



Postgraduate Diploma

Endodontics in Pediatric Dentistry

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 22 ECTS

» Schedule: at your own pace

» Exams: online

 $We bsite: {\color{blue}www.techtitute.com/us/dentistry/postgraduate-diploma/postgraduate-diploma-endodontics-pediatric-dentistry}$

Index

> 06 Certificate

> > p. 32





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 EEndodontics in Pediatric Dentistry** 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 in Pediatric Dentistry.
- 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 in Pediatric Dentistry.
- Content that is accessible from any fixed or portable device with an Internet connection.



Expand your knowledge through the Postgraduate Diploma in Endodontics in Pediatric Dentistry, 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 in Pediatric Dentistry, you will obtain a Postgraduate Diploma from TECH Global 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.

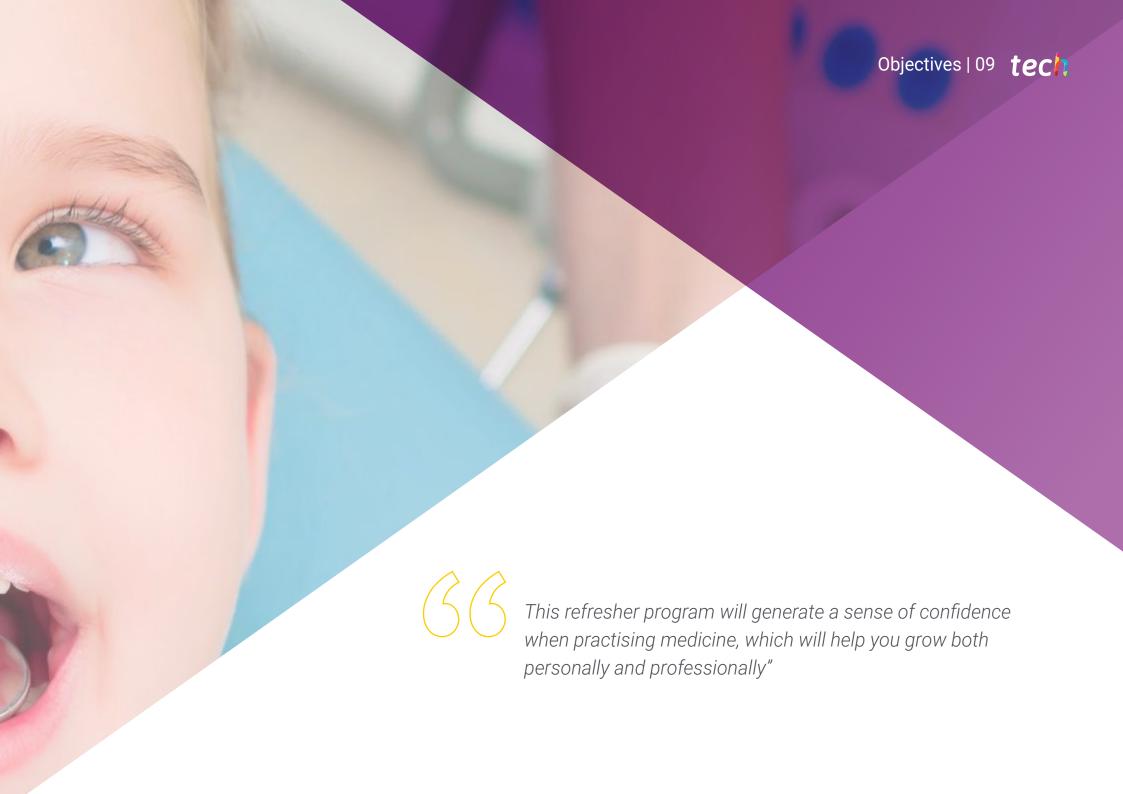
This program is designed around Problem Based Learning, whereby the physician must try to solve the different professional practice situations that arise during the course. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in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

