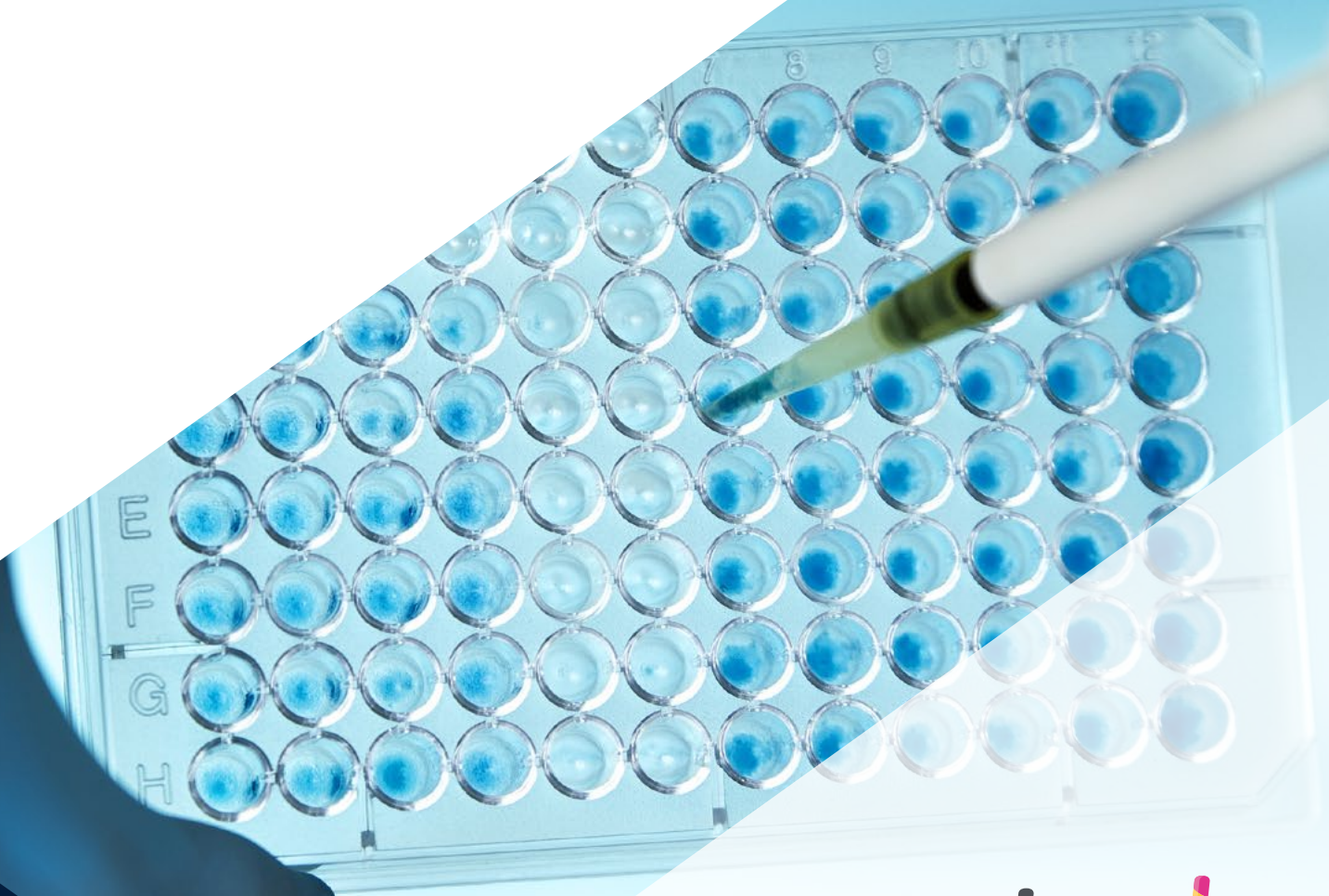


# Internship Program

## Clinical Analysis



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Internship Program  
Clinical Analysis

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# 01 Introduction

The recent pandemic situation has highlighted the enormous importance of clinical analysis in today's medicine. Therefore, this field not only constitutes a fundamental tool for the diagnosis and follow-up of numerous pathologies, but has also become one of the most demanded areas in the healthcare professional field. For this reason, this program has been designed with the aim of offering physicians the latest advances in this type of tests, so that they can incorporate them into their daily work in a practical way, thanks to the 3-week on-site internship that can be carried out in a clinical center of recognized prestige.

