

Internship Program

Acute Coronary Syndrome





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university

Internship Program
Acute Coronary Syndrome

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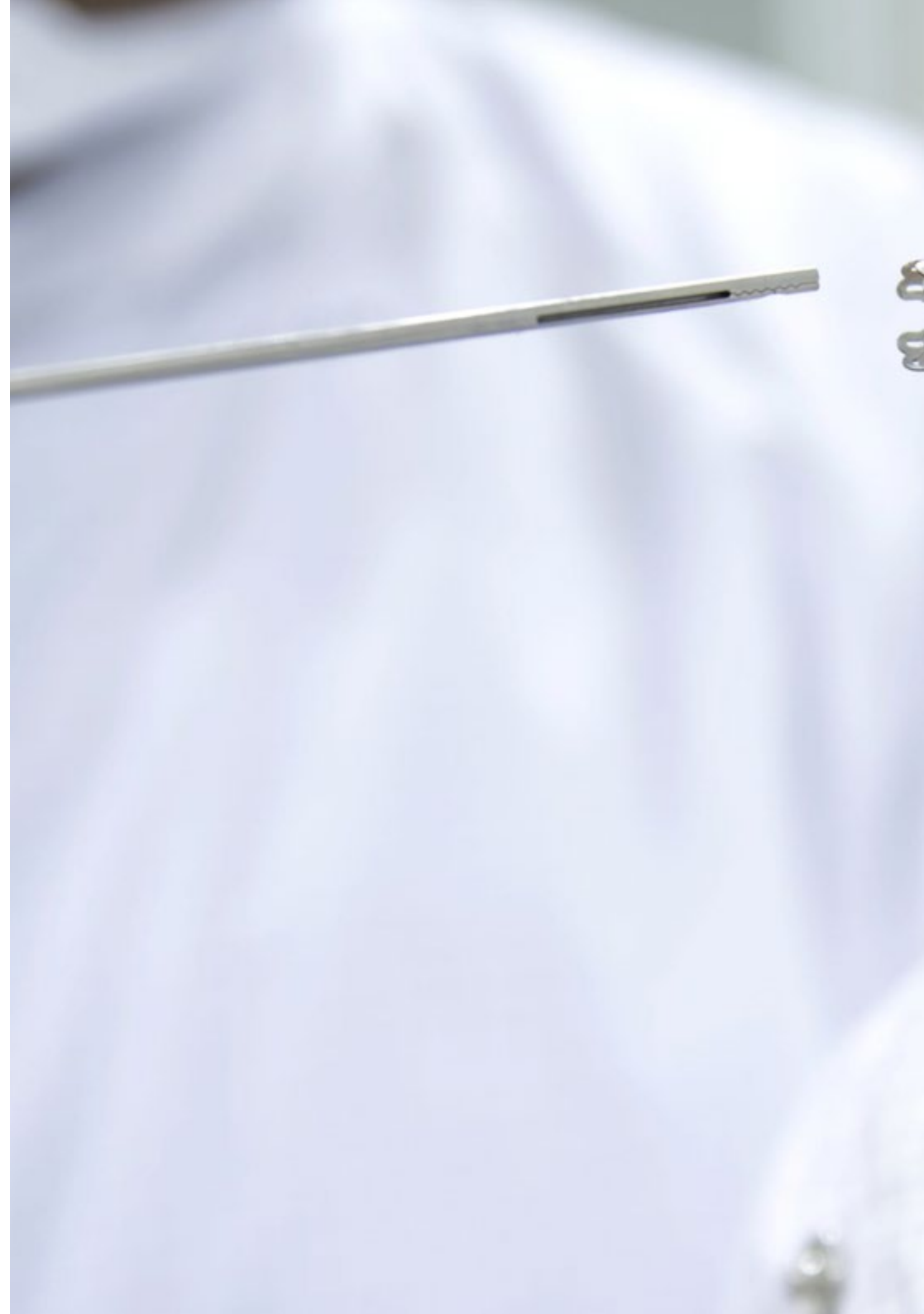
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01 Introduction

The research efforts of the medical sciences to find more efficient treatments for acute coronary syndrome have led to the emergence of innovative techniques for its diagnosis, treatment and rehabilitation of specific parts of the cardiovascular system. These advances oblige physicians to remain up to date, although there are not enough educational programs on the subject. Based on this problem, TECH has designed a 100% practical and face-to-face program, in which the specialist will complete 3 weeks of learning in a state-of-the-art hospital center. From there you will have access to the best technological tools and a team of experts with extensive experience. Upon completion of this study program, you will have the modern competencies and skills most in demand in your professional setting.



