



Postgraduate Certificate

Periodontics and Laser

» Modality: online

» Duration: 8 weeks

» Certificate: TECH Global University

» Credits: 10 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/dentistry/postgraduate-certificate/periodontics-laser

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tech 06 | Introduction

In recent years, dentistry in general, and laser therapy techniques in particular, have undergone enormous advances. More and more patients are coming to dental clinics looking for treatments that restore, not only from a functional point of view but also from an esthetic point of view, optimal oral health conditions.

New tools for periodontal pathology help the professionals to improve the results with the patient and to improve their prognosis in a remarkable way. The laser has become one of the most useful resources to achieve results with greater safety and fewer complications.

This program focuses on laser treatment in periodontal surgery, providing the dentists with an update in the knowledge of the discipline. Students will find a program that covers everything from the etiopathogenesis of periodontal diseases to basic and surgical therapeutics, without forgetting the novel approaches of regenerative therapy in periodontology.

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

- Development of clinical cases presented by experts in restorative surgical treatment in periodontal surgery.
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- Diagnostic and therapeutic innovations on laser treatment of periodontal pathology.
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- With a special emphasis on evidence-based medicine and periodontal laser research methodologies.
- All of 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



Update your knowledge through the Postgraduate Certificate in Periodontics and Laser, in a practical way and adapted to your needs"



This Postgraduate Certificate is the best investment you can make in the selection of an updating program for two reasons: in addition to updating your knowledge in Periodontics and Laser, you will obtain a 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, recognized by esteemed scientific communities.

Thanks to its multimedia content developed with the latest educational technology, they will allow the professionals a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to prepare in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. This will be done with the help of an innovative interactive video system developed by recognized experts in the field of dentistry with extensive teaching experience.

This Postgraduate Certificate allows training in simulated environments, which provide immersive learning programmed to train for real situations.

It includes clinical cases to bring the program's degree as close as possible to the reality of care in dentistry.







tech 10 | Objectives

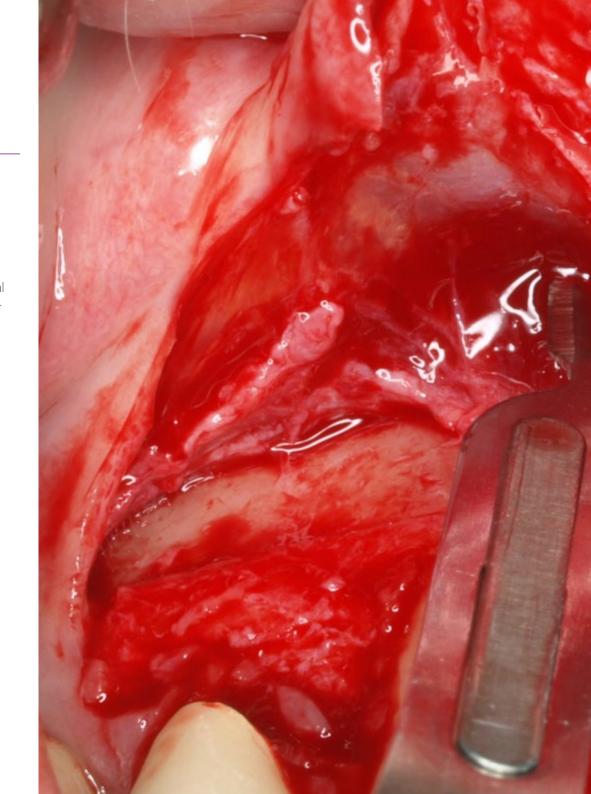


General Objectives

- Update the theoretical and practical knowledge of the dentist in the different areas of periodontics and implantology, through evidence-based dentistry.
- Promote work strategies based on a multidisciplinary approach to patients who are candidates for periodontal or implant therapy
- 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 education
- Encourage professional stimulation through continuous education and research



Take advantage of the opportunity and take the step to get up to date on the latest developments in lasers for periodontal pathology"







Specific Objectives

- Explain the macroscopic and microscopic anatomy of the periodontium, jaws and adjacent tissues and know how to apply this knowledge in diagnosis and periodontal and implantological treatments
- Describe the biology of osseointegration and be able to establish the biological differences between periodontal and peri-implant tissues
- Perform pre-surgical clinical history, pharmacological interactions and radiological techniques for periodontal diagnosis
- Describe basic surgical procedures: incisions, types of flaps, sutures, etc.
- Learn about each of the pathologies and alterations that can affect the periodontium, as well as the available means for their diagnosis
- Define each of the diagnostic means to study patients susceptible of being rehabilitated with implants
- Explain the non-surgical procedures of the initial phase
- Identify the main therapeutic techniques that allow non-surgical treatment of dental treatments.
- Conduct research on lasers in the periodontal process.
- Identify the improvements offered by lasers in periodontics.







