



Postgraduate Diploma

Endodontics and Periodontics

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/pk/dentistry/postgraduate-diploma/postgraduate-diploma-endodontics-periodontics

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tech 06 | Introduction

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 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.

The knowledge acquired will allow the student to face working life from a more qualified position, giving them a clear advantage when it comes to finding a job, since they will be able to offer the application of the latest technological and scientific advances in the field of Endodontics.

The fundamental justification of the program is, therefore, to train a professional with adequate knowledge, skills, attitudes, values and competencies, who is able to serve society by satisfying its health demands, both in terms of prevention, diagnosis and treatment, in an ethical, efficient and safe manner. This professional must appreciate the need for lifelong professional development and continuing education, be able to efficiently utilize advances in knowledge and technology, and understand the central role of the patient in therapeutic decision making.

This **Postgraduate Diploma in Endodontics and Periodontics** 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 the different dental specialties. 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 Endodontics and Periodontics.
- Algorithm-based interactive learning system for decision-making in the presented clinical situations.
- With special emphasis on evidence-based medicine and research methodologies in Endodontics and Periodontics.
- Content that is accessible from any fixed or portable device with an Internet connection.



Expand your knowledge through the Postgraduate Diploma in Endodontics and Periodontics, in a practical way and adapted to your needs"



This Postgraduate Diploma may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge in Endodontics and Periodontics, you will obtain a Postgraduate Diploma 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.

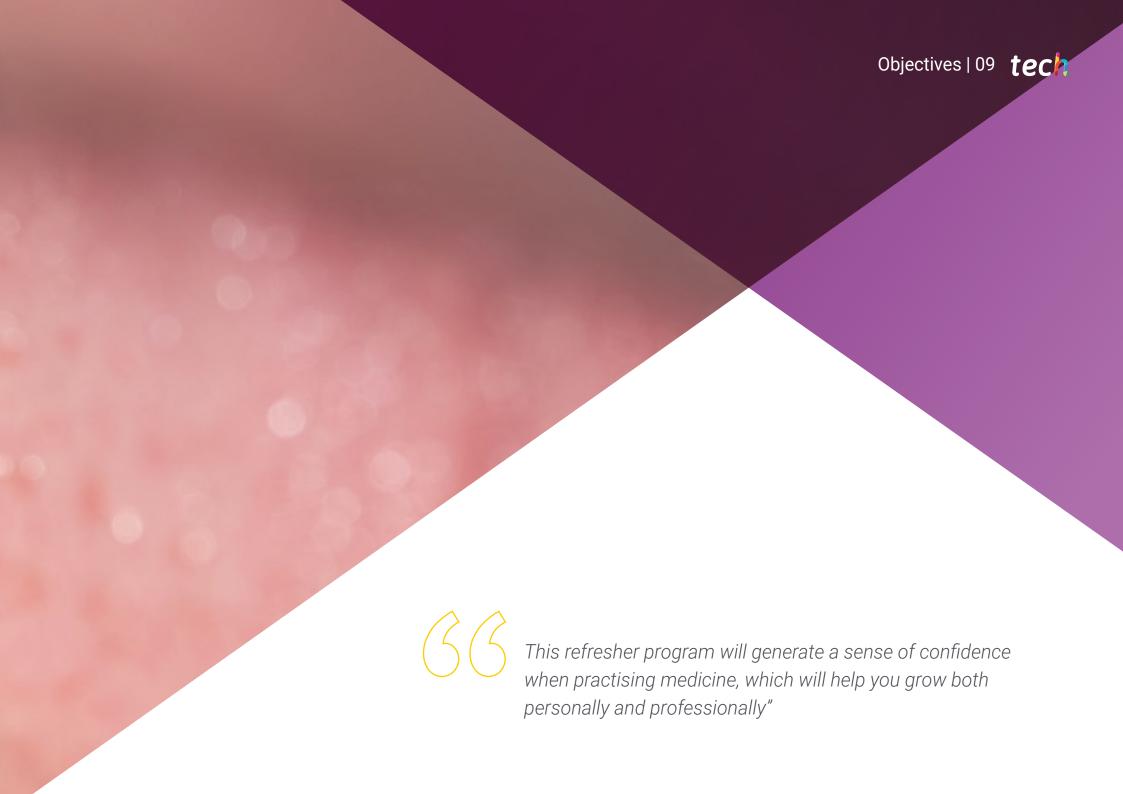
This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in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