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

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







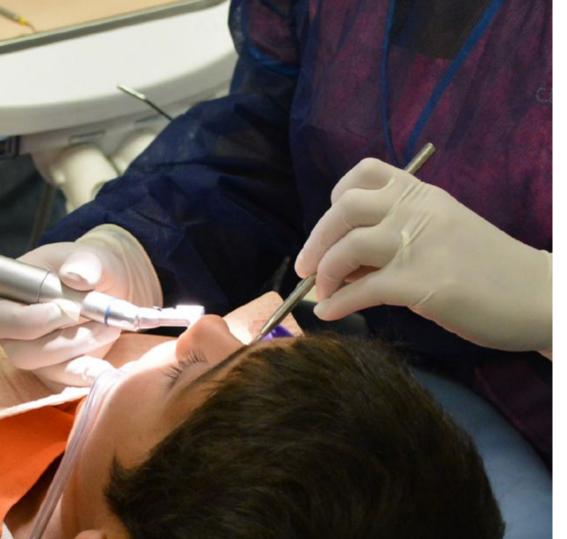
tech 10 | Objectives



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.
- Be able to perform the procedure for insulation by means of a rubber dam.
- Explain the anatomy and location of root canals.
- Correctly prepare the surgical field in apical surgery as well as master the sterilization protocols.
- Gain knowledge and skills in the use of magnification in Endodontics.
- Explain the performance of incision techniques in Apical surgery, lesion removal, apicoectomy, and retro-preparation.



Make the most of the opportunity and take the step to get up-to-date on the latest developments in Endodontics in Pediatric Dentistry"





tech 14 | Course Management

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

- 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 City of Cordoba Scientific Odonto-Estomatological Activities Contest 1997
- Pedro Ruíz de Temiño Malo Award for the best original article published in the Spanish Endodontics Journal 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





tech 20 | Structure and Content

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. Root Canal System Sealing

- 2.1. One or More Sessions in Endodontics.
 - 2.1.1. Compilation of the Surgical Procedure.
 - 2.1.2. Requirements that must be met in order to perform endodontics in one session.
 - 2.1.3. Drying and Dentin Preparation prior to Sealing.
- 2.2. Canal Sealing Materials.
 - 2.2.1. Gutta-Percha Tips.
 - 2.2.2. Classic Sealing Cements.
 - 2.2.3. Sealing Biocements.
- 2.3. Technique of Obturation with Gutta-Percha Tips (Lateral Condensation). Part I. General Conditions.
 - 2.3.1. Gutta-Percha Tips and Ergonomics in the Technique.
 - 2.3.2. Types of Spacers and Calipers.
 - 2.3.3. Placing Sealing Cement.
 - 2.3.4. Work Systematics.





Structure and Content | 21 tech

- Technique of Obturation with Gutta-Percha Tips (Lateral Condensation). Part II. Specific Considerations.
 - 2.4.1. Specifications on the Lateral Condensation Technique.
 - 2.4.2. Combined Technique of Lateral and Vertical Condensation with Heat.
 - 2.4.3. Apical Sealing with Lateral Condensation.
 - 2.4.4. Management of Occlusion after Endodontics.
- Materials and Techniques of Obturation with Thermoplasticized Gutta-Percha (Vertical Condensation with Hot Gutta-Percha).
 - 2.5.1. Introduction
 - 2.5.2. Considerations on the Classic Schilder Technique.
 - 2.5.3. Considerations on the "McSpadden" Technique and the "Hybrid Tagger Technique".
 - 2.5.4. Considerations on Buchanan's Continuous Wave Condensation Technique.
 - 2.5.5. Considerations on the Technique of Direct Injection of Thermoplasticized Gutta-Percha.
 - 2.5.6. Considerations on the Technique of Canal Obturation With Resin Cement Sealant After Acid Etching of the Canal Walls.
- 2.6. Materials and Techniques for Obturation With Thermoplasticized Gutta-Percha (Thermafil® System and Others).
 - 2.6.1. Considerations on the Technique of Direct Injection of Thermoplasticized Gutta-Percha with Previous MTA Apical Plug.
 - 2.6.2. Technical Considerations of the Thermafil and/or Guttacore® System
 - 2.6.3. Technical Considerations for the GuttaFlow System.
 - 2.6.4. Considerations on the Use of Expandable Polymer Tips.
- 2.7. Apical Sealing as the Objective of Treatment. Scarring and Apical Remodeling.
 - 2.7.1. Technical and Biological Techniques of Obturation.
 - 2.7.2. Concepts of Overextension, Overfilling and Underfilling.
 - 2.7.3. The Concept of Permeabilization and Apical "Puff".
 - 2.7.4. Sealing and Obturation of the Two Coronal Thirds of the Canal and of the Occlusal Cavity.
 - 2.7.5. Remodeling of the Root Apex.
- 2.8. Postoperative Pain Management and Final Patient Information.
 - 2.8.1. Inflammatory Reactivation.
 - 2.8.2. What to Do in Case of Inflammatory Reactivation or "Flare-Up".
 - 2.8.3. What Can Be Done to Prevent Inflammatory Reactivation or "Flare-Up"?
 - 2.8.4. Is the Tooth Milled to Free it From Occlusion or Is It Left As It Is?