“

*Enjoy an intensive 3-week stay in a reputable center and get up-to-date on the latest clinical procedures to achieve professional growth”*





Clinical analysis is the common basis for numerous clinical specialties, so it is not surprising that it is one of the medical fields with the greatest boost. Advances in analytical diagnostic methods, functional and laboratory tests and medical therapeutics have greatly boosted this specialty. This has led to a demand for qualifications such as this Internship Program offered by TECH, a unique program in the academic market in which the specialist will be introduced in a first-class clinic to check, in situ, all the latest medical developments.

The internship will be carried out intensively, in continuous schedules, and will allow the specialist to carry out various practical activities related to clinical analysis, delving into the different instrumental techniques and disciplines such as microbiology, parasitology or hematology. All this, with the support of the best professionals of the clinical center, who will ensure that the physician is up-to-date in a simple and agile way, preparing them to face the many challenges of the future in this complex field.

“ This program will allow you to learn the most advanced techniques in clinical analysis in a totally practical way, with the accompaniment of great specialists”

# 02

## Why Study an Internship Program?

The modernization of clinical analysis is more than evident. Elements such as the increasing automation of laboratories, chromatography or the use of big data in the management of medical data are just some examples of how the advancement of science provides new solutions and tools to the most up-to-date specialists. Precisely to promote this updating work, TECH has developed a unique program in the academic market, which gives the specialist the opportunity to join a highly qualified team in Clinical Analysis. This will take the work of updating to a new level, making use of the most advanced analytical technology in a real environment.



*Join a multidisciplinary and advanced team, with extensive experience in the management of Clinical Analysis, to access the latest clinical practice"*

### 1. Updating from the latest technology available

The prevailing development of information technology has inevitably had an impact on the field of Clinical Analysis, which has led to a substantial improvement in database management systems and their organization. In this Internship Program the specialist will have the opportunity to see the most advanced means of analytical and screening tests, obtaining a practical knowledge of immense value.

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

The best professionals, referents in Clinical Analysis, will support the specialist throughout the internship. In this way, they will be able to check in situ all the work methodology used in the day-to-day work of a first-class laboratory, resulting in a much more immersive and enriching experience.

### 3. Entering First-Class Clinical Environments

The practical environment to which the specialist has access is of the utmost vanguard, since TECH makes sure to select those centers and clinical laboratories of the highest relevance and reputation. Therefore, all the Internship Program will be carried out surrounded by the best possible equipment for diagnostic analysis and functional tests.



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

As the focus of the entire internship is purely practical, the specialist will be able to incorporate the specific techniques and approaches acquired during the Internship Program into their own work methodology. In this way, the update is practically immediate, which is a fundamental advantage for the specialist, since in only 3 weeks they will have access to the most important novelties and developments in Clinical Analysis.

#### 5. Expanding the Boundaries of Knowledge

Since clinical analytics is a medical field in constant expansion, the Internship Program also serves as a rigorous experience when it comes to understanding, assuming and incorporating all the most advanced developments in the methodology itself. This is a differential experience in the specialist's career, since practice is often the best way to continue advancing.

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

# 03 Objectives

The main objective of this Internship Program in Clinical Analysis is to bring professionals closer to the latest advances in this type of scientific tests, so that they can incorporate them into their daily work immediately. And to achieve this, this program has designed an on-site internship in which they will be able to get up-to-date through practice, receiving the guidance of the professionals of the scientific-health center itself.



## General Objectives

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- Study the practical methodology of a high level clinical laboratory
- Incorporate the most advanced techniques and analytical techniques to their own daily work
- Approach the most advanced and currently most useful functional and laboratory tests



*Make decisive progress in your update work thanks to this Internship Program"*







## Specific Objectives

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- ♦ Identify the need for correct management of health documentation
- ♦ Define the clinical indicators of analytical quality
- ♦ Analyze and carry out the instrumental techniques and sample collection processes that apply specifically to the clinical health analysis laboratory, as well as determine the fundamentals and correct handling of the necessary instruments
- ♦ Apply the instrumental techniques in the resolution of problems in health analysis
- ♦ Develop skills in the management and analysis of biochemical diagnosis parameters
- ♦ Apply different biochemical analytical techniques to the diagnosis of human diseases
- ♦ Know the usual procedures used in the field of biomedicine and clinical analysis to generate, transmit and disseminate scientific information
- ♦ Propose complementary explorations, essential for the clinical approach of patients affected by a hemopathy
- ♦ Correlate laboratory findings with clinical entities
- ♦ Establish differential diagnosis of the main blood dyscrasias
- ♦ To examine the etiological basis, pathogenesis, epidemiology, treatment and diagnosis of the main microbial and parasitic diseases affecting humans
- ♦ Compile various molecular biology techniques currently used for genetic diagnosis and analysis Interpret the results obtained from them
- ♦ Present the latest advances in the field of genetic medicine, genomics and personalized medicine

