



## Postgraduate Diploma

Hepatobiliopancreatic Oncological Surgery (HBP)

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 18 ECTS

» Schedule: at your own pace

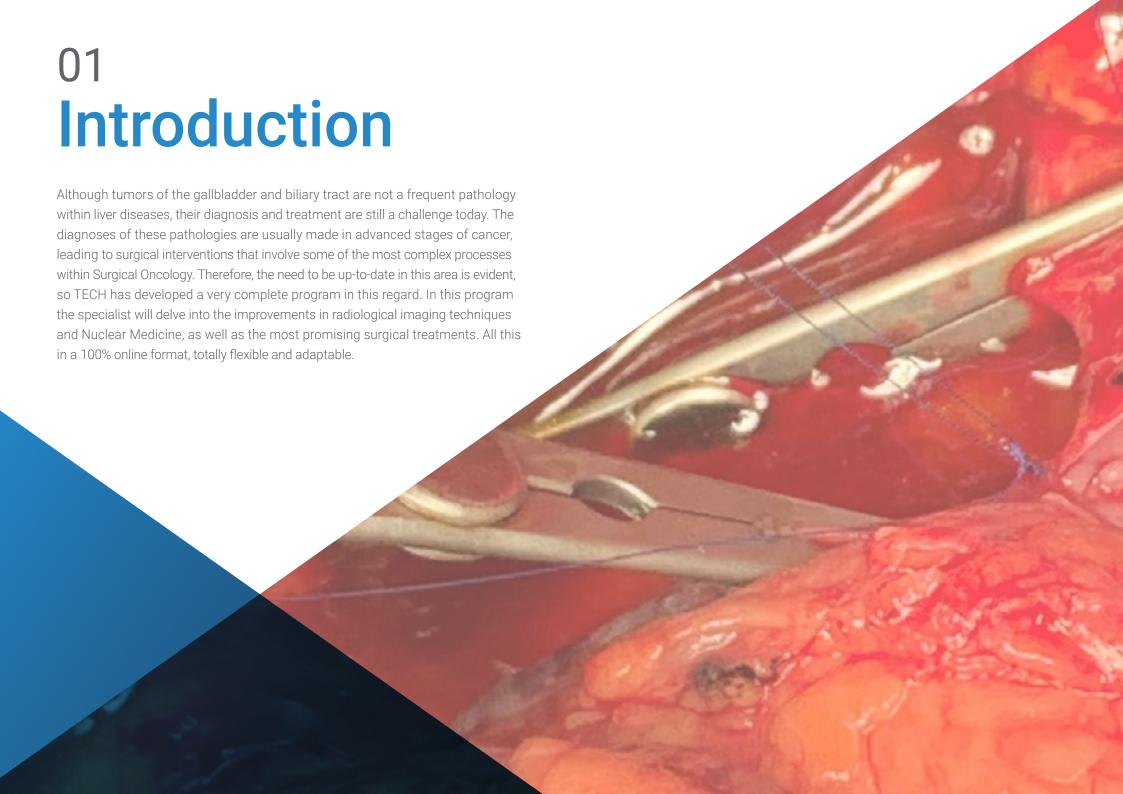
» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-hepatobiliopancreatic-oncological-surgery-hbp

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## tech 06 | Introduction

Both liver and biliary tract surgery and esophagogastric surgery have undergone a series of developments and advances of great relevance in recent years, especially with regard to endoscopic treatments, laparoscopy, robotic surgery and oncological therapies. Therefore, specialists dedicated to this field have much more advanced tools with which to address various hepatobiliopancreatic pathologies.

This is a major impulse for updating in this field, especially in everything related to therapies and Oncologic Surgery. This is the reason that has motivated TECH to create this program, where the latest developments in areas such as endoscopic treatment of esophageal cancer, diagnostic tests in hepatobiliary pathology and surgical treatment of metastases of neuroendocrine tumors are compiled.

All of this is supported by a teaching staff made up of experts in the area, who have contributed their own clinical experience to all the theoretical material. This gives each topic a particular practical vision, providing the specialist with an essential context to incorporate all these advances to their own work methodology.

The format of the program is, moreover, completely online. This means that there are no presential classes or fixed schedules, giving total freedom to take on the teaching load at one's own convenience. All the contents available in the Virtual Campus can be downloaded from any device with Internet connection, and can be reviewed later from the comfort of the tablet or even from a smartphone.

