Postgraduate Diploma Blocks in Locoregional Anesthesia





Postgraduate Diploma Blocks in Locoregional Anesthesia

- » Modality: online
- » Duration: 6 months
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-blocks-locoregional-anesthesia

Index



06 Certificate

01 Introduction

Local or Regional Anesthesia and the countless advances that have been made in the field of pharmacology have encouraged the development of therapies for suffering from intense pain in certain areas of the body such as, for example, the cervical and lumbar region. And thanks to the direct injection of neuraxial inhibitory treatment, pathologies such as hernias can be treated palliatively without the need to subject the patient to intensive surgery. It is precisely in this area that this program focuses. Moreover, through 450 hours of 100% online academic experience, the anesthesiologist will be able to learn in detail the latest developments in Interfascial and Thoraco-abdominal Blocks, as well as their applications in the upper and lower extremities.



A program at the forefront of Locoregional Medicine and Anesthesiology focused on the latest developments in Interfascial Blocks, also applicable to the upper and lower extremities"

tech 06 | Introduction

Inhibition of the peripheral nerve, through direct injection of anesthetics, has helped thousands of patients improve their quality of life through a considerable reduction in the pain they suffered. And, despite the fact that until just a few years ago Anesthesiology was only applied to the surgical field, today it includes an endless number of palliative treatments, among which are Blocks. Moreover, a pathology as common as hernias can be managed safely for the person, without the need to undergo an operation. It also serves as a resource for those patients who do need to enter the operating room, but for health reasons (pregnancy, weakness, inadequate response to treatment) must wait.

Therefore, it is an area in which in recent years many advances have been made in terms of techniques and drugs. For this reason, and in order to facilitate the specialist's access to the latest information in this regard, TECH Technological University has developed this Postgraduate Diploma in Blocks in Locoregional Anesthesia. Moreover, throughout 450 hours of the best multidisciplinary content, the professional will be able to catch up with the latest innovations in relation to the application of this medical guideline in the lower and upper extremities, as well as in the interfascial or thoraco-abdominal area.

All of this 100% online through diverse theoretical-practical and additional material, the latter presented in different formats: detailed videos, research articles, complementary readings, images, dynamic summaries of each unit, etc. In addition, the specialists will have the support of a teaching team versed in Anesthesiology and Pain Therapy, which will assess them during the 6 months of academic experience. Moreover, you will be able to update your medical practice with the help of the best and with the guarantee and endorsement of a great institution such as TECH Technological University.

This **Postgraduate Certificate in Blocks in Locoregional Anesthesia** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Practical cases presented by experts in Locoregional Anesthesiology
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

TECH has developed 450 hours of the best theoretical, practical and additional content so that you can delve into the latest developments in anesthesiology, through an exhaustive update of anatomy and its ins and outs"

Introduction | 07 tech

66

You will master the BRILMA techniques in ICU patients through the exhaustive management of its tools and the most innovative therapeutic guidelines for their application in patients with severe fractures or critical situations" An ideal program to implement the latest analgesic drugs developed into your practice, for example, to carry out infraclavicular or axillary blocks.

You will work on the knowledge of the most innovative and effective Blockade techniques based on the pathology of each patient and their physiological characteristics.

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 the professional a situated and contextual learning, that is, a simulated environment that will provide an immersive education programmed to prepare in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02 **Objectives**

The multiple options offered by Locoregional Anesthesia regarding the application of Blocks in the current clinical setting, especially in relation to Traumatology, have made TECH Technological University consider it necessary to develop a program that includes the most important developments in regard. This is how this Postgraduate Diploma arises, whose purpose is to provide the student with the most innovative information related to the anesthetic management of the upper and lower extremities, as well as with regard to the interfascial and thoraco-abdominal areas through a comfortable 100% online program.

