

# Postgraduate Certificate Hepatobiliary Oncologic Surgery





## Postgraduate Certificate Hepatobiliary Oncologic Surgery

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/hepatobiliary-oncologic-surgery](http://www.techtute.com/us/medicine/postgraduate-certificate/hepatobiliary-oncologic-surgery)

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# 01

# Introduction

Hepatic and biliary tract cancer is an increasingly common disease worldwide, and Hepatobiliary Oncologic Surgery is a vital medical specialty for its diagnosis and treatment. In that context, TECH has designed this program in Hepatobiliary Oncologic Surgery, which offers a complete and up-to-date degree in surgical techniques for the diagnosis and treatment of liver tumors, biliary tract tumors and liver metastases. In that sense, this program is a unique opportunity to improve surgical skills and update knowledge in this constantly evolving medical specialty, with the support of highly qualified and experienced professionals in the field, all from the comfort of your digital device of choice with a 100% online format.





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*Take advantage of this unique online catch-up opportunity to improve your skills and update your knowledge in an increasingly important medical specialty in modern medicine"*

In the last decade, Hepatobiliary Oncologic Surgery has experienced a great advance in the understanding of the surgical anatomy of the liver, biliary tract, and the application of minimally invasive surgical techniques. The importance of this medical specialty lies in the fact that liver and biliary tract tumors represent a significant burden to world health, due to their high incidence and mortality.

Hepatobiliary Oncologic Surgery focuses on diagnosing and treating liver tumors, biliary tract tumors and liver metastases effectively and preserving liver and biliary function. In order to improve specialization in this specialty, TECH has designed this Postgraduate Certificate in Hepatobiliary Oncologic Surgery, aimed at physicians specializing in general surgery, digestive surgery, oncology, interventional radiology, among others.

This Postgraduate Certificate in Hepatobiliary Oncologic Surgery of TECH addresses specific topics in two modules, covering from the surgical anatomy of the liver and biliary tract, diagnostic tests in hepatobiliary pathology, assessment of residual liver volume and function, principles of liver surgery, to surgery of biliary tract tumors, endoscopic and interventional treatment of bile duct and gallbladder tumors, and liver metastases of colorectal cancer, neuroendocrine, and others.

Advances in Hepatobiliary Oncologic Surgery have led to the application of less invasive surgical techniques, such as laparoscopic and robotic surgery, which allow for faster patient recovery and a reduction in postoperative complications. In addition, Hepatobiliary Oncological Surgery has experienced a significant advance in the identification of new biomarkers and specific therapies for liver tumors, which has significantly improved patient survival.

For all of the above reasons, studying TECH's Postgraduate Certificate in Hepatobiliary Oncologic Surgery represents a unique opportunity for health professionals to update their knowledge and improve their surgical skills in a medical specialty in constant evolution. Being 100% online and using the *Relearning* methodology, the participants will be able to evolve in the content at their own pace and with the quality that it deserves.

This **Postgraduate Certificate in Hepatobiliary Oncologic Surgery** 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 Oncologic Digestive Surgery
- ♦ 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



*Access a virtual learning environment designed to facilitate your learning process and improve retention of surgical concepts and techniques"*

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*Develop specialized skills to perform with excellence in Hepatobiliary Oncologic Surgery, a medical specialty in constant evolution”*