Add to your professional practice the performance of innovative Cardiac Rehabilitation procedures with this first class, intensive and immersive classroom learning program"





With the increase in cardiovascular pathologies, science and technology are tirelessly searching for modern tools and much more complex procedures for the correct diagnosis and treatment. An example of this is the use of specific drugs to dilate the coronary arteries, such as nitrates and beta-blockers, which help control ischemic heart disease. Also, much more complex interventional techniques such as radiofrequency ablation therapy have been included. Therefore, in just a few years, this medical discipline has been considerably developed, forcing many specialists to look for ways to keep up to date with all these elements.

Aware of this context, TECH has designed this Internship Program, which consists of a 3-week intensive face-to-face internship. During this period, the physician will be trained on innovative care trends from the point of view of Cardiology and, in particular, on the approach for Acute Coronary Syndrome. Throughout the internship program, you will learn about the most modern devices for the diagnosis of these pathologies, as well as the new surgical and non-invasive treatment techniques for the correct revascularization of the organism. At the same time, we will examine the most recent strategies of Cardiac Rehabilitation and the individual criteria to be taken into account for the patient in order to apply them.

The internship will take place in a state-of-the-art medical center, to which the professional will have to travel in order to complete 120 hours of practical training from Monday to Friday. During this clinical internship, you will receive personalized attention from an assistant tutor who will help you become familiar with the most modern dynamics and techniques within the specialty. At the same time, you will be able to add new experiences after working together with experts of wide-ranging skills working in that institution.

02

Why Study an Internship Program?

Cardiology is increasingly implementing technological resources and more comprehensive care protocols to provide solutions to complex pathologies such as acute coronary syndrome. However, not all specialists are prepared with the optimal skills to face this clinical condition. For this reason, TECH offers the physician a degree of maximum rigor in which they will have access to a hospital institution of international prestige. From there, they will carry out a 3-week intensive on-site stay, and will use the most innovative devices and procedures within this field of care.



Enrolling in this hands-on training will help you stay up to date on the most efficient imaging techniques and tools for the diagnosis of Acute Coronary Syndrome"

