Postgraduate Diploma Hepatopathies



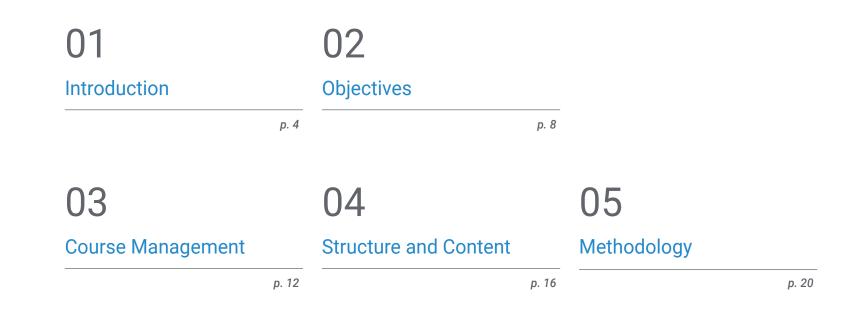


## Postgraduate Diploma Hepatopathies

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-hepatopathies

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06 Certificate

## 01 Introduction

In a context where liver diseases, ranging from infections to neoplasms, represent a growing diagnostic and therapeutic challenge, there is a critical need for highly trained professionals in the field of hepatology. In this sense, the liver, as a central organ in the functioning of the body, requires specialized attention, and this program has been conceived to meet that need. Adapting to contemporary demands, this unique academic program offers physicians world-class training. With a 100% online format, the program provides flexibility for healthcare professionals seeking to enhance their skills in hepatology. In addition, it is taught under the effective Relearningmethodology, which favors a deep and lasting assimilation of knowledge.



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Get updated in the pathophysiology of benign liver diseases thanks to this exclusive 100% online program by TECH"

## tech 06 | Introduction

In the field of Hepatopathies, the complexity and diversity of these diseases require highly updated health professionals. Also, the rapid evolution of scientific research and medical technologies demands constant adaptation in clinical practice. In this context, this program responds to the growing demand by providing professionals with the necessary tools to integrate the latest scientific advances in the care of patients with liver diseases. In this way, an expert in Hepatopathies, better equipped to interpret research and apply innovative technologies, becomes a fundamental asset in the effective and up-to-date management of these pathologies.

Throughout this Postgraduate Diploma in Hepatopathies, graduates will be updated in the identification and precise classification of various liver diseases, from hepatitis to cirrhosis and metabolic disorders. In addition, they will deepen their ability to recognize complications associated with benign liver diseases, providing strategies to prevent and manage them effectively. They will also be updated on the complexity of malignant liver diseases, analyzing specific risk factors and prognostic features to guide informed therapeutic decisions.

The program's methodology reflects the need for flexibility and adaptation to contemporary professional demands. With a 100% online format, it allows participants to advance their training without compromising their work responsibilities. In addition, the application of the *Relearning* methodology, based on the repetition of key concepts, ensures a deep and lasting understanding. This pedagogical approach reinforces the ability of professionals to effectively apply the knowledge acquired in their daily practice.

This **Postgraduate Diploma in Hepatopathies** contains the most complete and up-todate scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Hepatopathies
- The graphic, schematic and practical contents with which it is conceived gather scientific and practical information on those disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- 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



You will achieve better results by promoting the active participation of patients in their care and management"

## Introduction | 07 tech



Get updated with the latest developments in markers for the study of liver function" Get up to speed with cutting-edge diagnostic techniques, such as CT scanning at the world's best digital university according to Forbes.

Forget about memorizing! With the Relearning system you will integrate the concepts in a natural and progressive way.

The program's teaching staff includes professionals from the sector who contribute their work experience to this program, in addition to renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

## 02 **Objectives**

The main objective of this syllabus is to provide graduates with an exhaustive update in the identification and classification of various hepatic neoplasms. To this end, students will focus on the origin and histological characteristics of these disorders. They will also be trained to accurately meet the diagnostic challenges in this field. Throughout the syllabus, professionals will be equipped with the theoretical tools necessary to discern between the different types of hepatic neoplasms, allowing them to apply effective strategies in the evaluation and treatment of these complex pathologies.