Increase your decision-making confidence by updating your knowledge with this Postgraduate Diploma in Endodontics and Periodontics.

Don't miss out on the opportunity to update your knowledge in Endodontics and Periodontics in order to improve your care of your patients.





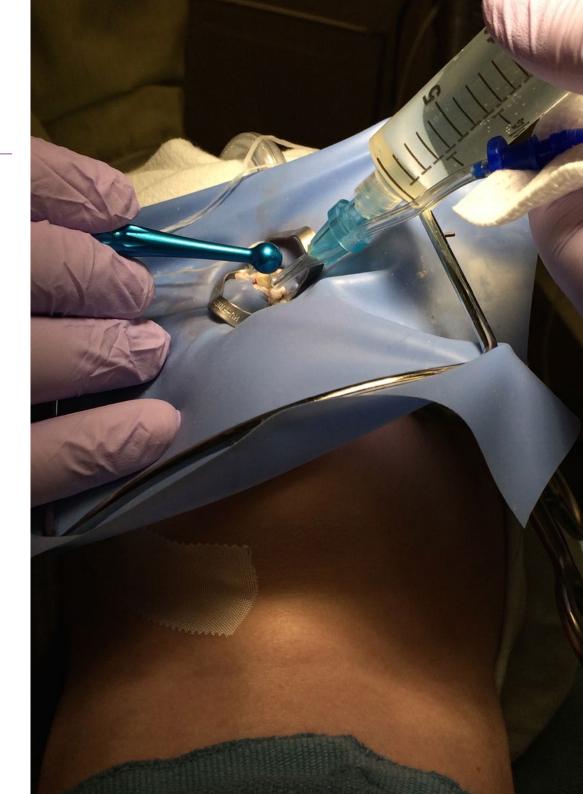


tech 10 | Objectives



General Objectives

- 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 audio-visual 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 oneself in the continuous study of the bibliography, acquiring stable bases and
 a habit of periodically reviewing the evolution of knowledge with a critical attitude and
 discriminating capacity.