tech 22 | Structure and Content

Module 3. The Use of Calcium Hydroxide and its Ions in Current Dentistry

- 3.1. Is Calcium Hydroxide an Obsolete Product?
 - 3.1.1. Calcium Hydroxide in Solution, Suspension, and Paste.
 - 3.1.2. Calcium Hydroxide Combined with Other Substances.
 - 3.1.3. Calcium Hydroxide as Cement.
- 3.2. Methods of Pulp Prevention in Young Molars and Other Teeth.
 - 3.2.1. Indirect Pulp Protection.
 - 3.2.2. Direct Pulp Protection.
 - 3.2.3. Pulp Curettage, Pulpotomy or Partial Pulpectomy.
- 3.3. Biomaterials as a Current Evolution to Calcium Hydroxide.
 - 3.3.1. Biomaterials as Calcium Ion Generators.
 - 3.3.2. Use and Handling of Biomaterials.
- 3.4. Uses of Calcium Hydroxide to Treat Pathologies and Other Intra-duct Medications.
 - 3.4.1. Calcium Hydroxide used as an Antibacterial.
 - 3.4.2. Calcium Hydroxide used as a Repair Inducer.
 - 3.4.3. Calcium Hydroxide used as a Sealer.
 - 3.4.4. Intra-duct Medication and its Role.
- 3.5. Uses of Biomaterials to Solve the Same Pathologies.
 - 3.5.1. Biomaterials Used as Pulp Protectors.
 - 3.5.2. Biomaterials Used as Repair Cements.
 - 3.5.3. Los biomateriales usados como materiales de sellado.

Module 4. Dental Trauma Diagnosis, Prognosis, and Treatment

- 4.1. Trauma Patient.
 - 4.1.1. Epidemiology, Etiology, and Prevention.
 - 4.1.2. Injury-related Questionnaire.
 - 4.1.3. Clinical Examination.
 - 4.1.4. Radiography Examination.



Structure and Content | 23 tech

- 4.2. Permanent Tooth Trauma.
 - 4.2.1. Periodontal Injuries.
 - 4.2.2. Concussion.
 - 4.2.3. Subluxation.
 - 4.2.4. Intrusion.
 - 4.2.5. Lateral Luxation.
 - 4.2.6. Extrusion.
 - 4.2.7. Avulsion.
 - 4.2.8. Alveolar Fracture.
 - 4.2.9. Dental Structure Injury.
 - 4.2.10. Crown Fracture.
 - 4.2.11. Root-Crown Fracture.
 - 4.2.12. Root Fracture.
 - 4.2.13. Gum Injury.
 - 4.2.14. Laceration.
 - 4.2.15. Contusion
 - 4.2.16. Laceration.
 - 4.2.17. Abrasion.
- 4.3. Primary Tooth Trauma.
 - 4.3.1. General Considerations in DT in Primary Teeth.
 - 4.3.2. Clinical Evaluation and Treatment of Tooth Structure in Primary Teeth.
 - 4.3.3. Crown Fractures without Pulp Exposure.
 - 4.3.4. Crown Fractures with Pulp Exposure.
 - 4.3.5. Root-Crown Fracture.
 - 4.3.6. Root Fracture.
 - 4.3.7. Clinical Evaluation and Treatment of the Supporting Structure in Primary Teeth.
 - 4.3.8. Concussion and Subluxation.
 - 4.3.9. Intrusion.
 - 4.3.10. Lateral Luxation.
 - 4.3.11. Extrusion.
 - 4.3.12. Avulsion.
 - 4.3.13. Alveolar Fracture.