International Guest Director

Dr. Leena Palomo is an eminent educator, clinician and dental researcher, internationally recognized. With a solid academic background and a career marked by excellence, she stands out as a leading figure in Periodontology, committed to innovation, research and excellence in patient care. She currently holds a senior position as Chair of the Arthur Ashman Department of Periodontology and Implant Dentistry, one of the leading programs in periodontology, whose primary mission is to educate undergraduate and graduate students; engage in clinical and laboratory and provide comprehensive and optimal periodontal care to the people of New York. His research focus has centered on vital areas such as women's health, aesthetics and quality of life. Of particular note is her leadership in collaborating with the Cleveland Clinic and the Center for Specialized Women's Health. In addition, she has played a key role in periodontal research and treatment for rheumatoid spectrum diseases, speaking at numerous national and international conferences on Sjögren's and Rheumatology, as well as publishing her wellness findings in multidisciplinary and interprofessional journals. His commitment to educational excellence and mentoring has led numerous dental and medical students to achieve recognition for the quality of their theses. In this context, Dr. Palomo's educational philosophy emphasizes the importance of curiosity and constant questioning to drive discovery and continuous learning in the field of contemporary periodontology. Likewise, her outstanding career in the field of Dentistry and Periodontology has been rewarded with several awards for her work and research. Some examples are the "Strides in Science", American Association of Dental Research November Researcher (2012), and the American Academy of Periodontology, Board of Trustees, Special Citation Award (2019). She also actively collaborates with the American Academy of Periodontology (AAP) Foundation to improve the dental health of society through the dissemination of periodontal diseases and their therapies.



Dr. Leena Palomo

- Chair of the Arthur Ashman Department of Periodontology and Implant Dentistry.
- Professional Master's Degree in Periodontology from Case Western Reserve University
- Bachelor of Science in Dentistry from Case Western Reserve University. Awards:
- Strides in Science," American Association of Dental Research November Researcher (2012)
- American Academy of Periodontology, Board of Trustees, Special Citation Award (2019)
- Member of:
- North East Society of Periodontology
- American Board of Periodontology
- Levi Award, American Academy of Periodontology Foundation
- College of Dentistry
- American Academy of Periodontology (AAP) Foundation



Thanks to TECH, you will be able to learn with the best professionals in the world"

Management



Dr. Bellver Fernández, Ricardo

- Degree in Dentistry Cardenal Herrera University
- Assistant dentist in the Oral Surgery, Periodontics and Implantology Service Unit. Ricardo Bellver Dental Clinic
- Professional Master's Degree in Implantology and Oral Surgery Cardenal Herrera University
- Professional Master's Degree in Dental Sciences University of Valencia
- Professional Master's Degree in Periodontics. Claudio Gioia Dental Clinic
- Surgical training at the Maxillofacial Service of the La Fe University Hospital, Maxillofacial and Stomatological Service unit, outpatient and operating rooms, children's and adult unit. Led by Dr. MC Baquero de la Hermosa
- Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (SEPA)
- Fellowship in bone regeneration. Brescia, Italy
- Training in Mucogingival Surgery at the University of Bologna. Italy



Dr. Martínez Gómez, Berta

- Degree in Dentistry at the service of PRODENTAL, Dental Clinic, Dr. Mateo & Dr. Ribas
- Degree in Dentistry from the University of Barcelona
- Professional Master's Degree in Comprehensive Periodontics C.G. Ongoing Training with Prof. Raúl G. Caffesse
- Professional Master's Degree in Implantology and Prosthodontics CIDESID
- Postgraduate course in Endodontics Dr. Hipólito Fabra
- Diploma in Endodontics CIDESID
- Advanced Multidisciplinary Course. Dr. Iñaki Gamborena, San Sebastián, Spain
- Course in Prosthodontics and Dental Aesthetics CIDESID
- Layering course on posterior and anterior teeth by CIDESID
- Theoretical and practical course of Periodontal Surgery: Periodontal and Peri-implant tissue reconstruction. Professor. Massimo de Sanctis -
- Dott. Fabio Vignoletti. Italian Society of Dental Training. Forli, Italy
- Collaborating Professor Professional Master's Degree in Comprehensive Periodontics C.G. Training. Professor. Dr. Raúl Caffesse
- Private practice dedicated to Periodontics and Conservative Dentistry
- Member of the SEPA and Fellowship in Bone Regeneration. Dr. Carlo Tinti. Brescia. Italy

