

Hybrid Professional Master's Degree

Hepatology





Hybrid Professional Master's Degree Hepatology

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Website: www.techtute.com/pk/medicine/hybrid-professional-master-degree/hybrid-professional-master-degree-hepatology

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01

Introduction

Hepatology has undergone great changes in recent years, especially in the approach to hepatitis B, delta hepatitis C, chronic cholestatic autoimmune diseases, liver cirrhosis and liver cancer. These advances have improved the quality of life of patients and reduced the mortality rate. Faced with this reality, TECH has created this program, which provides the medical professional with a complete update of their knowledge on the approach to the hepatological patient. All this in a 100% online theoretical format, complemented by an excellent 3-week stay in a prestigious clinical center.





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An exceptional and comprehensive refresher experience that will take you from theory to practice in the management of the hepatologic patient”

The development of diagnostic and therapeutic techniques in the last decades has been relevant. So, there have been developments in ultrasound equipment, Computed Axial Tomography, Nuclear Magnetic Resonance or FibroScan. In addition, the momentum of research and scientific studies has favored the creation of more effective treatments in the care of the liver patient.

Therefore, advances in the field of hepatology require permanent updating and the broadest applied knowledge, which allows professionals to efficiently incorporate new diagnostic and approach techniques. Faced with this reality, TECH has created this university program, which offers a theoretical framework 100% online, complemented by an excellent practical stay in a prestigious clinical center. The practical training of choice should be of the highest proven quality possible.

A program that will lead professionals to update their knowledge on research techniques and diagnostic methods, new antivirals for hepatitis B and C, immunosuppressants for autoimmune diseases or liver transplantation for end-stage liver diseases. For this, you will have the most innovative pedagogical tools in the academic panorama and a Relearning system, which will allow you to reduce the long hours of study and memorization.

Likewise, TECH gives the specialist the opportunity to apply the updated concepts in a reference center in the Hepatology unit, together with a magnificent team of specialists. In this way, during a 3-week on-site stay, the professional will be able to obtain a direct and real vision of the most effective techniques, methods and treatments in the approach to the hepatic patient.

A scenario that will provide an update in an area that has made important achievements in liver transplant surgeries or in the management of viral hepatitis. A unique opportunity for professionals seeking to keep abreast of the latest scientific developments through a quality university program.

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

- ♦ Development of more than 100 clinical cases presented by professionals in this area of work and university professors with extensive experience and experience. 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
- ♦ Comprehensive systematized action plans for major pathologies
- ♦ Presentation of practical workshops on procedures diagnosis, and treatment techniques
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Practical clinical guides on approaching different pathologies
- ♦ With a special emphasis on evidence-based medicine and research methodologies
- ♦ All of 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
- ♦ In addition, you will be able to carry out a clinical internship in one of the best hospitals in the world

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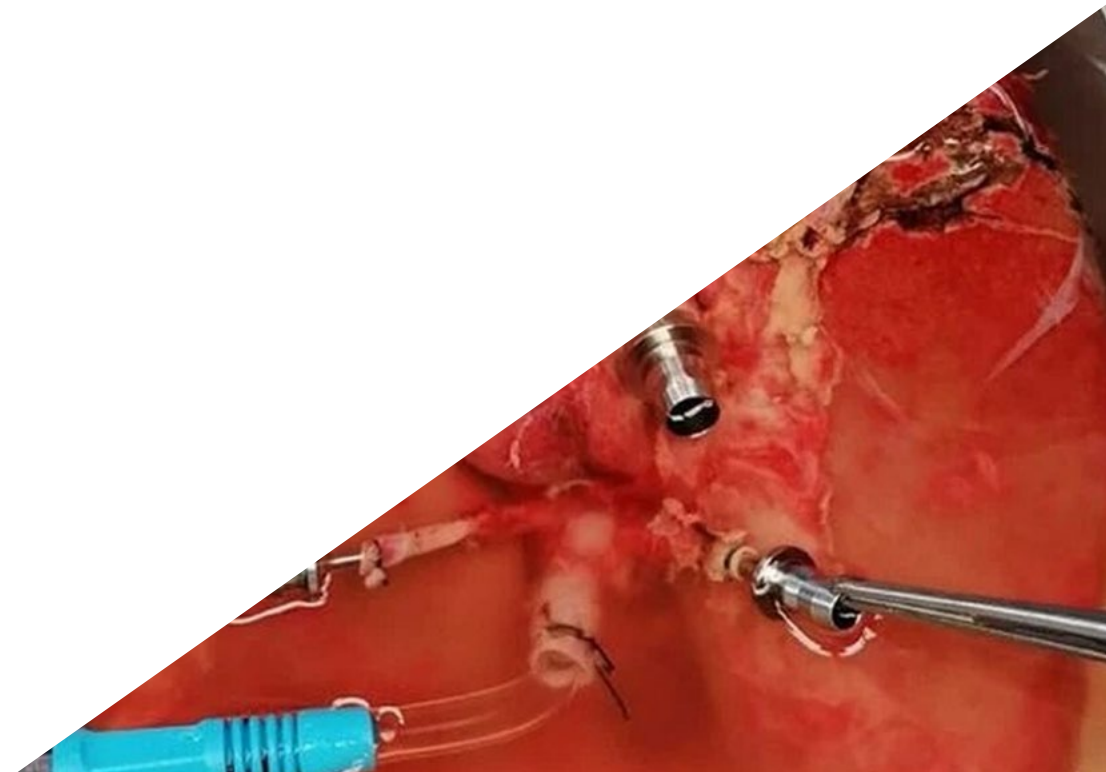
Enjoy an intensive 3-week stay and learn first-hand about the latest techniques used in the approach to the hepatic patient”

This Hybrid Professional Master's Degree allows you to access clinical case simulations and subsequently apply this methodology in a leading clinical center.

A library of multimedia resources is available 24 hours a day, 7 days a week.

