

# Postgraduate Certificate Surgery and Microsurgery in Endodontics





## Postgraduate Certificate Surgery and Microsurgery in Endodontics

Course Modality: Online

Duration: 6 weeks

Certificate: TECH Technological University

Teaching Hours: 150 h.

Website: [www.techtute.com/us/dentistry/postgraduate-certificate/surgery-microsurgery-endodontics](http://www.techtute.com/us/dentistry/postgraduate-certificate/surgery-microsurgery-endodontics)

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# 01

# Introduction

The need for this program lies in the importance of a more specific training for professionals due to the enormous volume of theoretical and practical knowledge required for the practice of this dental discipline, especially if we take into account the great demand for training in this area. The training of professionals who are increasingly committed to the society in which they carry out their work requires a deepening of the knowledge and subjects that comprise the educational background of their degrees.



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*Improve your knowledge through this program, where you will find the best didactic material with real clinical cases. Learn here about the latest advances in the speciality to be able to perform quality dental practice"*



This online program aims to respond to the needs not only of its students, but also of society, anticipating the future demands of the environment. Change, the result of globalization and the imperatives of a new knowledge-based economy, requires ambitious modernization programs in the field of online training.

This Postgraduate Certificate aims to cover the comprehensive training of dentists in Surgery and Microsurgery in Endodontics by providing the necessary skills to prepare them as highly qualified professionals in the field of Endodontics.

This training will be carried out in a balanced way, with a focus on endodontics, post-endodontic reconstruction and apical surgery with the intense involvement of anatomy, dental materials, radiology, the use of magnification, new technologies, and an interdisciplinary approach.

It is important to remember that pulpo-periapical pathology is one of the most prevalent and its correct diagnosis and treatment allows the preservation of the dental organ in a very high percentage.

This **Postgraduate Certificate in Surgery and Microsurgery in Endodontics** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- Clinical cases presented by experts in endodontics. The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- Latest information on diagnosis and therapeutic in Surgery and Microsurgery in Endodontics.  
An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- Special emphasis on test-based medicine and research methodologies in Surgery and Microsurgery in Endodontics.
- 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



*Expand your knowledge through the Postgraduate Certificate in Surgery and Microsurgery in Endodontics, in a practical way and adapted to your needs”*

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*This Postgraduate Certificate may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge in Surgery and Microsurgery in Endodontics, you will obtain a Postgraduate Certificate from TECH Technological University"*

Forming part of the teaching staff is a group of professionals in the world of Dentistry, who bring to this course their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

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 program to train 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 during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of radiology with extensive teaching experience.

*The course includes real clinical cases and exercises to bring the development of the course closer to the dentist's clinical practice.*

*Make the most of the opportunity to update your knowledge in Surgery and Microsurgery in Endodontics and improve your patient care.*



# 02 Objectives

The principal objective of the program is the development of both theoretical and practical learning, so that the professional can master, in a practical and rigorous way, the study of Surgery and Microsurgery in Endodontics.







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*This refresher program will generate a sense of confidence when practising dentistry which will help you grow both personally and professionally”*



## General Objectives

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- Update the theoretical and practical knowledge of the dentist in the different areas of Endodontics and Apical Microsurgery, through evidence-based dentistry.
- Promote work strategies based on a multidisciplinary approach to the patient who is a candidate for endodontic treatment or apical surgery.
- Encourage the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific training.
- Train the professional to reach levels of excellence based on the attentive observation of the patient and their circumstances, extraction of the appropriate clinical and exploratory data, elaboration of a diagnostic process and therapeutic plan that will lead them to offer the patient the best possible option in that situation. To this end, it will be essential to immerse yourself in the continuous study of the bibliography, acquiring solid foundations and a habit of periodically reviewing the evolution of your knowledge with a critical attitude and ability to discriminate.



*Make the most of the opportunity and take the step to get up-to-date on the latest developments in the Surgery and Microsurgery in Endodontics”*







## Specific Module Objectives

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- ◆ Describe the biological principles of Endodontics.
- ◆ Perform a correct clinical history in endodontics, taking into account the risk diseases as well as the various radiological techniques available to us to make a correct diagnosis.
- ◆ Know how to differentiate the different treatment options for open apex tooth.
- ◆ Perform the procedure for insulation by means of a rubber dam.
- ◆ Explain the anatomy and location of root canals.
- ◆ Solve possible operative accidents in Endodontics.
- ◆ Define the different types of root resorptions.
- ◆ Describe dental traumatology in emergency situations.
- ◆ Explain the indications for endodontic surgery.
- ◆ Correctly prepare the surgical field in apical surgery as well as master the sterilization.



