

Postgraduate Diploma

Comprehensive Diagnosis of Biliary Tract and Pancreas



Postgraduate Diploma Comprehensive Diagnosis of Biliary Tract and Pancreas

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

Website: www.techtute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-comprehensive-diagnosis-biliary-tract-pancreas

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 22

06

Certificate

p. 30

01

Introduction

In a medical setting where the complexity of pathologies related to the Biliary Tract and Pancreas is constantly evolving, the need for up-to-date experts is essential. Comprehensive diagnosis in these areas not only implies a deep understanding of anatomy and physiology, but also the ability to apply the latest technologies for an accurate and efficient assessment. Given this demand, this program emerges as a strategic response to update health professionals and qualify them to apply the latest liver tests and analysis of bilirubin levels. In addition, the academic itinerary stands out for its cutting-edge methodology, being 100% online, with a wide variety of multimedia content and an elite faculty.





“

Thanks to this comprehensive program you will be up to date on the latest trends in the diagnosis of extrahepatic cholangiocarcinoma”

Early identification and effective management of pathologies related to the Biliary Tract and Pancreas are crucial to improve clinical outcomes and prevent serious complications. A comprehensive diagnostic expert in this area can play a key role in the prevention and management of complications associated with diseases in these anatomical areas. Faced with this need, this syllabus is presented as an accurate and up-to-date response. Moreover, this program not only addresses the diagnostic complexity of these structures, but also qualifies professionals to effectively prevent and manage the complications of biliary tract and pancreatic diseases.

During the development of this university program, graduates will be up to date in the interpretation of specific laboratory tests related to the function of the biliary tract, such as liver tests and bilirubin levels. At the same time, they will address specific diagnostic techniques for benign diseases, such as abdominal ultrasound and cholangiography, ensuring an accurate and early assessment. At the same time, they will delve into other advanced working models such as computed tomography, magnetic resonance imaging and endoscopy, for an accurate and early assessment of malignant conditions.

On the other hand, the methodology implemented by TECH in the program reflects the need for flexibility and adaptation to contemporary professional demands. With a 100% online format, it allows students to advance their education without compromising their job responsibilities. The inclusion of a wide variety of multimedia content enriches the learning experience, facilitating the understanding of complex concepts. Likewise, the application of the Relearning system, based on the repetition of key concepts, guarantees a deep and lasting understanding.

This **Postgraduate Diploma in Comprehensive Diagnosis of Biliary Tract and Pancreas** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Comprehensive Diagnosis in Biliary Tract and Pancreas
- ♦ 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
- ♦ 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 have access to a virtual campus full of multimedia resources 24 hours a day"

“

Get up to date on the latest developments in Iatrogenic Bile Duct Injuries at the highest rated university in the world by its students according to the Trustpilot platform (4.9/5)"

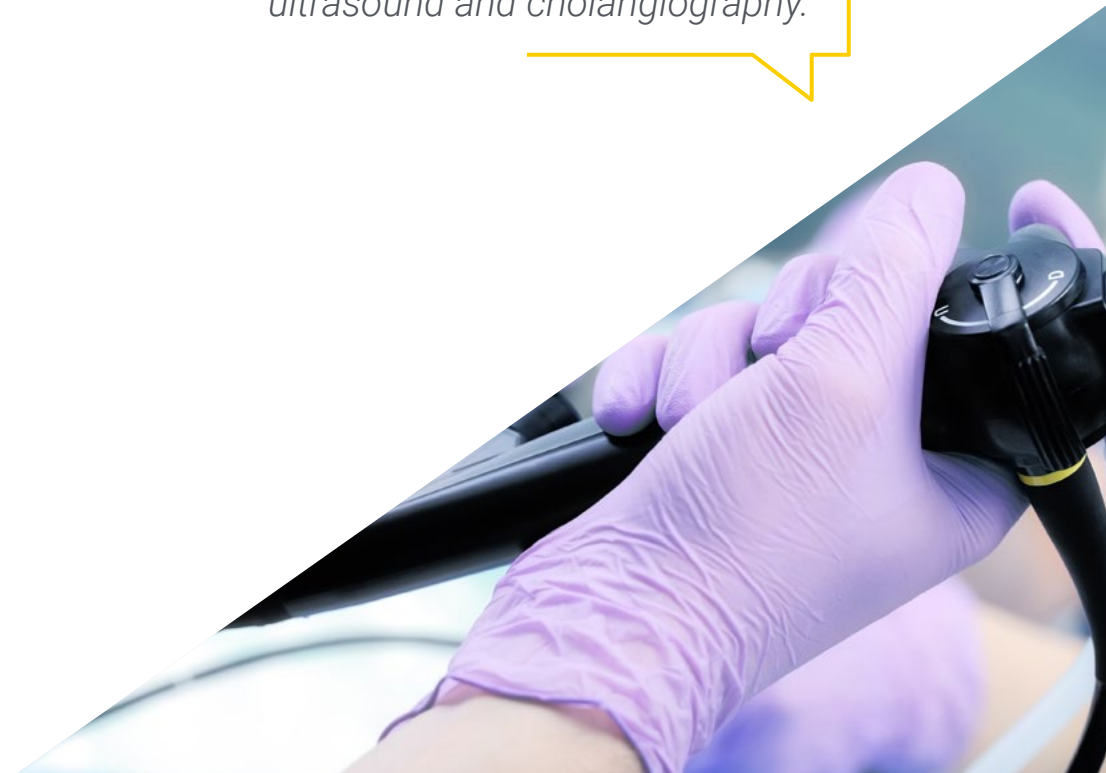
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Enroll in a program that stands out for its flexibility with a 100% online format to adapt to the agendas of active professionals.