In this Hybrid Professional Master's Degree proposal, of a professionalizing nature and blended learning modality, the program is aimed at updating medical professionals who perform their functions in hepatology units, and who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge into medical practice, and the theoretical-practical elements will facilitate the updating of knowledge and will allow decision making in patient management.

Thanks to their multimedia content developed with the latest educational technology, they will allow medical professional a situated and contextual learning, that is, 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, the student will be assisted by an innovative interactive video system created by renowned experts.



02

Why Study this Hybrid Professional Master's Degree?

Solid theoretical knowledge is essential in the healthcare field, but practice is undoubtedly essential for optimal performance. This is why TECH has gone a step further in the pedagogical landscape and promotes a program that offers an excellent combination of the most recent update in liver tumors, diagnostic methods or alcoholic liver disease with a practical stay in a leading clinical center. Thus, the professional will obtain a complete vision of the most current panorama in the area of Hepatology, always guided during this process by an expert in this field.



“

TECH offers you an excellent pedagogical option, which combines an update on liver tumors and diagnostic methods with a practical period of 3 weeks in a prestigious center”

1. Updating from the latest technology available

The area of Hepatology has made important advances in recent years thanks to non-invasive assessment methods, diagnostic imaging and immunological techniques. For this reason, and with the aim of bringing this technology closer to the specialist, TECH presents this program, where the expert will enter a cutting-edge clinical environment, accessing state-of-the-art equipment and instruments in Hepatology units.

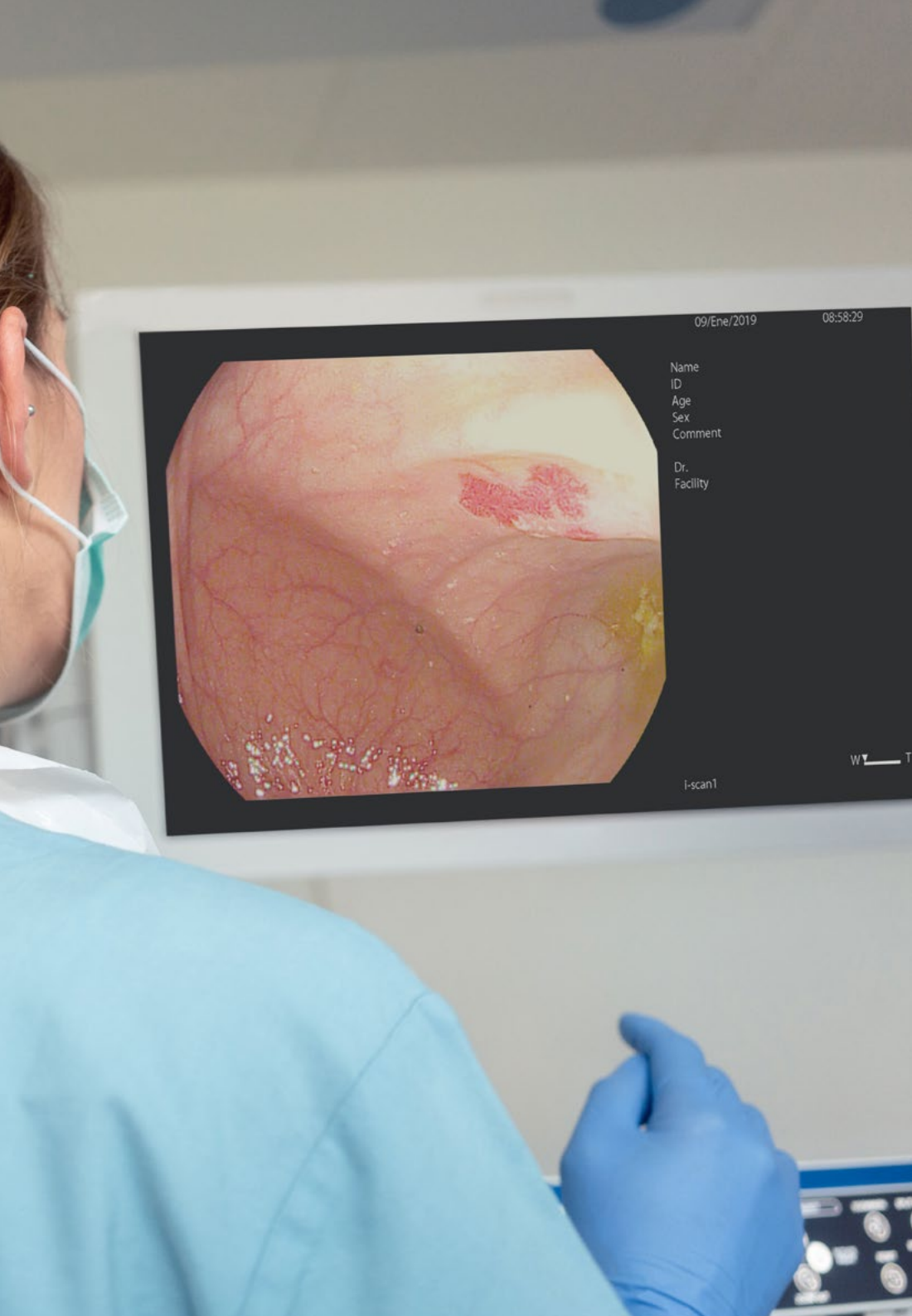
2. Gaining In-Depth Knowledge from the Experience of Top Specialists

The medical professional who seeks to update their knowledge in the Hepatology area will be able to do so first of all from an excellent specialized teaching team, in charge of providing the latest scientific and theoretical information. Secondly, during the practical period, the direct application of the existing techniques and methodologies will be carried out together with a team of professionals from the center where the stay will take place. This will allow you to work in a real environment with patients undergoing the most innovative and effective procedures currently developed.

3. Entering First-Class Clinical Environments

TECH maintains a philosophy based on quality education within everyone's reach. That is why it carefully selects all available centers for Internship Programs. Thanks to this, the specialist will have guaranteed access to a prestigious clinical environment in the area of Hepatology. In this way, you will be able to see the day-to-day work of a demanding and rigorous area, always applying the latest techniques and diagnostic tools used in this specialty.





