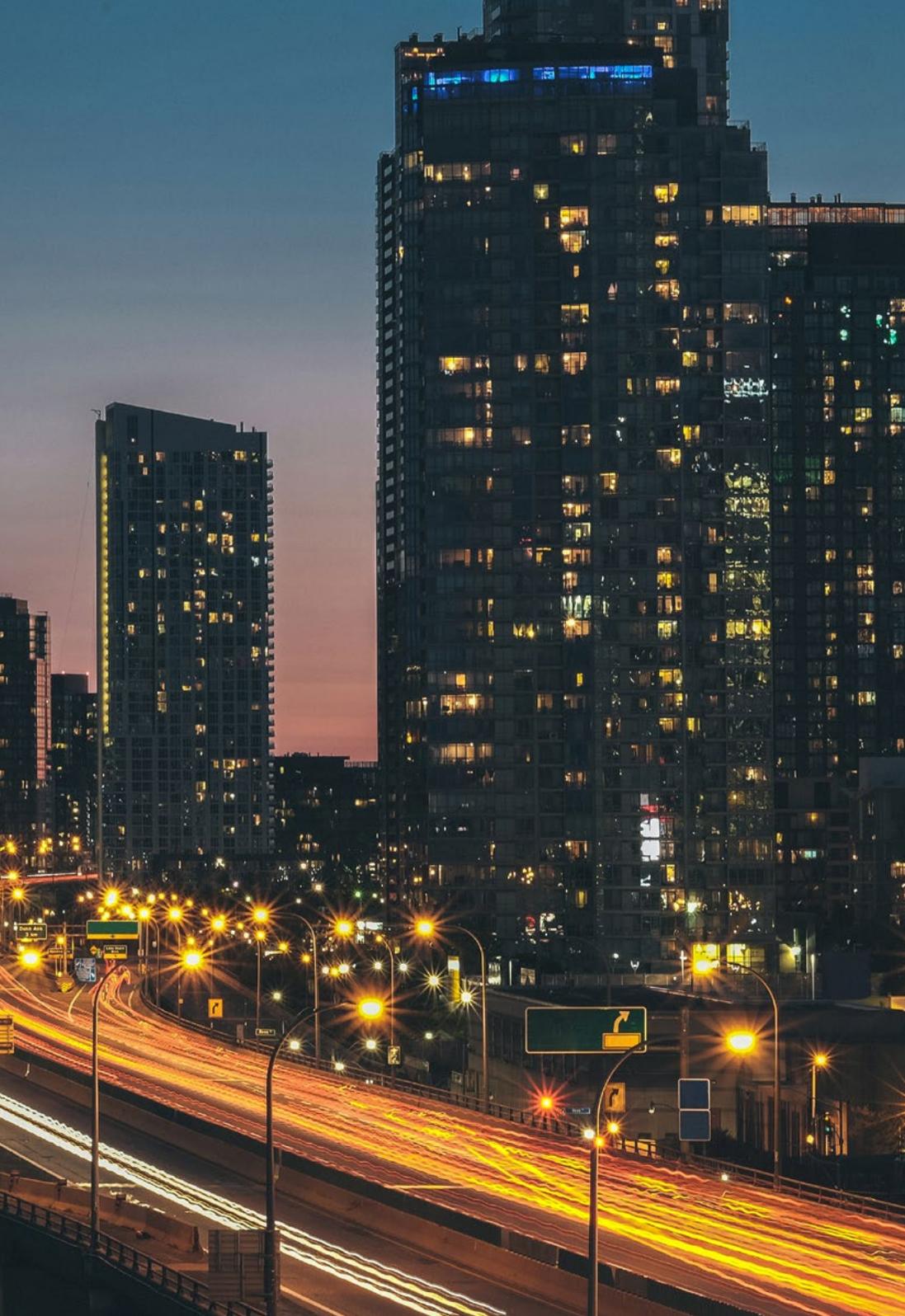
Address: Calle Hilados, 9, 28850, Torrejón de Ardoz, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Advanced Operating Room Nursing
- Orthodontics and Dentofacial Orthopedics