Update yourself in the planning and execution of treatment strategies and achieve your goals with TECH"

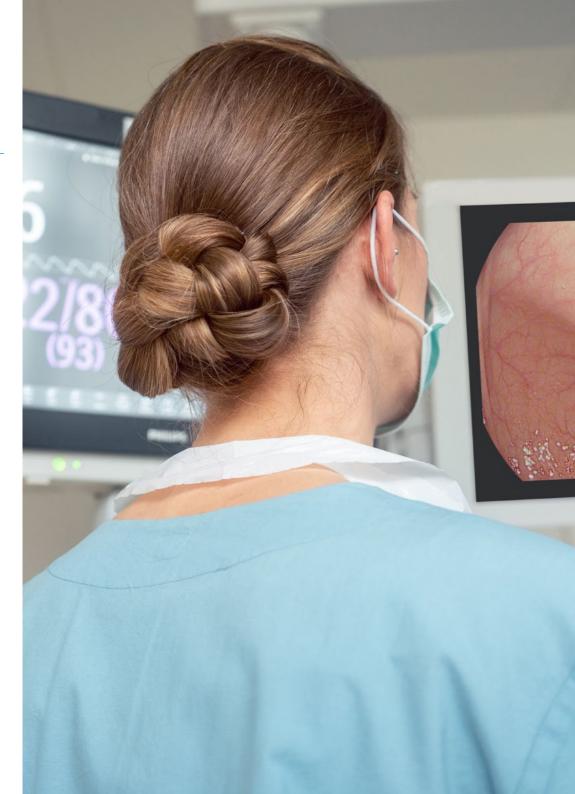
## tech 10 | Objectives



## **General Objectives**

- Develop a thorough understanding of the normal anatomy of the liver, including vascular distribution, hepatic segmentation and anatomical relationships
- Establish a solid foundation in normal liver physiology to facilitate identification of pathologic deviations
- Establish a thorough understanding of the pathophysiology of benign liver diseases, including steatosis, chronic hepatitis, and other conditions
- Improve ethical decision making in the selection and application of diagnostic procedures, considering patient safety and welfare
- Stimulate interest in pancreatic disease research and promote constant updating on therapeutic and technological advances

You will achieve your objectives thanks to TECH's didactic tools, including explanatory videos and interactive summaries"





#### Module 1. Hepatic Pathology

- Develop the ability to identify and classify various liver diseases, including hepatitis, cirrhosis and metabolic disorders
- Become familiar with the various laboratory tests and imaging techniques used to evaluate liver disease, allowing for a comprehensive patient assessment
- Evaluate the risk factors associated with liver disease and understand the progression of these conditions
- Develop skills in the planning and execution of treatment strategies, considering pharmacological and surgical approaches

#### Module 2. Benign Liver Disease

- Establish a thorough understanding of the pathophysiology of benign liver diseases, including steatosis, chronic hepatitis, and other conditions
- Become familiar with diagnostic techniques specific to benign liver diseases, such as laboratory tests and imaging studies, for accurate assessment
- Identify potential complications associated with benign liver diseases and learn how to prevent and manage them effectively
- Encourage the integration of a holistic approach in the management of patients with benign liver disease, considering medical, psychosocial, and nutritional aspects
- Develop skills to educate patients about their condition, promoting active participation in their care and management
- Improve evidence-based clinical decision making skills, considering the individualization of treatment for each patient

### Module 3. Malignant Liver Disease

- Establish a thorough understanding of the biological and pathophysiological mechanisms involved in malignant liver diseases, such as hepatocarcinoma and cholangiocarcinoma
- Develop skills to identify and classify different types of hepatic neoplasms, considering their origin and histological characteristics
- Become familiar with state-of-the-art diagnostic techniques, such as computed tomography, magnetic resonance imaging and specific biomarkers, for an accurate assessment
- Analyze specific risk factors and prognostic features associated with malignant liver diseases to guide therapeutic decisions
- Encourage interest in oncologic research and continuous updating on therapeutic advances and emerging technologies
- Improve ethical decision making skills in the management of hepatic malignancies

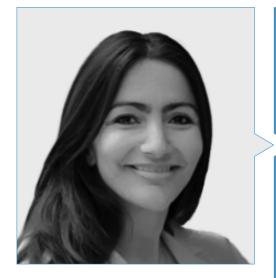
## 03 Course Management

The teaching staff of the Postgraduate Diploma in Hepatopathies is made up of distinguished professionals carefully selected by TECH. This faculty, made up of the best specialists in hepatology, contributes its vast experience and recognized professional background acquired in leading hospitals specialized in the hepatic field. In this aspect, students will receive cutting-edge knowledge backed by the latest scientific advances. Thanks to this careful selection, the program guarantees graduates access to up-to-date and relevant knowledge in the field of hepatopathies through 6 months of innovative training.

