

# Postgraduate Certificate Physician Assistance /Consultation and Surgery





## Postgraduate Certificate Physician Assistance/ Consultation and Surgery

Course Modality: Online

Duration: 2 months.

Certificate: TECH Technological University

6 ECTS Credits

Teaching Hours: 150 hours.

Website: [www.techtitute.com/medicine/postgraduate-certificate/physician-assistance-consultation-surgery](http://www.techtitute.com/medicine/postgraduate-certificate/physician-assistance-consultation-surgery)

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# 01

# Introduction

This course is the best teaching tool for the training of professionals in the field of hair transplantation. Throughout the process we will establish the guidelines to be followed in the first medical or diagnostic consultation and in the following consultations, mainly in the one prior to surgery. A unique training opportunity with the world's largest online university.



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*The guidelines for the development of medical consultation in the different phases of treatment in the hair disorder treatment setting”*



Throughout the course, we will provide the required guidelines to establish the necessary medical knowledge base, from the first visit of the patient to perform a trichological study, to visagism concepts applied to hair aesthetics, and to solve the most common problems that may arise in a hair micrografting intervention. Establish guidelines to be followed in the first medical consultation or diagnostic consultation and in the following consultations, mainly in the consultation prior to surgery, with emphasis on medical documentation and consents. We will also make a study of the different devices available for hair transplantation.

Review the team collaborating with the surgeon, the nursing team and the hair technicians, describing their roles throughout the hair process.

Likewise, we will explain the post-surgical treatments for optimal results and the different complications after surgery and their solutions.

Review the different local anesthetics, their pharmacokinetic characteristics and maximum dose, and the different loco-regional blocks at facial and peripheral level will also be discussed.

Address how to solve emergencies that may arise in daily practice in Capillary Medicine consultation, as well as during surgery, and how to act in each case and the different corrective treatments.

This **Postgraduate Certificate in Physician Assistance/Consultation and Surgery** contains the most complete and up-to-date scientific program on the market today, with the following notable features:

- ♦ Practical cases presented by experts in hair surgery.
- ♦ The latest developments in Hair Surgery, with special and dedicated attention to the innovative methodologies.
- ♦ Practical exercises where the self-evaluation process can be carried out to improve learning.
- ♦ Graphic contents, diagrams, and practical cases that gather scientific and practical information on the disciplines that are essential for professional hair surgery practice.
- ♦ Theoretical lessons, questions to experts and/or tutors, discussion forums on controversial issues and individual reflection work throughout the Postgraduate Certificate..
- ♦ Content that is accessible from any fixed or portable device with an Internet connection.



*This course in Physician Assistance/ Consulting and Surgery will help you stay current in providing comprehensive, quality patient care"*

“

*A Postgraduate Certificate created with the demand for excellence of all TECH specializations, to boost your professional growth backed up by the most advanced training system on the online market"*

The teaching staff includes professionals from the field of medicine, with extensive experience in hair transplantation, who bring their experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training programmed to train 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 professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Hair Transplantation.

*A multimedia program that will allow you to study in a simpler and more interactive way.*

*With learning strategies focused on practice, this training will enable you to learn in a direct and tangible manner.*



# 02 Objectives

The objective of this training is to ensure that our students learn in a stimulating and attractive way, so that interest in studying does not wane during working time. In this way, we give real encouragement to achieving the learning objectives and with them, your professional growth.





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*Learn, in just a few weeks, how to develop the different medical consultations, the basis of any hair surgery or approach"*