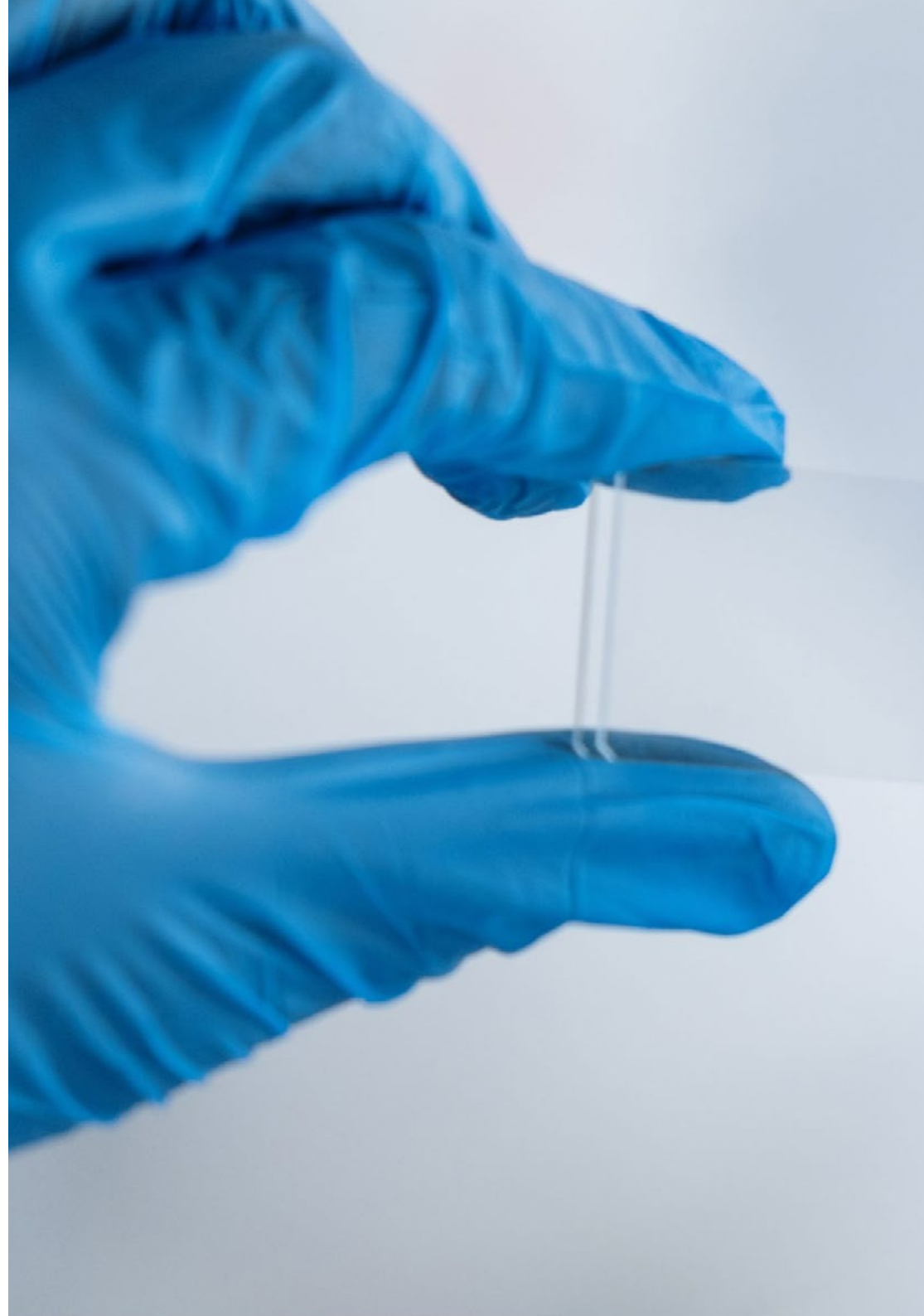
# 04

## Educational Plan

This Internship Program consists of 3 weeks of on-site training in a prestigious clinical center. In this institution, the professional will have at their disposal the most advanced technology, with which they will be able to put into practice the most advanced procedures in the area of Clinical Analyses. This internship will be carried out intensively, with a schedule from Monday to Friday and 8 hours of consecutive learning, therefore, guaranteeing the assimilation of the new concepts and techniques in a real environment.