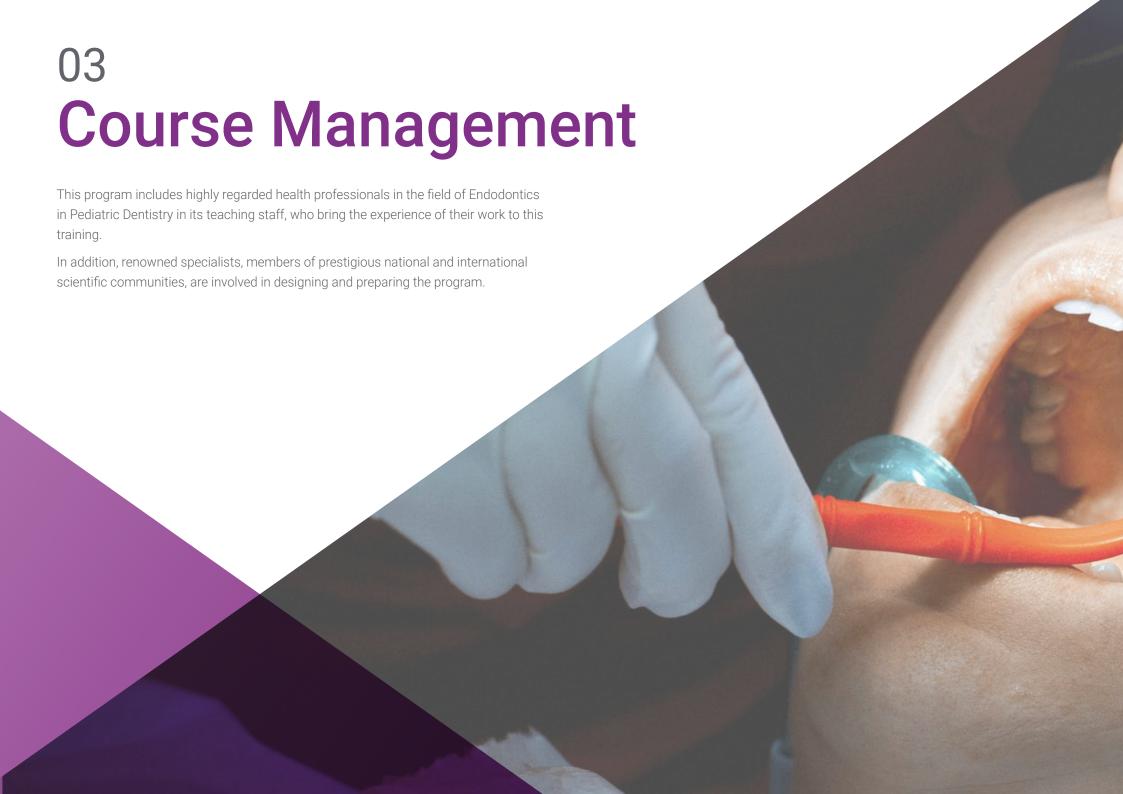


Specific Objectives

- 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 teeth.
- 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 resorption.
- 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 protocols.



Make the most of the opportunity and take the step to get up-todate on the latest developments in Endodontics and Periodontics"





tech 14 | Course Management

Management



Dr. Fabra Campos, Hipólito

- Graduate in medicine and surgery.
- Degree in Stomatology from the School of Stomatology of the Complutense University of Madrid.
- Doctor of Medicine from the Complutense University of Madrid.
- Collegiate of Honor of the Iltre. Official College of Odontologists and Stomatologists of La Rioja.
- Rodríguez Carvajal Award for the best case published in the magazine of the Spanish Endodontic Association 1992.
- Winner of the II Contest of Odonto-Stomatological Scientific Activities Ciudad de Córdoba 1997.
- Pedro Ruíz de Temiño Malo Award for the best original article published in the Spanish Journal of Endodontics 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 European and American Society of Endodontics, of the Academy of Dental Materials and Full Member Specialist of the Spanish Society of Periodontology.
- Active member of the Spanish section of the Pierre Fauchard Academy.
- Dictated more than 150 conferences and courses on Endodontics and Dental Surgery in Spain, Portugal, Argentina, Ecuador and Brazil.
- Co-author of the New Medical Etymological Dictionary of Dentistry 2008.
- More than 75 scientific articles published in various 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

