

# Postgraduate Diploma

Laparoscopy in General, Abdominal,  
Neonatal and Fetal Surgery



## Postgraduate Diploma Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-laparoscopy-general-abdominal-neonatal-fetal-surgery](http://www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-laparoscopy-general-abdominal-neonatal-fetal-surgery)

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# 01

# Introduction

Comprehensive training in minimally invasive techniques, as in Laparoscopy, cannot be acquired in undergraduate or postgraduate teaching programs covering the different surgical specialties. There is an increasing demand for specialized professionals in this area, and, as a result, this Postgraduate Diploma was created, which delves into the latest techniques and knowledge of Laparoscopy in General Surgery.







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*This program is aimed at specialists who want to update their knowledge and acquire the latest techniques in Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery”*

In addition to requiring in-depth knowledge of these techniques, this training requires a specific theoretical and practical program. When these techniques are offered in hospitals it is a sign of quality health care. Nowadays patient parents familiar with the latest technologies demand professionals who have mastered them and can treat their children with minimally invasive techniques such as endoscopy and laparoscopy. They can diagnose and treat many of the surgical pathologies in pediatric patients.

Therefore, it is reasonable to promote the training of professionals in this discipline, whose teaching is not regulated, having to resort to postgraduate training that includes different professional experts in this field as teachers.

In this program, the majority of endoscopic techniques used today in the pediatric patient will be studied in depth. Focusing on minimally invasive techniques, we will review the part of pediatric surgery that can be diagnosed or treated with Laparoscopy.

In order to guarantee all of the above, the best experts in the field will contribute their personal experience and present the latest trends in each of their areas.



*Improve the quality of patient care  
with this highly scientifically rigorous  
training”*

This **Postgraduate Diploma in Laparoscopy in General Abdominal, Neonatal and Fetal Surgery** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ♦ The latest technology in online teaching software
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ♦ Practical cases presented by practicing experts
- ♦ State-of-the-art interactive video systems
- ♦ Teaching supported by telepractice
- ♦ Continuous updating and recycling systems
- ♦ Autonomous learning: full compatibility with other occupations
- ♦ Practical exercises for self-evaluation and learning verification
- ♦ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ♦ Communication with the teacher and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection
- ♦ Supplementary documentation databases are permanently available, even after the course

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*Apply the latest trends in Laparoscopy in General Abdominal, Neonatal and Fetal Surgery to your daily professional practice”*

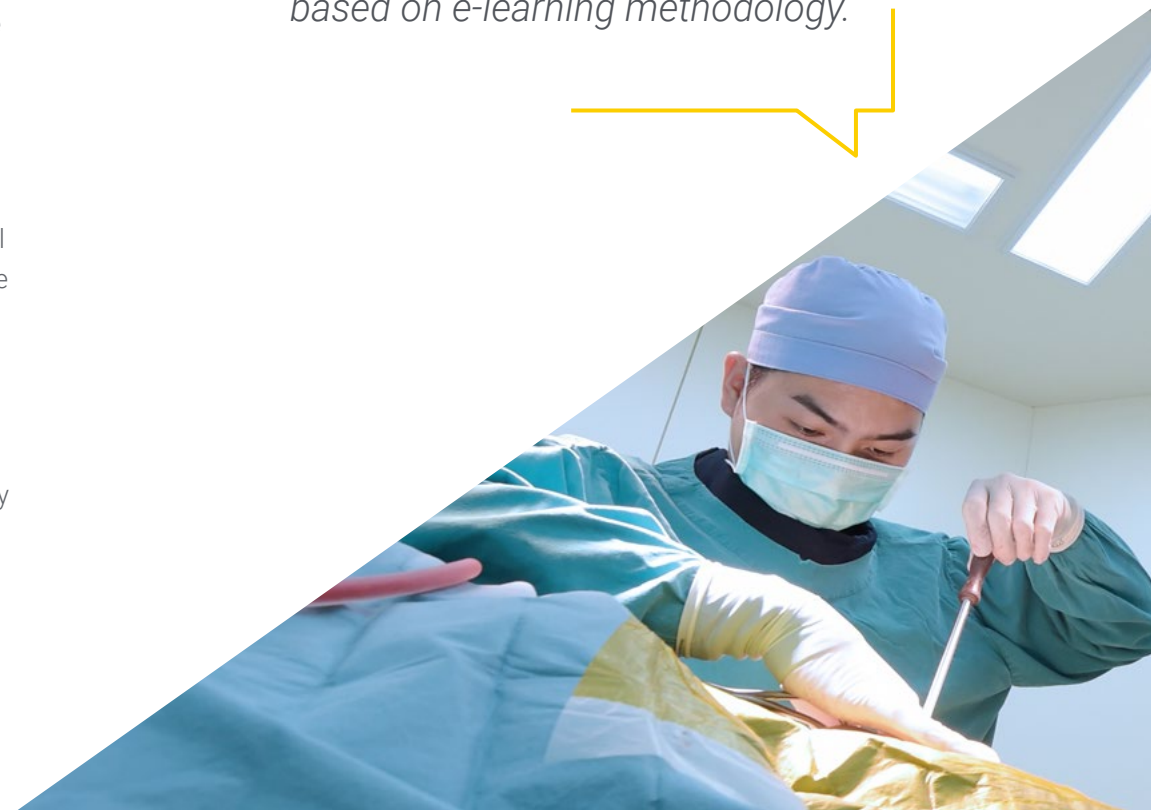
Our teaching staff is composed of medical professionals, practicing specialists. That way, we can ensure that we offer students the up-to-date training we at TECH aim to provide. A multidisciplinary team of professors trained and experienced in different environments, who will develop the theoretical knowledge in an efficient way, but, above all, will bring the practical knowledge derived from their own experience to the course: one of the differential qualities of this Postgraduate Diploma.