Medicine

Policlínico HM Las Tablas

Country	City
Spain	Madrid

Addresss: C. de la Sierra de Atapuerca, 5, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Trauma Nursing
- Diagnosis in Physiotherapy



Medicine

Policlínico HM Moraleja

Country	City
Spain	Madrid

Addresss: P.º de Alcobendas, 10, 28109, Alcobendas, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Rehabilitation Medicinein Acquired Brain Injury Management



Medicine

Policlínico HM Imi Toledo

Country	City
Spain	Toledo

Addresss: Av. de Irlanda, 21, 45005, Toledo

Network of private clinics, hospitals and specialized centers distributed throughout Spain

Related internship programs:

- Electrotherapy in Rehabilitation Medicine
- Hair Transplantation

09

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 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.



Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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.

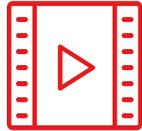
Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.

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 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

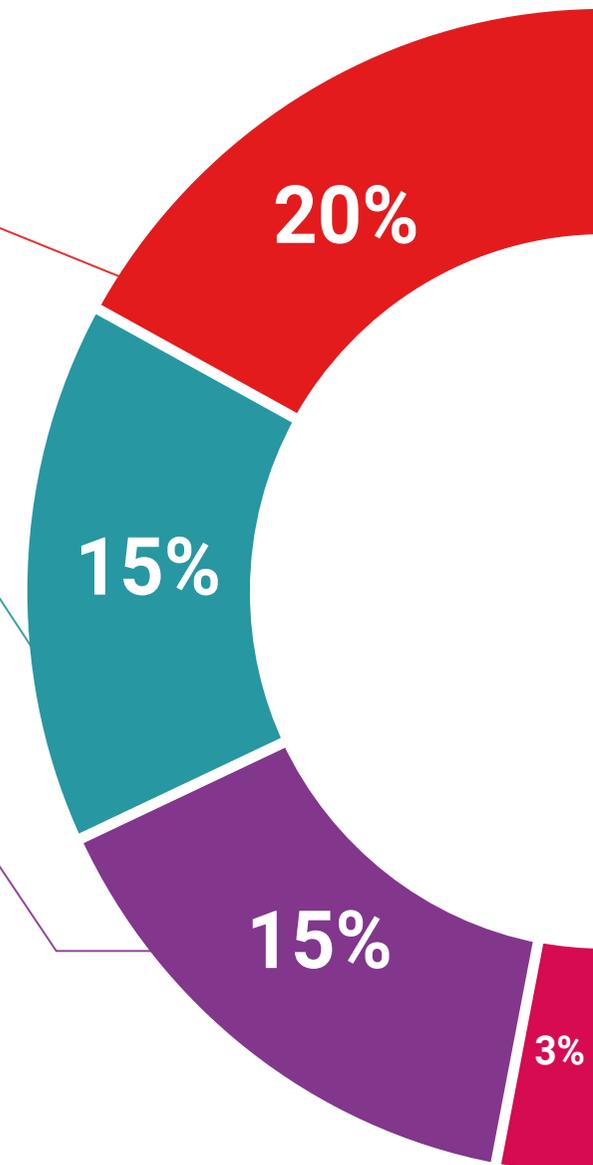
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