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

The success of this program lies in an advanced, specialized and updated syllabus and a practical offer in a prestigious center. In this way, the combination of these two pillars will allow the medical professional to achieve a much more complete update of their knowledge in Hepatology, integrating the most efficient current procedures in their daily practice.

5. Expanding the Boundaries of Knowledge

TECH offers, with this program, the possibility to broaden the view on the concepts known in Hepatology. As such, it offers a much more current and innovative vision of this specialty, not only through advanced pedagogical resources, but also with a stay in a center integrated by a specialized human team. This will allow the professional to face new challenges in this field, where there are multiple research projects.



You will have full hands-on immersion at the center of your choice”

03 Objectives

The latest advances in the specialty of Hepatology require immediate updating on the part of the professional. For this reason, this program offers two complementary methods of updating knowledge to ensure that this objective is met: on the one hand, the medical professional will have access to the latest theoretical and practical content in this area and, on the other hand, will have the opportunity to apply the new techniques acquired in a classroom stay to be carried out in a prestigious clinical center.



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A complete update is the main objective of this Hybrid Professional Master's Degree. A challenge TECH faces by establishing the highest quality criteria in each of the program's phases”



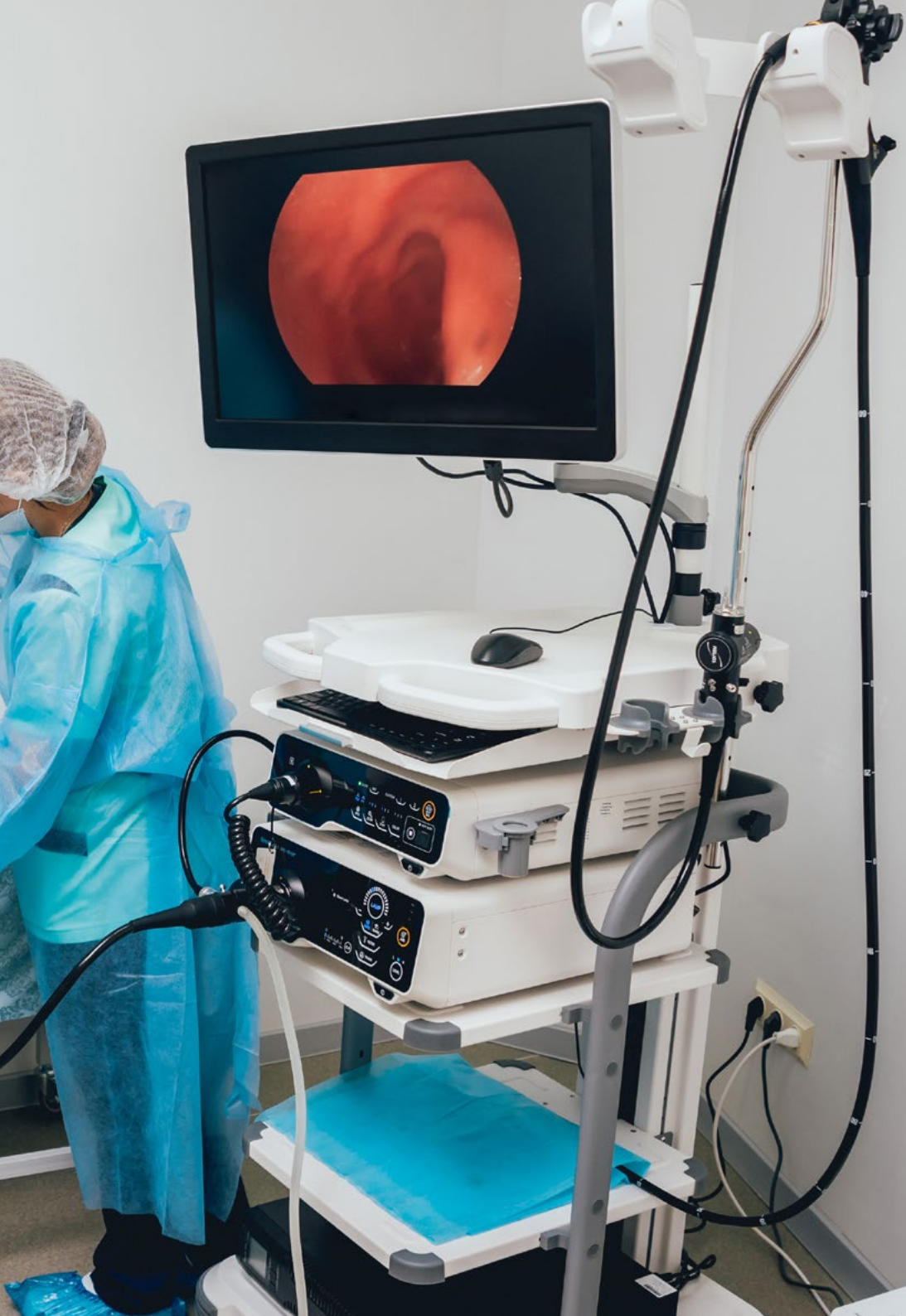
General Objective

- The general objective of this Hybrid Professional Master's Degree is to provide a complete update to the professional in this complex health specialty. Therefore, TECH will offer you everything you need to achieve this goal with the most innovative syllabus, the most advanced didactic resources and a teaching staff made up of active specialists in this area. A practical stay in a reference clinical center completes the updating process



This program will allow you to deepen your knowledge in the management of patients with Budd-Chiari Syndrome or portal venous thrombosis”