Whatever your goals, TECH will put at your disposal all the resources you need to overcome them in less than 6 months through an unparalleled academic experience"

tech 10 | Objectives



General Objectives

- Make available to the student the latest information related to Blocks in Locoregional Anesthesia in the area of the upper and lower extremities
- Delve into the therapeutic and pharmacological innovations that have emerged around Interfascial and Thoraco-abdominal Blocks for the therapeutic approach of different types of patients



A qualification through which you will perfect your skills in the application of analgesic treatments by updating your intervention guidelines"



Objectives | 11 tech





Specific Objectives

Module 1. Upper Limbs

- Identify the different Blocks that can be performed on the upper extremity and their main indications and contraindications
- Learn about the different responses to neurostimulation obtained in the different blocks of the upper extremity
- Become familiar with the ultrasound image obtained in the different blocks of the upper extremity

Module 2. Lower Limbs

- Identify the different Blocks that can be performed on the Lower extremity and their main indications and contraindications
- Learn about the different responses to neurostimulation obtained in the different blocks of the Lower extremity
- Become familiar with the ultrasound image obtained in the different blocks of the Lower extremity

Module 3. Thoraco-abdominal interfascial blocks

- Know in depth the anatomy of the thoracic and abdominal wall, distinguishing what will be blocked with each regional technique
- Learn to visualize, through ultrasound, the different muscle groups
- Train the professional in performing interfascial blocks, knowing the puncture site and the site where the local anesthetic can be administered
- At the end of the module, the student will be able to decide what type of block the patient needs depending on the type of aggression that is going to be carried out or has been carried out
- Differentiate between intercostal, interpectoral, erector spinae, serratus plane, TAP, lunate, quadratus lumborum, ilioinguinal and iliohypogastric blocks, which are part of the repertoire of analgesic techniques.
- Know the efficiency and effectiveness of the infiltration of the surgical wound itself

03 Course Management

Both the management and the teaching staff of this program are made up of a team of top-level professionals in the area of Anesthesiology, Resuscitation and Pain Therapy. This is a group of specialists who combine medical and academic activity, which is why they will provide this Postgraduate Diploma with an innovative, as well as multidisciplinary and critical nuance based on their own experience. Therefore, it is presented as a unique opportunity to catch up with the best anesthesiologists during a 6-month 100% online program.

4 0 4 10 F

The teaching team has worked conscientiously to prepare the 450 hours of teaching material included in this program and which will include clinical cases extracted from their own consultations"

tech 14 | Course Management

Management



Dr. Burgueño González, María Dolores

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Anesthesia Coordinator of Cantoblanco Hospital
- Responsible for Surgical Patient Safety at Cantoblanco Hospital
- Specialist Physician at the Virgen del Mar Hospital
- MIR in Anesthesiology, Resuscitation and Pain Therapy at the University Hospital La Paz
- Master PROANES: Official Updating Program in Anesthesiology, Resuscitation and Pain Therapy by the Catholic University of Valencia
- Postgraduate Diploma in Airway Management by the Catholic University of Valencia

Professors

Dr. Zurita Copoví, Sergio

- FEA of Anesthesiology and Resuscitation at the University Hospital La Paz
- Specialist Physician at the Virgen del Mar Hospital
- Resident Tutor at the University Hospital La Paz
- * Clinical teaching collaborator at the Autonomous University of Madrid
- Master's Degree in Clinical Management, Medical and Health Care Management
- Master in Patient Management
- * European Postgraduate Certificate in Anesthesia and Critical Care
- Member of the Spanish Society of Anesthesiology and Pain Treatment (SEDAR)

Dr. Sancho De Ávila, Azahara

- Free practice anesthesiologist at La Zarzuela Hospital
- FEA of Anesthesiology and Resuscitation at the University Hospital of La Paz
- Free practice anesthesiologist at the University Hospital of La Luz
- Free practice anesthesiologist at Nuestra Señora del Rosario Hospital
- Doctor in Medicine and Surgery from the University of La Laguna
- Specialist in Anesthesiology, Resuscitation and Pain Therapy by MIR examination at the University Hospital Nuestra Señora de la Candelaria

Course Management | 15 tech

Dr. Canser Cuenca, Enrique

- FEA of Anesthesiology and Resuscitation at El Escorial Hospital
- Specialist in Anesthesiology and Resuscitation at the University Hospital La Paz
- Residency in the Department of Anesthesiology and Resuscitation at the University Hospital La Paz
- PhD in "Neurosciences: Morphofunctional organization of the nervous system"
- Master in Pathophysiology and Treatment of Pain by the Autonomous University of Barcelona
- Master's Degree in Palliative Medicine and Supportive Care of the Cancer Patient