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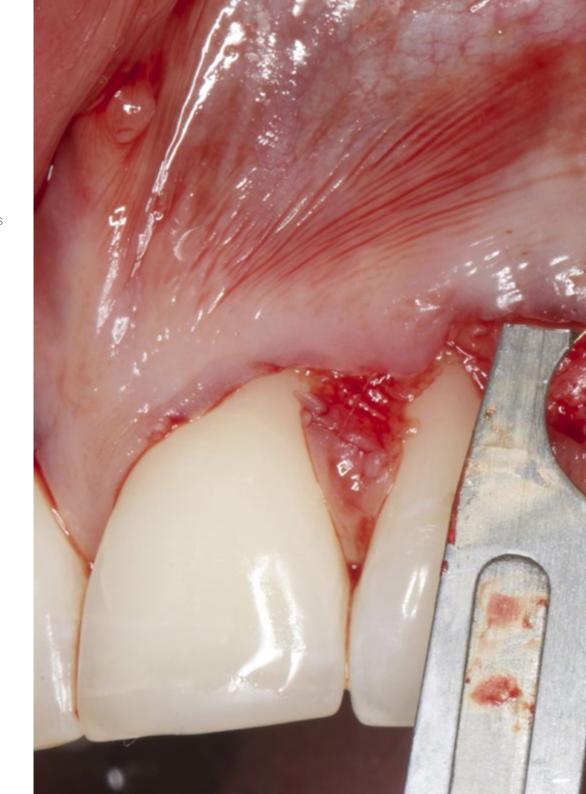
Professors

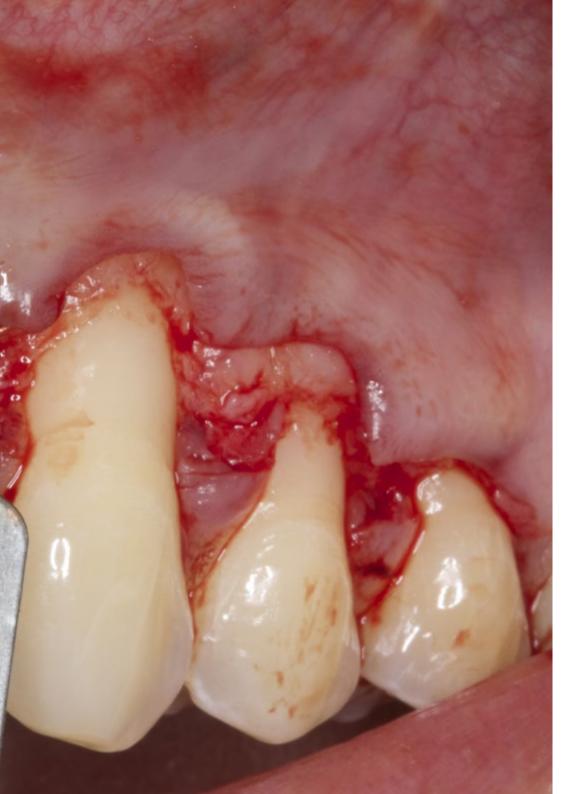
Dr. Abdi Galán, Barán

- Degree in Dentistry Rey Juan Carlos University (Madrid, Spain)
- Dentist Specialist in Periodontics and Osseointegration of the General Council of Dentists and Stomatologists of Spain
- Modular Master's Degree in Clinical Endodontics. Dr. C. Stambolsky. Atheneum of Postgraduate Dentistry (Madrid, Spain)
- Specialist in Implantoprosthesis. Rey Juan Carlos University (Madrid, Spain)
- Postgraduate Diploma in Dental Clinic Management. Udima
- Member of SEPA, Spanish Society of Periodontology and Osseointegration
- Member of SEPES, Spanish Society of Stomatological Prosthesis