Specific Objectives

Module 1. Diagnostic Methods and Research Techniques

- ◆ Identify the updated diagnostic criteria for liver diseases, and develop a correct differential diagnosis strategy
- ◆ Establish the pathogenic basis of liver diseases, incorporating the latest advances in the field of study
- ◆ Determine the treatment plan for the most prevalent acute and chronic liver diseases
- ◆ Define the rationale, indications, limitations, and cost-effectiveness of diagnostic tests used in Hepatology
- ◆ Define invasive and non-invasive methods for diagnosing and quantifying fibrosis and their clinical applicability
- ◆ Explain the main laboratory techniques used in basic research
- ◆ Study the alteration of liver function tests in primary care

Module 2. Viral Hepatitis

- ◆ Explain how to manage patients with chronic hepatitis undergoing antiviral treatment
- ◆ Describe the pathogenic basis of viral hepatitis, its diagnosis, and treatment
- ◆ Point out and analyze the surgical treatment options in the most frequent liver diseases and evaluate the risks and benefits

Module 3. Autoimmune Hepatitis and Cholangitis

- ◆ Describe the clinical utility of MRI cholangiography

Module 4. Alcoholic Liver Disease and Metabolic Hepatic Steatosis

- ◆ Describe the clinical manifestations, diagnosis, and treatment management of systemic diseases that involve the liver

Module 5. Hepatic Cirrhosis I

- ◆ Address the imaging diagnosis of cirrhosis, portal hypertension, and hepatic vascular disease
- ◆ Characterize the natural history of liver cirrhosis its clinical and hemodynamic manifestations

Module 6. Hepatic Cirrhosis II

- ◆ Point out the recommended and dangerous drugs in liver cirrhosis as well as dietary advice
- ◆ Address how to manage the complications of liver cirrhosis: ascites, infections, esophageal variceal bleeding, and hepatic encephalopathy
- ◆ Describe the main problems associated with portal hypertension, as well as the diagnosis and possible treatments

Module 7. Other Metabolic Liver Diseases

- ◆ Develop the clinical manifestations, diagnosis, and treatment of metabolic liver diseases
- ◆ Establish the pathogenic basis of autoimmune liver disease, diagnostic criteria, and treatment





Module 8. Liver Tumors

- ♦ Analyze hepatocellular carcinoma preventive strategies, staging and therapeutics
- ♦ Address the endoscopic management of neoplastic complications in the hepatopancreaticobiliary area
- ♦ Describe the epidemiology of hepatocarcinoma and its risk factors
- ♦ Analyze the different useful imaging techniques in the diagnosis of the main cholestatic diseases and the current treatment options
- ♦ Analyze the curative treatments for intermediate and advanced hepatocarcinoma

Module 9. Liver Transplant

- ♦ Describe the principles for selecting liver transplant candidates, the surgical basis of transplantation, immunosuppressive drugs, and the short and long-term management of the liver transplant patient
- ♦ Describe the principles for selecting candidates for pediatric liver transplantation and the short and long-term management of the patient
- ♦ Address the coordinated management of liver transplant patients in Primary Care

Module 10. Miscellaneous: Hepatic Vascular Diseases, Hepatotoxicity, Hepatic Pathology in Pregnancy

- ♦ Highlight the impact of the immune system on liver disease
- ♦ Identify the main childhood liver diseases
- ♦ Address the diagnosis and treatment of the main hepatic diseases during pregnancy
- ♦ Inform about the most frequent childhood liver problems and how they are treated
- ♦ Develop a correct differential diagnosis strategy for liver diseases

04 Skills

This Hybrid Professional Master's Degree will allow you to acquire the necessary and updated theoretical and practical skills that the professional must acquire for the intervention in Hepatology. A very complete approach, in a high-level Hybrid Professional Master's Degree, which makes the difference.



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This Hybrid Professional Master's Degree will allow you to update your knowledge in a real clinical environment, broadening your competencies through a highly intense practical experience”



General Skills

- ◆ Possess and understand knowledge that provides a basis or opportunity to be original when developing and/or applying ideas, often in a research context
- ◆ Know how to apply acquired knowledge and problem-solving skills in new or unfamiliar environments within broader (or multidisciplinary) contexts related to the field of study
- ◆ Integrate knowledge and face the complexity of making judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments
- ◆ Know how to communicate conclusions, knowledge, and supporting arguments to specialized and non-specialized audiences in a clear and unambiguous way
- ◆ Update learning skills that will enable further studying in a largely self-directed or autonomous manner





Specific Skills

- Describe the pathogenic basis of liver diseases
- Identify the latest advances in the field of hepatology
- Develop a correct differential diagnosis strategy based on the following criteria
- Updated diagnoses of liver diseases
- Explain the treatment plan for the most prevalent acute liver diseases
- Explain the treatment plan for the most prevalent chronic liver diseases
- Identify the principles for selecting candidates for liver transplantation
- Determine the surgical basis of liver transplantation
- Differentiate the immunosuppressive drugs of choice in the treatment of liver diseases
- Address the short and long-term management of patients with a liver allograft
- Describe the indications and limitations of diagnostic tests used in Hepatology
- Determine the cost-effectiveness of the diagnostic techniques used in the different liver
- Understand the impact of the immune system on liver disease
- Manage patients with chronic hepatitis undergoing antiviral treatment
- Identify the main childhood liver diseases
- Explain the diagnostic management of the main liver diseases during pregnancy
- Determine the treatment of choice for pregnant women with liver diseases
- Manage scientific databases for carrying out reviews and bibliographic searches of scientific studies
- Formulate, implement, and evaluate standards, action guides and protocols specific to the field of Hepatology
- Perform a critical and in-depth study on a topic of scientific interest in the field of Hepatology
- Communicate result findings after having analyzed, evaluated, and synthesized the data



You will combine theory and professional practice through a demanding and rewarding educational approach”

05

Course Management

In its maxim of offering an elite education for all, TECH counts on renowned professionals for the medical professional to update their knowledge in the specialty of hepatology. Therefore, this program has a highly qualified team, whose objective is to provide the professional with the most current techniques and the best tools for the development of their skills in the course of this university program.