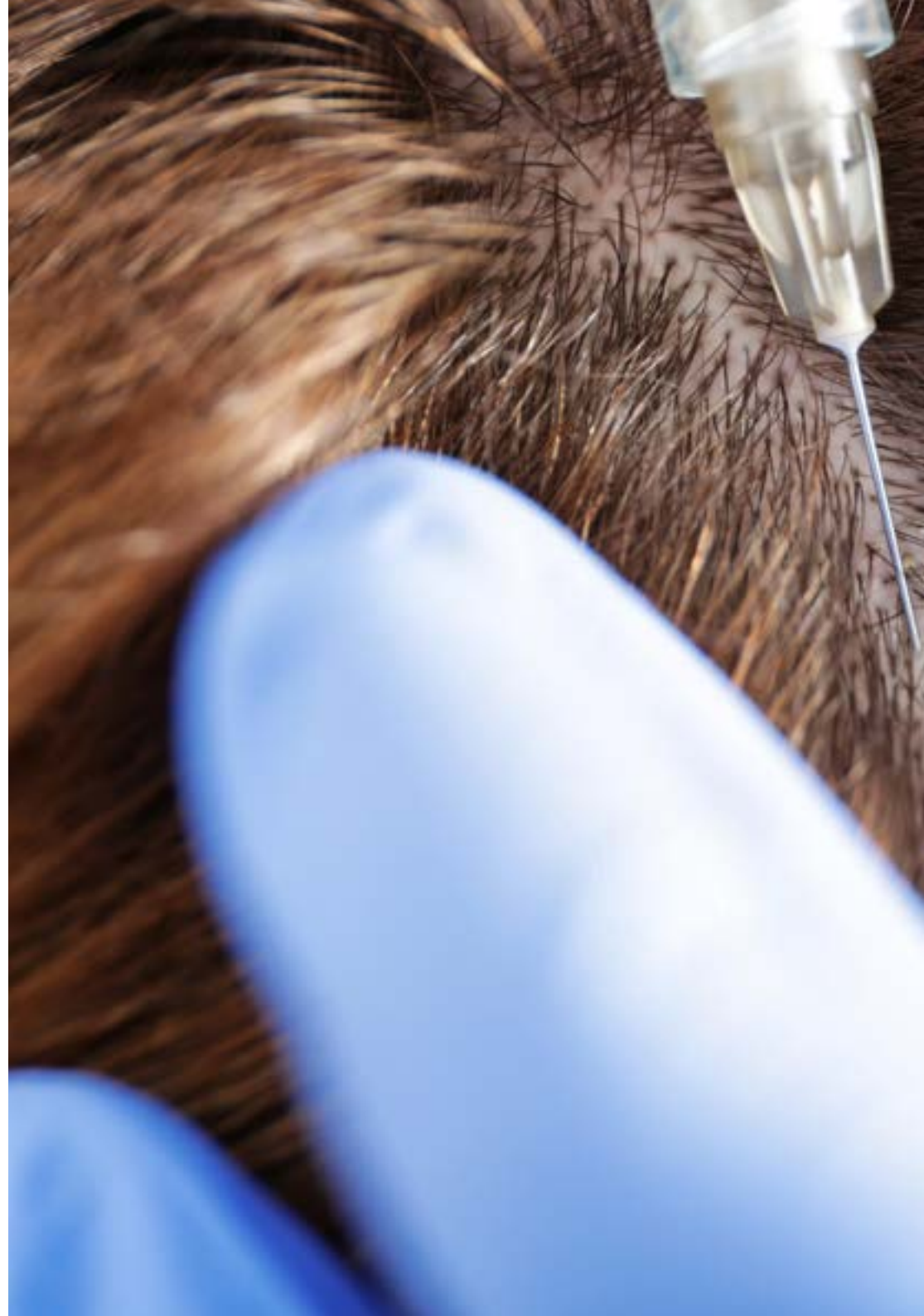
## General Objectives

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- Acquisition of knowledge, skills and abilities, both theoretical and practical, to be able to start working as a hair surgeon.
- Acquire diagnostic and treatment skills in cases of patients with alopecia and other hair and scalp problems, as well as to learn clinical-surgical skills, an essential foundation for the acquisition of deeper knowledge in this field.
- Learn the required clinical-surgical skills to solve patients' problems in Hair Transplantation and Hair Medicine



*Realistic objectives, which will measure your progress and your advancement as a professional, in a constant and effective way"*





## Specific Objectives

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- ◆ Acquire a solid base to solve our patients' problems. It is the most common form of androgenetic alopecia in men and women.
- ◆ Study the changes in the hair cycle in androgenic alopecia, the genetic and hormonal factors involved in it, the role of androgens in this pathology, testosterone, dihydrotestosterone and 5-alpha-reductase as responsible for this type of alopecia.
- ◆ Study the clinical characteristics.
- ◆ Classification of androgenetic alopecia (Norwood-Hamilton).
- ◆ Study the diagnosis of AGA: clinical study with a miniaturized hair pattern, laboratory tests and genetic study.
- ◆ Perform a differential diagnosis, with greater importance in women, generally supported by the following characteristics: focal pattern baldness with miniaturized hairs, gradual onset with progression, thinning, onset after puberty, and negative traction test.
- ◆ Know cosmetic, dietary, topical, local, and systemic treatments.
- ◆ Review specific treatment techniques: hair mesotherapy and biological therapies with platelet-rich plasma and stem cells.



