

# Internship Program

## Clinical Infectious Diseases and Antibiotic Therapy



tech



**tech**

Internship Program  
Clinical Infectious Diseases  
and Antibiotic Therapy

# Index

01

Introduction

---

*p. 4*

02

Why Study an Internship Program?

---

*p. 6*

03

Objectives

---

*p. 8*

04

Educational Plan

---

*p. 10*

05

Where Can I Do the Internship Program?

---

*p. 12*

06

General Conditions

---

*p. 14*

07

Certificate

---

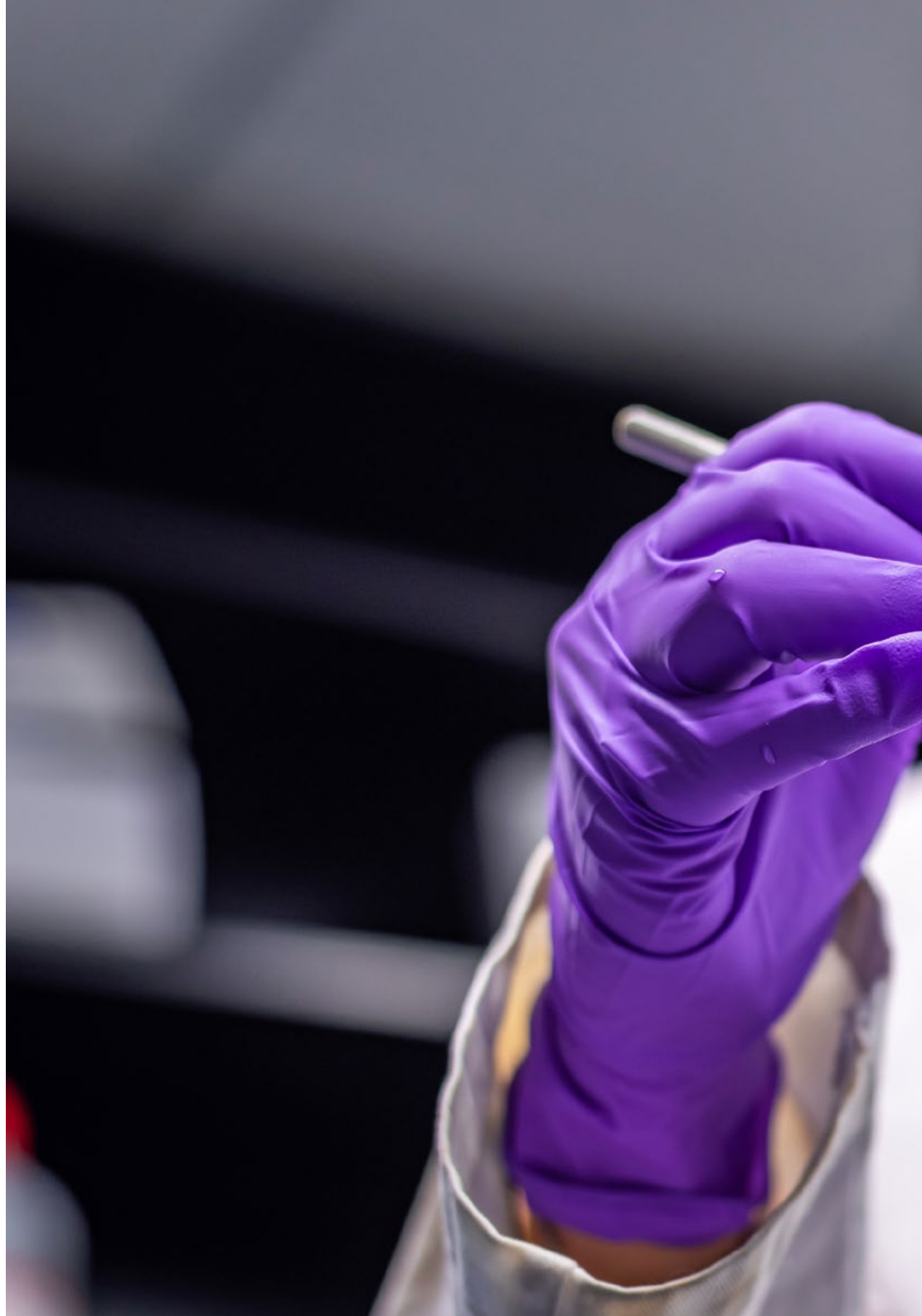
*p. 16*

# 01 Introduction

According to several studies, infectious diseases will be the ones causing the greatest number of deaths in the year 2050. In order to avoid this, more and more efforts are being made to develop new antibiotics to combat many of these diseases, drugs whose use must be mastered by physicians to preserve the well-being of their patients and eradicate their infections. Given this circumstance, TECH has created this exclusively practical program, through which the student will be integrated for 3 weeks in a first level hospital, in order to incorporate the novel antibiotic therapeutics for these pathologies in their work methodology.