Dr. Aragüés, Alfredo

- Director of the Essential Dental Clinic Dr. Aragüés
- President of the College of Dentists of Burgos
- Degree in Dentistry from the ISCS University in Portugal.
- Certificate in Periodontics from the Autonomous University of Nuevo Leon in Mexico.
- Professional Master's Degree in Periodontics by the University of Paris in France.
- Professional Master's Degree in Smoking from the University of Cantabria in Spain
- Professional Master's Degree in Laser by the University of Barcelona in Spain.
- European Interuniversity Professional Master's Degree
- Member of: World Clinical Laser Institute Spanish Society of Periodontology and
 Osseointegration, European Federation of Periodontology, American Academy of
 Periodontics, Spanish Laser Society, International Society for Oral Laser Applications,
 World Association For Oral Therapy, Adriatic Laser Academy, Founder of the National
 Association of Self-Employed Dentists.





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Dr. Ruíz-Oriol, Carlota

- Degree in Dentistry from the University of Barcelona
- Postgraduate course in Dental prosthesis. Dr. Mallat. Catalan Society of Odontostomatology of the Academy of Medical Sciences
- Postgraduate course in Advanced Dental Esthetics. Dr. Padrós. Catalan Society of Odontostomatology of the Academy of Medical Sciences
- Professional Master's Degree in Periodontics C.G. Ongoing Training. Dr. Raúl Caffesse
- Professional Master's Degree in Clinical Implantology and Oral Prosthetics. University of Barcelona
- Collaborating Professor Master's Degree in Comprehensive Periodontics C.G. Ongoing Training

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A unique, key, and decisive educational experience to boost your professional development"





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Module 1. Basic Periodontics

- 1.1. Anatomy of the Periodontium
 - 1.1.1. Gingivae: Keratinized, Free, Inserted, Interdental
 - 1.1.2. Alveolar Mucosa
 - 1.1.3. Periodontal Ligament
 - 1.1.4. Root Cement
 - 1.1.5. Alveolar Bone
 - 1.1.6. Blood, Lymphatic and Nervous System of the Periodontium
 - 1.1.7. Periodontal Biotypes
 - 1.1.8. Biological Space
- 1.2. Epidemiology of Periodontal Disease
 - 1.2.1. Prevalence of Periodontal Diseases
 - 1.2.2. Risk Factors for Periodontitis
 - 1.2.3. Periodontal Diseases and Their Relation to Systemic Diseases
- 1.3. Microbiology of Periodontal Disease
 - 1.3.1. Biofilm and Dental Calculus Microbiological and Clinical Aspects
 - 1.3.2. Periodontal Infections
 - 1.3.3. Periodontal Pathogens
 - 1.3.4. Bacterial Plague and Biofilm Disease Onset and Progression
- 1.4. Host-Parasite Interaction
 - 1.4.1. Disease Onset and Progression
 - 1.4.2. Pathogenesis of Periodontitis
 - 1 4 3 Host-Parasite Interaction
- 1.5. Factors Associated with Periodontal Disease
 - 1.5.1. Diabetes *Mellitus*
 - 1.5.2. Puberty, Pregnancy, Menopause
 - 1.5.3. Tobacco Use

Module 2. Examination, Diagnosis and Treatment Plan

- 2.1. Anamnesis of the Patient with Periodontal Disease
 - 2.1.1. Dental, Social and Family History. Smoking Status, Hygiene Habits, etc.
 - 2.1.2. Oral Hygiene Status
 - 2.1.3. Signs and Symptoms of Periodontal Disease: Gingiva, Periodontal Ligament and Alveolar Bone
- 2.2. Intraoral and Radiographic Examination
 - 2.2.1. Intraoral Exploration: Periodontogram
 - 2.2.2. X-Ray Examination: Periapical Radiographic Series
 - 2.2.3. Screening for Periodontal Disease
- 2.3. Diagnosis
 - 2.3.1. Diagnosis of Periodontal Lesions
 - 2.3.2. Gingivitis
 - 2.3.3. Mild Periodontitis
 - 2.3.4. Moderate or Advanced Periodontitis
- 2.4. Treatment Plan
 - 2.4.1. Initial Treatment Plan
 - 2.4.2. Pretherapeutic Prognosis
 - 2.4.3. Re-evaluation
 - 2.4.4. Corrective or Reconstructive Therapy
 - 2.4.5. Maintenance Therapy