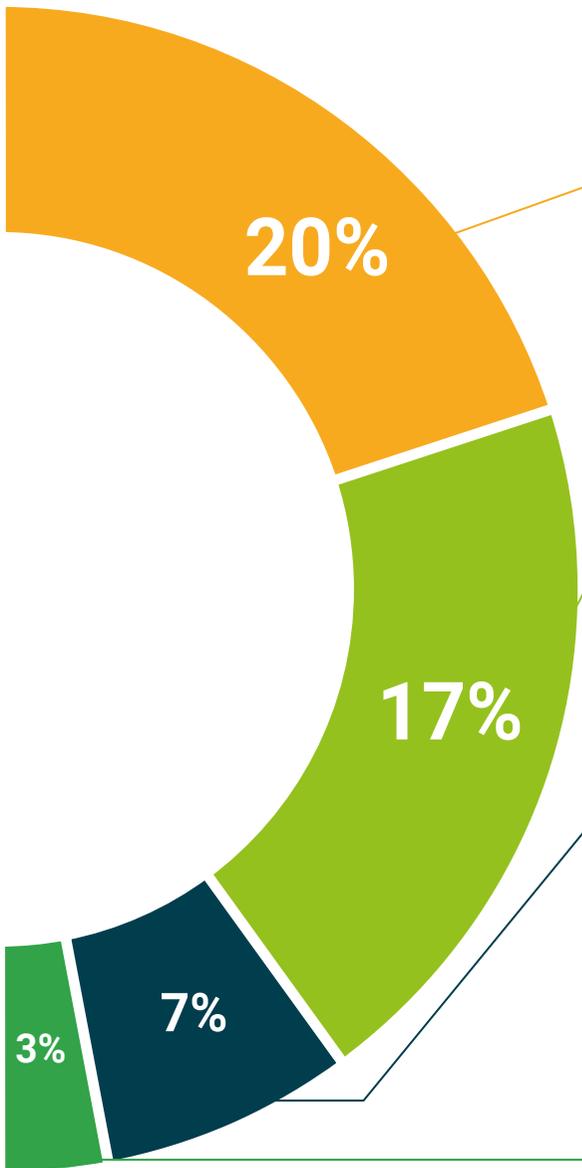
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



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.





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 assess and re-assess 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.



10 Certificate

The Hybrid Professional Master's Degree in Cardiac Arrhythmias guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree diploma issued by TECH Technological University.



“

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

This **Hybrid Professional Master's Degree in Cardiac Arrhythmias** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree issued by TECH Technological University via tracked delivery*.

The diploma issued by TECH Technological University will reflect the qualification obtained in the Hybrid Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

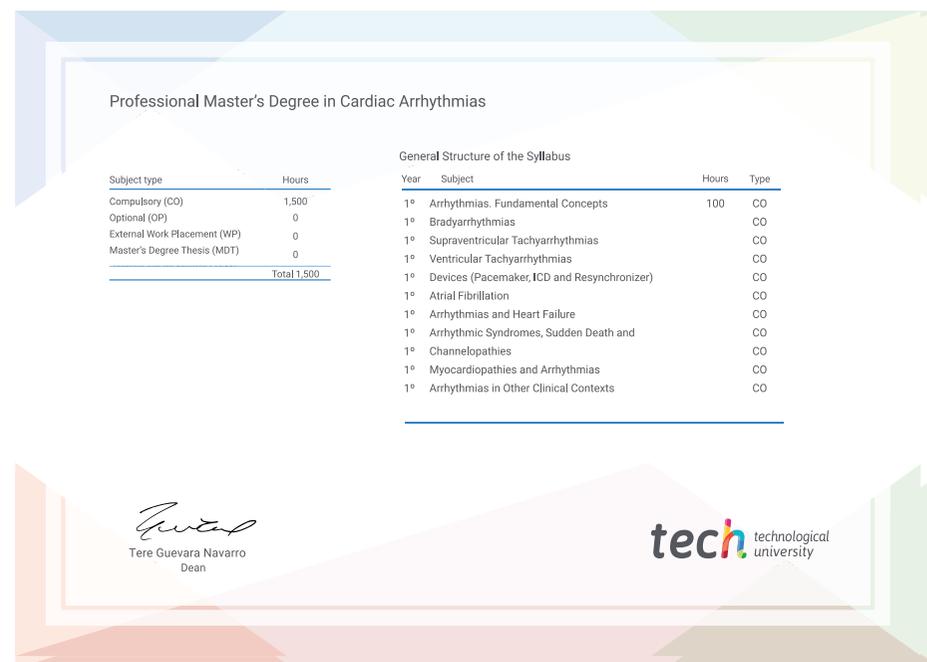
Title: **Hybrid Professional Master's Degree in Cardiac Arrhythmias**

Course Modality: **Hybrid (Online + Clinical Internship)**

Duration: **12 months**

Certificate: **TECH Technological University**

Official Hours: **1,620 h.**



*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge presence
online training
development languages
virtual classroom

tech universidad
tecnológica

**Hybrid Professional Master's
Degree**

Cardiac Arrhythmias

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Hybrid Professional Master's Degree

Cardiac Arrhythmias