Mastering the subject will be complemented by the effective methodology used throughout this Postgraduate Certificate by our multidisciplinary team of *e-learning* experts, as it integrates the latest advances in educational technology. This way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice learning: with the help of an innovative interactive video system and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

*You will have the latest multimedia tools, designed by experts in Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery, which will favor assimilation and learning speed.*

*This program uses the latest advances in educational technology, based on e-learning methodology.*



# 02

# Objectives

This Postgraduate Diploma will provide students with the theory and practice necessary to easily and confidently approach pediatric surgical pathologies susceptible to treatment using minimally invasive techniques, thereby benefiting child patients.





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*Our objective is to train highly qualified professionals for work experience”*



## General Objectives

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- Complement the training of specialists in pediatric surgery with special interest placed on minimally invasive techniques, i.e., pediatric laparoscopy
- Adequately prepare these professionals to face with guarantee and quality the different pediatric pathologies that can be addressed through these access routes
- Enable students to offer professional assistance supported by an accredited teaching program



*Seize the opportunity and take the step to get up to date on the latest developments in Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery”*





## Specific Objectives

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### Module 1. Laparoscopy in General Surgery

- ♦ Be able to handle with ease and obtain knowledge about all the pathology included in general surgery that can be treated by laparoscopy
- ♦ Delve deeper into the different laparoscopic surgical techniques that can be applied to different pathologies according to different authors

### Module 2. Cervicothoracic Laparoscopy

- ♦ Be able to handle with ease and obtain knowledge about all the pathology included in general surgery that can be treated by laparoscopy
- ♦ Delve deeper into the different laparoscopic surgical techniques that can be applied to different pathologies according to different authors

### Module 3. Gynecologic Laparoscopy

- ♦ Study the different gynecological pathologies in pediatrics and the laparoscopic surgical techniques to solve them

### Module 4. Neonatal and fetal surgery

- ♦ Learn the peculiarities of laparoscopic neonatal surgery, such as the size of the laparoscopic instruments, certain pathologies exclusive to this age group and the surgical techniques used in neonatal pathology
- ♦ Know those neonatal malformations that are attempted to be corrected prenatally and to know which ones require prenatal management and how to approach them





# 04

# Course Management

For our program to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record in the field of education. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.







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*An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your training: a unique opportunity not to be missed”*

## Management



### Dr. Cabezalí Barbancho, Daniel

- Specialist in Pediatric Surgery
- Specialist Area Physician (FEA) of the Pediatric Surgery Service, Urology Section, 12 de Octubre Hospital Madrid
- Doctor of Medicine and Surgery, Complutense University of Madrid

## Professors

### Dr. Gómez Fraile, Andrés

- ♦ Specialist in Pediatric Surgery
- ♦ Head of the Pediatric Surgery at 12 de Octubre Hospital
- ♦ Doctor of Medicine and Surgery, Complutense University of Madrid

### Dr. Cano Novillo, Indalecio

- ♦ Specialist in Pediatric Surgery
- ♦ Specialist Area Physician (FEA) of the Pediatric Surgery Service, General Surgery Section, Hospital 12 Octubre
- ♦ Head of the Pediatric Surgery at Sanitas La Zarzuela Hospital

### Dr. Pacheco Sánchez, Juan Antón

- ♦ Specialist in Pediatric Surgery
- ♦ Facultative Area Specialist (FAS) in Pediatric Surgery General Surgery at 12 de Octubre Hospital Madrid
- ♦ Doctor of Medicine and Surgery, Complutense University of Madrid



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*Take the first step to get up to date on the latest developments in Laparoscopy in General Abdominal, Neonatal and Fetal Surgery”*

05

# Structure and Content

The content structure has been designed by a team of expert surgeons, who collectively include all the updates on spine pathology.