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Course Management | 23 **tech**

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Boost your academic career with leading professionals and acquire the knowledge and skills you need to thrive in the field of hepatology”

International Guest Director

Dr. Doan Y. Dao Dao is an internationally recognized figure in the study and care of patients affected by Hepatitis B virus (HBV). As director of the Center of Excellence for Liver Disease in Vietnam (COE), he leads Johns Hopkins University's initiatives to help address the growing, urgent and significant disease burden of Liver Cancer caused by Hepatitis B in Vietnam.

As CEO, Dr. Dao is responsible for managing projects that contribute to the provision of medical services for the fight against these diseases. This is an ongoing collaboration with the Johns Hopkins School of Medicine, where it also fosters scientific research and educational activities related to specialization in diagnosis and effective therapeutic treatments.

As a member of the Board of Directors of V-VHA (Vietnam Viral Hepatitis Alliance), he has played a crucial role in promoting clinical care and international scientific studies in HBV. In addition, he served as co-chair of the National Task Force on Hepatitis B: Focus on Asian and Pacific Islander Americans, where he worked tirelessly to raise awareness of this condition.

He has received several awards throughout his career, such as the Hepatitis Fund for the Cure Postdoctoral Research Fellowship (2014), awarded by the American Liver Foundation; or the Asian Heritage Award in Public Health (2016), given by the Asian Heritage Society of California. In addition, he was named Everyday Hero (2016) by the American Liver Foundation for his efforts in addressing Hepatitis B in both the United States and Vietnam. His clinical training in Internal Medicine and Gastroenterology and Hepatology at UT Southwestern Medical Center in Dallas, Texas, along with his commitment to academic medicine, has allowed him to lead groundbreaking research in search of a cure for HBV.



Dr. Dao, Doan Y

- ♦ Director of the Center of Excellence for Liver Disease in Vietnam (COE) at the Johns Hopkins University School of Medicine
- ♦ Assistant Professor of Medicine, Division of Gastroenterology and Hepatology, The Johns Hopkins University School of Medicine
- ♦ Co-chair of the National Task Force on Hepatitis B: Focus on Asian and Pacific Islander Americans
- ♦ Specialist in Internal Medicine, Gastroenterology and Hepatology at UT Southwestern Medical Center Dallas
- ♦ Medical Degree from UT Southwestern Medical Center, Dallas
- ♦ Awards received: Hepatitis Fund for the Cure Postdoctoral Research Fellowship (2014), by the American Liver Foundation, Asian Heritage Award in Public Health (2016), by the Asian Heritage Society of California, Everyday Hero (2016) by the American Liver Foundation
- ♦ Member of: V-VHA (Vietnam Viral Hepatitis Alliance), Hepatitis B Foundation, Dallas Fort Worth (DFW) Hepatitis B Free

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

Management



Dr. García-Samaniego, Javier

- ♦ Head of the Hepatology Section at La Paz University Hospital
- ♦ Group Leader and Lead Researcher of the Hepatic and Digestive Diseases at the La Paz University Hospital
- ♦ Coordinator at the Alliance for the Elimination of Viral Hepatitis in Spain (AEHVE)
- ♦ Coordinator for the Spanish Guidelines for the treatment of Hepatitis B promoted by the National Agency and Prospective
- ♦ Trustee of the Biomedical Research Foundation of the University Hospital La Paz
- ♦ Collaborator in Guidelines and Therapeutic Protocols for Viral Hepatitis: Consensus for the Treatment of Viral Hepatitis in HIV-Positive Patients
- ♦ Collaborator in the elaboration of the document for the elimination of Hepatitis C in the Spanish Association for the Study of the Liver
- ♦ Project evaluator for the Health Research Fund and the National Agency of Evaluation and Prospective
- ♦ Principal Investigator in more than 60 international clinical trials on the treatment of viral hepatitis
- ♦ Speaker at numerous national and international conferences and forums
- ♦ Medical Degree from the University of Santiago
- ♦ Member of the Governing Council of IdiPAZ, Board of Directors of the AEEH, Regional Ethics and Clinical Research Committee of the Community of Madrid

Professors

Dr. Abadía Barnó, Marta

- ♦ Assistant Physician of the Digestive System Service at the University Hospital La Paz
- ♦ Hepatologist specializing in the Digestive Section at the Medical-Surgical Center for Digestive Diseases
- ♦ External rotation at the Hepatology and Liver Transplant Unit of the Clinic Institute of Digestive and Metabolic Diseases of Barcelona
- ♦ EMILIO MOYANO Award for the best oral communication at the XXVIII National Conference on Digestive Ultrasound
- ♦ Doctorate in Medicine from the Autonomous University Madrid
- ♦ Degree in Medicine from the University of Navarra

Dr. Andaluz, Irene

- ♦ Digestive System Specialist of the University Hospital of Getafe
- ♦ Graduated in Medicine from the Faculty of Medicine of the Complutense University of Madrid
- ♦ Master's Degree in Clinical Reasoning and Practice from the University of Alcalá, Spain
- ♦ Master's Degree in Gastroenterological and Hepatobiliary Diseases from the Distance Learning University of Madrid
- ♦ Master's Degree in Hepatology from University of Alcalá and Autonomous University of Madrid

Dr. García Sánchez, Araceli

- ♦ Specialist in Digestive System Medicine at the Hospital General Universitario Gregorio Marañón, Madrid
- ♦ Gastroenterology and Hepatology Intern at the Gregorio Marañón University General Hospital
- ♦ Author of numerous articles and book chapters of national and international reference
- ♦ Graduate in Medicine and Surgery from Universidad de Navarra

Dr. Madejón Seiz, Antonio

- ♦ Postdoctoral Researcher, Center for Biomedical Research Network on Liver and Digestive Diseases
- ♦ Researcher at the Foundation for Biomedical Research at the University Hospital La Paz
- ♦ Head of international projects in companies such as Episteme or Arcis Biotechnology Inc
- ♦ R&D Manager at Biotools B&M Labs
- ♦ Molecular Diagnostic Systems Developer
- ♦ Dr. in Molecular Biology from the Universidad Autónoma de Madrid
- ♦ Author of numerous high-impact publications in internationally renowned journals