Management



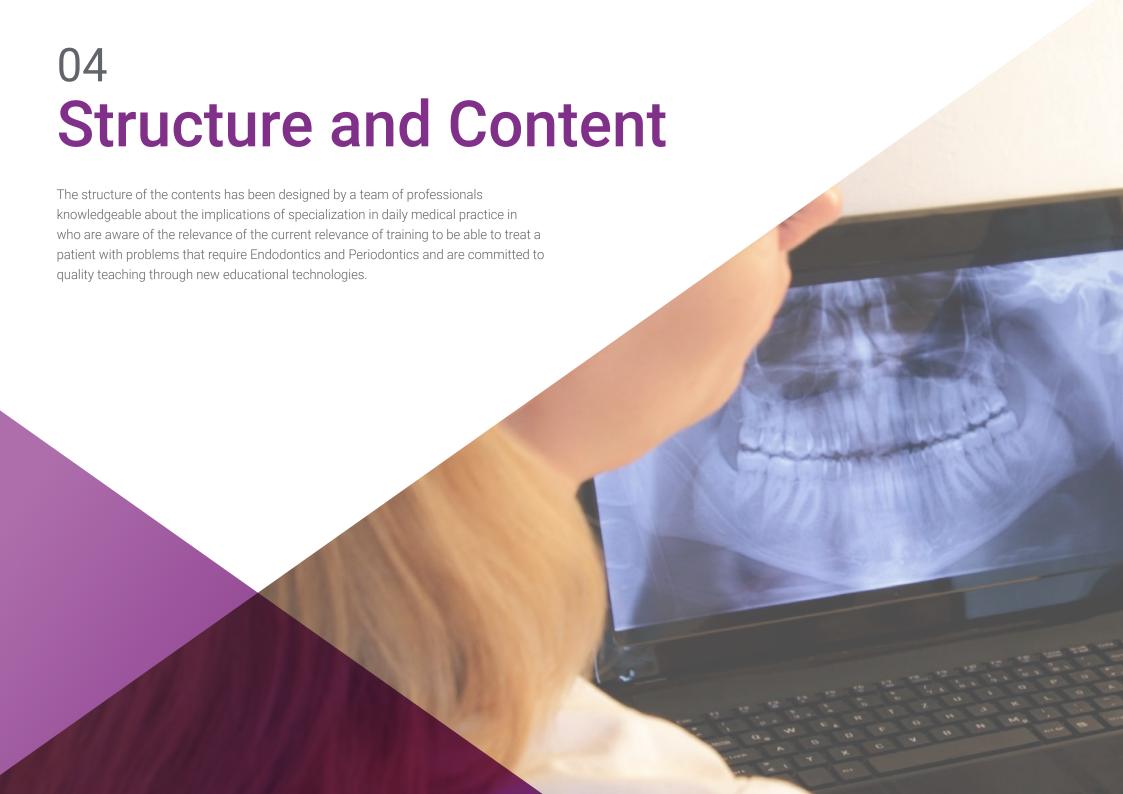
Dr. Cañizares, Luís

- Master Professor in Endodontics at the University of Zaragoza.
- Degree in Dentistry European University of Madrid.
- Official Master of Advanced Endodontics.
- Titular Member of the Spanish Association of Endodontics (AEDE).
- Master Professor in Endodontics at the University of Zaragoza.
- Exclusive dedication in Endodontics at the Dr. Ruiz de Gopegui Clinic.
- Speaker in different courses and congresses in the area of Endodontics.



Dr. García Rielo, Manuel Miguel

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





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Module 1. The Modern Concept of Endodontics

- 1.1. Reviewing the Concept of Dentinal Canal, Cementary Canal and Pulp Stump, Pulp Cap, or Differentiated Apical Periodontium.
 - 1.1.1. Dentinal Canal.
 - 1.1.2. Cementary Canal.
 - 1.1.3. Pulp Stump, Pulp Cap, or Differentiated Apical Periodontium.
- 1.2. Reviewing the Concept of Root Cementum, Apical Foramen, Periodontal Membrane, and Alveolar Bone.
 - 1.2.1. Cementodentinal Junction.
 - 1.2.2. Root Apex.
 - 1.2.3. Root Cementum.
 - 1.2.4. Apical Foramen.
 - 1.2.5. Periodontal Membrane.