1. Updating from the Latest Technology Available

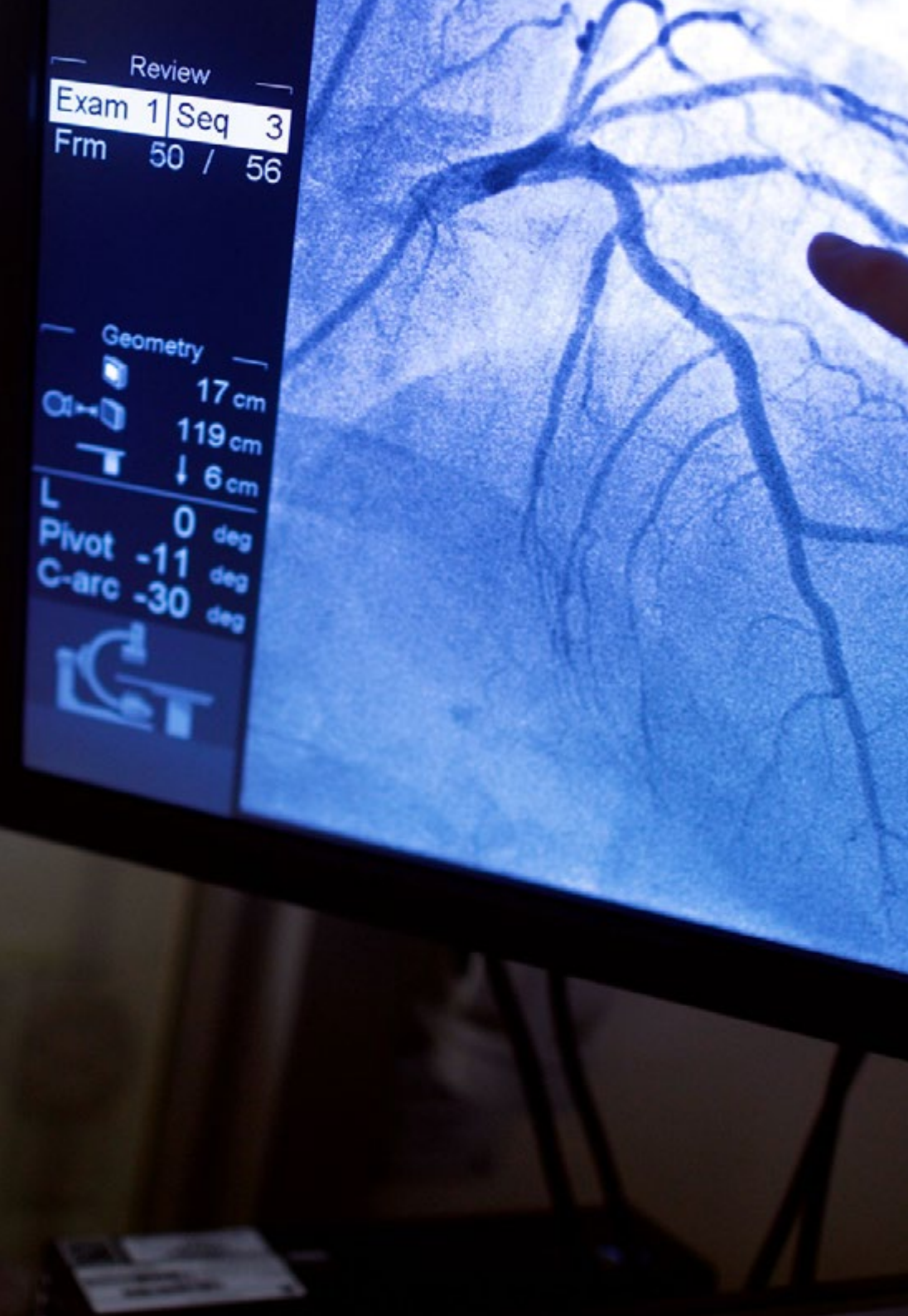
Thanks to this study program, the specialist will be up to date on the latest techniques and technologies to diagnose pathologies such as Acute Coronary Syndrome and Chronic Chest Pain. Likewise, they will delve into the essential tools for Cardiac Rehabilitation. Therefore, the physician will implement a professional praxis of excellence and rigor when they return to their daily practice.

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

During this Internship Program, the professional will be accompanied by a designated tutor. This professional figure will be in charge of supervising their academic progress and providing them with a dynamic insertion into the healthcare routines of the hospital center where they will spend their on-site stay. In addition, they will answer your questions and will work together with other experts from that institution.

3. Entering First-Class Clinical Environments

Under meticulous selection parameters, TECH has chosen the healthcare institutions that form part of its Internship Program in Acute Coronary Syndrome. These centers have the most up to date technological resources of the moment, as well as the most distinguished specialists who will help the physician to put into practice each one of them through the direct attention of real cases.



4. Putting the acquired knowledge into daily practice from the very first moment

Programs on Acute Coronary Syndrome are not abundant in the educational market. For this reason, TECH has set aside the deeper theoretical considerations about this sector and has composed a 100% face-to-face and intensive internship of excellence that will bring the cardiologist up to date on the latest developments in this health area.

5. Expanding the Boundaries of Knowledge

TECH has a wide network of agreements and contacts that help you choose, for this Internship Program, the most competitive institutions on the international scene. Therefore, the specialist will be able to complete this practical stay in centers located in distant geographical latitudes under their preference and master the advances of the specialty under globalized criteria.



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

03 Objectives

As the main objective of this Internship Program, the professional will delve into different diagnostic and therapeutic procedures for Acute Coronary Syndrome. This learning will be guided by leading experts in this area of health who will welcome you in the realization of a face-to-face and intensive stay in hospital centers of maximum prestige and health care.



