



## Postgraduate Certificate

## Biliary Tract Surgery

» Modality: online

» Duration: 12 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-certificate/biliary-tract-surgery

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Certificate





## tech 06 | Introduction

Biliary tract surgery mainly comprises the surgical treatment of cholelithiasis and choledocholithiasis, cysts and primary sclerosing cholangitis and bile duct and gallbladder tumors. Diagnostic advances and a better understanding of the pathophysiology of hepatobiliary diseases have allowed extraordinary progress in the treatment of these patients, especially with regard to the development of laparoscopic cholecystectomy, one of the most frequently performed procedures in our environment by most general surgeons.

Modern surgery implies a constant need for retraining, but the speed at which the advances in techniques and procedures, and the number of new products and services of scientific documentation, articles, etc., which are published every week on the subject of new treatments, make it almost impossible for a specialist to reconcile their work with the new update with their daily clinical and surgical practice.

The purpose of this Postgraduate Certificate in Biliary Tract Surgery and of the team of experts who has developed it, is to provide the surgeon with the opportunity to catch up on the latest surgical techniques by putting the latest educational technology at the service of the specialization and allowing for the exchange of knowledge and experience, create protocols for action and disseminate the most transcendental developments in this field of surgery.

This **Postgraduate Certificate in Biliary Tract Surgery** contains the most complete and up-to-date scientific program on the market. The most outstanding features of the Postgraduate Certificate are:

- Contains cinical cases presented by experts. The graphic, schematic, and eminently
  practical contents with which they are created provide scientific and practical
  information on the disciplines that are essential for professional practice.
- Diagnostic-therapeutic developments on the care of the patient with biliary problems, who is susceptible to surgical intervention.
- Presentation of practical workshops on surgical procedures, diagnostic and therapeutic techniques for the main biliary pathologies, such as cholelithiasis and choledocholithiasis, cysts, primary sclerosing cholangitis and bile duct and gallbladder tumors.
- Video lessons on the different pathologies and their approach.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- Availability of the contents from any fixed or portable device with internet connection.



Scientific evidence increases the quality of surgical practice. Keeping up-to- date is key to providing better care for the patient with biliary pathology".

## Introduction | 07 tech



This Postgraduate Certificate may be the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Biliary Tract Surgery, you will obtain a Postgraduate Certificate issued by TECH Technological University".

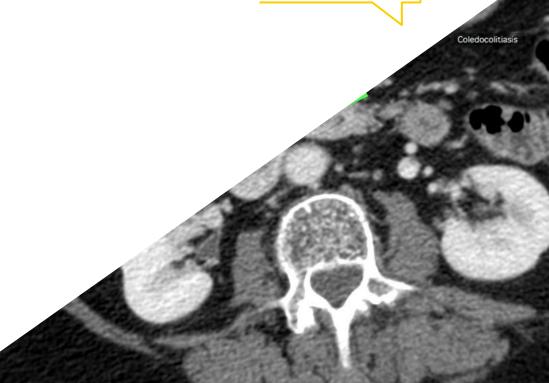
It includes in its teaching staff specialists in surgery of reference, who pour in this training the experience of their work, in addition to other specialists belonging to prestigious scientific societies.

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

The design of this program is based on Problem Based Learning, through which the physician must try to solve the different professional practice situations that arise during the Postgraduate Certificate. This will be done with the help of an innovative interactive video system developed by renowned experts in Biliary Tract Surgery, with extensive teaching experience.

Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.

Don't miss the opportunity to updateyour knowledge in Gallbladder and Biliary Tract Surgery.







## tech 10 | Objectives



## **General Objective**

• Update the surgeon's knowledge in the most frequent procedures and techniques of the usual clinical practice in Biliary Tract Surgery, providing answers to the common day-to-day questions of the professional.





#### **Specific Objectives**

#### Module 1.

- Address the surgical treatment of cholelithiasis.
- Surgical treatment of cholestatic diseases and bile duct and gallbladder tumors.
- Explain the surgical process in the treatment of cysts and primary sclerosing cholangitis.
- Describe the surgical approach to bile duct tumors.
- Describe the surgical approach to gallbladder tumors.

#### Module 2.

- Describe innovations in general and digestive system surgery: in surgical learning, in surgical devices, in NOTES surgery, and in Cell Therapy and Surgery.
- Point out the role of Information and Communication Technologies applied to surgery.
- Explain the indications and importance of robotic surgery.
- Address the features of financing, protection, and transfer of innovation in surgery.