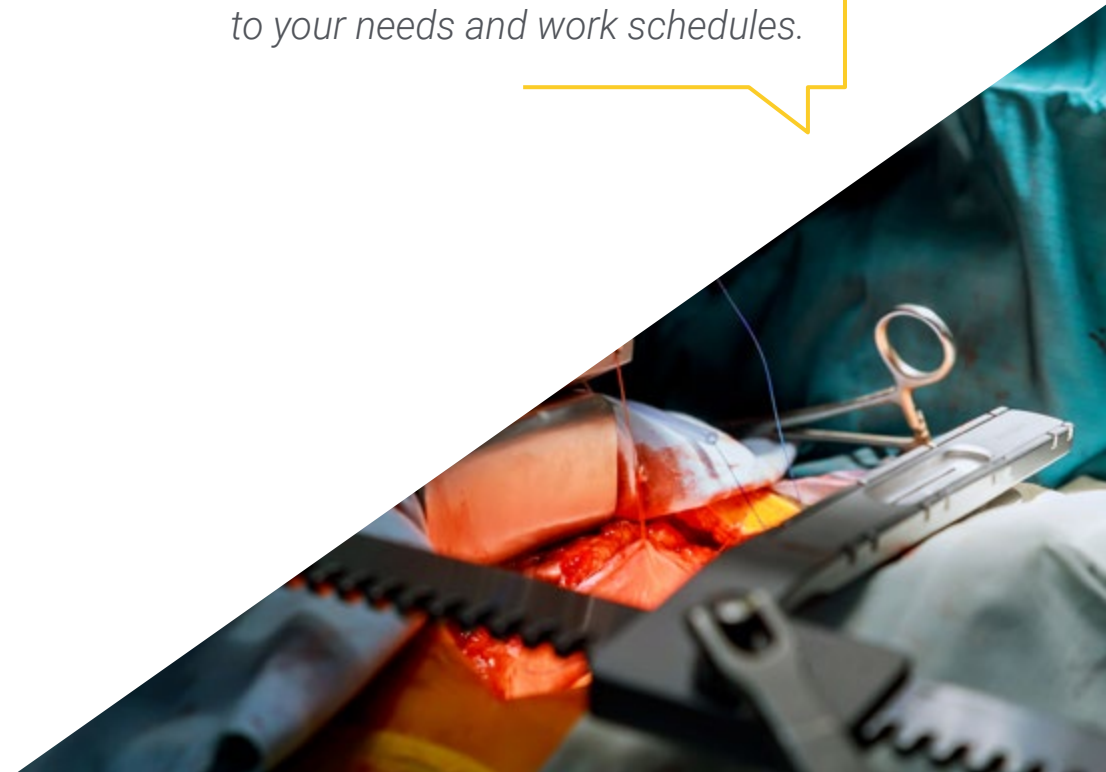
The program’s teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will provide the professionals 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 professionals must try to solve the different professional practice situations that are presented throughout the academic course. This will be done with the help of an innovative system of interactive videos made by renowned experts.

*Learn in a practical way, with interactive tools, multimedia resources and real clinical cases that will allow you to apply your knowledge to real clinical situations.*

*Take advantage of the flexibility of the 100% online format to study from anywhere and at any time, adapting to your needs and work schedules.*



# 02 Objectives

The main objective of TECH's Postgraduate Certificate in Hepatobiliary Oncologic Surgery is to provide health professionals with a specialized and updated education in Hepatobiliary Oncologic Surgery, a vital specialty in modern medicine. Through an online teaching methodology, the program seeks to provide the theoretical knowledge and practical skills necessary for the diagnosis and effective treatment of liver tumors, biliary tract tumors and liver metastases, with a focus on minimally invasive surgical techniques and preservation of hepatic and biliary function.





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*Obtain a university certification that supports your competencies and skills in Hepatobiliary Oncologic Surgery and strengthens your professional profile"*



## General Objectives

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- ♦ Deepen the specific knowledge on the management of patients with tumors affecting the digestive system
- ♦ 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 which are the ways of its development
- ♦ Study the fundamentals of research in oncological surgery
- ♦ Know the way to develop research projects, how to do it and where to get help
- ♦ To develop skills and technical knowledge with which to face any situation presented by a patient in an oncological surgery unit of the digestive system





## Specific Objectives

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- Obtain a surgical view of the anatomy of the liver to understand liver resection techniques and the importance of knowing that anatomy to avoid complications
- 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
- Present the techniques currently available to increase the residual liver volume of a patient, which allow increasing the resectability of liver tumors at diagnosis
- Know the development of the minimally invasive approach in liver surgery, including approach techniques, differences with open surgery, instruments and necessary material, etc
- Know the complications that can occur in liver and biliary tract surgery
- Study the main benign liver tumors with malignant potential and malignant tumors with special attention to hepatocarcinoma
- Establish the current surgical treatment options, indications for surgical resection and liver transplantation for hepatocarcinoma
- Know what alternatives to surgical treatment exist to treat hepatocarcinoma
- Distinguish the types of bile duct and gallbladder tumors
- Differentiate the different surgical treatments in the treatment of bile duct and gallbladder tumors
- Study the indications for radiotherapy in bile duct and gallbladder tumors
- Know the different types of hepatic metastases
- Manage the indications and techniques of surgery in hepatic metastases
- Understand the role of interventionism in the treatment of liver metastases
- Deepen in the indications and types of chemotherapy in liver metastases
- Distinguish the role of radiotherapy in liver metastases