Module 2. The Use of Calcium Hydroxide and its Ions in Current Dentistry

- 2.1. Is Calcium Hydroxide an Obsolete Product?
 - 2.1.1. Calcium Hydroxide in Solution, Suspension, and Paste.
 - 2.1.2. Calcium Hydroxide Combined with Other Substances.
 - 2.1.3. Calcium Hydroxide as Cement.
- 2.2. Methods of Pulp Prevention in Young Molars and Other Teeth.
 - 2.2.1. Indirect Pulp Protection.
 - 2.2.2. Direct Pulp Protection.
 - 2.2.3. Pulp Curettage, Pulpotomy or Partial Pulpectomy.
- 2.3. Biomaterials as a Current Evolution to Calcium Hydroxide.
 - 2.3.1. Biomaterials as Calcium Ion Generators.
 - 2.3.2. Use and Handling of Biomaterials.
- 2.4. Uses of Calcium Hydroxide to Treat Pathologies and Other Intra-duct Medications.
 - 2.4.1. Calcium Hydroxide used as an Antibacterial.
 - 2.4.2. Calcium Hydroxide used as a Repair Inducer.
 - 2.4.3. Calcium Hydroxide used as a Sealer.
 - 2.4.4. Intra-duct Medication and its Role.



Structure and Content | 21 tech

- 2.5. Uses of Biomaterials to Solve the Same Pathologies.
 - 2.5.1. Biomaterials Used as Pulp Protectors.
 - 2.5.2. Biomaterials Used as Repair Cements.
 - 2.5.3. Los biomateriales usados como materiales de sellado.

Module 3. Pulpo-Periodontal Pathology and the Endoperiodontal Relations.

- 3.1. Differential Diagnosis between Endodontic and Periodontal Lesions.
 - 3.1.1. General Considerations.
 - 3.1.2. The Pulpo-Periodontal Communication Pathways.
 - 3.1.3. Symptomatology and Diagnosis of Endoperiodontal Syndrome.
 - 3.1.4. Classification of Endoperiodontal Lesions.
- 3.2. Endoperiodontal Lesions due to Root Abnormalities. Part I.
 - 3.2.1. General Considerations.
 - 3.2.2. Combined Endoperiodontal Lesions: Diagnosis
 - 3.2.3. Combined Endoperiodontal Lesions: Treatment.
- 3.3. Endoperiodontal Lesions due to Root Abnormalities. Part II.
 - 3.3.1. Pure Periodontal Lesions: Diagnosis
 - 3.3.2. Pure Periodontal Lesions: Treatment.
 - 3.3.3. Conclusions.
 - 3.3.4. Other Treatment Options.
- 3.4. Cracked Tooth Syndrome and Root Bursting. Part I.
 - 3.4.1. Crown Fracture without Pulp Involvement.
 - 3.4.2. Crown Fracture with Pulp Involvement.
 - 3.4.3. Crown Fracture with Pulp and Periodontal Involvement.
 - 3.4.4. Root Burst in an Endodontically Treated Tooth.
- 3.5. Cracked Tooth Syndrome and Root Bursting. Part II.
 - 3.5.1. Fractura radicular por exceso de presión o fragilidad radicular.
 - 3.5.2. Root Fracture due to Excess Pressure or Root Fragility.
 - 3.5.3. Fracture due to Excessive Occlusal Contact or Overloading.