Dr. Romero, Miriam

- ♦ Assistant Physician in the Hepatology Unit at the University Hospital La Paz
- ♦ Specialist in Digestive System, Gastroenterology and Hepatology at the Hospital General Universitario Gregorio Marañón
- ♦ Member of the Clinical Research Ethics Committee at University Hospital La Paz
- ♦ Researcher of the CIBEREHD research network
- ♦ PhD in Medicine and Surgery from the Complutense University of Madrid
- ♦ Master's Degree in Hepatology from the University of Alcalá and the Autonomous University of Madrid

06

Educational Plan

The curriculum of this program has been configured as a process of continuous updating of knowledge on diagnostic methods and research techniques in the field of Hepatology. For this purpose, TECH provides multimedia teaching resources, which you can access conveniently, whenever and wherever you want. A syllabus with a theoretical-practical approach, which will be completed with a 3-week on-site stay in a prestigious hospital center.





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A study plan designed to offer you the most advanced and updated knowledge in Hepatology in only 12 months”

Module 1. Diagnostic Methods and Research Techniques

- 1.1. Introduction to the Diagnostic Methods. Hepatic function and prognoses
- 1.2. Hepatic biopsy
- 1.3. Non-Invasive Methods for Assessing Hepatic Fibrosis
- 1.4. Diagnostic Imaging: Ultrasound, CT, MRI, MRI
- 1.5. Basic and Advanced Endoscopy
- 1.6. Introduction to Research Techniques in Hepatology
- 1.7. Animal and Cellular Models
- 1.8. Immunological Techniques
- 1.9. PCR Techniques: Conventional and Point-of-Diagnosis
- 1.10. Next-Generation Sequencing Techniques: NGS

Module 2. Viral Hepatitis

- 2.1. Hepatitis A
- 2.2. Hepatitis B (Epi, Natural History and Diagnosis)
- 2.3. Hepatitis B (Treatment)
- 2.4. Hepatitis B (Special Populations)
- 2.5. Hepatitis D
- 2.6. Hepatitis C (Epi, Natural History and Diagnosis)
- 2.7. Hepatitis C (Treatment)
- 2.8. Hepatitis C (Special Populations)
- 2.9. Hepatitis E
- 2.10. Other Viral Hepatitis

Module 3. Autoimmune Hepatitis and Cholangitis

- 3.1. HAI (Pathogenesis and Diagnostic Criteria)
- 3.2. HAI (Treatment)
- 3.3. HAI (Treatment in Non-Responders or Intolerant Patients)
- 3.4. HAI vs DILI: Immune-Mediated Hepatitis
- 3.5. Intrahepatic and Extrahepatic Cholestasis: Differential Dx
- 3.6. Primary Biliary Cholangitis (PBC): Pathogenesis and Dx
- 3.7. PBC: Treatment
- 3.8. Primary Sclerosing Cholangitis (PSC): Pathogenesis, Symptoms and Diagnosis
- 3.9. PSC (Treatment)
- 3.10. Overlap Syndromes

Module 4. Alcoholic Liver Disease and Metabolic Hepatic Steatosis

- 4.1. Alcoholic Liver Disease (ALD): Epi, Hist. . Clinical Manifestations
- 4.2. ALD: Diagnosis and Severity Assessment
- 4.3. Acute Hepatitis
- 4.4. Cirrhosis
- 4.5. Liver Transplantation in ALD
- 4.6. Metabolic Hepatic Steatosis (MetHSS): Definition, epi. e hist. natural
- 4.7. MetHSS: Pathogenesis and Role of the Intestinal Microbiota
- 4.8. MetHSS: Diagnosis
- 4.9. METHss: Treatment
- 4.10. Liver Cancer and Transplantation in MetHSS

Module 5. Hepatic Cirrhosis I

- 5.1. Definition, Pathophysiology, Natural History
- 5.2. Clinical Manifestations and Prognostic Models
- 5.3. Compensated and Decompensated Cirrhosis
- 5.4. Use of Medication in Cirrhotic Patients
- 5.5. Nutrition in Cirrhosis
- 5.6. Portal Hypertension
- 5.7. Ascites
- 5.8. Renal Failure in Cirrhosis: Classification, Diagnosis and Biomarkers
- 5.9. Treatment of Renal Insufficiency and Hepatorenal Syndrome
- 5.10. The Role of Albumin in the Treatment of Cirrhotic Patients

Module 6. Hepatic Cirrhosis II

- 6.1. Upper Gastrointestinal Bleeding (UGH) Secondary to Portal Hypertension
- 6.2. TIPS: Current Indications
- 6.3. Hepatic Encephalopathy (HE): Concept, Pathogenesis and Symptoms. Minimum HE
- 6.4. HE: Treatment
- 6.5. Pulmonary Pathology in Cirrhosis: Hepatopulmonary Syndrome
- 6.6. Pulmonary Pathology in Cirrhosis: Porto-Pulmonary Hypertension
- 6.7. Acute on Chronic Hepatic Failure
- 6.8. Cardiomyopathy of the Cirrhotic Patient
- 6.9. Spontaneous Bacterial Peritonitis
- 6.10. Other Infections in the Cirrhotic Patient

Module 7. Other Metabolic Liver Diseases

- 7.1. Hemochromatosis: Epi and Clinical Manifestations
- 7.2. Hemochromatosis: Dx and Treatment
- 7.3. Hemochromatosis Due to Non-Classical Genes
- 7.4. Liver Porphyrrias
- 7.5. Wilson's Disease: Epi and Clinical Manifestations
- 7.6. Wilson's Disease: Diagnosis
- 7.7. Wilson Disease: Treatment
- 7.8. Deficiency of Alfa1 Antitripsina
- 7.9. LPAC
- 7.10. Glycogenesis