*Improve your surgical skills in the diagnosis and treatment of liver tumors, biliary tract tumors and liver metastases with highly qualified and experienced professionals"*

# 03

# Course Management

The teaching staff of the Postgraduate Certificate in Hepatobiliary Oncologic Surgery at TECH has highly qualified professionals with extensive experience in Digestive Surgery. The teaching team is composed of general surgeons, digestive surgeons, oncologists, interventional radiologists and specialists in liver transplantation, all of them leaders in their field of specialization. Students will have the opportunity to learn from these experts through a virtual learning environment designed to facilitate their study process and improve retention of surgical concepts and techniques.





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*Access an online study program specifically designed by physicians specializing in general surgery, digestive surgery, oncology, interventional radiology, among other professionals"*

## Management



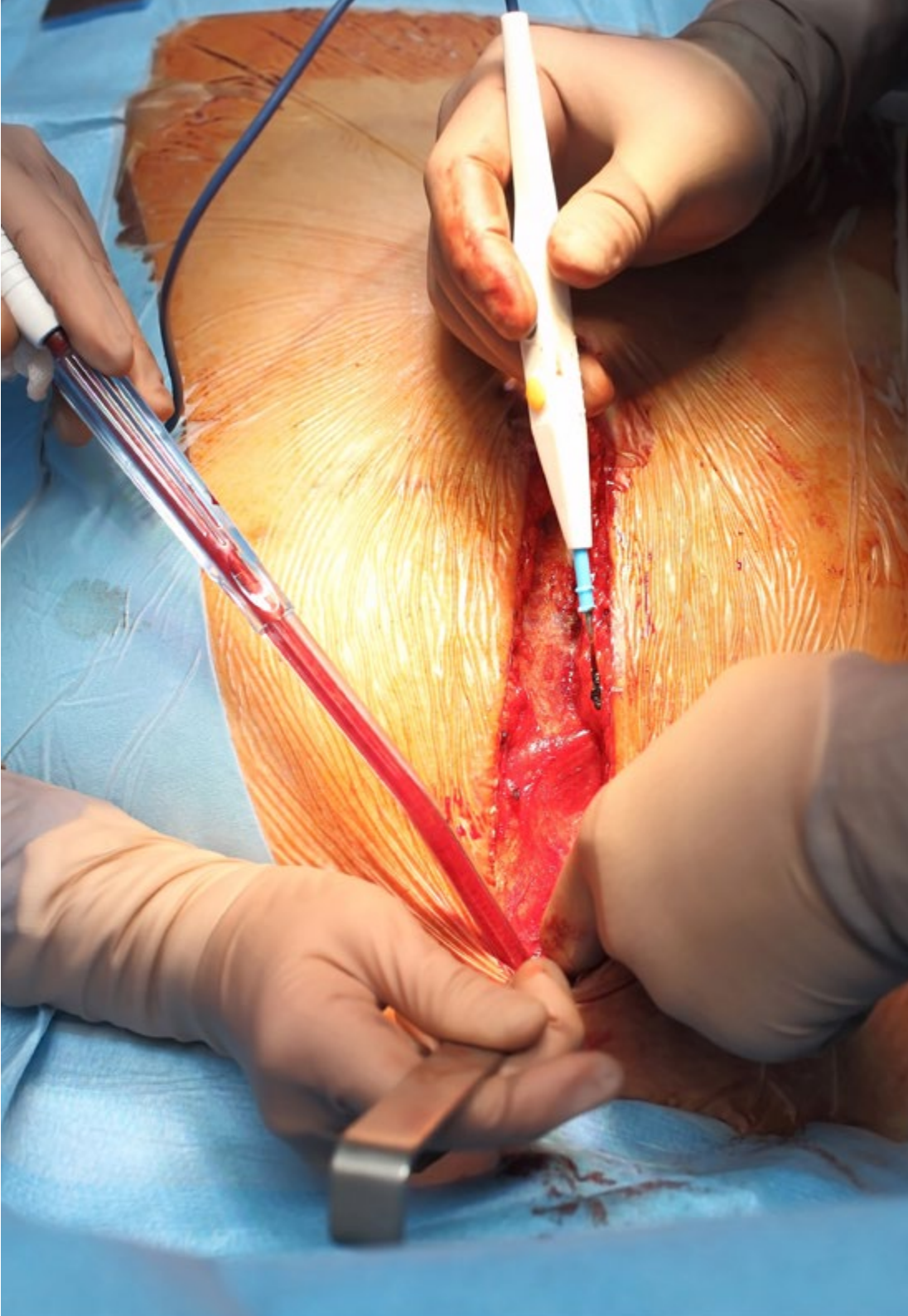
### Dr. Alonso Casado, Oscar

- ◆ Chief of Hepatobiliopancreatic Surgery at MD Anderson Cancer Center Madrid Hospital
- ◆ 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
- ◆ Assistant Surgeon at Quirónsalud Sur and El Escorial Hospitals
- ◆ Clinical Tutor in Practical Teaching at UFV and MD Anderson Cancer Center Madrid
- ◆ Degree in Surgery and Medicine from the UCM
- ◆ Certified in Console Surgery of the Da Vinci Xi Robotic System

## Professors

### 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
- ◆ Specialty in General and Digestive Surgery at Hospital 12 de Octubre
- ◆ Master's Degree in Clinical Management, Medical and Healthcare Management from CEU Cardenal Herrera University



**Dr. Loinaz Segurola, Carmelo**

- ♦ Chief of General and Digestive System Surgery Section, 12 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, Outstanding qualification Cum Laude
- ♦ Associate Professor of Health Sciences. Accredited as a 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
- ♦ Member of: 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 UCM Department of Surgery

# 04

# Structure and Content

TECH's Postgraduate Certificate in Hepatobiliary Oncologic Surgery is taught 100% online, which allows students to access the course content from anywhere and at any time. The teaching methodology is designed to facilitate autonomous learning and interaction with the teaching team through an intuitive and easy-to-use virtual learning platform. In addition, the program structure is divided into 2 modules ranging from surgical anatomy of the liver and biliary tract to minimally invasive surgical techniques and treatment of liver and biliary tract tumors, allowing for a comprehensive understanding of the specialty.