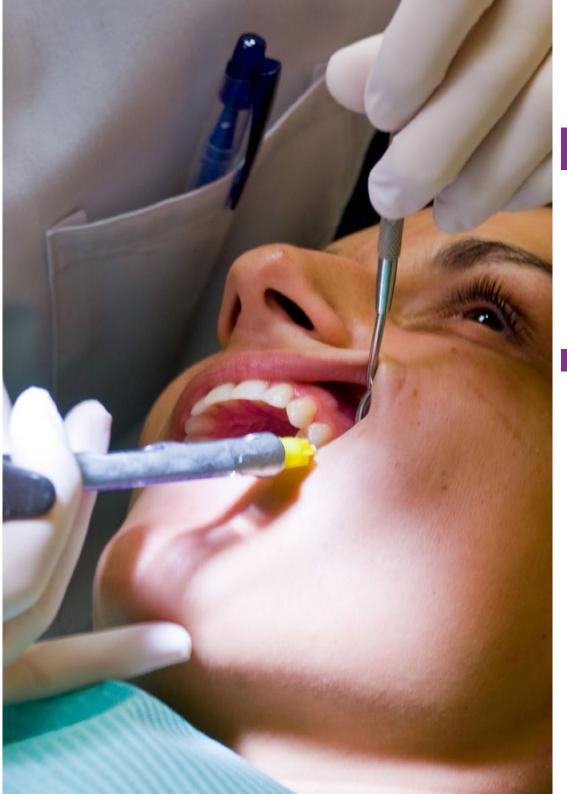
- 3.6. Endoperiodontal Damage due to Accidents and Trauma.
 - 3.6.1 Crown-Root Fractures
 - 3.6.2. Vertical and Horizontal Root Fractures.
 - 3.6.3. Contusion, Dental Luxation and Fracture of the Alveolar Process.
 - 3.6.4. Treatment of Alveolar-Dental Lesions.
- 3.7. Endoperiodontal Lesions due to Resorption. Part I.
 - 3.7.1. Resorption due to Pressure.
 - 3.7.2. Resorption due to Pulp Inflammation or Internal Resorption.
 - 3.7.3. Non-Perforated Internal Resorption.
 - 3.7.4. Perforated Internal Resorption.
 - 3.7.5. Resorption due to Periodontal Inflammation.
 - 3.7.6. Inflammatory.
 - 3.7.7. Replacement, by Substitution or Ankylosis.
 - 3.7.8. Cervical Invasive.
- 3.8. Endoperiodontal Lesions due to Resorption. Part II.
 - 3.8.1. Invasive Cervical Resorption in Endodontically Treated Teeth.
 - 3.8.2. Invasive Cervical Resorption without Pulp Involvement.
 - 3.8.3. Etiology and Prognosis of Cervical Resorption.
 - 3.8.4. Materials Used for the Treatment of Cervical Resorption.
- 3.9. Periodontal Problems Related to Endodontic Surgery in Radicectomies, Hemisections, and Bicuspidations.
 - 3.9.1. Radisectomy or Root Amputation.
 - 3.9.2. Hemisection.
 - 3.9.3. Bicuspidization

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Module 4. Endodontic Problems and Complications in Endodontics

- 4.1. Uncommon Root Anatomy in Different Teeth of the Dental Arch.
 - 4.1.1. Variations in the Root Anatomy of the Maxillary Incisors and Canines.
 - 4.1.2. Variations in the Root Anatomy of the Maxillary Premolars.
 - 4.1.3. Variations in the Root Anatomy of the Mandibular Incisors and Canines.
 - 4.1.4. Variations in the Root Anatomy of the Mandibular Premolars.
- 4.2. Etiopathogenesis of Large Periapical Lesions and their Treatment in a Single Session.
 - 4.2.1. Pathologic Diagnosis of Granuloma.
 - 4.2.2. Anatomopathological Diagnosis of Cysts. Odontogenic Cysts.
 - 4.2.3. Bacteriological Considerations for Performing Endodontic Treatment of Large Periapical Lesions in a Single Session.
 - 4.2.4. Clinical Considerations for Performing Endodontic Treatment of Large Periapical Lesions in a Single Session.
 - 4.2.5. Clinical considerations on the Management of Fistulous Processes Associated with a Large Periapical Lesion.
- 4.3. Treatment of Large Periapical Lesions in Multiple Sessions.
 - 4.3.1. Differential Diagnosis, Chamber Opening, Permeabilization, Cleaning, Disinfection, Apical Permeabilization, and Canal Drying.
 - 4.3.2. Intra-duct Medication.
 - 4.3.3. Temporary Crown Obutration (To close or not to close, that is the question).
 - 4.3.4. Catheterization of the Fistulous Tract or Perforation of the Granuloma and Blind Scraping of the Apical Lesion of the Tooth.
 - 4.3.5. Guidelines for a Regulated Approach to a Large Periapical Lesion.
- 4.4. Evolution in the Treatment of Large Periapical Lesions in Several Sessions.
 - 4.4.1. Positive Evolution and Treatment Control.
 - 4.4.2. Uncertain Evolution and Treatment Control.
 - 4.4.3. Negative Evolution and Treatment Control.
 - 4.4.4. Considerations on the Cause of Failure in the Conservative Treatment of Large Periapical Lesions.
 - 4.4.5. Clinical Considerations on Fistulous Processes in Relation to the Tooth of Origin.