In less than 6 months you will be up to date on the latest trends in abdominal ultrasound and cholangiography.



02 Objectives

The main objective of this academic itinerary is to keep graduates up to date with the emerging technologies in diagnosis for pancreatic and biliary pathologies. Physicians will be up to date with the skills necessary to effectively incorporate these innovations into their clinical practice. In this regard, by focusing on diagnostic accuracy using advanced tools, professionals will become highly skilled in the use of hepatic elastography, among other techniques, thereby improving their ability to comprehensively assess patients in their care.





“

Keep up to date in the management of complications associated with benign diseases and reach your professional goals with TECH"



General Objectives

- ◆ Develop a thorough understanding of the normal anatomy of the liver, including vascular distribution, hepatic segmentation and anatomical relations
- ◆ Establish a solid foundation in normal liver physiology in order to facilitate the 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 well-being
- ◆ Encourage interest in research on pancreatic diseases and promote constant updating on therapeutic and technological advances





Specific Objectives

Module 1. Study and Diagnosis of the Biliary Tract

- ♦ Establish a solid understanding of the normal anatomy and physiology of the biliary tract, including the gallbladder, bile ducts and sphincter of Oddi
- ♦ Become familiar with specific imaging techniques for the assessment of the biliary tract, such as cholangiography and cholangioresonance imaging
- ♦ Develop the ability to identify and classify different disorders affecting the tract
- ♦ Become familiar with non-invasive diagnostic methods, such as ultrasound and computed tomography, for a comprehensive assessment of the biliary tract
- ♦ Understand the interpretation of specific laboratory tests related to biliary tract function, such as liver tests and bilirubin levels
- ♦ Keep up to date with emerging technologies in diagnosis, such as hepatic elastography, in order to improve diagnostic accuracy

Module 2. Benign Pathology of the Biliary Tract and Pancreas

- ♦ Establish an in-depth understanding of the pathophysiology of benign diseases affecting the biliary tract and pancreas, including biliary lithiasis, pancreatic cysts and other conditions
- ♦ Develop the ability to identify and classify different benign conditions in the biliary tract and pancreas, recognizing their distinguishing features
- ♦ Become familiar with diagnostic techniques specific to benign diseases, such as abdominal ultrasonography and cholangiography, for accurate assessment
- ♦ Identify potential complications associated with benign disease and learn how to prevent and manage them effectively

Module 3. Malign Pathology of the Biliary Tract and Pancreas

- ♦ Establish a thorough understanding of the biological and pathophysiological mechanisms involved in malignant diseases of the biliary tract and pancreas, such as pancreatic cancer and cholangiocarcinoma
- ♦ Develop skills to identify and classify different types of malignant neoplasms in the biliary tract and pancreas, considering their origin and histological characteristics
- ♦ Become familiar with advanced diagnostic techniques, such as computed tomography, magnetic resonance imaging and endoscopy, for accurate and early assessment of malignant conditions
- ♦ Analyze specific risk factors



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

03

Course Management

The faculty of the Postgraduate Diploma in Comprehensive Diagnosis of Biliary Tract and Pancreas is distinguished by the careful selection of TECH, which has brought together the best specialists with an extensive and recognized professional background in reference hospitals in this field. In this regard, each faculty member brings practical experience and deep understanding of the diagnostic complexities related to the biliary tract and pancreas. In addition, TECH offers a 100% online educational environment, tailored to the needs of professionals.