Take this opportunity and take the step to get up-to-date on the most important aspects of Biliary Tract Surgery.





## tech 14 | Course Management

#### Management



#### Dr. Díaz Domínguez, Joaquín

In Memoriam

"Dr. Joaquín Díaz Domínguez was at the head of this program in its numerous editions, leading the teaching team, collaborating intensively, and going out of his way to continue spreading his knowledge of medicine and surgery to everyone that has had the opportunity to participate in this program.

From Tech University we want to pay a heartfelt tribute full of affection and gratitude for his dedication and commitment during these years, always lending himself to others and sharing his experience unconditionally, to contribute to continue saving lives and caring for people who have needed it most.

Thank you very much, Joaquín."



#### Dr. Pascual Migueláñez, Isabel

- Degree in Medicine from the Autonomous University Madrid
- Doctorate from the Autonomous University of Madrid with the thesis "Use of sutures coated with stem cells (biosutures) in colic anastomoses. An experimental study in rats" with the qualification "Outstanding cum laude".
- Resident Doctor from the MIR program in General and Digestive System Surgery at La Paz University Hospital. Madrid
- Specialist in General and Digestive System Surgery at the Infanta Sofía University Hospital, San Sebastián de los Reyes, Madrid. Hepatobiliopancreatic Surgery Unit
- Specialist in General and Digestive System Surgery at La Paz University Hospital, Madrid. Colorectal Surgery Unit

#### Management



#### Dr. Álvarez Gallego, Mario

- Degree in Medicine and Surgery from the University of Alcalá de Henares
- Diploma of Advanced Studies (DAS): "Use of mesenchymal stem cells to prevent the formation of intra-abdominal adhesions".

  Autonomous University of Madrid. Surgery Department. Grade. Oustanding, Cum Laude
- Residency in General and Digestive System Surgery at La Paz University Hospital, Madric
- · Specialist in General and Digestive System Surgery, Colorectal Surgery Unit, Infanta Sofía Hospital.
- Specialist in General and Digestive System Surgery at the Infanta Cristina Hospital, Parla, Madrid.
- Specialist in General and Digestive System Surgery, Colorectal Surgery Unit, La Paz Hospital, Madrid.
- Rotations: General and Digestive System Surgery Service, Son Llátzer Hospital, Palma de Mallorca; Abdominal Organ Transplant Unit, 12 de Octubre Hospital, Madrid; Polytraumatized Patient Unit, Los Angeles County Hospital, University of Southern California (USC), Los Angeles, California, USA.
- Member of the Innovation Platform of La Paz Hospital (Idipaz).
- Patent: "Insufflation and suction assisted surgical specimen removal device". Ownership: FIBHULP. Inventor: Mario Álvarez Gallego.
   Spanish patent: P201031490. Application for international protection PCT/ ES2011/002357

## tech 16 | Course Management

#### **Professors**

#### Dr. García Sanz, Iñigo.

- General and Digestive System Surgery Department.
- La Princesa Hospital. Madrid.

#### **Dr. Georgiev Hristov, Tihomir.**

- General and Digestive System Surgery Department.
- Jiménez Díaz Foundation, Madrid.

#### Dr. Salinas Gómez, Javier.

- General and Digestive System Surgery Department.
- La Paz University Hospital. Madrid.

#### Dr. Trébol López, Jacobo.

- General and Digestive System Surgery Department.
- La Paz University Hospital. Madrid.

#### Dr. García Oria, Miguel Juan.

General and Digestive System Surgery Department. Puerta de Hierro Hospital.
 Madrid.

#### Dr. Jiménez Toscano, Marta.

General and Digestive System Surgery Department. Barcelona Clinical Hospital.

#### Dr. Morandeira Rivas, Antonio.

- General and Digestive System Surgery Department. "La Mancha Centro" Hospital Complex.
- Alcázar de San Juan.





## Course Management | 17 tech

#### Dr. Moreno Sanz, Carlos.

- Head of the General and Digestive System Surgery Department.
- "La Mancha-Centro" Hospital Complex. Alcázar de San Juan.