- 4.5. Location, Origin, and Management of Fistulous Processes.
 - 4.5.1. Fistulous Tracts Originating from the Anterosuperior Group.
 - 4.5.2. Fistulous Tracts Originating from the Maxillary Molars and Premolars.
 - 4.5.3. Fistulous Tracts Originating from the Anteroinferior Group.
 - 4.5.4. Fistulous Tracts Originating from the Mandibular Molars and Premolars.
 - 4.5.5. Cutaneous Fistulas of Dental Origin.
- 4.6. The Problems of Maxillary First and Second Molars in Endodontic Treatment. The 4th Canal.
 - 4.6.1. Anatomical Considerations of the Maxillary First Molars of Children or Adolescents.
 - 4.6.2. Anatomical Considerations of Adult Maxillary First Molars.
 - 4.6.3. The Mesio-Buccal Root in the Maxillary First Molars. The 4th Canal or Mesio-Vesticulo-Palatine Canal and the 5th Canal.
 - 4.6.3.1. Ways to Detect the 4th Canal: See it Bleeding.
 - 4.6.3.2. Ways to Detect the 4th Canal: See its Entrance.
 - 4.6.3.3. Ways to Detect the 4th Canal: With a Manual File.
 - $4.6.3.4. \ \mbox{Ways}$ to Detect the 4th Canal: Using an Optical Microscope with Magnified Vision.
 - 4.6.3.5. Ways to Detect the 4th Canal: With a Mechanical File.
 - 4.6.4. The Disto-Buccal Root in the Maxillary First Molars.
 - 4.6.5. The Palatal Root in the Maxillary First Molars.
- 4.7. The Problems of Mandibular First and Second Molars in Endodontic Treatment. 3 Ducts in the Mesial Root or the Intermediate Canal.
 - 4.7.1. Anatomical Considerations of the Mandibular First Molars of Children or Adolescents.
 - 4.7.2. Anatomical Considerations of Adult Mandibular First Molars.
 - 4.7.2.1. The Mesial Root in the Mandibular First Molars.
 - 4.7.2.2. The Distal Root in the Mandibular First Molars.
 - 4.7.3. Mandibular Molars with 5 Ducts.
 - 4.7.4. Anatomical Considerations of Adult Mandibular Second Molars.
 - 4.7.4.1. C-Shaped Canal.
 - 4.7.4.2. Molars with a Single Canal.
 - 4.7.5. Anatomical Considerations of the Mandibular Wisdom Teeth.



Structure and Content | 23 tech

Module 5. Making Decisions between Root Canal Treatment, Retreatment, Apical Surgery, or Implant

- 5.1. Treat the Tooth or Extract It?
 - 5.1.1. Reasons to Extract a Tooth.
 - 5.1.2. Factors to Consider for Maintaining a Tooth.
- 5.2. Interrelation between Endodontics and Implants.
 - 5.2.1. Endodontic-Implant Pathology.
 - 5.2.2. Classification of Endodontic-Implant Pathology.
 - 5.2.3. Diagnosis of Endodontic-Implant Pathology.
 - 5.2.4. Treatment of Endodontic-Implant Pathology.
 - 5.2.5. Prevention of Endodontic-Implant Pathology.