General Objectives

- ♦ To develop an in-depth knowledge of Acute Coronary Syndrome, starting with its pathophysiology and its importance as one of the main causes of death in civilized countries
- ♦ To develop Professional skills in the assessment and differential diagnosis of chest pain in the emergency department understanding the value of the different complementary techniques available
- ♦ Adequately classify the patient's initial risk and the most appropriate prehospital treatment and monitor measures in the prehospital phase





Specific Objectives

- ♦ To assimilate reperfusion therapies, their limitations, advantages and protocols, understand the great importance for the time of ischemia
- ♦ Diagnose and manage the mechanical and arrhythmic complications that can occur in this syndrome
- ♦ Implement appropriate treatment measures during the hospital phase and the value of Coronary Units
- ♦ Understand the value and structure of Cardiac Rehabilitation programs
- ♦ Manage the treatments that have provided value in secondary prevention of these patients
- ♦ Delve into the risk factors for developing atherosclerosis, both classic and new.
- ♦ Classify acute coronary syndromes and their reasons
- ♦ Adapt the epidemiology and the different clinical presentations of SCASET
- ♦ Stratify patients by thrombotic and hemorrhagic risk to individualize their treatment
- ♦ Correctly evaluate patients with chest pain in the emergency department and the value of chest pain units
- ♦ Assess the use of transthoracic ultrasound at the bedside in patients with chest pain
- ♦ Control the different forms of revascularization possible and their respective advantages and disadvantages
- ♦ Understand the electrocardiographic manifestations of this condition, its possible differential diagnoses and the evolutionary pattern over time
- ♦ Identify the rest of the potential mechanical complications (cardiac rupture, VSD and MI) and their incidence, treatment and prognosis
- ♦ Monitor the usefulness of imaging techniques in the evaluation of patients with NSTEMACS with suspected mechanical complications
- ♦ Deepen the knowledge of MINOCA, patients with ischemic myocardial damage, but without evidence of obstructive epicardial coronary artery disease
- ♦ Describe a protocol for antiplatelet treatment in patients who also need to take anticoagulant drugs
- ♦ Internalize hemodynamic support measures during primary angioplasty
- ♦ Recognize the problem of out-of-hospital sudden death and primary ventricular fibrillation.
- ♦ Assess which supraventricular arrhythmias are to be expected in this pathology and which antiarrhythmic medication are appropriate during infarction.
- ♦ Control the indications for pacemaker implantation and electrical cardioversion.
- ♦ To deepen in the particularities of diabetic patients with ACS and specific treatment measures in this important group of patients
- ♦ Understand the utility and structure of Cardiac Rehabilitation programs
- ♦ To manage the opportunities offered by telemedicine in Rehabilitation and specifically in its ambulatory phase

04

Educational Plan

The TECH Practical Training program consists of a face-to-face and intensive internship in a state-of-the-art hospital. In this center, the physician will adapt to the holistic development of the main novelties in the field of Acute Coronary Syndrome management. At all times, they will receive personalized guidance from highly prestigious experts and will be supported by an assistant tutor who will closely monitor their academic progress.

In this completely practical Internship Program, the activities are aimed at developing and perfecting the skills necessary to provide healthcare in areas and conditions that require highly qualified professionals, and are oriented towards specific expertise for practicing the activity, in a safe environment for the patient and with highly professional performance.

The practical teaching will be carried out 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 training partners that facilitate teamwork and multidisciplinary integration as transversal competencies for medical practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the internship, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:



Module	Practical Activity
New trends in imaging tests and other techniques for the detection of Ischemia	Creating detailed images of the heart and the blood vessels that supply it through computed tomography
	Injecting contrast dye into the coronary arteries and imaging the coronary arteries through coronary angiography
	Evaluate blood flow through Echocardiography tools
	Obtain detailed images of the heart and blood vessels through Cardiovascular Magnetic Resonance Imaging
	Monitor the heart rhythm during Stress Tests indicated to the patient under suspicion of Ischemia
	Introduce a small amount of radioactive material into the body to detect any areas of the heart that are not receiving sufficient blood flow with the Nuclear Stress Ischemia Test
	Perform Holter monitoring and heart rate monitoring for patients at risk for cardiovascular disease
Latest Therapeutic Trends in Acute Coronary Syndrome and Revascularization Techniques	Unclogging the compromised arteries through coronary angioplasty with stenting that places a mesh to keep closed pathways open
	Remove the tissue that is causing the abnormal heart rhythm through Radiofrequency Ablation Therapy
	Implementing Coronary Revascularization surgery techniques that are performed without the need for Extracorporeal Circulation
	Administer live cells (cell therapy), such as stem cells, to the heart to help repair the damage caused by ischemia
	Perform complex procedures with greater precision and less invasiveness on the heart, using modern tools such as the DaVinci® surgical robot
Modern strategies in the management of patients with cardiac ischemia in a hospital coronary unit	Relieve the pain of the ischemic patient and achieve stabilization of heart rate and blood pressure
	Dilate the coronary arteries, such as nitrates and beta-blockers, examples of treatments for cardiac ischemia
	Detect any changes in their health status and to ensure that they are receiving appropriate treatment

Module	Practical Activity
Latest therapeutic trends in Reperfusion to restore blood flow to the heart	Indicate fibrinolytic therapy (use of specific drugs) that breaks down the blood clot that is blocking the coronary artery
	Apply mechanical thrombectomy using a specific device to remove a clot from the coronary artery
	Use a small aspirator (suction coronary thrombectomy) to remove the clot from the coronary artery
	Improve the patient's quality of life and recovery through minimally invasive revascularization techniques.
New Cardiac Rehabilitation protocols	Personalize Cardiac Rehabilitation protocols according to the physical and psychological conditions of each patient
	Start with a gradual exercise program, with the objective of exponentially increasing the intensity and providing a better recovery of the patient
	Maintain health monitoring and strict control over the individual risk factors of each patient



Receive specialized education in an institution that can offer you all these possibilities, with an innovative academic program and a human team that will help you develop your full potential"

05 Where Can I Do the Internship Program?

TECH has chosen several prestigious centers in the hospital field for this 100% practical and face-to-face mode of study. The doctor will access them for 3 weeks, from Monday to Friday, to complete 120 educational hours. In these institutions, your learning will be guided by a prestigious expert, in charge of making you acquire the skills most requested by the healthcare environment with respect to this medical area. You will also provide direct assistance to real patients with severe Acute Coronary Syndrome.

“

Enroll in this internship program and you will have access to first level hospital centers, focused on the diagnosis and treatment of Acute Coronary Syndrome”





The student will be able to do this program at the following centers:



Medicine

Hospital HM Modelo

Country: Spain
City: 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: Spain
City: 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: Spain
City: 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
- Nursing in the Traumatology Department



Medicine

Hospital HM Regla

Country: Spain
City: 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: Spain
City: 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: Spain
City: 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: Spain
City: 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: Spain
City: 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, 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

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

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

Related internship programs:

- Nursing in the Traumatology Department
- Diagnosis in Physiotherapy



Medicine

Policlínico HM Moraleja

Country	City
Spain	Madrid

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

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

Related internship programs:

- Rehabilitation Medicine in Acquired Brain Injury Management



Medicine

Policlínico HM Imi Toledo

Country	City
Spain	Toledo

Address: 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

06

General Conditions

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 Internship Program, students will be assigned 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 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 student does not show up on the start date of the Internship Program, 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 Internship Program will receive a certificate accrediting their stay at the center.

5. EMPLOYMENT RELATIONSHIP: The Internship Program shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION Some centers may require a certificate of prior education for the Internship Program. 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 Internship Program 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.

07 Certificate

This program will allow you to obtain your **Internship Program diploma in Acute Coronary Syndrome** endorsed by **TECH Global University**, the world's largest online university.

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

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

Title: **Internship Program in Acute Coronary Syndrome**

Duration: **3 weeks**

Attendance: **Monday to Friday, 8-hour consecutive shifts**

Accreditation: **5 ECTS**





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