

Postgraduate Diploma

New Minimally Invasive and Robotic
Surgery Techniques in Gynecology





Postgraduate Diploma New Minimally Invasive and Robotic Surgery Techniques in Gynecology

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 17 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-new-minimally-invasive-robotic-surgery-techniques-gynecology

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

Certificate

p. 28

01

Introduction

Minimally invasive surgical specialization, including laparoscopy, hysteroscopy and pelvic floor surgery, specifically in the field of gynecology, is of great importance, although its qualification is insufficient due to the lack of time to delve into it. Because of this, many medical specialists and professionals in training choose to further their skills in this area. For all these reasons, together with the difficulty of learning and the technical complexity of the field, constant renewal of knowledge is necessary, since the evolution of instruments and mini-invasive techniques has experienced an exponential growth in the last five years, which is difficult to adapt to without the appropriate continuous education.





“

This Postgraduate Diploma includes an innovative methodology that will help you get qualified through the most complete and up-to-date scientific program on the market”

The medical field is one of those that has changed the most in recent years, this is due to technological growth and its application within the area. Nowadays, procedures are more effective thanks to the use of intelligent devices, so conventional surgery has taken a back seat and minimally invasive surgery and robotics are becoming increasingly necessary. In the same way, the gynecological sector also requires this knowledge, as it turns out to be more effective and less invasive, all in view of the patient's needs.

It is for this reason that TECH has created this program, presented in an innovative 100% online format, which reviews fundamental aspects such as laparoscopic surgery, the application of new technology and robotics. In this way, the professional who wishes to take the program will find accurate and rigorous information to broaden their current outlook.

All with a *Relearning* methodology, focused on practical exercises and simulation, making the Postgraduate Diploma a unique learning experience and leaving behind the tedious conventional learning model. In the same way, the physician will be able to balance their healthcare work with the updating of their knowledge, managing their schedules and taking the program at the time of their choice.

This **Postgraduate Diploma in New Minimally Invasive and Robotic Surgery Techniques in Gynecology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Clinical cases presented by experts in the different specialties
- ♦ The graphic, schematic, and practical contents of which they are composed provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ The latest developments in Minimally Invasive and Robotic Surgery in Gynecology
- ♦ Algorithm-based interactive learning system for decision-making in the presented clinical situations
- ♦ With special emphasis on evidence-based medicine and research methodologies in Minimally Invasive and Robotic Surgery in Gynecology
- ♦ All this will be complemented by 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



Update your knowledge through the Postgraduate Diploma in New Minimally Invasive and Robotic Surgery Techniques in Gynecology in a practical way adapted to your needs"

“

This Postgraduate Diploma is the best investment you can make when selecting a refresher program for two reasons: in addition to updating your knowledge in New Minimally Invasive and Robotic Surgery Techniques in Gynecology you will obtain a certificate issued by TECH Global University”