Dr. Salgado Aranda, Patricia

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Teaching and research experience
- Clinical Teaching Collaborator of the University Hospital La Paz
- PhD from the Autonomous University of Madrid
- Degree in Medicine from the University of Alcalá, Spain
- Master's Degree in Infectious Diseases in Intensive Care
- Member of the Illustrious Official College of Physicians of Madrid

Dr. Vallejo Sanz, Irene

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Collaborator in Clinical Simulation workshops
- MIR in Anesthesiology, Resuscitation and Pain Therapy
- European Diploma of Anaesthesiology and Intensive Care, EDAIC part I
- Member of the Illustrious Official College of Physicians of Madrid.
- Member of the Spanish Society of Anesthesiology and Pain Treatment (SEDAR)

Dr. Rodríguez Roca, María Cristina

- FEA of Anesthesiology and Resuscitation at the University Hospital La Paz
- Teaching and research experience in several university centers
- PhD from the Autonomous University of Madrid
- * European Postgraduate Certificate in Anesthesia and Critical Care (EDAIC)
- Member of the Spanish Society of Anesthesiology and Pain Treatment (SEDAR)
- Member of the working group of Chronic Pain of the Spanish Society of Anesthesiology and Resuscitation

Dr. Martín Martín, Almudena

- FEA in Anesthesiology and Resuscitation at the HU La Paz
- Clinical Teaching Collaborator of the University Hospital La Paz
- * MIR in Anesthesiology, Resuscitation and Pain Therapy at the University Hospital La Paz
- Master of Continuing Education in "Patient Management"

04 Structure and Content

TECH Technological University is a pioneer in the entire academic panorama for the development of its programs following the guidelines of the innovative pedagogical methodology of Relearning. It is a strategy that consists of reiterating the most important concepts throughout the syllabus, contributing to an update of natural and progressive knowledge, without the need to invest extra hours in memorizing. This allows professionals to take advantage of the time to expand each section of the syllabus in a personalized way thanks to the dozens of hours of additional multidisciplinary material that are included in this Postgraduate Diploma.

Structure and Content | 17 tech

GG

The best program on the current academic market to work towards achieving the best response to neurostimulation, through the use of the most innovative clinical and anesthesiological strategies"

tech 18 | Structure and Content

Module 1. Upper Limbs

- 1.1. Brachial Plexus Anatomy
 - 1.1.1 Anatomy
 - 1.1.2 Nerve territory and exploration
 - 1.1.3 Cutaneous and motor distribution of brachial plexus nerves
- 1.2. Superficial and deep cervical block
 - 1.2.1 Anatomy
 - 1.2.2 Indications
 - 1.2.3 Contraindications
 - 1.2.4 Anatomical references, posture and puncture sites
 - 1.2.5 Material
 - 1.2.6 Response to neurostimulation
 - 1.2.7 Blockage by Ultrasound
 - 1.2.8 Complications
- 1.3. Interscalene Block
 - 1.3.1 Anatomy
 - 1.3.2 Indications
 - 1.3.3 Contraindications
 - 1.3.4 Anatomical references, posture and puncture sites
 - 1.3.5 Material
 - 1.3.6 Response to neurostimulation
 - 1.3.7 Blockage by Ultrasound
 - 1.3.8 Complications
- 1.4. Infraclavicular Block
 - 1.4.1 Anatomy
 - 1.4.2 Indications
 - 1.4.3 Contraindications
 - 1.4.4 Anatomical references, posture and puncture sites
 - 1.4.5 Material
 - 1.4.6 Response to neurostimulation
 - 1.4.7 Blockage by Ultrasound
 - 1.4.8 Complications

- 1.5. Infraclavicular Block
 - 1.5.1 Anatomy
 - 1.5.2 Indications
 - 1.5.3 Contraindications
 - 1.5.4 Anatomical references, posture and puncture sites
 - 1.5.5 Material
 - 1.5.6 Response to neurostimulation
 - 1.5.7 Blockage by Ultrasound
 - 1.5.8 Complications
- 1.6. Axillary Block
 - 1.6.1 Anatomy
 - 1.6.2 Indications
 - 1.6.3 Contraindications
 - 1.6.4 Anatomical references, posture and puncture sites
 - 1.6.5 Material
 - 1.6.6 Response to neurostimulation
 - 1.6.7 Blockage by Ultrasound
 - 1.6.8 Complications
- 1.7. Blocks in the humeral canal (midhumeral block)
 - 1.7.1 Anatomy
 - 1.7.2 Indications
 - 1.7.3 Contraindications
 - 1.7.4 Anatomical references, posture and puncture sites
 - 1.7.5 Material
 - 1.7.6 Response to neurostimulation
 - 1.7.7 Blockage by Ultrasound
 - 1.7.8 Complications