This Postgraduate Diploma in Hepatobiliopancreatic Oncological Surgery (HBP) 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 Digestive System Surgery and Oncology
- 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 self-assessment can be used 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



Get up-to-date on the surgical treatment of hepatocarcinomas, including complete studies on the patient and liver transplantation"



Download all the contents of the Virtual Campus so you can review and study them whenever you want"

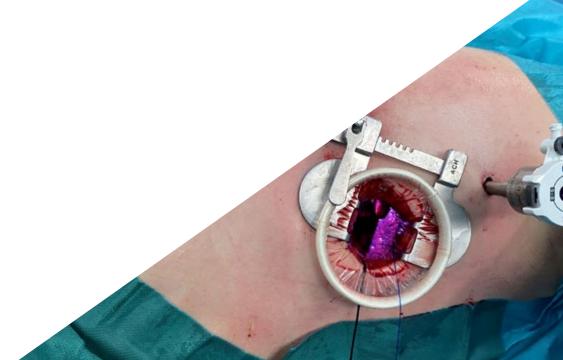
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

You will not have to follow any kind of fixed schedule, always directing the times and rhythms of study.

Delve into innovation and future lines of research in esophagogastric oncologic surgery.







## tech 10 | Objectives



#### **General Objectives**

- Delve into the specific knowledge on the management of patients with tumors affecting the digestive tract
- Discern the surgical techniques to be used and the new technologies currently available for their diagnosis and treatment
- Know where modern surgery is heading and what are the ways of its development
- Study the fundamentals of research in Oncological Surgery
- Knowing the way to develop research projects, how to do them and where to get help
- Develop skills and technical knowledge in the specialist with which they can face any situation presented by a patient in a unit of Oncological Surgery of the digestive system



#### **Specific Objectives**

#### Module 1. Esophagogastric Oncologic Surgery

- Study the general aspects of esophageal cancer, its epidemiology and classification, as well as the diagnostic advances available
- Know the updates in the surgical approach to esophageal cancer
- Analyze the reconstruction with gastric plasty and its alternatives
- Define and know the indications of standard and extended lymphadenectomies in esophageal cancer
- Analyze the new classification of esophagogastric junction tumors
- Study the clinical and epidemiological differences of gastric tumors in the western and eastern setting
- Update the surgical treatment of gastric cancer, weighing the technical alternatives for the performance of anastomosis
- Define the new criteria for oncologic lymphadenectomy
- Explain and analyze the possible sequelae after esophagogastric surgery, in order to perform an adequate management and treatment
- Analyze the possible short and long term complications of esophagogastric surgery and the different options to avoid their appearance and minimize their consequences
- Study the new oncological targeted therapies, reviewing the latest published results that recommend their current use
- Learn about endoscopic and interventional therapies in esophagogastric tumors

#### Module 2. Liver and Biliary Tract I Generalities. Liver Tumors

- Obtain a thorough knowledge of the anatomy of the liver and biliary tract from a practical point of view and applied to liver surgery
- Obtain a surgical vision of the anatomy of the liver that allows to understand the techniques of liver resection and the importance of knowing this anatomy to avoid complications
- Know the diagnostic tests that currently exist to study the patient with hepatic tumor pathology, as well as the techniques for the study of hepatic function
- Develop the ability to determine what residual liver volume a patient needs to survive and the techniques to determine the volume that will remain after surgery
- Establish the technical basis of liver surgery Obtain the basic and essential knowledge to be able to understand and initiate oneself in liver surgery
- Present the techniques currently available to increase the residual hepatic volume of a patient, which allow to increase the resectability of liver tumors at diagnosis
- Learn about the development of the minimally invasive approach in liver surgery, including approach techniques, differences with open surgery, necessary instruments and material, etc
- Know the complications that can occur in liver and biliary tract surgery
- Study the main benign liver tumors with malignant and malignant potential, with special attention to hepatocarcinoma
- Establish which are the current surgical treatment options, indications for surgical resection and liver transplantation for hepatocarcinoma
- Know what alternatives to surgical treatment exist to treat hepatocarcinoma

#### Module 3. Liver and Biliary II. Bile Duct Tumors. Liver Metastases

- · Distinguish the types of tumors of the bile duct and gallbladder
- Differentiate the different surgical treatments in the treatment of bile duct and gallbladder tumors
- Know the role of endoscopic and interventional treatment
- Analyze the role of chemotherapy in the treatment
- Study the indications for radiotherapy in biliary tract and gallbladder tumors
- Know the different types of hepatic metastases
- Manage the indications and techniques of surgery in hepatic metastases
- Know the role of interventionism in the treatment of hepatic metastases
- Delve into the indications and types of chemotherapy in hepatic metastases
- Distinguish the role of radiotherapy in liver metastases