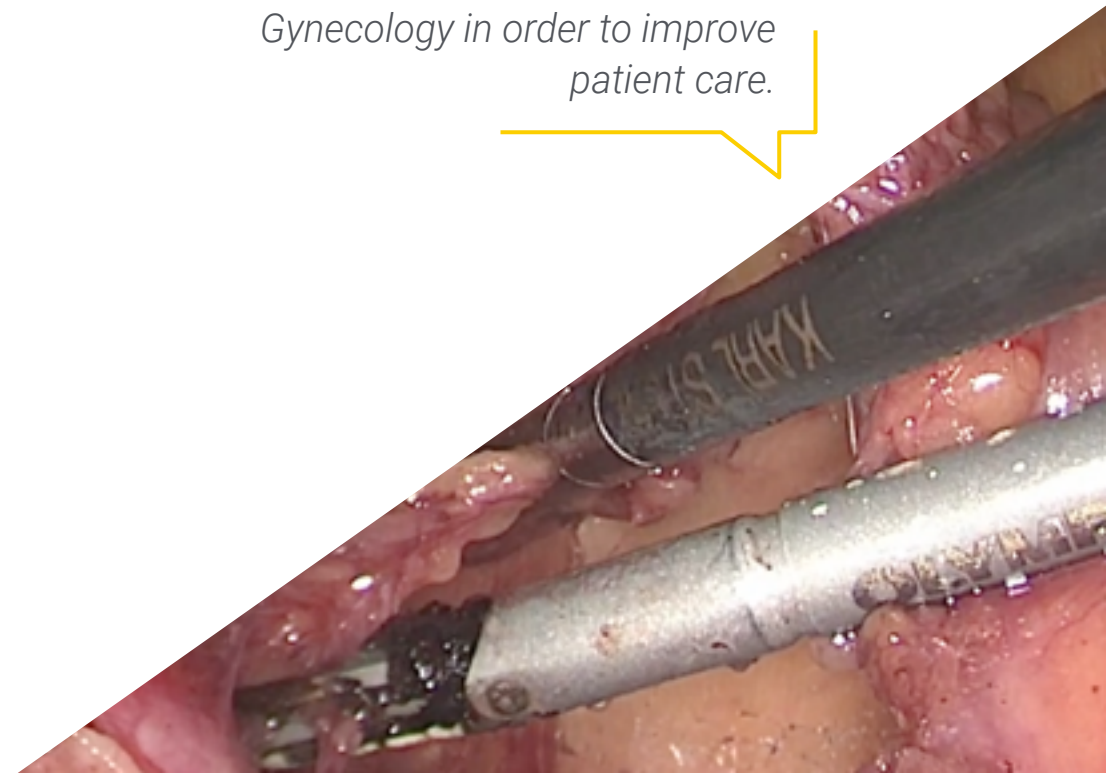
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive education programmed to prepare in real situations.

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

Increase your decision-making confidence by updating your knowledge with this Professional Diploma in New Minimally Invasive and Robotic Surgery Techniques in Gynecology.

Don't miss out on the opportunity to update your knowledge of Minimally Invasive and Robotic Surgery in Gynecology in order to improve patient care.



02 Objectives

The main program objective is to develop both theoretical and practical learning, so physicians can practically and rigorously master Minimally Invasive and Robotic Surgery in Gynecology.





“

This refresher program will generate a sense of confidence when practicing medicine and will help you grow both personally and professionally”



General Objectives

- Get to know all the instruments available to perform endoscopic and hysteroscopic surgery
- Know how to prepare endoscopic operating rooms
- Learn about general aspects such as ergonomics in the laparoscopic and electrosurgical operating rooms to be used in gynecological procedures
- Apply different appropriate techniques in each specific clinical case
- Gain detailed knowledge of female pelvic and abdominal anatomy
- Learn hysteroscopic techniques and their application in uterine pathology
- Establish a series of alternatives to manage benign ovarian pathology
- Know how to treat benign uterus pathology
- Learn techniques to resolve pelvic floor problems using laparoscopy
- Apply minimally invasive mesh placement
- Learn the to endoscopically manage endometriosis
- Learn different advanced techniques in gynecologic oncology for minimally invasive treatments
- Provide tools to resolve complications in gynecologic endoscopy



Specific Objectives

Module 1. Minimally Invasive Surgery

- Delve into the history of laparoscopy
- Gain a deeper understanding of how to prepare the endoscopic operating room
- Know the correct postural factors and ergonomics
- Approach the management of patients pre- and post-operatively
- Know the details of conventional laparoscopic operating rooms
- Determine the anesthetic and recovery details of patients
- Learn *Fast-Track* postoperative management and the ERAS protocol
- Describe the main features irrigation and suction systems

Module 2. Hysteroscopic Surgery

- Prepare the material for diagnostic and surgical hysteroscopy
- Update the new technological advances in hysteroscopy, such as morcellators, lasers and endometrial ablation systems
- Describe the tools to perform hysteroscopy in the office
- Acquire up-to-date knowledge of the literature on advances in hysteroscopy
- Explain advanced techniques, such as malformation treatment or hysteroscopic myomectomy
- Improve success rate in consultation
- Acquire up-to-date knowledge of the indications for office or surgical hysteroscopy
- Learn the latest developments in hysteroscopic surgery
- Acquire skills to resolve hysteroscopic complications, typical of the technique, such as perforations or vasovagal syndrome