Structure and Content | 19 tech

1.8. Peripheral blockages.

1.8.1 Shoulder level blocks

- 1.8.1.1. Supraclavicular nerve block
- 1.8.1.2. Suprascapular nerve block
- 1.8.1.3. Lateral Femoral Cutaneous Nerve Block
- 1.8.1.4. Medial antebrachial cutaneous nerve block
- 1.8.2 Isolated blocks at elbow level
 - 1.8.2.1. median nerve block
 - 1.8.2.2. Suprascapular nerve block
 - 1.8.2.3. Suprascapular nerve block
- 1.8.3 Isolated locks at wrist and hand level
 - 1.8.3.1. median nerve block
 - 1.8.3.2. Suprascapular nerve block
 - 1.8.3.3. Suprascapular nerve block
 - 1.8.3.4. Distal Blocks
- 1.9. Intravenous Regional Anesthesia of the upper extremity
 - 1.9.1 Indications
 - 1.9.2 Contraindications
 - 1.9.3 Material
 - 1.9.4 Methodology
- 1.10. Infiltrations in the upper extremity
 - 1.10.1 General Aspects
 - 1.10.2 Indications
 - 1.10.3 Contraindications
 - 1.10.4 Material and drugs
 - 1.10.5 Methodology
 - 1.10.6 Adverse Effects
 - 1.10.7 Shoulder level Infiltrations
 - 1.10.8 Elbow level Infiltrations
 - 1.10.9 Infiltration at hand level

Module 2. Lower Limbs

- 2.1. Lumbar Plexus Anatomy
 - 2.1.1 Anatomy
 - 2.1.2 Nerve territory and exploration
 - 2.1.3 Cutaneous and motor distribution of Lumbar plexus nerves
- 2.2. Sacro Plexus Anatomy
 - 2.2.1 Anatomy
 - 2.2.2 Nerve territory and exploration
 - 2.2.3 Cutaneous and motor distribution of Sacro plexus nerves
- 2.3. Posterior lumbar block
 - 2.3.1 Anatomy
 - 2.3.2 Indications
 - 2.3.3 Contraindications
 - 2.3.4 Material
 - 2.3.5 Anatomical references, posture and puncture sites
 - 2.3.6 Response to neurostimulation
 - 2.3.7 Blockage by Ultrasound
 - 2.3.8 Complications
- 2.4. Femoral block
 - 2.4.1 Anatomy
 - 2.4.2 Indications
 - 2.4.3 Contraindications
 - 2.4.4 Anatomical references, posture and puncture sites
 - 2.4.5 Material
 - 2.4.6 Response to neurostimulation
 - 2.4.7 Blockage by Ultrasound
 - 2.4.8 Complications

tech 20 | Structure and Content

2.5. Obturator nerve and femoralcutaneous nerve blocks

2.5.1 Obturation Nerve Block 2.5.1.1. Anatomy

2.5.1.2. Indications

2.5.1.3. Contraindications

2.5.1.4. Anatomical references, posture and puncture sites

2.5.1.5. Material

2.5.1.6. Response to neurostimulation

2.5.1.7. Blockage by Ultrasound

2.5.1.8. Complications

2.5.2 Lateral Femoral Cutaneous Nerve Block

2.5.2.1. Anatomy

2.5.2.2. Indications

2.5.2.3. Contraindications

2.5.2.4. Anatomical references, posture and puncture sites

2.5.2.5. Material

2.5.2.6. Response to neurostimulation

2.5.2.7. Blockage by Ultrasound

2.5.2.8. Complications

2.6. Interfascial blocks for hip surgery

2.6.1 Introduction

- 2.6.2 PENG or pericapsular nerve group block
- 2.6.3 Fascia iliaca block

2.6.3.1. Suprainguinal

2.6.3.2. Infrainguinal

2.6.4 Benefits of Hip Peripheral Nerve Blocks

2.7. Saphenous nerve block and intra-articular block for knee surgery

2.7.1 Introduction

2.7.2 Saphenous Nerve Block2.7.2.1. Blockage of the Internal Saphenous Nerve (Adductor Canal)2.7.2.2. Other blocking locations