*The Internship Program in Clinical Infectious Diseases and Antibiotic Therapeutics will enable you to master antimicrobial treatment procedures with patients suffering from renal or hepatic insufficiency"*





One of the main concerns of researchers in the field of infectious diseases are emerging viruses of animal origin, since there is a great fear that antibiotics may not be effective against certain pathologies and may spread to millions of people. For this reason, new drugs are continually being developed to combat emerging diseases, as well as those that have been present in society for a longer period of time, with the aim of eradicating their existence. Due to the fact that many of these antibiotic treatments, already developed, are very effective in combating various infections, doctors who are experts in their administration are increasingly needed to ensure the well-being of the patient.

In view of this situation, TECH has created this Internship Program, which will enable the student to master the use of the latest antibiotics to combat various infectious diseases. This will be done in a 100% practical way, through a 120-hour hospital experience with the best specialists in the field. During this period of time, the physician will assimilate the protocols for treatment with antimicrobials for pregnant patients or patients with renal insufficiency and the administration of antivirals for various diseases.

The student will be guided at all times by a designated tutor to ensure that the teaching experience accurately meets the expectations of the student, who will push them towards the adoption of a set of skills that will make them a professional at the forefront of the field of infectious diseases.



*The teaching materials of this program, elaborated by these specialists, have contents that are completely applicable to your professional experiences”*



# 02

## Why Study an Internship Program?

In the field of infectious diseases, it is relevant to know the theoretical ins and outs of the new pathologies that arise worldwide, but it is essential to master the administration of antibiotics that favor the recovery of the patient suffering from them. In this line, TECH has created this program, which aims to provide the professional with the latest skills in this field to enrich their medical practice focused on the diagnosis and treatment of infectious diseases.



*Thanks to TECH, you will have the opportunity to spend 3 weeks in an excellent multidisciplinary team to increase the quality of your health care in the treatment of infectious diseases"*

### 1. Updating from the Latest Technology Available

The field of infectious diseases is in constant evolution due to the continuous emergence of new pathologies, as well as medications to combat them and those that were already widespread in society. Because of this, TECH has created this program that, in a practical way, will allow the doctor to increase their skills in the antibiotic treatment of numerous infections.

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

The excellent medical team in which the student will be integrated during his practical experience endorses the quality of the program offered by TECH. Together with the advice of a specific tutor, you will develop your medical skills in the treatment of infectious diseases with real patients.

### 3. Entering First-Class Clinical Environments

TECH carefully selects all available centers for Internship Programs. As a result, the specialist will have guaranteed access to a prestigious clinical environment in the field of infectious diseases. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology.



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

Within the academic market, many programs focus exclusively on theory and forget the practical applicability of the contents offered. For this reason, TECH has created a disruptive teaching model that allows physicians to learn by working to incorporate the most useful skills in the antibiotic treatment of infectious diseases into their daily practice.

#### **5. Expanding the Boundaries of Knowledge**

TECH offers the possibility of completing this Internship in centers renown worldwide. This way, the specialist will be able to expand their frontiers and catch up with the best professionals, who practice in first class centers and in different continents. A unique opportunity that only TECH could offer.

“

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

# 03 Objectives

The Internship Program in Clinical Infectious Diseases and Antibiotic Therapeutics aims to enable medical professionals to expand and update their skills in the diagnosis and treatment of various infectious diseases based on the latest scientific evidence.



## General Objectives

---

- ◆ Update based on the latest scientific evidence and develop skills for daily clinical practice in care or research work in the field of infectious diseases
- ◆ Acquire the necessary skills in the diagnosis and treatment of infectious diseases to improve medical care for patients with infectious diseases



*A unique training experience,  
key and decisive to boost your  
professional development"*