- ♦ Identify the different techniques used in uterine morcellation and myoma morcellation laparoscopically in a watertight manner to avoid the possibility of dissemination in case of uterine sarcoma
- ♦ Select the different endoscopy applications within the different modalities of complexity in hysterectomy
- ♦ Acquire up-to-date knowledge of the use of laparoscopy in uterine malformations and their resolution
- ♦ Incorporate the advances of the laparoscopic neovagina technique
- ♦ Incorporate theoretical knowledge related to vaginal vault dehiscence
- ♦ Identify the different types of uterine mobilizers
- ♦ Acquire up-to-date knowledge of the evaluation procedures for pelvic floor defects
- ♦ Acquire up-to-date knowledge of procedures to manage ectopic pregnancy using laparoscopy
- ♦ Acquire up-to-date knowledge of procedures to manage ovarian torsion using laparoscopy
- ♦ Acquire up-to-date knowledge of the procedures to manage pelvic infections using laparoscopy
- ♦ Establish the strategy to adequately access the abdominal cavity
- ♦ Describe the process of taking an exploratory biopsy and abdominal cytology using laparoscopy
- ♦ Acquire up-to-date knowledge of the laparoscopic management of ovarian remnant syndrome
- ♦ Update the procedures to manage uterine fibroids
- ♦ Establish the strategy to reduce bleeding in laparoscopic myomectomy

Module 3. Ultra-Minimally Invasive Surgery

- ♦ Explain the main characteristics of adhesions and how to prevent them
- ♦ Describe laparoscopic tubal chromopertubation
- ♦ Incorporate the advances in the 3 mm laparoscopic technique
- ♦ Select specific instruments for mini-laparoscopy
- ♦ Acquire up-to-date knowledge of the specific technique for 3 mm ports
- ♦ Incorporate the novel aspects of single-port laparoscopy
- ♦ Describe the main characteristics of the instrumentation specific single-port
- ♦ Acquire up-to-date knowledge of the technique for *single-glove laparoscopy*
- ♦ Acquire up-to-date knowledge of the specific technique for *single-ports*
- ♦ Describe the advantages of each of the ultra mini-invasive techniques
- ♦ Foresee technical problems derived from using these methods in interventions

Module 4. Robotic Surgery in Gynecology

- ♦ Incorporate new options, such as surgery without entry trocars, into practice
- ♦ List the advantages and disadvantages of robotic surgery in gynecology
- ♦ Acquire up-to-date knowledge of the different types of robotic systems for surgery, such as the Da Vinci, Zeus or Amadeus
- ♦ Identify how to apply this type of surgery in gynecology
- ♦ Describe the specific instrumentation procedures used in robotic surgery
- ♦ Evaluate the financial aspects of robotic surgery
- ♦ Foresee the complications typical of robotic surgery
- ♦ Identify how to apply *single-port* in gynecologic robotic surgery
- ♦ Acquire up-to-date knowledge of on new robotic advances

03

Course Management

The teaching staff of this program is made up of a respected internationally renowned expert in the area of Minimally Invasive Surgery in Gynecology. His extensive knowledge of the new techniques in the area is a plus of quality for the specialist, who will be able to delve into them through a series of detailed *Masterclasses* created by the teacher himself.



“

Delve into the new techniques of Robotic and Minimally Invasive Surgery in Gynecology through a high-quality masterclass”

International Guest Director

As one of the pioneer surgeons in Brazil by introducing advanced techniques of **Laparoscopic Oncologic Surgery** in Paraná, Dr. Reitan Ribeiro is one of the most prolific experts in this specialty. So much so that he has even received recognition as an **honorary citizen** of the city of Curitiba, highlighting his work in the creation and development of the technique of **Uterine Transposition**.

The IJGC, International Journal of Gynecologic Cancer, has also recognized the outstanding work of Dr. Reitan Ribeiro. His publications on **Uterine Robotic Transposition in Cervical Cancer**, **Uterine Transposition after Radical Trachelectomy** and directed research in the technique of **Uterine Transposition for patients with gynecological cancers who want to preserve fertility** are highlighted. He has received the **National Award for Medical Innovation** for his research in the field of Uterine Transposition, highlighting these advances in the preservation of the patient's fertility.