You will learn the most innovative and specific techniques for the diagnosis of liver diseases from the best experts in the field"

## tech 14 | Course Management

### Management



### Dr. Al Shwely Abduljabar, Farah

- Head of the Hepatobiliopancreatic Surgery Unit of the University Hospital of Guadalajara
- PhD in Medicine, University of Alcala
- Specialist in General and Digestive System Surgery at the University Hospital of Guadalajara
- Astellas Fellowship in Hepatobiliopancreatic Surgery and liver and pancreatic transplantation
- Official Master's Degree in Hepatology and Clinical Research at the University of Barcelona
- Official Master's Degree in Medical Expertise and Valuation of Bodily Injury by the University of Barcelona
- Degree in Medicine from the University of Alcalá, Spain
- Reviewer of the Central European Journal of Medicine
- Member of the Spanish Association of Surgeons
- Editor of: Journal of Liver and Clinical Research, EC Orthopaedics, Austin Pancreatic Disorders and Annals of Clinical Cytology and Pathology

## Professors

#### Dr. Díaz Candelas, Daniel Alejandro

- Specialist in General and Digestive System Surgery, University Hospital of Guadalajara, Mexico
- Postgraduate Diploma in Bases in Esophagogastric Surgery
- Degree in Medicine from the Central University of Venezuela
- Professor at the University Hospital of Guadalajara

#### Dr. López Marcano, Aylhin

- Physician in the Hepatobiliopancreatic Surgery Unit of the University Hospital of Guadalajara
- PhD in Medicine, University of Alcala
- Specialist in General and Digestive System Surgery
- Graduated from the Luis Razetti School of Medicine
- Degree in Medicine from the Central of Caracas University

## Course Management | 15 tech

### Dr. García Gil, José Manuel

- Specialist in Esophagogastric and Endocrine Surgery at the University Hospital of Guadalajara
- Doctor of General Surgery and Digestive System at the University Hospital of Móstoles
- Professional Master's Degree in Updating in General Surgery and Digestive System by Cardenal Herrera University
- Teaching experience in Emergency Surgical Pathology courses
- Regular attendee at congresses and scientific conferences to update his knowledge
- Member of the Spanish Association of Surgeons

### Dr. González Sierra, Begoña

- Specialist in General and Digestive System Surgery at the University Hospital of Guadalajara
- Professional Master's Degree in General Surgery Updating by the Spanish Confederation of Universities
- Professional Master's Degree in Integration and Clinical Problem Solving in Medicine from the University of Alcalá, Spain
- Professional Master's Degree in Aesthetic Medicine, Universidad Rey Juan Carlos, Madrid
- Degree in Medicine from the Complutense University of Madrid
- Postgraduate Certificate in Physiotherapy from the Rey Juan Carlos University

## 04 Structure and Content

Throughout this university program, graduates will be updated in the integral management of liver diseases. Throughout the syllabus, students will be immersed in the advanced knowledge of various laboratory tests and imaging techniques used in the evaluation of liver pathologies. This update in diagnostic methods will allow professionals to perform an exhaustive evaluation of the patient, contributing to a more precise and effective approach to hepatopathies. Likewise, the application of the Relearning method guarantees a deep and lasting learning thanks to the repetition of key concepts.

Structure and Content | 17 tech

Get up to date on the latest developments in liver function testing (LFTs) through 450 hours of the best multimedia content"

## tech 18 | Structure and Content

### Module 1. Hepatic Pathology

- 1.1. Pre-Operative Study
  - 1.1.1. Medical History
  - 1.1.2. Hepatic Function Tests (LFTs)
  - 1.1.3. Other Tests
- 1.2. Liver function
  - 1.2.1. Key liver functions
  - 1.2.2. Bile production
  - 1.2.3. Conclusions
- 1.3. Classification of liver diseases
  - 1.3.1. Infectious
  - 1.3.2. Metabolic
  - 1.3.3. Genetics
- 1.4. Pre-operative and intraoperative diagnostic methods for liver disease
  - 1.4.1. Imaging tests
  - 1.4.2. Hepatic biopsy
  - 1.4.3. Hepatic scintigraphy
  - 1.4.4. Other Tests
- 1.5. Study of Liver Function
  - 1.5.1. Markers
  - 1.5.2. Coagulation time
  - 1.5.3. Laboratory Tests
- 1.6. Hepatic volumetry
  - 1.6.1. Computed Tomography (CT) and Magnetic Resonance Imaging (MRI)
  - 1.6.2. Hepatic Ultrasound Scan
  - 1.6.3. Hepatic scintigraphy
- 1.7. Diagnostic imaging of focal hepatic lesions in patients with chronic liver disease
  - 1.7.1. Abdominal Ultrasound
  - 1.7.2. Computed Tomography (CT)
  - 1.7.3. Magnetic Resonance Imaging (MRI)

- 1.8. Incidental hepatic lesions
  - 1.8.1. Differential Diagnosis
  - 1.8.2. Types of Lesions
  - 1.8.3. Treatment
- 1.9. Interventional radiology in the management of liver disease
  - 1.9.1. Image-Guided Liver Biopsy
  - 1.9.2. Percutaneous Drainage of Hepatic Abscesses
  - 1.9.3. Transarterial Embolization (TAE) and Chemoembolization (TACE)
- 1.10. Anesthetic management in hepatic surgery
  - 1.10.1. Preoperative evaluation
  - 1.10.2. Hemodynamic Control
  - 1.10.3. Coagulation Management

