Postgraduate Diploma

Laparoscopic and Pelvitrainer Learning Models

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Postgraduate Diploma

Laparoscopic and Pelvitrainer Learning Models

- » Modality: **online**
- » Duration: **6 months.**
- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

Website: **www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-laparoscopic-pelvitainer-learning-models**

Index

01
Introduction

Medical qualifications in minimally invasive surgery in the field of gynecology, including laparoscopy, hysteroscopy and pelvic floor surgery, is insufficient due to the lack of time to delve into it despite the transcendental importance the technique has. 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 learning difficulty and technical complexity in the field, constant updating of knowledge is vital, since instruments and mini-invasive techniques have experienced exponential development in the last five years, which is difficult to adapt to without the appropriate ongoing training.

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Increase your decision-making confidence by updating your knowledge with this Postgraduate Diploma in Laparoscopic and Pelvitrainer Learning Models.

From the clinical point of view, laparoscopic and pelvitrainer surgery in gynecology is gaining ground and displacing conventional surgery to a second place. For this reason, most healthcare centers are trying to introduce this type of surgical modality in a higher percentage.

With the increasing complexity of the procedures performed laparoscopically, it has reached a point where it covers practically 95% of gynecological surgical interventions. By performing these surgeries in a minimally invasive manner, operation results and patient recovery are optimized, which is why updating on new techniques is vital for proper patient care.

That is why the demand for trained professionals in this area is increasing. As a consequence, TECH has designed this program in order to provide first class information, developed by experts and specialists with extensive experience. All this presented in an innovative online format, full of audiovisual resources, complementary readings and practical exercises. This Postgraduate Diploma also uses the Relarning methodology, based on practical learning and leaving behind hours of unproductive study and memorization.

This **Postgraduate Diploma in Laparoscopic and Pelvitrainer Learning Models** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- Activities and clinical cases presented by experts in the different specialties
- The graphic, schematic, and practical contents with which they are created, provide scientific and healthcare training on the disciplines that are essential to professional practice
- The latest developments in Laparoscopic and Pelvitrainer Learning Models
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- With special emphasis on evidence-based medicine and research methodologies in Laparoscopic and Pelvitrainer Learning Models
- All of 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

Expand your knowledge through the Postgraduate Diploma in Laparoscopic and Pelvitrainer Learning Models 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 Laparoscopic and Pelvitrainer Learning Models, you will obtain a qualification edorsed by TECH Technological University"

This Postgraduate Diploma in Laparoscopic and Pelvitrainer Learning Models contains the most complete and up-to-date scientific program on the market.

Make the most of this opportunity to update your knowledge in Laparoscopic and Pelvitrainer Learning Models to improve patient care.
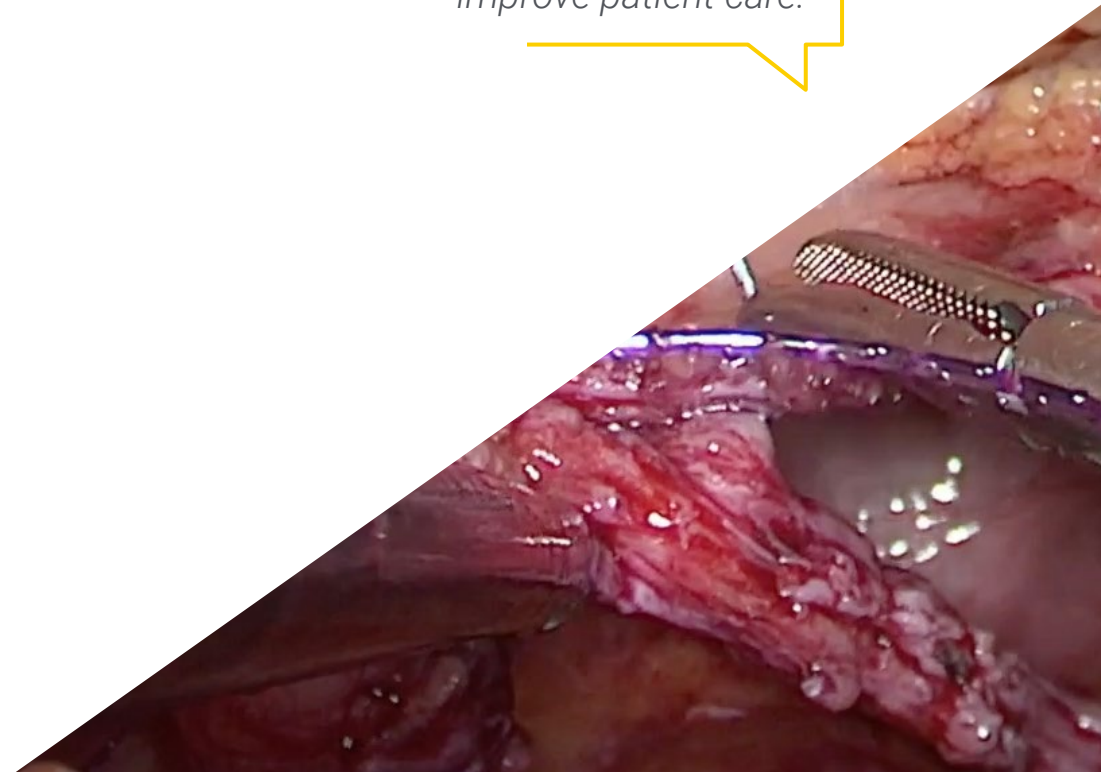
The teaching staff is made up of a group of professionals from the area of laparoscopic training using *Pelvitrainer*, who bring to this course their work experience, as well as a group of renowned specialists, recognized by esteemed scientific communities.