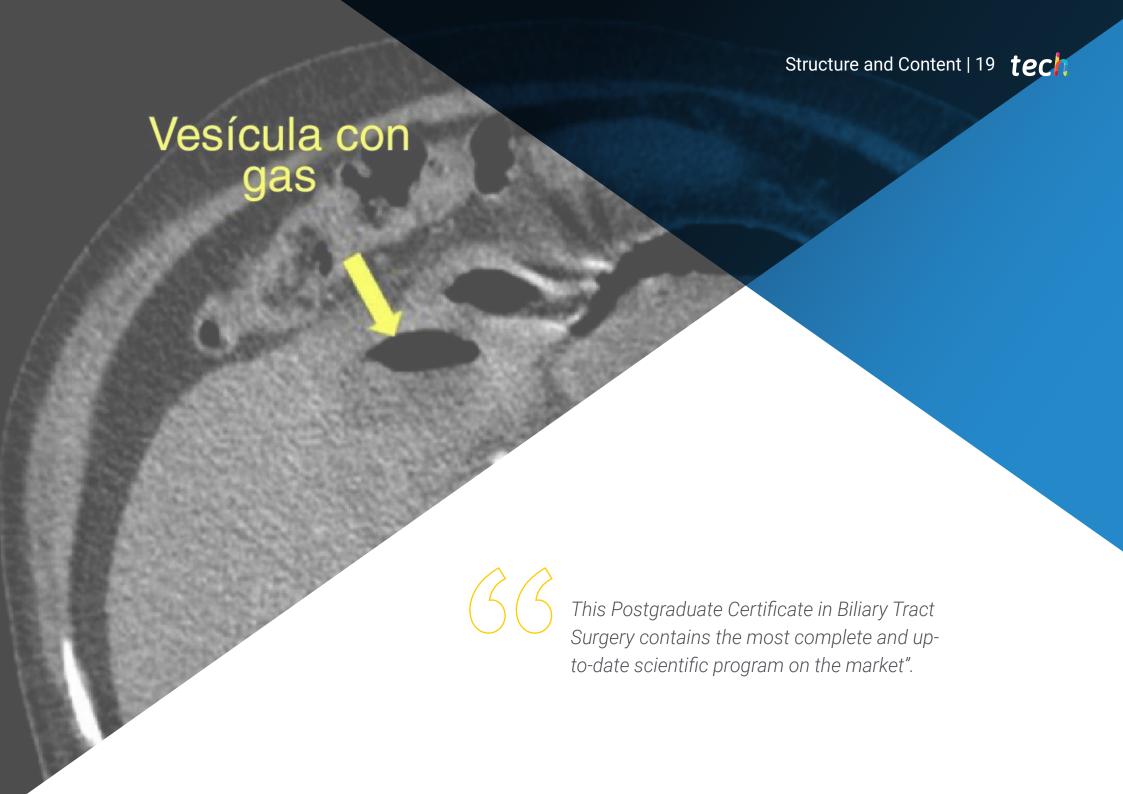
#### Dr. Noguera Aguilar, José F.

• Head of the General and Digestive System Surgery Department. A Coruña University Hospital Complex.

#### Sánchez Simón, Estela.

- Lawyer and Innovation and Knowledge Transfer Manager at the Innovation Support
  Unit of the Health Research Institute of the La Paz University Hospital (IdiPAZ).
   Madrid Tejedor Botello, Marisa.
- Economist La Paz University Hospital-Institute for Biomedical Research of La Paz Hospital (IdiPAZ) of Madrid, as a member of the Innovation Support Unit.