03

# Course Management

This program includes highly regarded health professionals in the field of Endodontics in its teaching staff, who bring the experience of their work to this training.

In addition, renowned specialists, members of prestigious national and international scientific communities, are involved in designing and preparing the program.





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*Learn about the latest advances in Surgery and Microsurgery in Endodontics from leading professionals”*

## International Guest Director

Dr. Federico Foschi is an outstanding authority in the field of Endodontics and Oral Surgery. His doctorate, in collaboration with the prestigious Forsyth Institute of Boston in the United States, earned him the IADR Pulp Biology award for his contributions in the field of Endodontic Microbiology.

For more than two decades he has developed his practice in the United Kingdom. In that country he completed an exhaustive five-year training in Restorative Dentistry at Guy's Hospital in London. He has also maintained a constant practice based on Endodontic referral, root canal management, primary and secondary treatments and Apical Surgery.

Dr. Foschi has also collaborated as a consultant in different clinics where he continuously demonstrates his extensive knowledge of all aspects of oral health. He has also been associated as a research fellow with the Faculty of Dentistry, Oral and Craniofacial Sciences at King's College London and has served as director of academic programs on behalf of Health Education England. He has also been appointed Professor at the University of Plymouth.

This expert, who graduated from the University of Bologna with honors, has published 50 peer-reviewed articles, two book chapters and a volume of his own. Among other contributions, he has extensively investigated the source of "toothache" and participated in the development of a new method for the detection of bacteria during root canal treatment. A project thanks to which the failure of some treatments and the need for follow-ups could be reduced.

At the same time, Dr. Foschi is a member of the Higher Education Academy of the United Kingdom, as well as of the British Endodontic Society. He has also shared his therapeutic innovations at numerous congresses, making him a reference for dentists all over the world.





## Dr. Foschi, Federico

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- ♦ Consultant and academic collaborator at King's College London
- ♦ Consultant and academic collaborator at the University of Plymouth
- ♦ Director of the Endodontic Training Program at Health Education England
- ♦ PhD in Endodontic Microbiology at the Forsyth Institute, Boston, USA
- ♦ Degree in Dentistry from the University of Bologna
- ♦ Member of:
  - ♦ Higher Education Academy of the United Kingdom
  - ♦ Royal College of Surgeons of England
  - ♦ British Endodontic Society

## Management



### Dr. Fabra Campos, Hipólito

- ◆ Degree in Medicine and Surgery
- ◆ Degree in Stomatology from the School of Stomatology at the Complutense University of Madrid.
- ◆ PhD in Medicine from the Complutense University of Madrid.
- ◆ Honorary Member of the Iltre Official College of Dentists and Stomatologists of La Rioja
- ◆ Rodriguez Carvajal Award for the best case published in the journal of the Spanish Association of Endodontics 1992.
- ◆ Winner of the II Certamen de Actividades Científicas Odonto-Estomatológicas Ciudad de Córdoba 1997.
- ◆ Pedro Ruíz de Temiño Malo Award for the best original article published in the Revista Española de Endodoncia 1998.
- ◆ Award for the best communication in video format XXVI National Congress of AEDE 2005
- ◆ Founding member of the Spanish Society of Endodontics.
- ◆ Active member of the American and European Society of Endodontics, the Academy of Dental Materials and full Specialist member of the Spanish Society of Periodontology
- ◆ Active Member of the Spanish Section of the Pierre Fauchard Academy
- ◆ More than 150 lectures and courses on Endodontics and Dental Surgery given in Spain, Portugal, Argentina, Ecuador and Brazil
- ◆ Co-author of the New Etymological Medical Dictionary of Dentistry 2008.
- ◆ More than 75 scientific articles published in several Spanish journals, as well as in The Journal of Endodontics, The International Endodontic Journal, The Endodontics & Dental Traumatology, The Quintessence International and The Endodontic Practice.