04

# Course Management

This Postgraduate Certificate is the opportunity to learn from the best, with a teaching staff of professionals in the sector who will invest their theoretical and practical knowledge to take you to the highest level of training. With the latest and most effective teaching methods on the online teaching market.



A close-up photograph showing a hair transplant procedure. A gloved hand is using a small white tray to hold a blue cylindrical object, likely a hair follicle, over a patch of skin with thinning hair.

“

*The most up-to-date developments in the field of hair transplantation, from leading experts in this type of procedure"*



## Management



### Dr. Pérez Castaño, Cristina Gema

- ◆ Degree in Medicine and Surgery from the Complutense University of Madrid in 2004. Specialist via MIR in Intensive Care Medicine at the Doce de Octubre Hospital in Madrid. Doctoral courses in the field of surgery and infectious diseases with outstanding results. PhD in organ transplantation with asystole donors through a Mutua Madrileña Scholarship, specialized training in medical pathology, infectious diseases, organ transplantation and emergency units worldwide. Homologation of the master's degree in out-of-hospital emergency medicine, accredited by the Laín Entralgo Agency of the Community of Madrid, Spain.
- ◆ Specialist in hair transplantation in clinics such as MC360, MAN MEDICAL INSTITUTE and head of the hair transplant unit at the EIVIESTETIC clinic in Ibiza, collaborating in various hair transplant units in the diagnostic and surgical area and various medical-esthetic treatments.
- ◆ Along with the rest of the MAN MEDICAL INSTITUTE hair surgery medical team in 2019, she received the "Medical Team of the Year 2019" award for the hair surgery branch from the newspaper La Razón "Salud"

## Professors

### Dr. Da Silva Coelho, Catarina Sofia

- ◆ Degree in Medicine and Medical Surgery from the Autonomous University of Barcelona Faculty of Medicine. Postgraduate studies in esthetic and anti-aging medicine at the University of Alcalá (2019).
- ◆ Master's Degree in Esthetic Medicine from the University of Alcalá in 2020.
- ◆ Training in Hair Microsurgery and Trichology at CM2C Medical Center (Portugal), practicing as a Hair Surgeon at the same center from Oct 2017-Aug 2019.
- ◆ Along with the rest of the MAN MEDICAL INSTITUTE hair surgery medical team in 2019, she received the "Medical Team of the Year 2019" award for the hair surgery branch from the newspaper La Razón "Salud"

### Dr. Rivarola, Cristian

- ◆ Bachelor of Medicine and Surgery, specialist in plastic, reconstructive and major burns surgery, as well as minimally invasive surgery.
- ◆ Training Director at IMS (International Medical School), associated with the UAX (Universidad Alfonso X el Sabio). Outstanding specialist in hair micrografting, FUS and FUE techniques.
- ◆ International medical training in Argentina, Paraguay, Spain, and Japan.



# 05

# Structure and Content

The Postgraduate Certificate is structured as a comprehensive tour through each and every one of the concepts required to understand and work in this field. With an approach focused on practical application that will help you grow as a professional from the very first moment of training.





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*A comprehensive syllabus focused on acquiring knowledge and converting it into real skills, created to propel you to excellence”*