You will be able to start improving your clinical approach even before you finish your program"





## tech 14 | Course Management

#### Management



#### Dr. Alonso Casado, Oscar

- Head of Hepatobiliopancreatic Surgery at MD Anderson Cancer Center Madrid
- Specialist in the General and Digestive Oncology Surgery Service at MD Anderson Cancer Center Madrid, collaborating
  in the Thoracic Surgery Unit and Plastic Surgery Unit
- Attending Surgeon at Quirónsalud Sur and El Escorial Hospitals
- Clinical Tutor in Practical Teaching at the Francisco de Vitoria University and MD Anderson Cancer Center Madrid
- Degree in Surgery and Medicine from the Complutense University of Madrid
- Da Vinci Xi Robotic System Console Surgeon Certification

#### **Professors**

#### Dr. Loinaz Segurola, Carmelo

- Head of General and Digestive System Surgery Section, Doce de Octubre University Hospital
- Head of the General Surgery Unit, Alcorcón University Hospital
- Degree in Medicine and Surgery, Navarra University
- Specialist in General and Digestive System Surgery, Doce de Octubre University Hospital
- Doctor of Medicine and Surgery, Complutense University of Madrid, qualification outstanding cum laude
- Associate Professor of Health Sciences Accredited as Full Professor by ANECA
- Master's Degree in Medical and Clinical Management, UNED and School of Health -Carlos III Institute
- Coordinator of Humanitarian Collaboration Group, AEC
- He is a member of the Spanish Association of Surgeons, Spanish Society of Parenteral and Enteral Nutrition, The American College of Surgeons, Spanish Society of Transplantation, The Spanish Society of Liver Transplantation, The European Society of Organ Transplantation, The Transplantation Society (IRTA section, Intestinal Rehabilitation and Transplant Association), The International Society of Surgeons, Gastroenterologists and Oncologists (IASGO), The International Society of Diseases of the Esophagus (ISDE), Health Cooperation Committee of the Department of Surgery of the UCM

#### Dr. Paseiro Crespo, Gloria

- Head of the General and Digestive System Service at the Hospital Infanta Leonor
- Specialist in General and Digestive System Surgery at the Infanta Leonor Hospital
- Specialist in the General and Digestive Surgery Service at the University Hospital of Guadalajara
- Teaching Coordinator of Physiopathology and Surgical Propedeutics at the Complutense University of Madrid

- PhD in Medicine and Surgery from the Complutense University of Madrid
- Degree in Medicine and Surgery from the Autonomous University of Madrid
- Specialist in General and Digestive System Surgery at 12 de Octubre University Hospital
- Master's Degree in Clinical Management, Medical and Healthcare Management from the CEU Cardenal Herrera University

#### Dr. Pérez Saborido, Baltasar

- Head of the Hepatobiliopancreatic Surgery Unit and Robotic Surgery Unit of the Recoletas Campo Grande Hospital
- Surgeon in the Advanced Oncological Surgery Unit and Liver Transplant Unit at the Rio Hortega University Hospital
- Head of the General and Digestive Surgery Department at Hospital Recoletas Campo Grande
- Innovation Coordinator of the Valladolid West Health Area
- Associate Professor in the Department of Surgery, Ophthalmology, Otorhinolaryngology and Physiotherapy at the University of Valladolid
- Doctor of Medicine and Surgery, from the Complutense University of Madrid
- Graduate in Medicine and Surgery from the University of Malaga
- Specialist in General and Digestive System Surgery at 12 de Octubre Hospital
- Master's Degree in Clinical Management, Medical and Healthcare Management from the CEU Cardenal Herrera University