“

Get up to date on the identification and classification of different types of pancreatic neoplasms from the best experts in the field”

Management



Dr. Al Shwely Abduljabar, Farah

- ♦ Head of the Hepatobiliopancreatic Surgery Unit at the Puerta de Guadalajara Hospital
- ♦ Doctorate in Medicine, University of Alcalá
- ♦ 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 from the University of Barcelona
- ♦ Official Master's Degree in Medical Expertise and Bodily Injury Assessment by the University of Barcelona
- ♦ Degree in Medicine from the University of Alcalá
- ♦ 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. Bajawi, Mariam

- ◆ Specialist in General and Digestive System Surgery at the University Hospital of Guadalajara.
- ◆ General and Digestive System Surgery Clinical Professor.
- ◆ Doctorate in Health Sciences, University of Alcalá the Henares
- ◆ Master's Degree in Digestive Oncology (CEU Cardenal Herrera University) and Clinical Medicine (Camilo José Cela University)
- ◆ Degree in Medicine from the University of Jordan

Dr. Díaz Candelas, Daniel Alejandro

- ◆ Specialist in General and Digestive System Surgery at the University Hospital of Guadalajara
- ◆ Diploma in Esophagogastric Surgery Principles
- ◆ Degree in Medicine from the Central University of Venezuela
- ◆ Teacher at the University Hospital of Guadalajara

Dr. López Marcano, Aylhin

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

Dr. Catalán Garza, Vanessa

- ◆ Specialist in General and Digestive System Surgery at the University Hospital of Guadalajara.
- ◆ Physician at the San Carlos Clinical Hospital
- ◆ Master's Degree in Pediatrics in Clinical Medicine from the Camilo José Cela University
- ◆ Degree in Medicine from the University of Zaragoza

Dr. Picardo, María Dolores

- ◆ General and Digestive System Surgeon at the University Hospital of Guadalajara
- ◆ Director of doctoral theses and final projects at La Paz University Hospital
- ◆ R+D+i management and participation in scientific committees
- ◆ Professor in courses and seminars oriented to university teaching education
- ◆ Degree in Medicine from the Autonomous University of Madrid
- ◆ Member of the Technical-Assistance Board of the Integrated Care Management of Guadalajara

Dr. García Gil, José Manuel

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

04

Structure and Content

This program will offer advanced education aimed at updating health professionals. Throughout the syllabus, graduates will delve into the latest non-invasive diagnostic methods, highlighting ultrasound and computed tomography. In this way, these cutting-edge tools will allow for a more precise and up-to-date approach. In addition, the syllabus is positioned as a benchmark in the education of experts capable of using advanced technologies for the effective diagnosis of pathologies in these anatomophysiological areas. Likewise, the use of the *Relearning* methodology is key to fix knowledge and facilitate learning.





“

Comprehensive Diagnosis of Biliary Tract and Pancreas using innovative techniques such as Interventional Radiology”

Module 1. Study and Diagnosis of the Biliary Tract

- 1.1. Surgical and Vascular Anatomy of the Biliary Tract
 - 1.1.1. Liver
 - 1.1.2. Gallbladder
 - 1.1.3. Cystic Duct
- 1.2. Physiology of Bile
 - 1.2.1. Production
 - 1.2.2. Storage
 - 1.2.3. Functions
- 1.3. Pathophysiology of the Gallbladder and Bile Ducts
 - 1.3.1. Gallbladder Calculus
 - 1.3.2. Tumours
 - 1.3.3. Others
- 1.4. Clinical History, Laboratory Tests in the Patient with Biliary Pathology
 - 1.4.1. Medical History
 - 1.4.2. Risk Factors
 - 1.4.3. Conclusions
- 1.5. Imaging Study of the Biliary Tract
 - 1.5.1. Abdominal Ultrasound
 - 1.5.2. Magnetic Resonance Cholangiography (MRCP)
 - 1.5.3. Abdominal Computed Tomography (CT)
- 1.6. Colelitis
 - 1.6.1. Coledocolitis
 - 1.6.2. Causes
 - 1.6.3. Symptoms
- 1.7. Endoscopic Treatment of Coledocolitis
 - 1.7.1. Endoscopic Retrograde Cholangiopancreatography (ERCP)
 - 1.7.2. Echoendoscopy
 - 1.7.3. Others
- 1.8. Interventional Radiology in the Diagnosis of Biliary Tract Pathology
 - 1.8.1. Transhepatic Percutaneous Cholangiography (TPC)
 - 1.8.2. Magnetic Resonance Cholangiography (MRCP)
 - 1.8.3. Endoscopic Retrograde Cholangiopancreatography (ERCP)
- 1.9. Surgical Management of Lithiasic Pathology of the Biliary Tract
 - 1.9.1. Description
 - 1.9.2. Advantages
 - 1.9.3. Procedures
- 1.10. New Therapeutic Approach of Lithiasic Pathology of the Biliary Tract
 - 1.10.1. Laparoscopic Approach
 - 1.10.2. Robotic Surgery
 - 1.10.3. Others