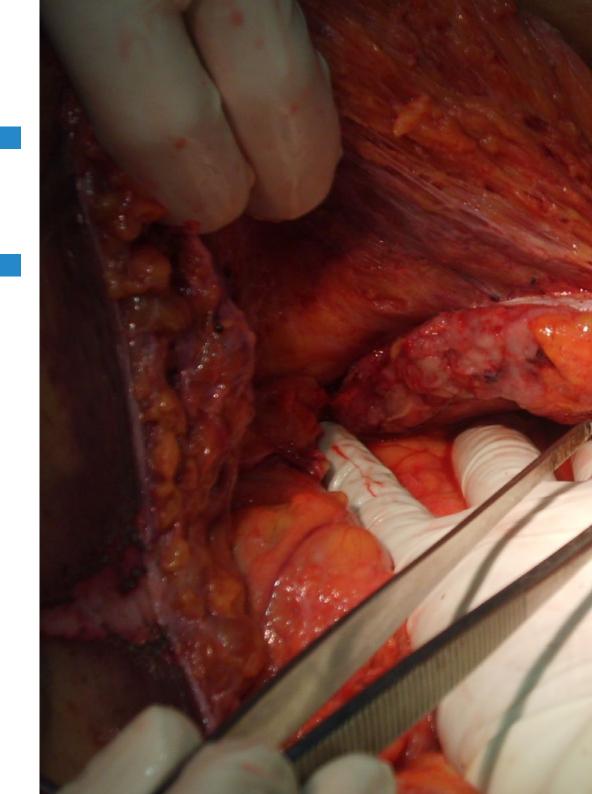
## tech 20 | Structure and Content

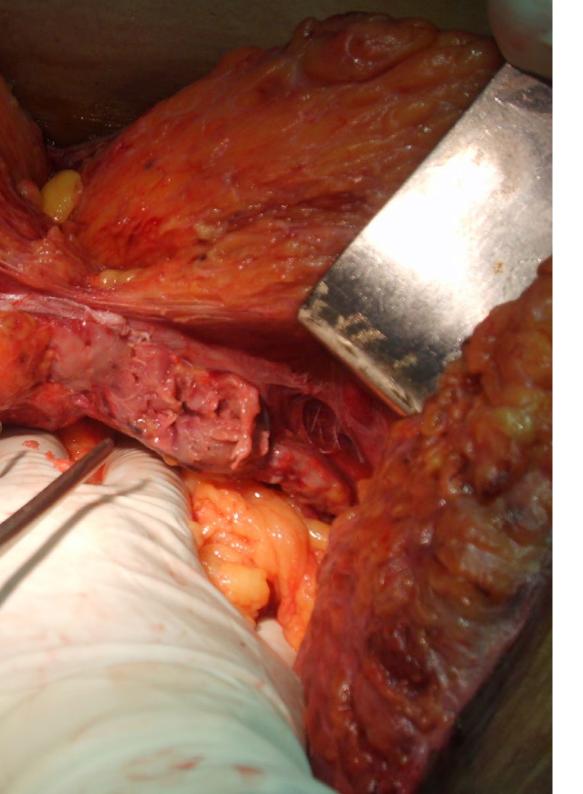
#### Module 1. Biliary Tract Surgery

- 1.1. Colelitiasis
- 1.2. Coledocolitiasis
- 1.3. Cysts and Primary Sclerosing Cholangitis
- 1.4. Gallbladder Tumors
- 1.5. Bile Duct Tumors

#### Module 2. Surgical Innovation

- 2.1. Introduction to Surgical Innovation
- 2.2. Innovation in Surgical Learning
- 2.3. IC
- 2.4. Innovation in Surgical Devices
- 2.5. Innovation in NOTES Surgery
- 2.6. Robotic Surgery
- 2.7. Financing, Protection, and Transfer of Innovation in Surgery