## tech 18 | Structure and Content

#### Module 1. Esophagogastric Oncologic Surgery

- 1.1. General Aspects from Esophageal Cancer
  - 1.1.1. Epidemiology and Etiopathogenesis
  - 1.1.2. Classification and Diagnosis
  - 1.1.3. Monitoring and Prognosis
- 1.2. Surgical Treatment of Esophageal Cancer
  - 1.2.1. Types of Anastomoses
  - 1.2.2. Standard and Extended Lymphadenectomy
  - 1.2.3. Alternatives to Gastric Plasty Reconstruction
- 1.3. Endoscopic and Interventional Treatment of Esophageal Cancer
  - 1.3.1. Treatment of Precursor Lesions
  - 1.3.2. Treatment of Early Cancer
  - 1.3.3. Palliative treatment
  - 1.3.4. Management of Complications
- 1.4. Cancer of the Oesophagogastric Junction
  - 1.4.1. Controversies in the Management of UEG Cancer
  - 1.4.2. Approach according to the New Clinical Guidelines
  - 1.4.3. Lymphadenectomy and Surgical Approach
- 1.5. General Aspects from Gastric Cancer
  - 1.5.1. Epidemiology and Etiopathogenesis
  - 1.5.2. Classification and Diagnosis
  - 1.5.3. Monitoring and Prognosis
- 1.6. Surgical Treatment of Gastric Cancer
  - 1.6.1. Anastomosis.
  - 1.6.2. Technical Basis of Lymphadenectomy
  - 1.6.3. Treatment of Non-Adenocarcinoma Tumors
  - 1.6.4. Endoscopic treatment
- 1.7. Oncologic Therapies for Esophagogastric Tumors
  - 1.7.1. Neoadjuvant and Adjuvant Chemotherapy
  - 1.7.2. Neoadjuvant and Adjuvant Radiotherapy
  - 1.7.3. New Oncological Therapies: Immunotherapy

- 1.8. Oncologic Esophagogastric Surgery Complications
  - 1.8.1. Immediate Postoperative Complications
  - 1.8.2. Post Gastrectomy Sequelae
  - 1.8.3. Post-Thesophagectomy Seguelae
- 1.9. Intensified Recovery in Esophagogastric Surgery
  - 1.9.1. Prehabilitation
  - 1.9.2. Optimization
  - 1.9.3. Clinical Pathway
- 1.10. Research and Innovation in Esophagogastric Oncologic Surgery

#### Module 2. Liver and Biliary Tract I. Generalities. Liver Tumors.

- 2.1. Surgical Anatomy of the Liver
  - 2.1.1. Hepatic Segmentation
  - 2.1.2. Hepatic Vascular Distribution
  - 2.1.3. Anatomy of the Biliary Tract
- 2.2. Diagnostic Tests in Hepatobiliary Pathology
  - 2.2.1. Ultrasound
  - 2.2.2. CAT
  - 2.2.3. MRI
- 2.3. Assessment of Residual Liver Volume and Function
  - 2.3.1. Concept and Limits of Residual Liver Volume
  - 2.3.2. Techniques for Measuring RLV
  - 2.3.3. Methods of Liver Function Determination
- 2.4. Principles of Liver Surgery
  - 2.4.1. Fundamental Aspects and Phases of Hepatic Resection
  - 2.4.2. Parenchymal Section Techniques
  - 2.4.3. Pringle's Maneuver and Vascular Control
  - 2.4.4. Hemostasis and Bilistasis
- 2.5. Techniques to Increase Hepatic Resectability
  - 2.5.1. Hepatic Regeneration
  - 2.5.2. Portal Embolization and 2-Stage Surgery
  - 2.5.3. ALPPS Technique

## Structure and Content | 19 tech

- 2.6. Minimally Invasive Liver Surgery: Laparoscopy and Robotics
  - 2.6.1. Basis of Minimally Invasive Surgery in Hepatobiliary Surgery
  - 2.6.2. Laparoscopic Approach
  - 2.6.3. Contribution of the Robotic Approach
- 2.7. Complications of Liver Surgery and Post-operative Management
  - 2.7.1. Post-Operative Care ERAS
  - 2.7.2. Complications of Hepatobiliary Surgery
  - 2.7.3. Treating Complications
- 2.8. Benign and Malignant Liver Tumors
  - 2.8.1. Benign Hepatic Tumors
  - 2.8.2. Malignant Liver Tumors
  - 2.8.3. Hepatocarcinoma: Epidemiology, Risk Factors, Classification and Diagnosis
- 2.9. Hepatocarcinoma: Non-surgical Treatment
  - 2.9.1. Alternative and "Bridging" Treatments to Surgery
  - 2.9.2. Medical Treatment
- 2.10. Hepatocarcinoma: Surgical Treatment
  - 2.10.1. Study of the Patient with Hepatocarcinoma
  - 2.10.2. Surgical Resection
  - 2.10.3. Liver Transplant