Module 8. Liver Tumors

- 8.1. Epidemiology, Risk Factors and Screening for Hepatocellular Carcinoma
- 8.2. Diagnosis, Prognostic Evaluation and Staging of HCC
- 8.3. Hepatic Resection of HCC
- 8.4. Ablative HCC Treatments
- 8.5. Transarterial HCC Treatments
- 8.6. Liver Transplantation and HCC
- 8.7. Systemic Treatment and HCC. Basic Concepts, Immunotherapy and Antiangiogenesis
- 8.8. Future Perspectives in HCC Management
- 8.9. Cholangiocarcinoma
- 8.10. Benign Hepatic Tumors

Module 9. Liver Transplant

- 9.1. Indications, Patient Selection, and Waiting List Management
- 9.2. Expansion of Liver Transplant Criteria. Organ Preservation Strategies
- 9.3. Severe Acute Liver Failure
- 9.4. Liver Transplant Surgery
- 9.5. Infections and Liver Transplantation
- 9.6. Immunosuppression in Liver Transplantation. Acute and Chronic Rejection
- 9.7. Biliary Complications
- 9.8. Long-Term Management of Transplanted Patients
- 9.9. Hepatocarcinoma and De Novo Tumors After Liver Transplantation
- 9.10. Survival in Liver Transplantation. Factors Associated with Early and Late Mortality

Module 10. Miscellaneous: Hepatic Vascular Diseases, Hepatotoxicity, Hepatic Pathology in Pregnancy

- 10.1. Non-Cirrhotic Portal Hypertension
- 10.2. Budd-Chiari Syndrome
- 10.3. Portal Vein Thrombosis in Cirrhosis Patients
- 10.4. Portal Vein Thrombosis in Non-Cirrhosis Patients
- 10.5. Sinusoidal Obstruction Syndrome
- 10.6. DILI
- 10.7. Surgical Risk Assessment in Cirrhosis Patients
- 10.8. Fontan-associated Liver Disease
- 10.9. Hepatic Pathology in Pregnancy (I)
- 10.10. Hepatic Pathology in Pregnancy (II)



A university program that will allow you to keep abreast of the advances in the survival of liver transplant patients"

07

Clinical Internship

After completing the online training period, the program includes a practical training period in a reference clinical center. The medical professional will have at their disposal the support of a tutor who will accompany them throughout the process, both in the preparation and in the development of the clinical practices.





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Do your clinical internship in one of the best hospital centers, being part of a highly competent work team and participating in an interdisciplinary way in the areas of interest for the clinical practice in this field”

The practical period of this program consists of a clinical internship in a prestigious clinical center, lasting 3 weeks, from Monday to Friday, with 8 consecutive hours of practice with an associate specialist. This stay will allow you to see real patients alongside a team of reference professionals applying the most innovative diagnostic procedures and planning the latest generation of therapy for each pathology.

In this way, the professional will be able to deploy their technical skills for the diagnosis of liver patients, collaborate in the analysis of samples in the laboratory and adapt treatments according to the latest pharmacological developments in this area. All this, in an exquisite health environment, integrated by specialists in this discipline.

TECH thus provides an excellent option to keep up to date with the procedures and methodologies used in Hepatology Units, in a space of innovation. A new way of understanding and integrating healthcare processes through a specialized and high-level environment.

In this training proposal, completely practical in nature, the activities are aimed at developing and perfecting the competencies necessary for the provision of health care in areas and conditions that require a high level of qualification, and which are oriented towards specific training for the exercise of the activity, in an environment of patient safety and high professional performance.

It is undoubtedly an opportunity to learn by working in the innovative hospital of the future where real-time health monitoring of patients is at the heart of the digital culture of its professionals. This is a new way of understanding and integrating health processes, making it the ideal teaching scenario for this innovative experience in the improvement of professional medical competencies for the 21st century.

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 the professors and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for medicine Diseases Clinical Analysis Care Medicine (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 will be subject to the center's own availability and workload, the proposed activities being the following:



During the practical stay you will learn first-hand about the coordinated management of the liver transplant patient in Primary Care”



| Module | Practical Activity |
|--|--|
| Diagnostic and research methods in Hepatology | Participate in the performance of liver biopsies |
| | Perform diagnostic imaging of liver problems by ultrasound, CT and MRI |
| | Perform basic and advanced endoscopy in hepatic pathology |
| | Assessment of hepatic fibrosis by non-invasive methods |
| | Use of PCR and microarray techniques in the diagnosis and follow-up of liver pathologies |
| Diagnostic procedures and management and treatment of viral hepatitis | Apply immunocytochemistry procedures in the diagnosis of liver diseases |
| | Follow the most updated clinical protocols in the approach to viral hepatitis |
| | Diagnose, by liver biopsy, the degree of fibrosis activity in hepatitis |
| | Carry out the specific approach to Hepatitis in special populations: pregnancy, patients with cirrhosis or liver transplantation |
| Techniques for approaching liver cirrhosis | Management of HCV-HIV co-infection after hepatitis |
| | Recognize, through the use of prognostic models, the clinical manifestations of cirrhosis |
| | Evaluate the evolution of liver cirrhosis, based on laboratory blood tests, looking for signs of deficiency in the functioning of the liver (excess bilirubin) and kidneys (creatinine values) |
| | Perform MRE elastography to identify liver stiffening |
| | Indicate the use of recommended and dangerous drugs in liver cirrhosis |
| | Diagnose and treat portal hypertension, as well as Ascites and Hepatorenal Syndrome |
| Liver transplantation techniques and approach to hepatocellular carcinoma and other tumors | Treating esophageal bleeding due to varicose veins |
| | Diagnosis by blood tests, imaging tests (MRI and CT) and liver biopsy of hepatocarcinoma, liver metastases and cholangiocarcinoma |
| | Apply radiofrequency ablation, cryoablation and microwave ablation methods in hepatocarcinoma |
| | Manage neoplastic complications of the hepatopancreaticobiliary area by means of endoscopic techniques |
| | Participate in the surgical intervention of liver transplantation and assess the subsequent condition of the patient, addressing the immediate and mediate complications of this surgery |
| Perform endoscopic treatment of biliary complications in liver transplantation | |

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 achieving this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this educational entity undertakes to take out civil liability insurance to cover any eventuality that may arise during the stay at the internship center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. In this way, the professional will not have to worry in case he/she has to face an unexpected situation and will be covered until the end of the practical 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?