Thanks to its multimedia content developed with the latest educational technology, it will allow the professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

This program is designed around Problem-Based Learning, whereby the physician must try to solve the different professional practice situations that arise throughout the program. For this reason, students will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of Gynecological Surgery with extensive teaching experience.

02
Objectives

The program's main objective is focused on theoretical and practical learning, so physicians can master Laparoscopic and Pelvitrainer Learning Models in a practical and rigorous manner.

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

General Objectives

- 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 mini-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 deeper 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. Instrumentation, Materials and Electrosurgery

- Manage the preparation of the surgical site before each operation
- Establish skin cleansing and asepsis
- Learn how to position patients on the operating table
- Learn the peculiarities of integrated operating rooms
- Increase knowledge of anesthetic aspects related to endoscopy
- Learn the different applications of bipolar and monopolar energy in instrumentation
- Acquire information about electrosurgery for its use in clinical practice
- Select morcellation instruments and apply them safely
- Describe the main features of specimen extraction bags
- Determine the types and use of tissue sealants

Module 3. General Training in Minimally Invasive Surgery

- Identify dissection and cutting instruments for laparoscopy and the use of each piece of equipment
- Select the correct optics for each specific patient
- Differentiate between entry trocars used in surgeries
- Perform pelvitrainer simulation exercises
- Learn how to assemble a homemade pelvitrainer
- Explain the use of learning pyramids
- Identify the types of laparoscopic simulators
- Acquire up-to-date knowledge of animal simulation procedures
- Bring new advances to cadaver simulation procedures
- Apply simulated organ models
- Acquire up-to-date knowledge of simple laparoscopic suturing procedures

Module 4. Laparoscopic Suture Training

- Explore all the material for laparoscopic suturing, including suture holders, suture threads, needles and other instruments
- Give a detailed description of all the accessory material for gynecological laparoscopy
- Distinguish the types of recorders available for surgery
- Acquire up-to-date knowledge of the orientation of laparoscopic vision systems
- Identify the types of insufflators and how they work
- Identify general surgical instruments

03
Course Management

In order to guarantee the highest quality in all the contents offered in this Postgraduate Diploma, TECH has counted on the collaboration of a prestigious international teaching staff with wide experience in Minimally Invasive Surgery in Gynecology. In this way, the specialist will be able to access a series of distinctive masterclasses in this area, specifically in everything related to innovative laparoscopic techniques.

Get up to date on the most current Laparoscopic and Pelvitrainer Learning Models, being able to incorporate them directly into your daily practice"

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 figures in this specialty. So much so that he has even received recognition as a**n 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 training 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, McGuill 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

- Research Director, Gynecologic Oncology Department - Erasto Gaertner Hospital - Brazil
- Director of the Fellowship Program in Gynecologic Oncology at the Erasto Gaertner Hospital.
- Director of the Robotic Surgery Training Program of the Gynecologic Oncology Oncology Department of the Erasto Gaertner Hospital.
- Senior Surgeon in the Department of Gynecologic Oncology, Erastus Gaertner Hospital.
- Director of the Resident Oncologist Program at the Erasto Gaertner Hospital.
- Consultant at Johnson & Johnson and Merck Sharp & Dohme
- Degree in Medicine at the Federal University of Porto Alegre
- Fellowship in Gynecologic Oncologic Surgery at Memorial Sloan Kettering Cancer Center

- Fellowship in Minimally Invasive Surgery, McGuill 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.