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*This Postgraduate Diploma consists of a quality program adapted to the latest trends in the area of spinal surgery”*

### Module 1. Laparoscopy in General Surgery I

- 1.1. Anesthesia for Abdominal Laparoscopic Surgery
- 1.2. Basic Materials for Abdominal Laparoscopic Surgery
- 1.3. Gastrointestinal Tract I
  - 1.3.1. Esophageal Achalasia
  - 1.3.2. Gastroesophageal Reflux: Fundoplication
- 1.4. Gastrointestinal Tract II
  - 1.4.1. Laparoscopic Gastrectomy
  - 1.4.2. Pyloromyotomy
- 1.5. Gastrointestinal Tract III
  - 1.5.1. Treatment of Intestinal Obstruction
  - 1.5.2. Bowel Intussusception
- 1.6. Gastrointestinal Tract IV
  - 1.6.1. Meckel's Diverticulum
  - 1.6.2. Bowel Intussusception
- 1.7. Gastrointestinal Tract V
  - 1.7.1. Acute Appendicitis
- 1.8. Gastrointestinal Tract VI
  - 1.8.1. Laparoscopy in Inflammatory Bowel Disease
- 1.9. Gastrointestinal Tract VII
  - 1.9.1. Hirschsprung's Disease
  - 1.9.2. Anorectal Malformations
- 1.10. Gastrointestinal Tract VIII
  - 1.10.1. Laparoscopy for Stomas
  - 1.10.2. Rectopexy

### Module 2. Laparoscopy in General Surgery II

- 2.1. Liver I. Biliary Tract
  - 2.1.1. Cholecystectomy
- 2.2. Liver II: Biliary Tract
  - 2.2.1. Biliary Tract Atresia: Portoenterostomy of Kasai
  - 2.2.2. Choledochal Cyst
- 2.3. Liver III
  - 2.3.1. Hepatectomy
  - 2.3.2. Liver Cysts
- 2.4. Spleen/Pancreas
  - 2.4.1. Splenectomy Techniques
  - 2.4.3. Laparoscopic Approach to the Pancreas
- 2.5. Abdomen I
  - 2.5.1. Ventriculoperitoneal Shunts
  - 2.5.2. Catheters of Peritoneal Dialysis
- 2.6. Abdomen II
  - 2.6.1. Abdominal Trauma.
- 2.7. Abdomen III
  - 2.7.1. Laparoscopy for Intra-abdominal Tumor Lesions
- 2.8. Obesity Surgery
- 2.9. Diaphragm
- 2.10. Abdominal Wall

### Module 3. Neonatal and fetal surgery

- 3.1. Fetal Endoscopy
  - 3.1.1. General and Technical
- 3.2. Successful Techniques
- 3.3. Fetal Posterior Urethral Valve Surgery
- 3.4. Fetal Treatment for Congenital Diaphragmatic Hernia
- 3.5. Neonatal Congenital Diaphragmatic Hernia
- 3.6. Esophageal Atresia/Long-Gap Esophageal Atresia
- 3.7. Duodenal Atresia
- 3.8. Intestinal Atresia
- 3.9. Intestinal Malrotation
- 3.10. Neonatal Ovarian Cysts

### Module 4. Single-Port Abdominal Surgery

- 4.1. Materials and Generalities of Laparoscopic Single Port Surgery
- 4.2. Single-Port Appendectomy
- 4.3. Single-Port Nephrectomy and Heminephrectomy
- 4.4. Single Port Cholecystectomy
- 4.5. Inguinal Herniorrhaphy
- 4.6. Materials and General Aspects of Robotic Surgery
- 4.7. Thoracic Robotic Surgery
- 4.8. Abdominal Robotic Surgery
- 4.9. Urological Robotic Surgery



*A unique, key, and decisive training experience to boost your professional development”*



06

# 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 Harvard 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 Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 private qualification will allow you to obtain a **Postgraduate Diploma in Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery** endorsed by **TECH Global University**, the world's largest online university.

This **TECH Global University** private qualification 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 Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery**

Modality: **online**

Duration: **6 months**

Accreditation: **24 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.

health future  
confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development language  
virtual classroom



## Postgraduate Diploma Laparoscopy in General, Abdominal, Neonatal and Fetal Surgery

- » Modality: **online**
- » Duration: **6 months**
- » Certificate: **TECH Global University**
- » Accreditation: **24 ECTS**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

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Neonatal and Fetal Surgery