Module 5. Endodontic Treatment of Immature Teeth

- 5.1. Considerations on Deciduous and Young Permanent Teeth.
- Pulp Therapy for Deciduous and Permanent Teeth Diagnosed with Healthy Pulp or Reversible Pulpitis.
 - 5.2.1. Indirect Pulp Coating.
 - 5.2.2. Direct Pulp Coating.
 - 5.2.3. Pulpotomy.
- Pulp Therapy for Deciduous and Permanent Teeth Diagnosed with Irreversible Pulpitis or Necrosis.
 - 5.3.1. Root Canal Treatment (Pulpectomy).
 - 5.3.2. Apex Formation.
- 5.4. Regenerative Therapy. The Role of Stem Cells.

Module 6. Making Decisions between Root Canal Treatment, Retreatment, Apical Surgery, or Implant

- 6.1. Treat the Tooth or Extract It?
 - 6.1.1. Reasons to Extract a Tooth.
 - 6.1.2. Factors to Consider for Maintaining a Tooth.
- 6.2. Interrelation between Endodontics and Implants.
 - 6.2.1. Endodontic-Implant Pathology.
 - 6.2.2. Classification of Endodontic-Implant Pathology.
 - 6.2.3. Diagnosis of Endodontic-Implant Pathology.
 - 6.2.4. Treatment of Endodontic-Implant Pathology.
 - 6.2.5. Prevention of Endodontic-Implant Pathology.



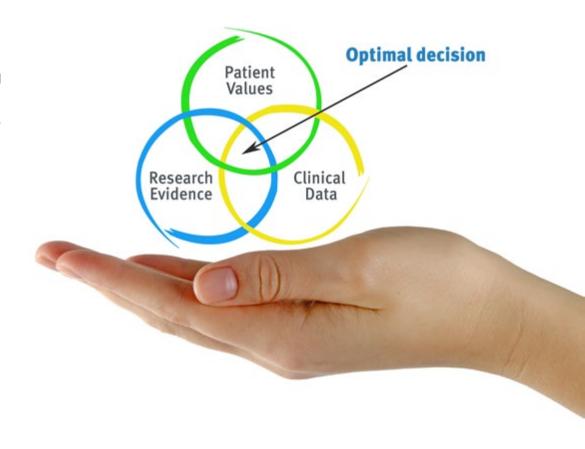


tech 26 | Methodology

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.



tech 28 | Methodology

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.



Metodology | 29 **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 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

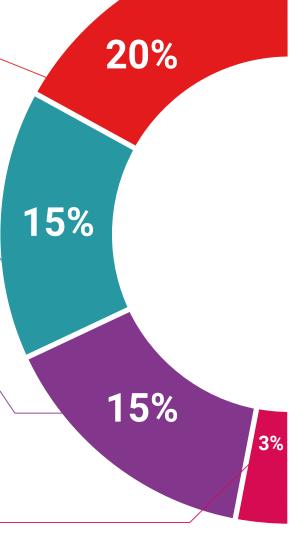
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current dental techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



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.

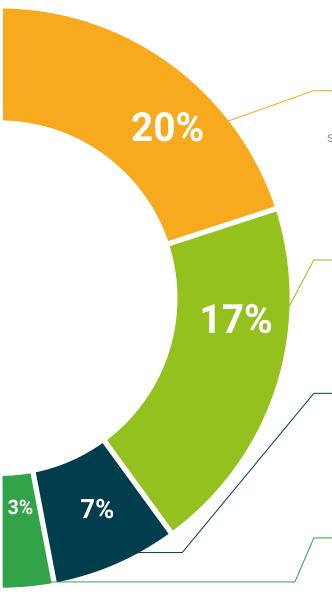
This multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





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.







tech 34 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Endodontics in Pediatric Dentistry** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Postgraduate Diploma in Endodontics in Pediatric Dentistry

Modality: online

Duration: 6 months

Accreditation: 22 ECTS



Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Diploma in Endodontics in Pediatric Dentistry

This is a program of 550 hours of duration equivalent to 22 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



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

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