### Module 2. Benign Liver Disease

- 2.1. Classification of benign hepatic tumors
  - 2.1.1. Hepatic hemangiomas
  - 2.1.2. Focal Nodular Hyperplasia (FNH)
  - 2.1.3. Hepatic Adenomas
- 2.2. Benign hepatocellular epithelial tumors
  - 2.2.1. Hepatocellular adenoma
  - 2.2.2. Focal Nodular Hyperplasia (FNH)
  - 2.2.3. Nodular Regeneration Focus (NRF)
- 2.3. Benign cholangiocellular epithelial tumors
  - 2.3.1. Biliary papilloma
  - 2.3.2. Biliary adenoma
  - 2.3.3. Ductopenia
- 2.4. Benign mesenchymal tumors
  - 2.4.1. Hepatic fibroma
  - 2.4.2. Hepatic leiomyoma
  - 2.4.3. Conclusions
- 2.5. Pyogenic Hepatic Abscesses
  - 2.5.1. Causes and Risk Factors
  - 2.5.2. Symptoms
  - 2.5.3. Diagnosis

## Structure and Content | 19 tech

- 2.6. Amoebic Liver Abscesses
  - 2.6.1. Causes
  - 2.6.2. Symptoms
  - 2.6.3. Diagnosis
- 2.7. Hepatic hydatidosis
  - 2.7.1. Causes
  - 2.7.2. Symptoms
  - 2.7.3. Diagnosis
- 2.8. Complications of hepatic abscesses
  - 2.8.1. Rupture of the Abscess
  - 2.8.2. Fistula Formation
  - 2.8.3. Other Complications
- 2.9. Simple liver cysts
  - 2.9.1. Polycystic liver cyst
  - 2.9.2. Diagnosis
  - 2.9.3. Treatment
- 2.10. Other benign liver lesions
  - 2.10.1. Hamartoma
  - 2.10.2. Inflammatory pseudotumor
  - 2.10.3. Other Lesions

#### Module 3. Malignant Liver Disease

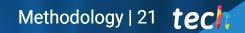
- 3.1. Malignant Liver Disease
  - 3.1.1. Main Diseases
  - 3.1.2. Risk Factors
  - 3.1.3. Lifestyle
- 3.2. Hepatocellular Carcinoma
  - 3.2.1. Risk Factors
  - 3.2.2. Symptoms
  - 3.2.3. Diagnosis
- 3.3. Intrahepatic Cholangiocarcinoma
  - 3.3.1. Risk Factors
  - 3.3.2. Symptoms
  - 3.3.3. Diagnosis

- 3.4. Other less frequent epithelial tumors
  - 3.4.1. Hepatic cystadenocarcinoma
  - 3.4.2. Fibrolamellar carcinoma
  - 3.4.3. Hepatoblastoma
- 3.5. Mesenchymal Tumors
  - 3.5.1. Undifferentiated embryonal sarcoma
  - 3.5.2. Epidermoid hemangioendothelioma
  - 3.5.3. Angiosarcoma. Lymphoma
- 3.6. Hepatic metastases of colorectal cancer
  - 3.6.1. Risk Factors
  - 3.6.2. Symptoms
  - 3.6.3. Diagnosis
- 3.7. Clinical scenarios and factors to be taken into account for treatment choice
  - 3.7.1. Causes
  - 3.7.2. Control of Risk Factors
  - 3.7.3. Possible treatments
- 3.8. Surgical strategies for malignant hepatic pathology
  - 3.8.1. Hepatic resection
  - 3.8.2. Liver transplantation
  - 3.8.3. Others
- 3.9. Liver metastases from colorectal cancer and neuroendocrine tumors
  - 3.9.1. Risk Factors
  - 3.9.2. Symptoms
  - 3.9.3. Treatment
- 3.10. Liver metastases not from colorectal cancer or neuroendocrine tumors
  - 3.10.1. Risk Factors
  - 3.10.2. Symptoms
  - 3.10.3. Treatment

## 05 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



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

## tech 22 | Methodology

### 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.

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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:

 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.
- 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.



## tech 24 | Methodology

## **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.



## Methodology | 25 tech

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.



## tech 26 | Methodology

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.

20%

15%

3%

15%

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.

## Methodology | 27 tech



#### **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.

20%

7%

3%

17%



#### **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.



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.

## 06 **Certificate**

The Postgraduate Diploma in Hepatopathies guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma degree issued by TECH Technological University.



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

## tech 30 | Certificate

This **Postgraduate Diploma in Hepatopathies** contains the most complete and up-todate scientific program on the market.

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

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

#### Title: Postgraduate Diploma in Hepatopathies

Official Nº of Hours: 450 h.



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

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Postgraduate Diploma Hepatopathies