## Module 1. Physician Attendance/Consultation and Surgery

- 1.1. Diagnostic Medical Consultation
  - 1.1.1. Exploration Methods
    - 1.1.1.1. Visual
    - 1.1.1.2. Optical Microscope
    - 1.1.1.3. Digital Microcameras
    - 1.1.1.4. Micrometer
    - 1.1.1.5. Wood Light
    - 1.1.1.6. Traction Tweezers
    - 1.1.1.7. Cigarette Paper
  - 1.1.2. Performing a Trichogram
  - 1.1.3. Dermographic Study
  - 1.1.4. Traction Test
  - 1.1.5. Wood Light
  - 1.1.6. Bipsy (If Required)
  - 1.1.7. Specific Blood Test.
  - 1.1.8. Photography
- 1.2. Pre-Surgical Medical Consultation
  - 1.2.1. Medical History of Interest
  - 1.2.2. Photography
  - 1.2.3. Medical Consent
  - 1.2.4. Patient Expectations
  - 1.2.5. Surgical Plan
  - 1.2.6. Pre-Op Instructions
  - 1.2.7. Confirmation of Surgical Suitability
  - 1.2.8. Post-Op Instructions
  - 1.2.9. Surgical Alternatives and Other Treatments
- 1.3. Hair Transplant Devices
  - 1.3.1. Hair Grafting Tools for Extraction
    - 1.3.1.1. Punch or Circular Scalpel:
    - 1.3.1.2. S.A.F.E. System
    - 1.3.1.3. RotoCore
    - 1.3.1.4. NeoGraft® Automated FUE and Implantation System
  - 1.3.2. Hair Grafting Tools for Implantation
    - 1.3.2.1. Implanter
      - 1.3.2.1.1. Advantages
      - 1.3.2.1.2. Disadvantages
    - 1.3.2.2. Making Incisions
      - 1.3.2.2.1. Advantages
      - 1.3.2.2.2. Disadvantages
  - 1.3.3. Instruments for Making Incisions:
    - 1.3.3.1. SHARP POINTS
    - 1.3.3.2. NEEDLES
    - 1.3.3.3. MINI-BLADES
  - 1.3.4. Main Developments
    - 1.3.4.1. Extractor Machine with 0.7 mm Punch
    - 1.3.4.2. Special Blades for Cutting and Trimming Follicular Units with the Strip Technique.
    - 1.3.4.3. High-Resolution Microscope
    - 1.3.4.4. 3-5x Magnifiers
    - 1.3.4.5. 0.8-1.3 Angled Blades
    - 1.3.4.6. 0.8mm and 1mm Implanters
  - 1.3.5. Automated Extraction Systems - Capillary Implantation
    - 1.3.5.1. Automatic: Extraction
    - 1.3.5.2. Semi-Automatic: Extraction and Implantation
- 1.4. Esthetic Eyebrow Procedures
  - 1.4.1. Indications
  - 1.4.2. Diagnosis
  - 1.4.3. Etiology Treatment
  - 1.4.4. Most Common Procedures
    - 1.4.4.1. Recreating the Eyebrow Curve
    - 1.4.4.2. Hair Density Recovery.
    - 1.4.4.3. Correcting Drooping Eyebrows
  - 1.4.5. Post-Operative Care



- 1.4.6. Anesthesia in Capillary Surgery
  - 1.4.6.1. Pre-Operative Study
  - 1.4.6.2. EKG and Chest X-Ray
  - 1.4.6.3. Pre-Medication
  - 1.4.6.4. Oral Sedation Model
    - 1.4.6.4.1. Stomach Protector
    - 1.4.6.4.2. Oral Antiemetic
    - 1.4.6.4.3. Oral Dormicum 7.5mg 1 Hour before Surgery
- 1.5. Intravenous Options
  - 1.5.1. Venous Route
  - 1.5.2. Antiemetics
  - 1.5.3. Administer Dormicum (2mg) and Fentanest (50ug)
  - 1.5.4. Portable Pulse Oximetry without the Need for Cardiac Monitoring
  - 1.5.5. Annexate and Naloxone Availability
- 1.6. Types of Anesthetics
  - 1.6.1. Ester Type: Tetracaine, Chlorprocaine, Benzocaine, and Procaine
  - 1.6.2. Amide Type: Lidocaine, Mepivacaine, Prilocaine, Bupivacaine, Ropivacaine, and Etidocaine.
- 1.7. Factors Influencing its Action
  - 1.7.1. Its Anesthetic Potency is Related to Liposolubility in a Directly Proportional Manner.
  - 1.7.2. Vasodilation Capability.
  - 1.7.3. Plasma Protein Binding.
  - 1.7.4. Addition of a Vasoconstrictor, such as Adrenaline or Phenylephrine, Increases the Effect
  - 1.7.5. Adrenaline Dosage Should Not Exceed 250ng in Adults.
  - 1.7.6. Alkalinization Improves Diffusion and Promotes Latency.
  - 1.7.7. Solution Heating Improves Blocking
  - 1.7.8. Complications
    - 1.7.8.1. Local Anesthesia Allergy.
    - 1.7.8.2. Local Anesthesia Toxicity.
- 1.8. Non-Medical Team
  - 1.8.1. Nurses
    - 1.8.1.1. Functions
      - 1.8.1.1.1. Assisting the Physician in Surgery
      - 1.8.1.1.2. Extracting Follicular Units
      - 1.8.1.1.3. Graft Trimming and Cleaning
      - 1.8.1.1.4. Implanting Micrografts
  - 1.8.2. Capillary Technician
    - 1.8.2.1. Functions
      - 1.8.2.1.1. Assisting the Nurse
      - 1.8.2.1.2. Preparing the Room
      - 1.8.2.1.3. Graft Trimming and Cleaning
      - 1.8.2.1.4. Implanting Micrografts
      - 1.8.2.1.5. Sterilization and Cleaning of the Room and Equipment
- 1.9. Complications/Emergencies in Surgery
- 1.10. Post-Operative Treatment
  - 1.10.1. Post-Operative Medication
  - 1.10.2. Keep the Graft Site Clean and Hydrated
  - 1.10.3. Sleep in a Half-Seated Position (40°/45°)
  - 1.10.4. Avoid Sun Exposure
  - 1.10.5. Minimal Physical Exercise
  - 1.10.6. Apply Cold to the Face

06

# Methodology

This training program provides you with a different way of learning. Our methodology uses a cyclical learning approach: ***Re-learning***.