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

04

Structure and Content

The content structure has been designed by a team of professionals who recognize the implications of training in daily medical practice, who are aware of the relevance of updated training on simulators and systems to improve expertise in laparoscopy, and who are committed to quality teaching through new educational technologies.

Apply to your practice the different high definition systems such as 3D vision, 4K and Full HD for a more effective diagnosis"

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
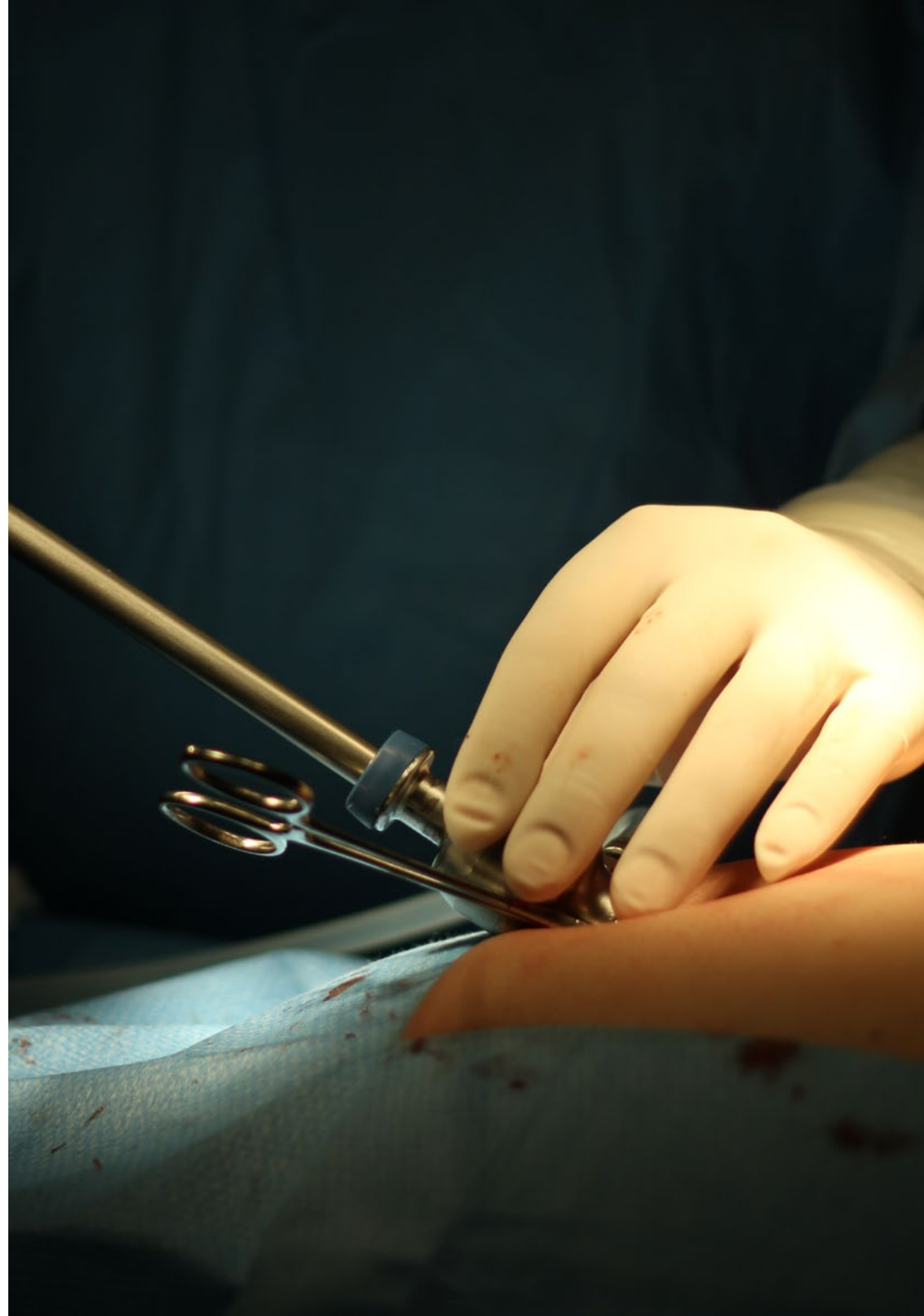
Module 2. Instrumentation, Materials and Electrosurgery