2.7.3 Intra-articular knee block





Structure and Content | 21 tech

- 2.8. Sciatic block
 - 2.8.1 Sciatic Blockage Gluteal Level
 - 2.8.1.1. Anatomy
 - 2.8.1.2. Indications
 - 2.8.1.3. Contraindications
 - 2.8.1.4. Anatomical references, posture and puncture sites
 - 2.8.1.5. Material
 - 2.8.1.6. Response to neurostimulation
 - 2.8.1.7. Blockage by Ultrasound
 - 2.8.1.8. Complications
 - 2.8.2 Sciatic Blockage Gluteal Level
 - 2.8.2.1. Anatomy
 - 2.8.2.2. Indications
 - 2.8.2.3. Contraindications
 - 2.8.2.4. Anatomical references, posture and puncture sites
 - 2.8.2.5. Material
 - 2.8.2.6. Response to neurostimulation
 - 2.8.2.7. Blockage by Ultrasound
 - 2.8.2.8. Complications
- 2.9. Sciatic Nerve Block Popliteal Level
 - 2.9.1 Anatomy
 - 2.9.2 Indications
 - 2.9.3 Contraindications
 - 2.9.4 Anatomical references, posture and puncture sites
 - 2.9.5 Material
 - 2.9.6 Response to neurostimulation
 - 2.9.7 Blockage by Ultrasound
 - 2.9.8 Complications
- 2.10. Blockage of the Terminal Branches of the Sciatic Nerve
 - 2.10.1 Posterior Tibial Nerves
 - 2.10.2 Sural nerve
 - 2.10.3 Common peroneal nerve
 - 2.10.4 Foundations peroneal nerve
 - 2.10.5 Superficial peroneal nerve

tech 22 | Structure and Content

Module 3. Thoraco-abdominal interfascial blocks

3.1.	Interfascial	blocks

- 3.1.1 What is an interfascial block?
- 3.1.2 History & evolution
- 3.1.3 Advantages and Disadvantages
- 3.2. Chest Wall Anatomy
 - 3.2.1 Musculoskeletal component
 - 3.2.2 Nerve Components
 - 3.2.3 Cutaneous innervation
- 3.3. Intercostal Blockages
 - 3.3.1 Blockade of the anterior cutaneous branches of the intercostal nerves (ABRA) or pectointercostal block
 - 3.3.1.1. Introduction
 - 3.3.1.2. Indications and Contraindications
 - 3.3.1.3. Position and Patient Preparation
 - 3.3.1.4. Materials
 - 3.3.1.5. Anatomical Image vs. Ultrasound Imaging
 - 3.3.1.6. Block under ultrasound vision
 - 3.3.1.7. Complications
 - 3.3.2 BRILMA
 - 3.3.2.1. Introduction
 - 3.3.2.2. Indications and Contraindications
 - 3.3.2.3. Position and Patient Preparation
 - 3.3.2.4. Materials
 - 3.3.2.5. Anatomical Image vs. Ultrasound Imaging
 - 3.3.2.6. Block under ultrasound vision
 - 3.3.2.7. Complications
 - 3.3.2.8. Modified BRILMA