### **Dr. Baroni Cañizares, Luís**

- ◆ Degree in Dentistry from the European University of Madrid
- ◆ Official Master's Degree in Advanced Endodontics
- ◆ Full Member of the Spanish Association of Endodontics (AEDE)
- ◆ Master's Degree teacher in Endodontics at the University of Zaragoza, Spain
- ◆ Exclusive dedication in Endodontics at Dr. Ruiz de Gopegui Clinic.
- ◆ Lecturer in different courses and congresses in the area of Endodontics.



### **Dr. García Rielo, Manuel Miguel**

- ◆ Degree in Dentistry from the University of Santiago de Compostela
- ◆ International Master's Degree in Advanced Endodontics
- ◆ Master's Degree in Implantology, Periodontics and Oral Surgery
- ◆ Diploma of Advanced Studies
- ◆ USC Clinical Tutor Professor in the Dental Pathology and Therapeutics Teaching Unit
- ◆ Collaborating professor of the International Master's Degree in Advanced Endodontics at the USC School of Dentistry
- ◆ Author of several articles in national and international journals
- ◆ Lecturer and author of two books in preparation courses for competitive examinations.
- ◆ National research awards granted by the Spanish Society of Conservative Dentistry (SEOC)
- ◆ Member of different scientific societies: SEPES, SEPA, SEOC, SEGER and SEMO



04

# Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of specialization in daily medical practice and who are aware of the current relevance of training to be able to act correctly in cases of Surgery in Endodontics and are committed to quality teaching through new educational technologies.





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*This Postgraduate Certificate in Surgery and Microsurgery in Endodontics contains the most complete and up-to-date scientific program on the market”*



## Module 1. Surgery and Microsurgery in Endodontics

- 1.1. Surgical or Non-Surgical Retreatment Decision Making
  - 1.1.1. Endodontic Surgery
  - 1.1.2. Non-Surgical Retreatment
  - 1.1.3. Surgical Technique
- 1.2. Basic Instruments
  - 1.2.1. Scanning Tray
  - 1.2.2. Anesthesia Tray
  - 1.2.3. Rotary Instruments
  - 1.2.4. Types of Endodontic Files
- 1.3. Simple Incisions for Access to the Operative Site
  - 1.3.1. Incision Through the Gingival Sulcus
  - 1.3.2. Gingival Flap
  - 1.3.3. Triangular Flap
  - 1.3.4. Trapezoidal Flap
  - 1.3.5. Modified Semilunar Incision
  - 1.3.6. Semilunar Incision
- 1.4. Managing the Flap and Controlling Bleeding
  - 1.4.1. Design of the Flap
  - 1.4.2. Surgical Complication
  - 1.4.3. General Considerations
  - 1.4.4. Presurgical Considerations for Controlling Bleeding
  - 1.4.5. Surgical Considerations for Controlling Bleeding
  - 1.4.6. Local Anesthesia
  - 1.4.7. Design and Elevation of the Flap
- 1.5. Techniques and Materials Used for Retropreparation and Retro-Obturation
  - 1.5.1. Mineral Trioxide Aggregate (MTA)
  - 1.5.2. Endodontic Application of MTA
  - 1.5.3. Paraendodontic Surgery
  - 1.5.4. Properties of MTA
  - 1.5.5. Biodentine







- 1.6. Ultrasonic Tips and Optical Microscope as Essential Equipment
  - 1.6.1. Types of Tips
  - 1.6.2. Optical Microscope
  - 1.6.3. Surgical Microscope (S.M.)
  - 1.6.4. Appropriate Use of Instruments
  - 1.6.5. Ultrasonic Devices and Designed Tips
- 1.7. The Maxillary Sinus and Other Anatomical Structures With Which We Can Interact
  - 1.7.1. Neighboring Anatomical Structures
  - 1.7.2. Maxillary Sinus
  - 1.7.3. Inferior Alveolar Nerve
  - 1.7.4. Mental Foramen
- 1.8. Medication and Recommendations for Optimal Postoperative Care

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

05

# Methodology

This training 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.