Module 2. Benign Pathology of the Biliary Tract and Pancreas

- 2.1. Lithiasic Pathology
 - 2.1.1. Cholecystitis
 - 2.1.2. Cholangitis
 - 2.1.3. Diagnosis and Treatment
- 2.2. Iatrogenic Bile Duct Injuries
 - 2.2.1. Cholecystectomy
 - 2.2.2. Liver Surgery
 - 2.2.3. Others
- 2.3. Obstructive Jaundice
 - 2.3.1. Causes
 - 2.3.2. Symptoms
 - 2.3.3. Treatment
- 2.4. Choledochal Cysts
 - 2.4.1. Types
 - 2.4.2. Causes
 - 2.4.3. Symptoms
- 2.5. Acute Pancreatitis
 - 2.5.1. Classification
 - 2.5.2. Nomenclature
 - 2.5.3. Treatment
- 2.6. Management of Acute Pancreatitis
 - 2.6.1. Hospitalization
 - 2.6.2. Pain Management
 - 2.6.3. Hydration
- 2.7. Chronic Pancreatitis
 - 2.7.1. Types
 - 2.7.2. Causes
 - 2.7.3. Symptoms

- 2.8. Management of Chronic Pancreatitis
 - 2.8.1. Supplements
 - 2.8.2. Diet
 - 2.8.3. Complications
- 2.9. Pancreatic Cystic Tumors
 - 2.9.1. Types
 - 2.9.2. Causes
 - 2.9.3. Symptoms
- 2.10. Surgical Indications for Pancreatic Cystic Tumors
 - 2.10.1. Size
 - 2.10.2. Features
 - 2.10.3. Tumor Location

Module 3. Malign Pathology of the Biliary Tract and Pancreas

- 3.1. Pancreatic Ductal Adenocarcinoma
 - 3.1.1. Features
 - 3.1.2. Symptoms
 - 3.1.3. Treatment
- 3.2. Classification of Pancreatic Ductal Adenocarcinomas
 - 3.2.1. Types
 - 3.2.2. Causes
 - 3.2.3. Conclusions
- 3.3. Multidisciplinary Treatment of Pancreatic Adenocarcinoma
 - 3.3.1. Multidisciplinary Team
 - 3.3.2. Initial Assessment and Staging
 - 3.3.3. Surgery
- 3.4. Surgical Techniques
 - 3.4.1. Cephalic Duodenopancreatectomy
 - 3.4.2. Corporocaudal Splenopancreatectomy
 - 3.4.3. Cephalic Pancreatectomy
- 3.5. Anatomopathological Study of the Pancreatectomy Specimen
 - 3.5.1. Obtaining the Specimen
 - 3.5.2. Fixation and Processing
 - 3.5.3. Histological Sections





- 3.6. Gallbladder Adenocarcinoma
 - 3.6.1. Description
 - 3.6.2. Staging of Adenocarcinoma of the Gallbladder
 - 3.6.3. Conclusions
- 3.7. Treatment of Adenocarcinoma of the Gallbladder
 - 3.7.1. Surgery
 - 3.7.2. Chemotherapy
 - 3.7.3. Radiotherapy
- 3.8. Extrahepatic Cholangiocarcinoma
 - 3.8.1. Description
 - 3.8.2. Diagnosis of Extrahepatic Cholangiocarcinoma
 - 3.8.3. Conclusions
- 3.9. Classification of Extrahepatic Cholangiocarcinoma
 - 3.9.1. Types
 - 3.9.2. Symptoms
 - 3.9.3. Risk Factors
- 3.10. Treatment of Extrahepatic Cholangiocarcinoma
 - 3.10.1. Surgery
 - 3.10.2. Chemotherapy
 - 3.10.3. Radiotherapy

“ You will enhance your knowledge and skills through the innovative Relearning methodology that TECH implements. **Enroll now!”**

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"

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.



06 Certificate

The Postgraduate Diploma in Comprehensive Diagnosis of Biliary Tract and Pancreas guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



“

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

This **Postgraduate Diploma in Comprehensive Diagnosis of Biliary Tract and Pancreas** contains the most complete and up-to-date scientific 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 certificate 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 Comprehensive Diagnosis of Biliary Tract and Pancreas**

Official N° of Hours: **450 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.



Postgraduate Diploma
Comprehensive Diagnosis
of Biliary Tract and Pancreas

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

Postgraduate Diploma

Comprehensive Diagnosis of Biliary Tract and Pancreas