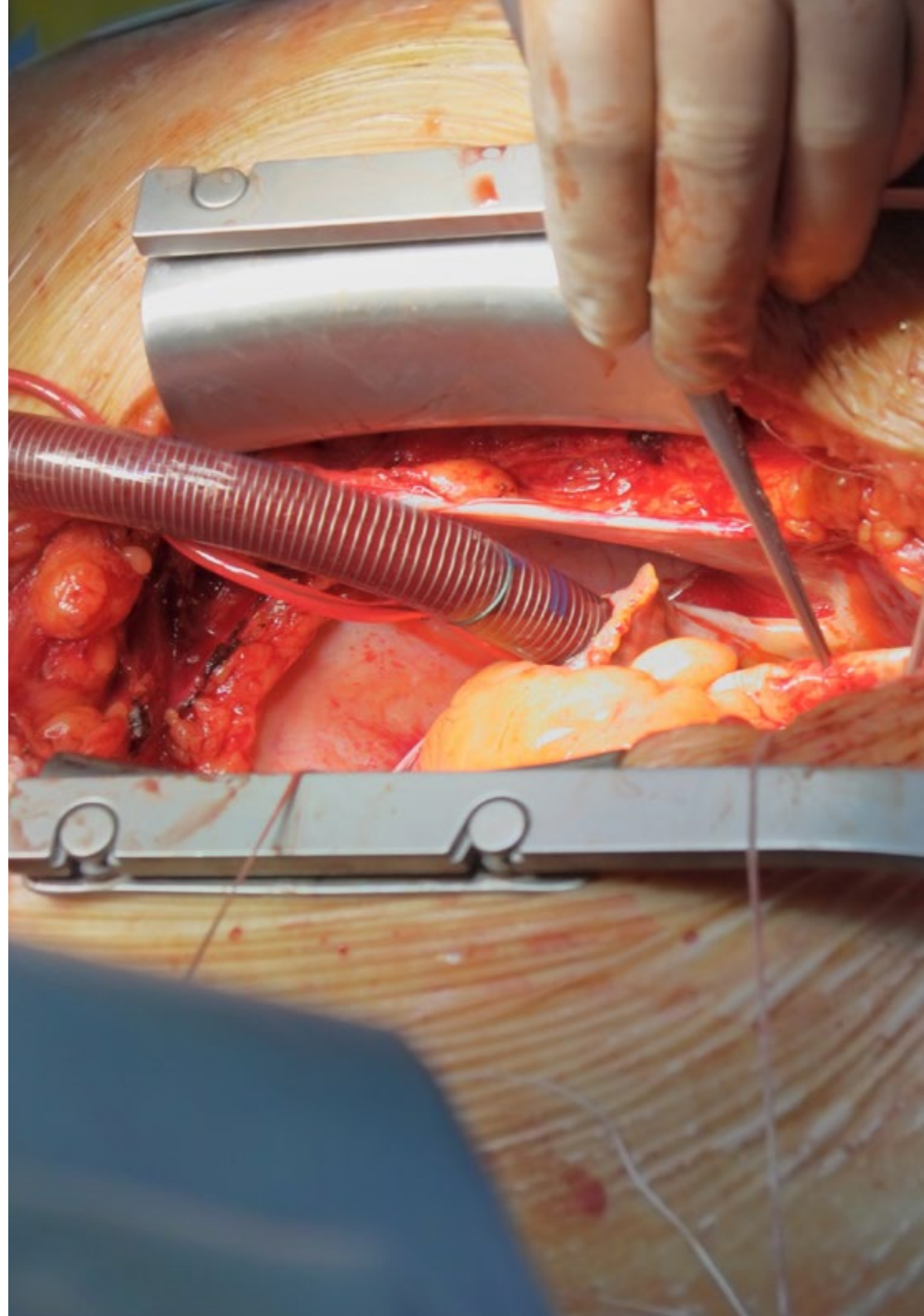


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*You will access a complete update program divided into 2 modules, with specific topics covering all areas of Hepatobiliary Oncologic Surgery”*

**Module 1. Liver and biliary tract I. General. Hepatic tumors**

- 1.1. Surgical anatomy of the liver
  - 1.1.1. Hepatic segmentation
  - 1.1.2. Hepatic vascular distribution
  - 1.1.3. Anatomy of the biliary tract
- 1.2. Diagnostic tests in hepatobiliary pathology
  - 1.2.1. Ultrasound
  - 1.2.2. CAT
  - 1.2.3. MRI
- 1.3. Assessment of residual liver volume and function
  - 1.3.1. Concept and limits of residual hepatic volume
  - 1.3.2. Techniques for measuring RLV
  - 1.3.3. Methods of liver function determination
- 1.4. Principles of liver surgery
  - 1.4.1. Fundamental aspects and phases of hepatic resection
  - 1.4.2. Parenchymal section techniques
  - 1.4.3. Pringle's maneuver and vascular control
  - 1.4.4. Hemostasis and bilistasis
- 1.5. Techniques to increase hepatic resectability
  - 1.5.1. Hepatic regeneration
  - 1.5.2. Portal embolization and 2-stage surgery
  - 1.5.3. ALPPS technique
- 1.6. Minimally invasive hepatic surgery: laparoscopy and robotics
  - 1.6.1. Basis of minimally invasive surgery in hepatobiliary surgery
  - 1.6.2. Laparoscopic approach
  - 1.6.3. Contribution of the robotic approach
- 1.7. Complications of hepatic surgery and postoperative management
  - 1.7.1. Post-Operative Care ERAS
  - 1.7.2. Complications of hepatobiliary surgery
  - 1.7.3. Treating Complications
- 1.8. Benign and malignant hepatic tumors
  - 1.8.1. Benign liver tumors
  - 1.8.2. Malignant liver tumors
  - 1.8.3. Hepatocarcinoma: epidemiology, risk factors, classification and diagnosis