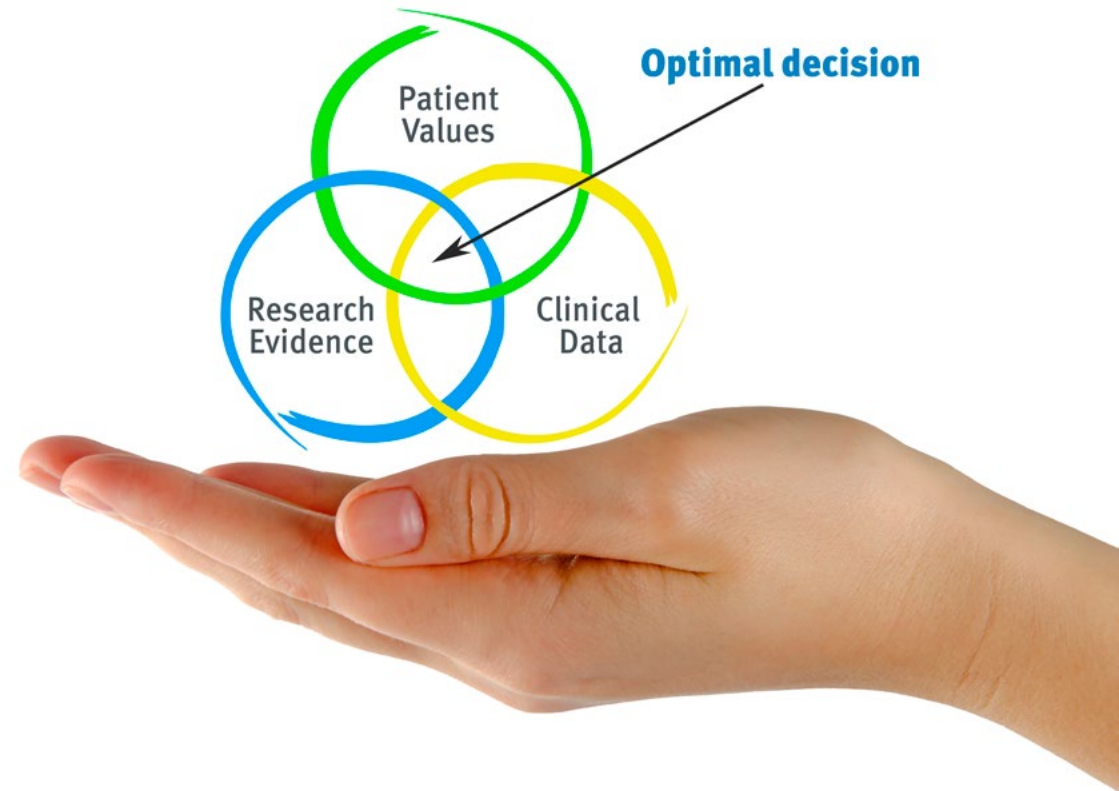
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*Discover Re-learning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

In a given clinical 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. Dentists 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. Gervas, 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 the dentist's professional practice.



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

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

1. Students who follow this method not only grasp concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply 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 student 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 115,000 students 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.

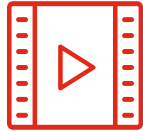
*Re-learning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

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 specifically for the course by the specialists who teach 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.



### Surgical Techniques and Procedures on Video

We introduce you to the latest techniques, to the latest educational advances, to the forefront of current dental 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