#### Module 3. Liver and Biliary II. Bile Duct Tumors. Liver Metastases

- 3.1. General Aspects of Gallbladder and Biliary Tract Cancer
  - 3.1.1. Epidemiology and Etiopathogenesis
  - 3.1.2. Classification
  - 3.1.3. Diagnosis
- 3.2. Surgery of Tumors of the Bile Duct and the Gallbladder
  - 3.2.1. Surgery of Intrahepatic BV Tumors
  - 3.2.2. Surgery of Extrahepatic BV Tumors
  - 3.2.3. Surgery of Gallbladder Tumors
- 3.3. Endoscopic and Interventional Treatment of Bile Duct and Gallbladder Tumors
  - 3.3.1. Preoperative Endoscopic Treatment
  - 3.3.2. Preoperative Interventional Radiology
  - 3.3.3. Endoscopic Treatment of Complications
  - 3.3.4. Interventional Radiology in Complications

- 3.4. Medical Oncology Treatment of Bile Duct and Gallbladder Tumors
  - 3.4.1. Medical Oncology in Bile Duct Cancer
  - 3.4.2. Medical Oncology in Gallbladder Cancer
- 3.5. Treatment of Bile Duct and Gallbladder Tumors by Radiation Oncology
  - 3.5.1. Radiotherapy in Bile Duct Cancer
  - 3.5.2. Radiotherapy in Gallbladder Cancer
- 3.6. General Aspects of Liver Metastasis
  - 3.6.1. Epidemiology and Etiopathogenesis
  - 3.6.2 Classification
  - 3.6.3. Diagnosis and Prognosis
- Surgical Treatment of Colorectal Cancer Liver Metastases and Alternatives to Surgical Treatment
  - 3.7.1. Assessment and Surgical Planning in Patients with Colorectal Cancer Liver Metastases
  - 3.7.2. Surgical Alternatives and Transplantation
  - 3.7.3. Non-surgical Alternatives
- 3.8. Medical Oncologic Surgery in the Treatment of Colorectal Cancer Liver Metastases
  - 3.8.1. Neoadjuvant and Adjuvant Treatment
  - 3.8.2 Palliative treatment
  - 3.8.3. New Perspectives
- 3.9. Metastases of Neuroendocrine Tumors
  - 3.9.1. Classification, Diagnosis and Prognosis
  - 3.9.2. Surgical Management
  - 3.9.3. Role of Liver Transplantation
- 3.10. Liver Metastases of Other Non-Colorectal and Non-Neuroendocrine Tumors
  - 3.10.1. Metastasis of ENT Tumor
  - 3.10.2. Metastases of Esophagogastric Tumor
  - 3 10 3 Metastasis of Breast Cancer 1
  - 3.10.4. Metastases of Pancreatic Cancer





## 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.



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.
- 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.





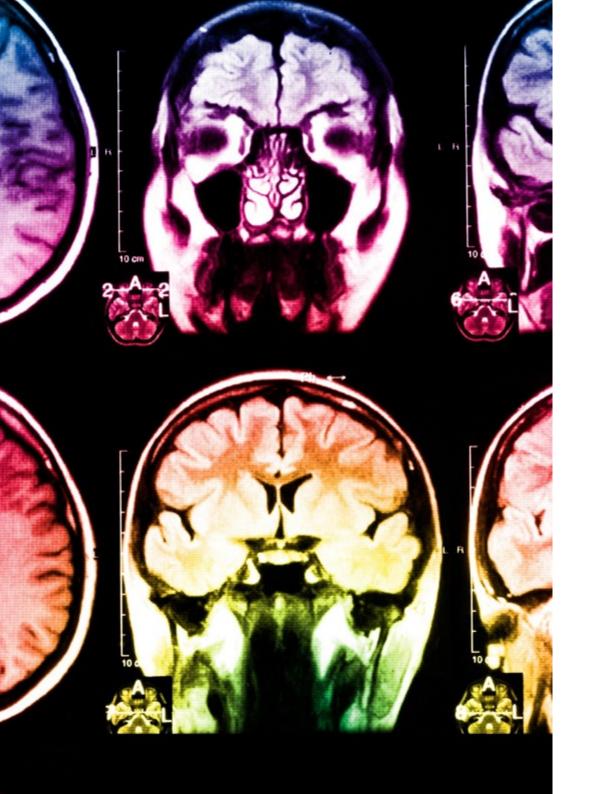
#### Relearning Methodology

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.





## 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.

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.









## tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Hepatobiliopancreatic Oncological Surgery (HBP)** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Hepatobiliopancreatic Oncological Surgery (HBP)

Modality: online

Duration: 6 months

Accreditation: 18 ECTS



Mr./Ms. \_\_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Diploma in Hepatobiliopancreatic Oncological Surgery (HBP)

This is a program of 450 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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

health confidence people education information tutors guarantee accreditation teaching institutions technology learning



# Postgraduate Diploma Hepatobiliopancreatic Oncological Surgery (HBP)

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