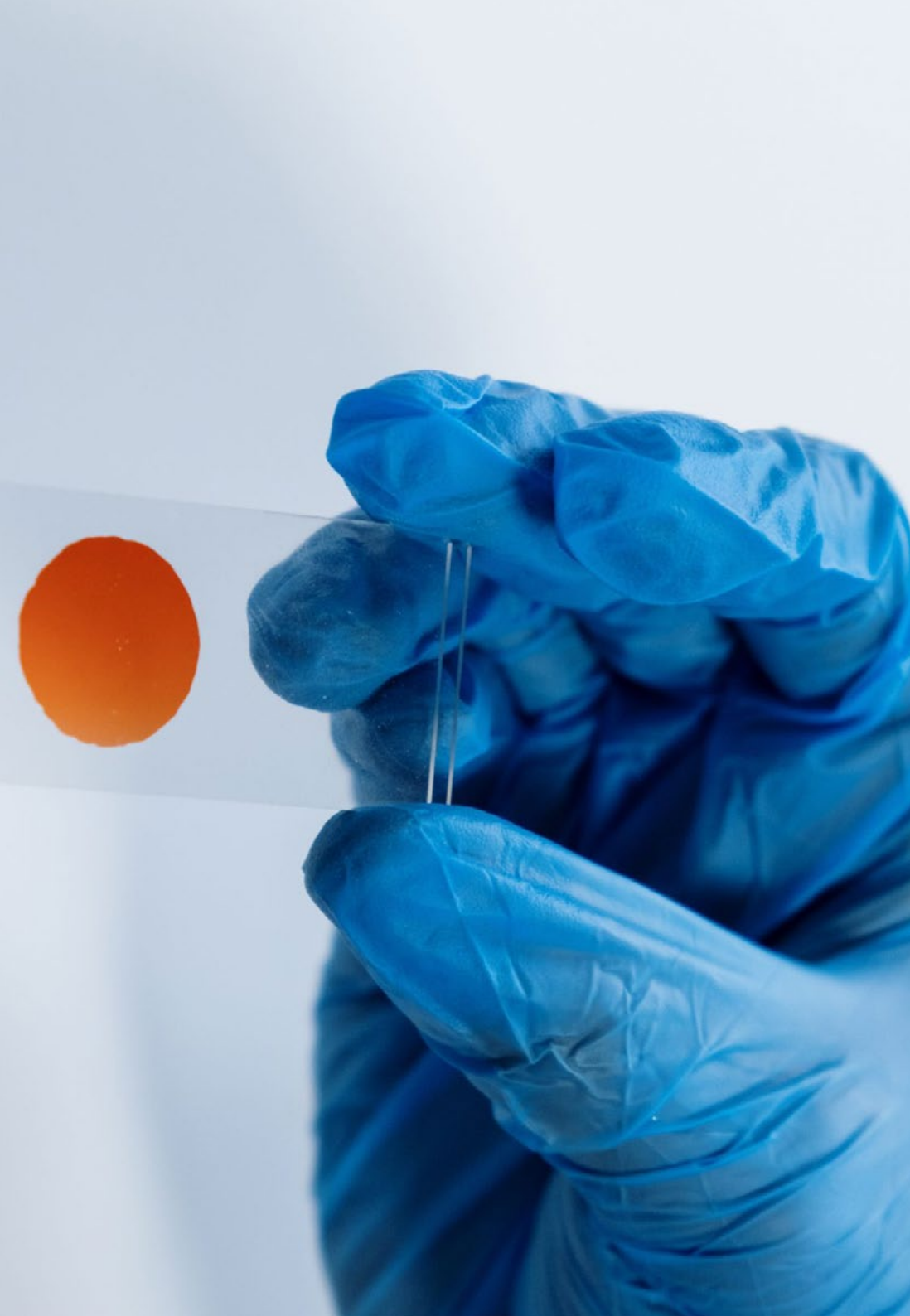
In this completely practical Internship Program, the activities are aimed at developing and perfecting the skills necessary to provide clinical analysis services, and are oriented towards specific expertise for practicing the activity, in a safe environment for the patient and with highly professional performance.