This teaching system is used 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 Re-learning, 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

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

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



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



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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 grasp concepts, but also develop their mental capacity by evaluating real situations and applying their knowledge.
2. The learning process has a clear focus on practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
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.





## Re-Learning Methodology

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

Our University is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.



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

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

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

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

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

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



In this program you will have access to the best educational material, prepared with you in mind:



#### Study Material

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

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



#### Latest Techniques and Procedures on Video

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



#### Interactive Summaries

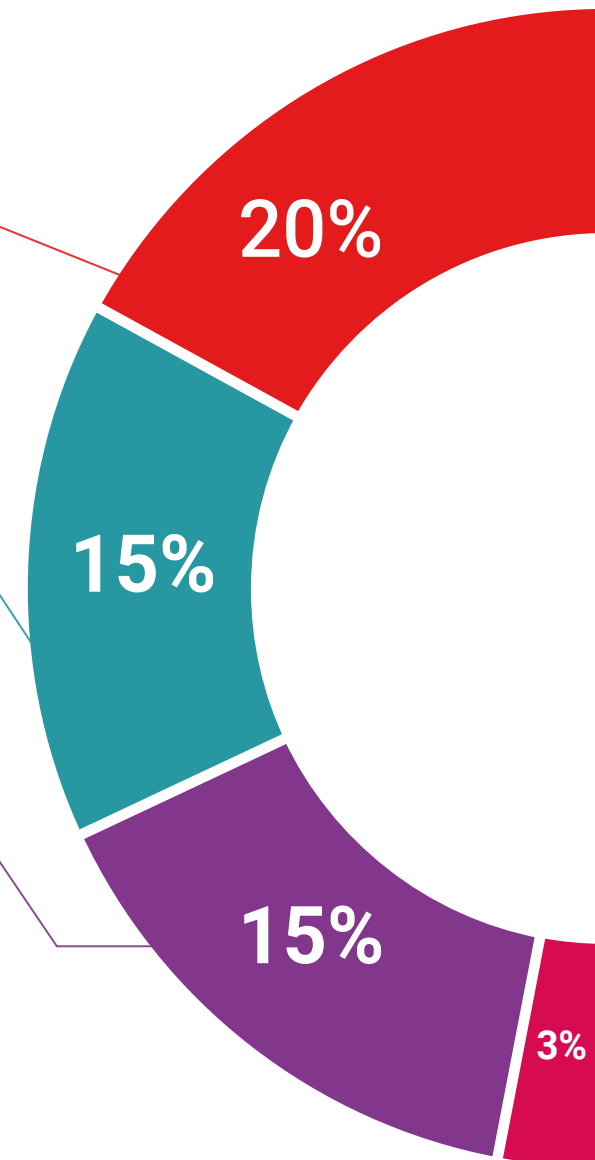
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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



#### Additional Reading

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





#### Expert-Led Case Studies and Case Analysis

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



#### Testing & Re-testing

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



#### Classes

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

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



#### Quick Action Guides

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





# 06

# Certificate

Through a different and stimulating learning experience, you will be able to acquire the necessary skills to take a big step in your training. An opportunity to progress, with the support and monitoring of a modern and specialized university, which will propel you to another professional level.





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*Include in your training a Postgraduate Certificate in Physician Assistance/Consulting and Surgery: a highly qualified added value for any medical professional"*

This **Postgraduate Certificate in Physician Assistance/Consultation and Surgery** contains the most complete and up-to-date program on the market.

After the student has passed the evaluations, they will receive by mail with acknowledgment of receipt their corresponding Postgraduate Certificate Degree issued by **TECH Technological University**.

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

Title: **Postgraduate Certificate in Physician Assistance/Consultation and Surgery**

ECTS: **6**

Official Number of Hours: **150**



\*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.

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



**Postgraduate Certificate**  
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Certificate: TECH Technological University

6 ECTS Credits

Teaching Hours: 150 hours.



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## Physician Assistance/ Consultation and Surgery