2.1. Laparoscopy Tower and General Supplies
2.2. Specific Vision Systems
    2.2.1 Full HD High Definition Systems
    2.2.2 3D Vision Systems
    2.2.3 4K Vision Systems
2.3. Endoscopy
    2.3.1 Rigid Endoscopy
    2.3.2 Flexible and Angle Adjustable Endoscopes
    2.3.3 Small Bore Endoscopes
2.4. Insufflation Systems
    2.4.1 General Functioning
    2.4.2 Smoke Extraction Systems
2.5. Image Recording Modules
2.6. Access Instrumentation
    2.6.1 Veress Needle
    2.6.2 First Access Trocars
    2.6.3 Accessory Trocars
2.7. Grasping Instruments
    2.7.1 Types of Instruments
    2.7.2 Most Appropriate Uses for Each
2.8. Cutting Instruments
2.9. Electrosurgery
    2.9.1 Electrosurgery in Medicine
    2.9.2 Monopolar Energy
    2.9.3 Bipolar Energy
    2.9.4 Electrical Isolation of Instruments
    2.9.5 Precautions to Avoid Accidents
2.10. Endoscopic Tissue Sealants
2.11. Bags and Specimen Extraction
2.12. EndoGIA and General Surgery Instrumentation
2.13. Morcellators and Containment Systems
2.14. Other Instruments: Aspiration, Suction, Retractors, Organ Suspension Systems, Port Closure Systems, Tie Rods, etc.

Module 3. General Training in Minimally Invasive Surgery

3.1. Introduction and Learning Pyramid
3.2. Different Types of Options for Learning Endoscopy
    3.2.1 Conducting Training Courses and Programs
    3.2.2 Laparoscopic Simulators
        3.2.2.1. Physical Simulations
        3.2.2.2. Virtual Simulators
    3.2.3 Animal Models in Gynecologic Endoscopy
    3.2.4 Human Models for Simulation
3.3. How to Build a Homemade Pelvitrainer
3.4. Different Types of Practical Pelvitrainer Exercises
3.5. Organ Bank and Artificial Phantoms

Module 4. Laparoscopic Suture Training

4.1. Introduction and Suture Use in Endoscopy
4.2. Types of Needles
4.3. Types of Sutures Used
    4.3.1 Conventional Sutures
    4.3.2 Vascular Suture
    4.3.3 Bearded Suture
    4.3.4 Automatic Suture Systems
4.4. Specific Instrumentation
    4.4.1 Types of Needle Holders
    4.4.2 Low Knots
    4.4.3 LapraTy Applicator
    4.4.4 Others
4.5. Technical Aspects
    4.5.1 Introducing the Needle into the Cavity
    4.5.2 Needle Placement in Holder
    4.5.3 Types of Sutures
    4.5.4 Intracorporeal Knotting
    4.5.5 Extracorporeal Knotting
    4.5.6 Single-Port Knotting
    4.5.7 Sutures and Special Types of Knots (Vascular, Intestinal)
    4.5.6 Suture Removal

05
Methodology

This 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.

"

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 assess 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

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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 adapted in 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.

20%

15%

15%

3%

20%

17%

7%

3%

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 assess and re-assess 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 Laparoscopic and Pelvitrainer Learning Models guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.

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

This **Postgraduate Diploma in Laparoscopic and Pelvitrainer Learning Models** 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 Diploma** issued by **TECH Technological University via tracked delivery***.

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

Title: **Postgraduate Diploma in Laparoscopic and Pelvitrainer Learning Models**

Official Nº of Hours: **425 hours.**

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CONSTANCIA

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C. _____, con documento de identificación nº_____

Por haber superado con éxito y acreditado el programa de

EXPERTO UNIVERSITARIO

en

Modelos de Aprendizaje Laparoscópico y con Pelvitrainer

Se trata de un título propio de esta Universidad con una duración de 425 horas, con fecha de inicio dd/mm/aaaa y fecha de finalización dd/mm/aaaa.

TECH es una Institución Particular de Educación Superior reconocida por la Secretaría de Educación Pública a partir del 28 de junio de 2018.

A 17 de junio de 2020

Mtra. Tere Guevara Navarro
Rectora

Este título propio se deberá acompañar siempre del título universitario habilitante expedido por la autoridad competente para ejercer profesionalmente en cada país.   código único TECH: AFW0R23S techtitute.com/titulos

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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