- 1.9. Hepatocarcinoma: non-surgical treatment
  - 1.9.1. Alternative treatments and "bridges" to surgery
  - 1.9.2. Medical Treatment
- 1.10. Hepatocarcinoma: surgical treatment
  - 1.10.1. Study of the patient with hepatocarcinoma
  - 1.10.2. Surgical resection
  - 1.10.3. Liver Transplant

## Module 2. Liver and biliary tract II. Tumors of the biliary tract. Liver metastases

- 2.1. General aspects of gallbladder and bile duct cancer
  - 2.1.1. Epidemiology and Etiopathogenesis
  - 2.1.2. Classification
  - 2.1.3. Diagnosis
- 2.2. Surgery of the bile duct and gallbladder tumors
  - 2.2.1. Surgery of intrahepatic BV tumors
  - 2.2.2. Surgery of extrahepatic BV tumors
  - 2.2.3. Surgery of Gall Bladder tumors
- 2.3. Endoscopic and interventional treatment of biliary tract and gallbladder tumors
  - 2.3.1. Preoperative endoscopic treatment
  - 2.3.2. Preoperative interventional radiology
  - 2.3.3. Endoscopic Treatment of Complications
  - 2.3.4. Interventional radiology in complications
- 2.4. Medical oncology treatment of biliary tract and gallbladder tumors
  - 2.4.1. Medical oncology in biliary tract cancer
  - 2.4.2. Medical Oncology in Gallbladder Cancer
- 2.5. Radiation oncology treatment of biliary tract and gallbladder tumors
  - 2.5.1. Radiotherapy in biliary tract cancer
  - 2.5.2. Radiotherapy in gallbladder cancer
- 2.6. General aspects of liver metastases
  - 2.6.1. Epidemiology and Etiopathogenesis
  - 2.6.2. Classification
  - 2.6.3. Diagnosis and Prognosis
- 2.7. Surgical treatment of liver metastases from colorectal cancer and alternatives to surgical treatment
  - 2.7.1. Evaluation and surgical planning in patients with colorectal cancer liver metastases
  - 2.7.2. Surgical alternatives and transplantation
  - 2.7.3. Non-surgical alternatives
- 2.8. Medical Oncology in the treatment of liver metastases from colorectal cancer
  - 2.8.1. Neoadjuvant and adjuvant treatment
  - 2.8.2. Palliative treatment
  - 2.8.3. New Perspectives
- 2.9. Metastases of neuroendocrine tumors
  - 2.9.1. Classification, Diagnosis and Prognosis
  - 2.9.2. Surgical treatment
  - 2.9.3. Role of liver transplantation
- 2.10. Hepatic metastases of other non-colorectal and non-neuroendocrine tumors
  - 2.10.1. Metastases of ENT tumor
  - 2.10.2. Esophagogastric tumor metastases
  - 2.10.3. Metastasis of breast cancer 1
  - 2.10.4. Metastases of pancreatic cancer



*Update your skills and knowledge in Hepatobiliary Oncologic Surgery, a vital specialty in modern medicine. Do it 100% online. 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.



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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.

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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:

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.

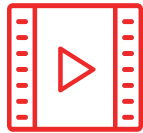
*Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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