Module 3. Basic Non-Surgical Periodontal Treatment Initial Phase

- 3.1. Mechanical Control of Supergingival Plaque
 - 3.1.1. Plaque Control: Brushing and Interdental Cleaning. Techniques
 - 3.1.2. Instruction and Motivation in Plague Control
- 3.2. Chemical Control of Supragingival Plaque Use of Antiseptics in Periodontics
 - 3.2.1. Chemical Control Concept, Agents, Mechanisms of Action and Drivers
 - 3.2.2. Chemical Plaque Control Agent Classification
 - 3.2.3. Chlorhexidine: Toxicity, Pigmentation, Mechanism of Action, Clinical Use



Structure and Content | 21 tech

- 3.3. Non-Surgical Treatment of Periodontal Disease
 - 3.3.1. Calculus Detection and Removal
 - 3.3.2. Debridement Techniques. Mechanical and Manual
 - 3.3.3. Postoperative Care and Control of Tooth Sensitivity
- 3.4. Pharmacological Treatment. Use of Antibiotics in Periodontics
 - 3.4.1. Principles of Antibiotics Therapy Specific Characteristics and Limitations
 - 3.4.2. Evaluation of Antimicrobials for Periodontal Therapy
- 3.5. Re-evaluation
 - 3.5.1. Interpretation of Results Treatment Evaluation
- 3.6. Periodontal Maintenance
 - 3.6.1. Risk Assessment: Patient, Tooth, Progression
 - 3.6.2. Objectives of Maintenance in Gingivitis and Periodontitis
 - 3.6.3. Continuous Review and Reassessment
 - 3.6.4. Motivation

Module 4. Laser in Periodontics

- 4.1. Introduction to the Laser
 - 4.1.1. History of the Laser
 - 4.1.2. Low-Power Laser
 - 4.1.3. High-Power of Surgical Laser
 - 4.1.4. Laser Safety
- 4.2. Types of Laser Features
 - 4.2.1. Diode Laser
 - 4.2.2. Erbium Laser
- 4.3. Indications and Applications of Lasers in Periodontics
 - 4.3.1. As a Stand-Alone Treatment
 - 4.3.2. As a Complement to Conventional Treatment
- 4.4. Laser Therapy Photobiomodulation





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At TECH we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

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



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

- Dentists 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. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- **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.





Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

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 | 29 **tech**

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

With this methodology we have trained more than 115,000 dentists with unprecedented success, in all specialties regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

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

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

This program offers the best educational material, prepared with professionals in mind:



Study Material

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

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



Educational Techniques and Procedures on Video

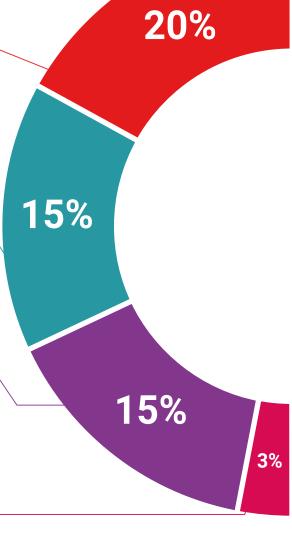
TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

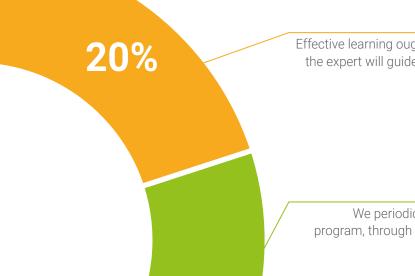
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".





Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.



17%

7%

Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



Classes

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





Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.







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This program will allow you to obtain your **Postgraduate Certificate in Periodontics and Laser** 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 Certificate in Periodontics and Laser

Modality: online

Duration: 8 weeks

Accreditation: 10 ECTS



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

Postgraduate Certificate in Periodontics and Laser

This is a program of 300 hours of duration equivalent to 10 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.

health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning



Postgraduate Certificate

Periodontics and Laser

- » Modality: online
- » Duration: 8 weeks
- » Certificate: TECH Global University
- » Credits: 10 ECTS
- » Schedule: at your own pace
- » Exams: online