To ensure that the updating process is the best possible, TECH proposes the realization of this on-site stay in a prestigious center that can provide the doctor with the latest advances in the field of Hepatology. This is a very complex and broad field, so it requires updating by the specialist, and the role of the hospital institutions proposed here is vital in this process, since they will offer the most advanced knowledge in the specialty.





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*The most advanced knowledge
in Hepatology awaits you in
this complete TECH program”*



The student will be able to take the practical part of this Hybrid Professional Master's Degree in the following centers:



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 Maternidad HM Belén

| | |
|---------|-----------|
| Country | City |
| Spain | 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



Medicine

Hospital HM Rosaleda

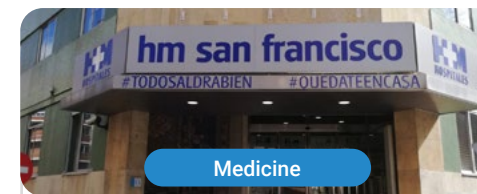
| | |
|---------|-----------|
| Country | City |
| Spain | La Coruña |

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 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: 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: Spain City: 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: Spain City: 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

Policlínico HM Cruz Verde

Country: Spain City: Madrid

Address: Plaza de la Cruz Verde, 1-3, 28807, Alcalá de Henares, Madrid

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

Related internship programs:

- Advanced Clinical Podiatry
- Optical Technologies and Clinical Optometry



Medicine

Policlínico HM Distrito Telefónica

Country: Spain City: 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: Spain City: Madrid

Address: C. de Jorge Juan, 19, 1º 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 Sanchinarro


Country: Spain City: 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 Midwives
- Nursing in the Digestive Tract Department



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





Medicine

Sanatorio Central Banda

Country City
Argentina Santiago del Estero

Address: Amadeo Jacques N° 175 4300,
La Banda , Santiago del Estero

Clinical center for comprehensive inpatient and
surgical care

Related internship programs:

- Hepatology
- Primary Care Clinical Ultrasound



Medicine

Grupo Gamma

Country City
Argentina Santa Fe

Address: Entre Ríos 330, Rosario, Santa Fe

Polyclinic specialized in various medical specialties

Related internship programs:

- Update in Anesthesiology and Resuscitation
- Gynecologic Oncology



Medicine

Hospital Italiano La Plata

Country City
Argentina Buenos Aires

Address: Av. 51 N° 1725 e/ 29 y 30 La Plata,
Buenos Aires

Non-profit Community Center
of specialized clinical care

Related internship programs:

- Advanced Emergency Medicine
- Gynecologic Oncology

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.





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

At TECH we use the Case Method

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

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



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

“

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

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

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



Relearning Methodology

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

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

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



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

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

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

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

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



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



Study Material

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

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



Surgical Techniques and Procedures on Video

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



Interactive Summaries

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

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



Additional Reading

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





Expert-Led Case Studies and Case Analysis

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



Testing & Retesting

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



Classes

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



Quick Action Guides

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



10 Certificate

The Hybrid Professional Master's Degree in Hepatology guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree qualification 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 Hepatology** contains the most complete and up-to-date program on the professional and educational field.

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

In addition to the certificate, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

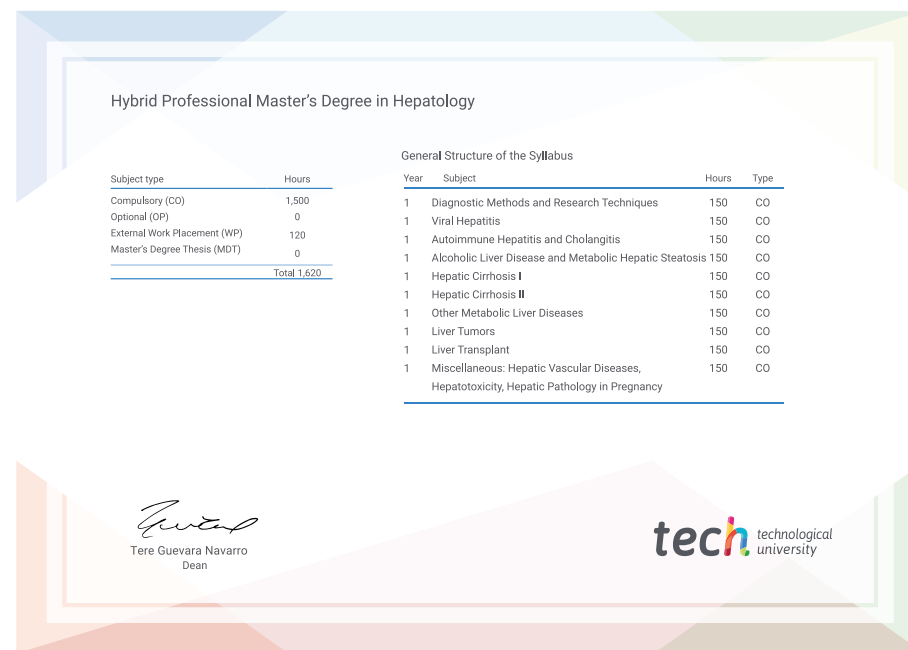
Title: **Hybrid Professional Master's Degree in Hepatology**

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

Duration: **12 months**

Certificate: **TECH Technological University**

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



*Apostille Convention. In the event that the student wishes to have their paper certificate 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 present quality
development languages
virtual classroom



**Hybrid Professional Master's
Degree**
Hepatology

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

Hybrid Professional Master's Degree

Hepatology