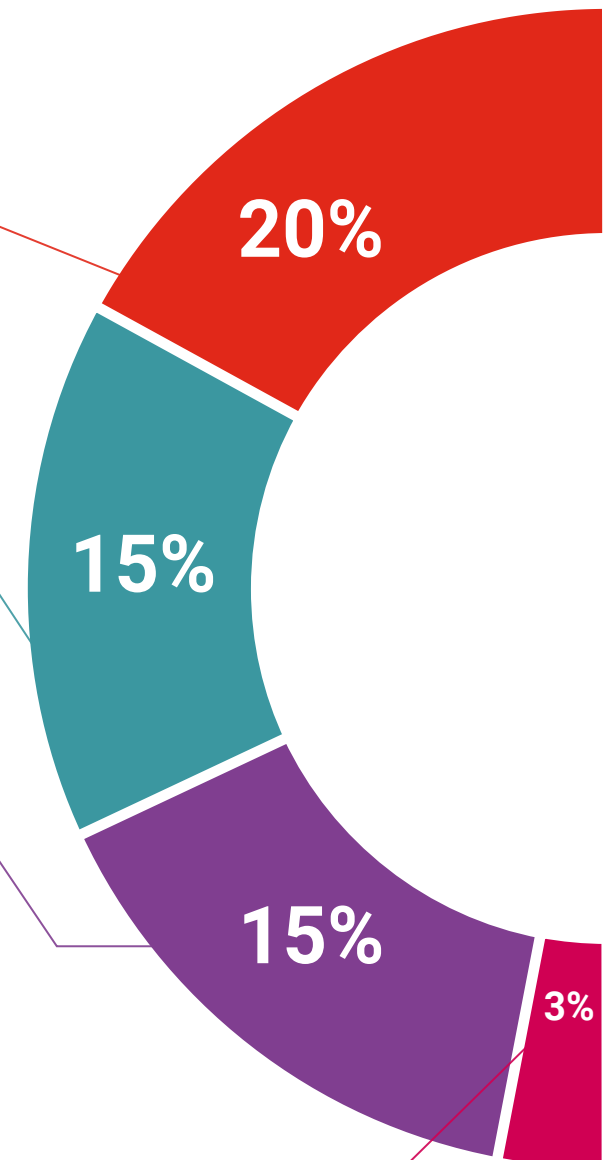
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

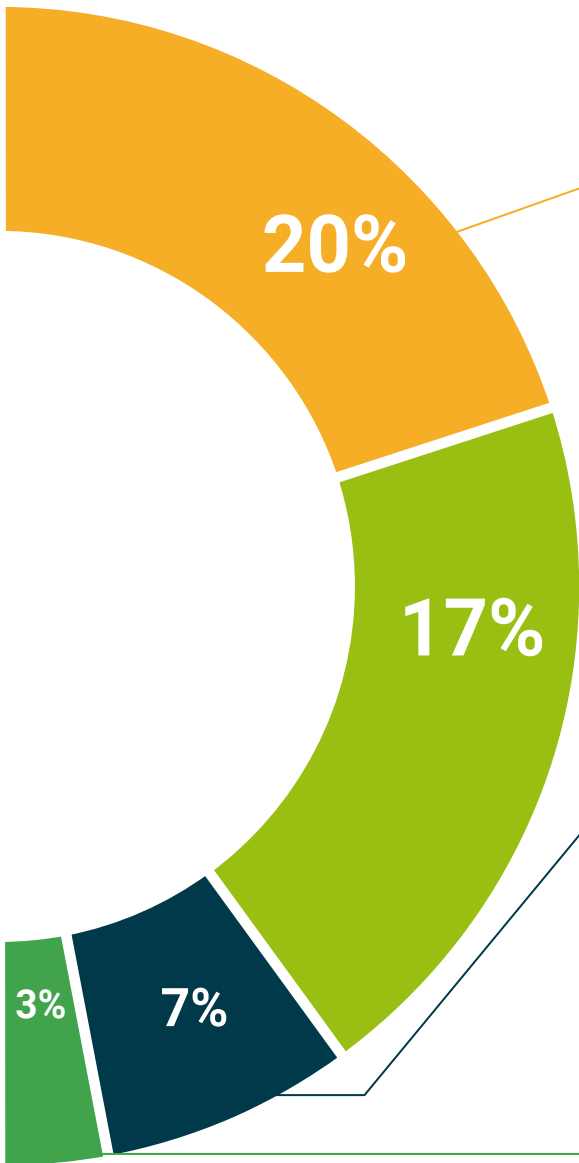


### Additional Reading

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

The Postgraduate Certificate in Surgery and Microsurgery in Endodontics guarantees you, in addition to the most rigorous and updated training, access to a certificate issued by TECH Technological University.





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*Receive your university degree  
without having to travel"*



This **Postgraduate Certificate in Surgery and Microsurgery in Endodontics** contains the most complete and up-to-date scientific program on the market.

After students have passed the assessments, they will receive by certified mail their **Postgraduate Certificate** issued by **TECH Technological University**.

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

Title: **Professor Certificate in Surgery and Microsurgery in Endodontics**

Official Number of Hours: **150 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.



future  
health 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**  
Surgery and Microsurgery  
in Endodontics

Course Modality: Online  
Duration: 6 weeks  
Certificate: TECH Technological University  
Teaching Hours: 150 h.

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