## Specific Objectives

---

- ♦ Learn the principles of the clinical method in the process of diagnosing infectious disease
- ♦ Manage Epidemiology in the study of infectious diseases
- ♦ Understand the behavior of infectious diseases in the population
- ♦ Knowing how to deal with epidemic outbreaks
- ♦ Integrate the principles of the use of microbiological examinations in patients with infectious pathologies
- ♦ Correctly perform protocols for virological, bacteriological, mycological and parasitological studies
- ♦ Appropriate interpretation of microbiological studies
- ♦ Detect the immune response to viral and bacterial infections
- ♦ Recognize the most frequent clinical manifestations of immunosuppression
- ♦ Identify the most frequent clinical manifestations of febrile syndrome in neutropenic patients
- ♦ Update the general and basic concepts of the infectious health-disease process, as well as the stages of the infectious process
- ♦ Describe septic shock based on its clinical manifestations and differential features from other types of shock
- ♦ Learn how to handle the main antivirals for respiratory infections and understand how their mechanism of action works
- ♦ Associate major and minor opportunistic diseases and to know the application for their prophylaxis
- ♦ Treating different types of bacterial skin infections
- ♦ Point out the clinical characteristics of urinary tract and gynecological infections in women, their diagnosis and treatment
- ♦ Increase medical knowledge about deep and frequent fungal infections
- ♦ Identify the particularities of the most frequent fungal infections such as Cryptococcosis, Histoplasmosis or Aspergillosis
- ♦ Apply pharmacokinetics and pharmacodynamics to different parasitic and tropical diseases such as antiprotozoal or helminth antiparasitic drugs
- ♦ Delve into the therapeutics of nosocomial pneumonia associated with mechanical ventilation, establishing the general concepts, epidemiology, risk factors, etiology, diagnosis, prevention and the most commonly used antibiotics
- ♦ Update professional knowledge based on the global program for the control of antimicrobial resistance and the research of new antibiotics
- ♦ Acquire the competences and skills of the infectologist



*TECH offers you an update of your skills in the treatment of infectious diseases in only 120 hours and in a completely practical way"*

# 04 Educational Plan

This Internship Program is designed to be developed through a 3-week internship in a prestigious hospital center, from Monday to Friday with 8 consecutive working hours under the guidance of an associate specialist in the field. Through this practical phase, students will perform their tasks with real patients and, as part of a multidisciplinary work team, will assimilate updated skills for the diagnosis and treatment of different infectious diseases.

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.

TECH offers you, therefore, an excellent opportunity to develop your skills working in a hospital with the latest technology and the best equipment, where the optimization of medical treatment is essential to ensure the recovery and adequate quality of life of patients affected by various infectious diseases.

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 support and guidance of professors and other training partners that facilitate teamwork and multidisciplinary integration as transversal competencies Doctor (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:



*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"*



Module	Practical Activity
<b>Microbiological Diagnosis and Other Examinations for Infectious Diseases</b>	Take the necessary samples for the elaboration of the different tests for the detection of infectious diseases
	Carry out the protocols for the performance of virological, bacteriological, mycological and parasitological studies oriented to the detection of infectious diseases
	Properly interpret the results obtained through microbiological studies to detect the infectious pathology suffered by a patient
<b>Bacterial Diseases and Antimicrobials</b>	Treat efficiently the different bacterial infections that occur in the skin
	Diagnose and treat urinary tract and gynecological infections in women
	Therapeutically use penicillin and beta-lactamase inhibitors to combat various bacterial diseases
<b>Fungal diseases, parasitic and tropical diseases</b>	Provide the appropriate treatment for each of the most common fungal infections
	Diagnose and treat malaria or pathologies caused by intestinal protozoa
	Deal with different parasitic and tropical diseases, applying an approach based on pharmacokinetics and pharmacodynamics
<b>Antimicrobial resistance and appropriate use of antimicrobial agents</b>	Provide alternative treatment for patients who respond inadequately to antimicrobials
	Provide antimicrobial treatment for patients in special situations such as pregnant women or people with renal and hepatic insufficiency



# 05 Where Can I Do the Internship Program?

In order to promote the satisfaction of the students who take this Internship Program in Clinical Infectious Diseases and Antibiotic Therapeutics, TECH has chosen centers characterized by their avant-garde operation for the development of this program.



*Enjoy an internship in a highly prestigious hospital center with the best technologies to improve your medical practice"*







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



### **Policlínico HM Sanchinarro**

Country	City
Spain	Madrid

Address: Av. de Manoteras, 10,  
28050, Madrid

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

---

#### **Related internship programs:**

Gynecological Care for Obstetricians  
- Nursing in the Digestive Tract Department



*Make the most of this opportunity  
to surround yourself with expert  
professionals and learn from their  
work methodology"*

# 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 program agreement shall be 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 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 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 Infectious Diseases and Antibiotic Therapy** contains the most complete and up-to-date program on the professional and academic field.

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

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

Title: **Internship Program in Clinical Infectious Diseases and Antibiotic Therapy**

Duration: **3 weeks**

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

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





**tech**

Internship Program  
Clinical Infectious Diseases  
and Antibiotic Therapy

# Internship Program Clinical Infectious Diseases and Antibiotic Therapy



tech