His professional career is not without success, as he holds numerous positions of responsibility in the prestigious Erasto Gaertner Hospital. He directs the research program in **Gynecologic Oncology** of this center, being also director of the Fellowship program in this specialty, in addition to coordinating the program in **Robotic Surgery** focused on **Gynecologic Oncology**.

At the academic level, he has completed internships at numerous prestigious centers, including Memorial Sloan Kettering Cancer Center, McGill University and the National Cancer Institute of Brazil. He balances his clinical responsibilities with consulting work for leading medical and pharmaceutical companies, mainly Johnson & Johnson and Merck Sharp & Dohme.



Dr. Ribeiro, Reitan

- ♦ Director of Research, Department of Gynecologic Oncology, Erasto Gaertner Hospital, Curitiba, Brazil
- ♦ Director of the Fellowship Program in Gynecologic Oncology, Erasto Gaertner Hospital
- ♦ Director of the Robotic Surgery Training Program, Department of Gynecologic Oncology, Erasto Gaertner Hospital
- ♦ Senior Surgeon in the Department of Gynecologic Oncology, Erasto Gaertner Hospital
- ♦ Director of the Resident Oncologist Program, Erasto Gaertner Hospital
- ♦ Consultant at Johnson & Johnson and Merck Sharp & Dohme
- ♦ Degree in Medicine at the Federal University of Health Sciences of Porto Alegre
- ♦ Fellowship in Gynecologic Oncologic Surgery, Memorial Sloan Kettering Cancer Center
- ♦ Fellowship in Minimally Invasive Surgery, McGill University
- ♦ Internships at Governador Celso Ramos Hospital, National Cancer Institute of Brazil and Erasto Gaertner Hospital
- ♦ Certification in Oncologic Surgery by the Oncologic Surgery Society of Brazil

“

Thanks to TECH you will be able to learn with the best professionals in the world”

04

Structure and Content

The content has been structured and designed by a team of professionals who recognize the implications of specialization in daily medical practice, who are aware of the relevance of current specialization to treat patients with gynecologic surgical pathologies, and who are committed to quality teaching using new educational technologies.



“

This Postgraduate Diploma in New Minimally Invasive and Robotic Surgery Techniques in Gynecology contains the most complete and up-to-date scientific program on the market”

Module 1. Minimally Invasive Surgery

- 1.1. General Introduction
- 1.2. History of Laparoscopy
- 1.3. Introduction to Hysteroscopic Surgery
- 1.4. Ergonomics in Laparoscopy
- 1.5. Asepsis and Antisepsis
 - 1.5.1. Hand Washing
 - 1.5.2. Preparing Instrumentation. Sterilization.
 - 1.5.3. Preparing the Surgical Field
 - 1.5.3.1. Skin Cleansing
 - 1.5.3.2. Proper Cloth Placement
- 1.6. Laparoscopic Operating Room
 - 1.6.1. Conventional Operating Rooms
 - 1.6.2. Integrated Operating Rooms
 - 1.6.3. Future Perspectives
- 1.7. Preoperative Preparation for Laparoscopy
 - 1.7.1. Physical Preparation for Patients
 - 1.7.2. Preoperative Medication and Bowel Preparation
 - 1.7.3. Patient Position on the Operating Table
- 1.8. *Fast-Track*/ ERAS Program
- 1.9. Anesthetic Considerations in Endoscopic Surgery
 - 1.9.1. General Aspects
 - 1.9.2. Circulatory System Involvement
 - 1.9.3. Respiratory System Involvement
 - 1.9.4. Spinal Catheter Placement and Other Blockages
 - 1.9.5. Postoperative Recovery

Module 2. Hysteroscopic Surgery

- 2.1. Introduction to Hysteroscopic Surgery
- 2.2. Organization of an Outpatient Hysteroscopy Consultation
- 2.3. Hysteroscopy Equipment and Instruments in Consultation
 - 2.3.1. Peculiarities of the Hysteroscopy Tower
 - 2.3.2. Types of Diagnostic Hysteroscopes
 - 2.3.3. Types of Instrument