Module 6. Endodontics in Elderly Patients

- 6.1. Involution of Dental Structures and Regressive Pulp Alterations. Physiological and Pathological Pulp Canal Obliteration.
 - 6.1.1. Physiological Calcium Degeneration.
 - 6.1.2. Pathologic Calcium Degeneration.
- 6.2. Calcium Metamorphosis, Dystrophic Calcification or Calcification of the Pulp of the Canal due to Trauma.
 - 6.2.1. No Dental Pathology and Crown Discoloration.
 - 6.2.2. Periapical Pathology associated with Calcification of the Canal without Discoloration of the Tooth.
 - 6.2.3. Periapical Pathology associated with Calcification of the Canal and Discoloration of the Tooth.
 - 6.2.4. Clinical Management of Canal Calcification and Useful Treatment Considerations.



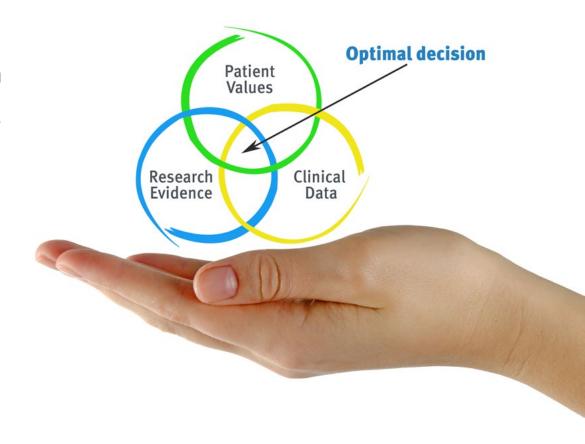


tech 24 | Methodology

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. 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 the dentist'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 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.



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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.



Methodology | 27 tech

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 Postgraduate Diploma you will have access to the best educational material, prepared with you in mind:



Study Material

After a complex production process, we transform the best content into high-quality educational and audiovisual multimedia. We select the best syllabus and make it available to you. Everything you need to acquire in-depth knowledge of a discipline, from A to Z. Lessons written and chosen by specialists in each of the disciplines.



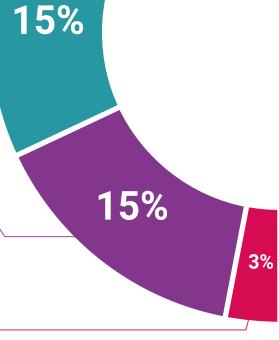
Surgical techniques and clinical procedures on video

We bring you closer to the newest techniques, to the latest scientific advances, to the forefront of medical developments. 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 training system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

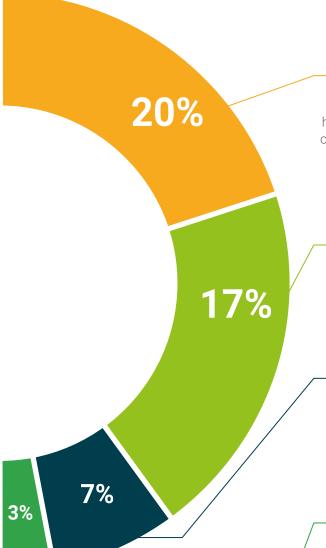


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Additional Reading

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

Through the narratives of expert professionals, it is possible to acquire a high degree of understanding of the most frequent problematic situations. The professional's healthcare practice is not alien to the context in which it takes place. If we want to train ourselves to improve our professional practice, this training must be situated within the context in which it takes place.



Testing & Re-testing

We periodically evaluate and re-evaluate your knowledge throughout this program through activities and evaluative exercises.



Classes

There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an expert strengthens knowledge and recall, and generates confidence in our future difficult decisions



Quick Action Guides

One of the most important functions of our team is to select those contents considered essential and present them in the form of worksheets or quick action guides to facilitate their understanding.







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This Postgraduate Diploma in Endodontics and Periodontics contains the most complete and up-to-date scientific program on the market.

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

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

Title: postgraduate diploma endodontics-periodontics

ECTS: 18

Official Number of Hours: 450 hours.



This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

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

technological university

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