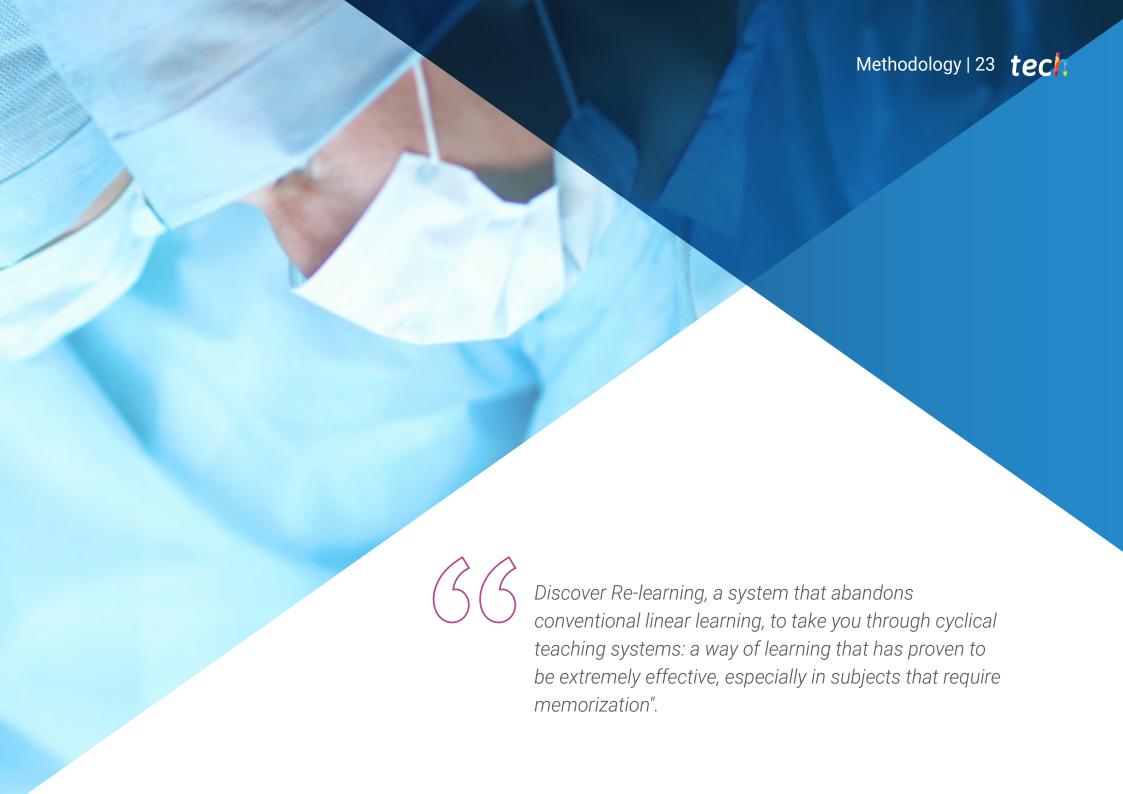






A unique, key and decisive training experience to boost your professional development".





## tech 24 | Methodology

#### At TECH we use the Case Method

In a given situation, what would you do? Throughout the program, you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you can 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 potential 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 professional medical 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 grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
- 2. The learning process has a clear focus on 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.



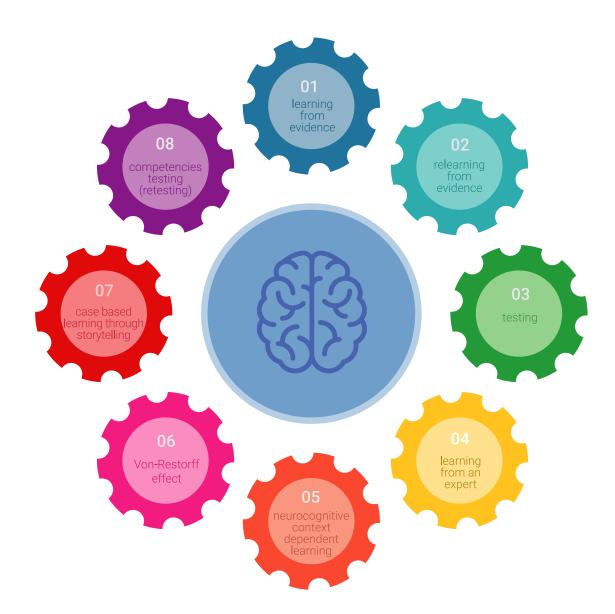


#### **Re-Learning Methodology**

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

The physician will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-theart software to facilitate immersive learning.



### Methodology | 27 tech

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

With this methodology we have trained more than 250,000 physicians with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 (we learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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

## tech 28 | Methodology

In this program you will have access to the best educational material, prepared with you 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### **Latest Techniques and Procedures on Video**

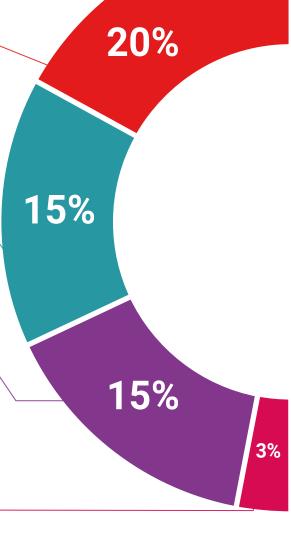
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current medical techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **Interactive Summaries**

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.

# Expert-Led Case Studies and Case Analysis Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of

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#### **Testing & Re-testing**

understanding.

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your goals.



#### Classes

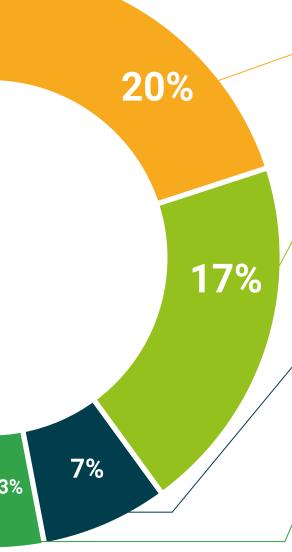
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an expert strengthens knowledge and memory, and generates confidence in our future difficult decisions.



#### **Ouick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







## tech 32 | Certificate

This **Postgraduate Certificate in Biliary Tract Surgery** contains the most complete and up-to-date scientific program on the market.

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

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

Title: Postgraduate Certificate in Biliary Tract Surgery

Nº Hours: 250



TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as



## Postgraduate Certificate Biliary Tract Surgery

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