- 2.4. Hysteroscopy in Consultation
 - 2.4.1. Indications for In-Consultation Hysteroscopy
 - 2.4.2. In-Consultation Hysteroscopy Technique
 - 2.4.3. How to Increase Success Rate
- 2.5. Surgical Hysteroscopy
 - 2.5.1. Surgical Hysteroscopies Indications
 - 2.5.2. Peculiarities of the Procedure in the Operating Room
- 2.6. Systematic Endometrial Exploration and Biopsy
- 2.7. Hysteroscopic Polypectomy
- 2.8. Foreign Body Removal (IUD, Essures)
- 2.9. Hysteroscopic Myomectomy
 - 2.9.1. Limits to In-Consultation Interventions
 - 2.9.2. Types of Hysteroscopic Morcellators
 - 2.9.3. Suitable Techniques
- 2.10. Resection of Septum and Intracavitary Malformations
- 2.11. Intrauterine Devices
- 2.12. Endometrial Ablation
 - 2.12.1. Resectoscope Use
 - 2.12.2. Novasure and Other Devices
- 2.13. Complications and Post-Procedural Management in Hysteroscopy
 - 2.13.1. Uterine or Cervical Perforation
 - 2.13.2. Infections
 - 2.13.3. Vasovagal Syndrome
 - 2.13.4. Bleeding
 - 2.13.5. Postoperative Pain
 - 2.13.6. Hyperosmolar Syndrome
 - 2.13.7. Others
- 2.14. New Developments in Hysteroscopy
 - 2.14.1. Using Monopolar Energy vs. Bipolar Energy
 - 2.14.2. Use of Laser in Hysteroscopy
 - 2.14.3. Other Developments

Module 3. Ultra-Minimally Invasive Surgery

- 3.1. Introduction to Ultra-Minimally Invasive Surgery
- 3.2. Single-Port Surgery
 - 3.2.1. Evidence in Gynecology for Its Use
 - 3.2.2. Specific Instruments
 - 3.2.3. Surgical Technique by Procedures
 - 3.2.4. Single-Glove
- 3.3. Mini-Laparoscopic Surgery
 - 3.3.1. Evidence in Gynecology for Its Use
 - 3.3.2. Specific Instruments
 - 3.3.3. Surgical Technique by Procedures
- 3.4. Surgery without Ports of Entry
 - 3.4.1. Evidence in Gynecology for Its Use
 - 3.4.2. Specific Instruments
 - 3.4.3. Surgical Technique by Procedures
- 3.5. Other Ultra-Minimally Invasive Breakthroughs
- 3.6. Comparison between the Different Techniques

Module 4. Robotic Surgery in Gynecology

- 4.1. Introduction and Advantages of Robotic Surgery
- 4.2. Different Types of Robotic Systems
 - 4.2.1. Da Vinci System
 - 4.2.2. Zeus System
 - 4.2.3. Amadeus-Titan System
 - 4.2.4. Others
- 4.3. Instrumentation in Robotic Surgery
- 4.4. Docking and Setting Surgical Robots
- 4.5. Comparison between the Robotic Pathway and Other Pathways
- 4.6. Financial Factors and Robotic Efficiency
- 4.7. Complications in Robotic Surgery
- 4.8. Single-Port in Robotics
- 4.9. New Developments in Robotics

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.



“

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.

“

Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



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

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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



This program offers the best educational material, prepared with professionals in mind:



Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Surgical Techniques and Procedures on Video

TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



Interactive Summaries

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

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



Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



06

Certificate

The Postgraduate Diploma in New Minimally Invasive and Robotic Surgery Techniques in Gynecology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

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 Diploma in New Minimally Invasive and Robotic Surgery Techniques in Gynecology** 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 New Minimally Invasive and Robotic Surgery Techniques in Gynecology**

Modality: online

Duration: 6 months

Accreditation: 17 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 Diploma
New Minimally Invasive
and Robotic Surgery
Techniques in Gynecology

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 17 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Diploma

New Minimally Invasive and Robotic Surgery Techniques in Gynecology