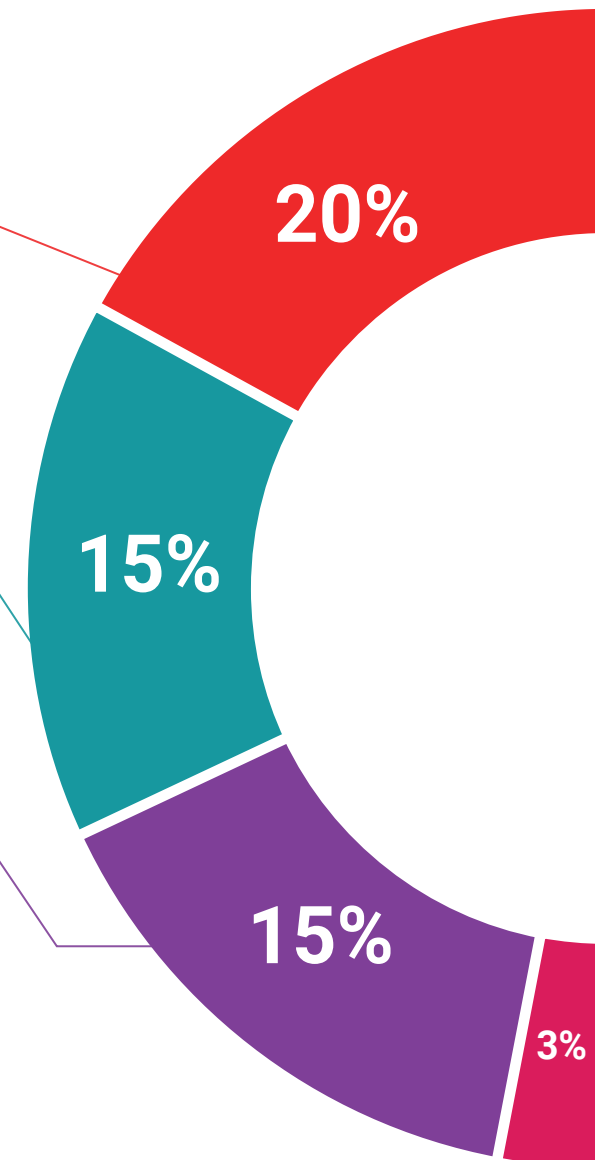
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

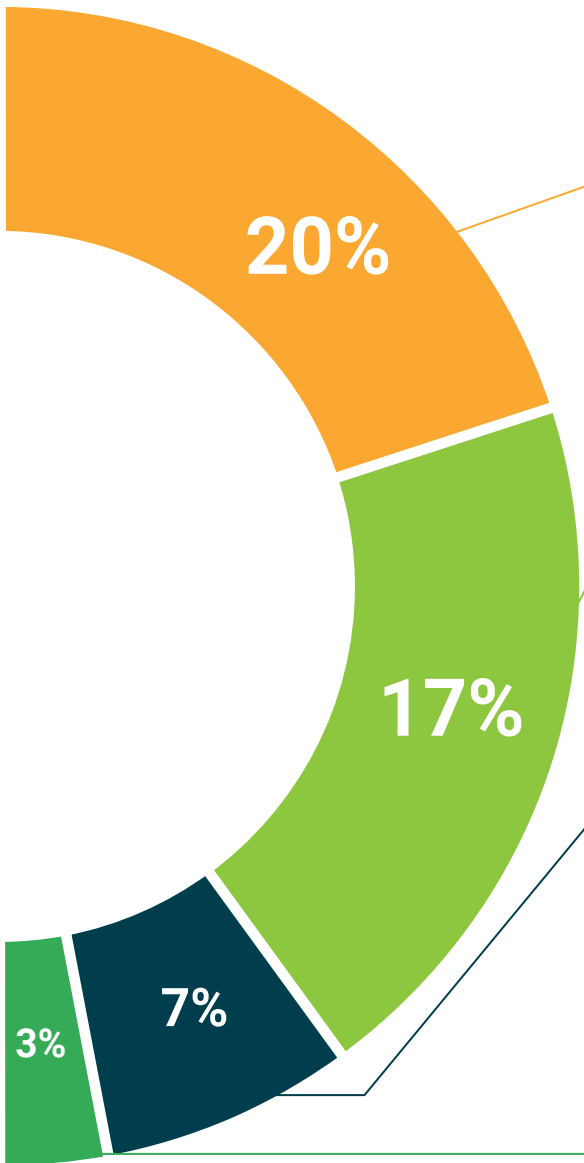
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### 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 Certificate in Hepatobiliary Oncologic Surgery guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in Hepatobiliary Oncologic Surgery** 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 Certificate in Hepatobiliary Oncologic Surgery**

Modality: **online**

Duration: **12 weeks**

Accreditation: **12 ECTS**



\*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.



## Postgraduate Certificate

Hepatobiliary

Oncologic Surgery

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

# Postgraduate Certificate Hepatobiliary Oncologic Surgery