The practical teaching will be carried out with the active participation of the student performing the activities and procedures of each area of knowledge (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 competencies for the practice of Clinical Analysis (learning to be and learning to relate).



The procedures described below will form 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 workload, with the proposed activities being as follows:

Module	Practical Activity
<b>Instrumental, Management and Biochemistry Techniques in the Clinical Analysis Laboratory</b>	Apply the most modern microscopic techniques to the study of samples
	Use chromatography and electrophoresis
	Evaluate the possible analytical interferences in the interpretation of results
	Perform a biochemical study of vitamins and vitamin deficiencies
	Perform a laboratory analysis of blood biochemistry
	Examine congenital alterations of amino acid and lipid metabolism
	Assess the reliability of the results obtained in the analysis procedure
	Communicate the results of analyses according to the protocol in force
	Manage the stock of material and supplies of the clinical laboratory
<b>Hematology, Microbiology and Parasitology</b>	Assess anemias, erythrocytosis, hemoglobinopathies and other erythrocyte disorders
	Perform a differential diagnosis of acute leukemias
	Examine monoclonal gammopathies and multiple myeloma
	Study common viral infections and applicable state-of-the-art analytics
	Develop general virology techniques with best results
	Perform various parasitic disease analyses
	Apply hematological analysis techniques on samples received
	Perform microbiological analysis on samples and cultures
	Apply immunological techniques to biological samples
	Perform analysis of biochemical parameters (cholesterol, triglycerides, glucose, uric acid, bilirubin, transaminases, etc.)
<b>Immunology and Genetics in the Clinical Laboratory</b>	Perform prenatal diagnostic assessments
	Perform analysis of hypersensitivity reactions
	Analyze patient's immune response
	Perform genomics and proteomics assessments
	Employ the most advanced bioinformatics tools in clinical data management



# 05 Where Can I Do the Internship Program?

The doctor will be able to carry out this Internship Program in a clinical center of renowned prestige that will have the most advanced clinical and technological tools to carry out numerous activities in a real environment. In addition, they will be accompanied by renowned specialists belonging to the institution where the internship will take place, so they will have the best guidance throughout the learning process.



*This program has the best clinical centers for you to carry out your internship at the highest level, acquiring the most up-to-date competencies in this fundamental area of medicine”*





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



### Diagnoslab

Country: Spain City: Madrid

Address: C. Cam. del Berrocal, 4, 28400 Collado Villalba, Madrid

Clinical Analysis Laboratory for Medical Diagnostics

**Related internship programs:**

- Clinical Analysis
- Nursing in the Gynecology Service



### 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



### Hospital Maternidad HM Belén

Country: Spain City: La Coruña

Address: R. Filantropía, 3, 15011, A Coruña

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

**Related internship programs:**

- Update in Assisted Reproduction
- Hospitals and Health Services Management



### Hospital HM Rosaleda

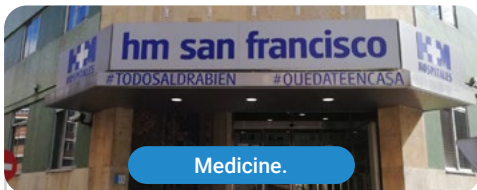
Country: Spain City: La Coruña

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



### 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
- Trauma Nursing



### 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



### 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



### 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 Montepíncipe

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:**

- Palliative Care
- Aesthetic Medicine



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 Nuevo Belén

Country	City
Spain	Madrid

Address: Calle José Silva, 7, 28043, Madrid

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

**Related internship programs:**

- General and Digestive System Surgery
- Clinical Nutrition in Medicine





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.

### Clínica Intègria

Country City  
Spain Granada

Address: Calle Torre de Comares,  
2, 18007 Granada

INTÈGRIA, clinic with more than 20 years of experience in Aesthetic Medicine, General Medicine, Capillary Surgery and Aesthetic Surgery

**Related internship programs:**

- Clinical Analysis
- Aesthetic Plastic Surgery

# 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 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 practical 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 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 **Internship Program in Clinical Analysis** contains the most complete and up-to-date program in the professional and academic landscape.

After the student has passed the evaluations, they will receive their corresponding TECH Internship Program issued by TECH Technological University via tracked delivery.

The certificate issued by TECH will reflect the grade obtained in the test.

Program: **Internship Program in Clinical Analysis**

Duration: **3 weeks**

Course Modality: **Monday to Friday, 8-hour consecutive shifts**

Total Hours: **120 h. of professional practice**



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Clinical Analysis

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