- 3.4. Interpectoral blocks 3.4.1 PEC I-II. 3.4.1.1. Introduction 3.4.1.2. Indications and Contraindications 3.4.1.3. Position and Patient Preparation 3.4.1.4. Materials 3.4.1.5. Anatomical Image vs. Ultrasound Imaging 3.4.1.6. Block under ultrasound vision 3.4.1.7. Complications 3.4.2 PEC I-II. 3.4.2.1. Introduction 3.4.2.2. Indications and Contraindications 3.4.2.3. Position and Patient Preparation 3.4.2.4. Materials 3.4.2.5. Anatomical Image vs. Ultrasound Imaging 3 4 2 6 Block under ultrasound vision 3.4.2.7. Complications Other Blocks of the Thoracic Wall 3.5. 3.5.1 Erector spinae block 3.5.1.1. Introduction 3.5.1.2. Indications and Contraindications 3.5.1.3. Position and Patient Preparation 3.5.1.4. Materials 3.5.1.5. Anatomical Image vs. Ultrasound Imaging 3 5 1 6 Block under ultrasound vision 3.5.1.7. Complications 3.5.2 Serratus Blockage 3.5.2.1. Introduction 3.5.2.2. Indications and Contraindications 5.5.2.3. Position and Patient Preparation
 - 3.5.2.4. Materials
 - 3.5.2.5. Anatomical Image vs. Ultrasound Imaging
 - 3.5.2.6. Block under ultrasound vision
 - 3.5.2.7. Complications

Structure and Content | 23 tech

- 3.6. Anatomy of the Abdominal Wall
 - 3.6.1 Musculoskeletal component
 - 3.6.2 Nerve Components
 - 3.6.3 Cutaneous innervation
- 3.7. Transversus Abdominis Plane (TAP Block
 - 3.7.1 Introduction
 - 3.7.2 Indications and Contraindications
 - 3.7.3 Position and Patient Preparation
 - 3.7.4 Materials
 - 3.7.5 Anatomical Image vs. Ultrasound Imaging
 - 3.7.6 Block under ultrasound vision
 - 3.7.7 Complications
 - 3.7.8 Variants of the TAP lock3.7.8.1. Subcostal TAP3.7.8.2. Rear TAP
- 3.8. Ilioinguinal e Iliohypogastric Block
 - 3.8.1 Introduction
 - 3.8.2 Indications and Contraindications
 - 3.8.3 Position and Patient Preparation
 - 3.8.4 Materials
 - 3.8.5 Anatomical Image vs. Ultrasound imaging
 - 3.8.6 Block under ultrasound vision
 - 3.8.7 Complications
- 3.9. Other Blocks of the Ultrasound Wall
 - 3.9.1 Locking of the Rectus Sheath
 - 3.9.1.1. Introduction
 - 3.9.1.2. Indications and Contraindications
 - 3.9.1.3. Position and Patient Preparation
 - 3.9.1.4. Materials
 - 3.9.1.5. Anatomical Image vs. Ultrasound Imaging
 - 3.9.1.6. Block under ultrasound vision
 - 3.9.1.7. Complications

- 3.9.2 Semilunar block3.9.2.1. Introduction3.9.2.2. Indications and Contraindications3.9.2.3. Position and Patient Preparation
 - 3924 Materials
 - 3.9.2.5. Anatomical Image vs. Ultrasound Imaging
 - 3.9.2.6. Block under ultrasound vision
 - 3.9.2.7. Complications
- 3.9.3 Lumbar Square Blockage
 - 3.9.3.1. Introduction
 - 3.9.3.2. Indications and Contraindications
 - 3.9.3.3. Position and Patient Preparation
 - 3.9.3.4. Materials
 - 3.9.3.5. Anatomical Image vs. Ultrasound Imaging
 - 3.9.3.6. Block under ultrasound vision
 - 3.9.3.7. Complications
- 3.10. Incisional analgesia
 - 3.10.1 Infiltration of local anesthetic into surgical wound
 - 3.10.2 Continuous analgesia delivery systems. Incisional catheters
 - 3.10.3 Rate of Infusion
 - 3.10.4 Efficiency and safety



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"

tech 26 | Methodology

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.

66

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 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.
- 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.



tech 28 | Methodology

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.



Methodology | 29 tech

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.



tech 30 | Methodology

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.

20%

15%

3%

15%

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.

Methodology | 31 tech



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.

20%

7%

3%

17%



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 Blocks in Locoregional Anesthesia guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



66

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

tech 34 | Certificate

This **Postgraduate Certificate in Blocks in Locoregional Anesthesia** 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 Blocks in Locoregional Anesthesia Official N° of Hours: 450 h.



*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.

technological university Postgraduate Diploma Blocks in Locoregional Anesthesia » Modality: online » Duration: 6 months » Dedication: 16h/week » Schedule: at your own pace » Exams: online

Postgraduate Diploma Blocks in Locoregional Anesthesia

