

# Postgraduate Certificate

Minimally Invasive Preparations  
for Digital Dentistry



## Postgraduate Certificate

### Minimally Invasive Preparations for Digital Dentistry

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/in/dentistry/postgraduate-certificate/minimally-invasive-preparations-digital-dentistry](http://www.techtute.com/in/dentistry/postgraduate-certificate/minimally-invasive-preparations-digital-dentistry)

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# 01

# Introduction

Technological advances in dentistry have allowed the development of new techniques and tools that offer more precise and less invasive treatments, focused on Digital Dentistry, which offers both new opportunities and challenges for specialists in the area. Looking for a reliable update that delves into the main novelties in Minimally Invasive Preparations, TECH has created a program focused on the different 3D printers, milling machines, software systems and new digital dental materials, in order to take the dentist's practice to the maximum clinical rigor. In addition, it is taught 100% online, which allows the student to study from anywhere and at any time without the restriction of fixed schedules or in-person classes.





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*Enroll now in this Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry and acquire advanced knowledge to keep up-to-date with the latest trends in the field"*

In recent years, dentistry has experienced a great advance thanks to digital technology, allowing the development of new techniques and tools to carry out more precise and less invasive treatments. However, this progress also presents new challenges for dental professionals, who must be up-to-date on the latest techniques and technologies available in order to maintain high clinical practice.

Aware of this reality, TECH has created a Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry. This program aims to update dentists and specialists in the latest techniques and technologies in digital dentistry, especially in minimally invasive preparations, which allow more accurate and less painful treatments for the patient.

In this way, the dentist will delve into treatment planning with digital dentistry, the use of advanced technologies for minimally invasive preparations and the application of digital techniques in the design of dental prostheses. In addition, real case studies are included that contextualize all the theory offered, so that it can be put into practice from the very first moment.

In addition, this Postgraduate Certificate is taught 100% online, which is a great advantage for professionals who wish to update their knowledge without having to travel. This methodology allows the student to study from anywhere and at any time, which facilitates the reconciliation of professional and personal life.

This **Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Software applied to Digital Dentistry
- ♦ 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
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ 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



*Delve into the most innovative techniques from the hand of experts in the field, with a 100% online program free of schedules and in-person classes"*

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*You will delve into the management of advanced technologies for digital dentistry, being able to apply them in your clinical practice”*

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will learn about the latest trends and advances in Minimally Invasive Preparations, which will allow you to keep your practice updated and competitive.*

*You will learn the processes of design and fabrication of digital dental restorations using advanced software tools.*



# 02

# Objectives

The main objective of the program is for the student to be able to plan treatment with digital dentistry, use advanced technologies for minimally invasive preparations and apply digital techniques in the design of dental prostheses. In addition, throughout the Postgraduate Certificate, real cases are analyzed to contextualize the theory offered, which allows it to be put into practice from the very first moment.







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*You will be able to apply the knowledge acquired in real clinical situations, thanks to the practical cases and simulations included in the program"*



## General Objectives

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- Increase the professional's knowledge of the application of digital technologies in the diagnosis, treatment and planning of clinical cases
- Know the techniques of digital orthodontics and computer-guided implant planning
- Develop skills in interdisciplinary communication and collaboration in teamwork, using digital technology as a tool
- Examine the application of acquired knowledge in clinical practice, in this way improving the quality of patient care





## Specific Objectives

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- Understand the basic principles of minimally invasive tooth preparation and its relationship to the preservation of natural tooth structure
- Identify the different CAM system options for the fabrication of dental restorations, both in the dental laboratory and in the dental office
- Develop skills in the use of chairside CAM systems, which allow the fabrication of dental restorations on the same day of the patient's appointment



*Expand your knowledge in dental aesthetics and discover how advances in Digital Dentistry can help you achieve natural, customized results for each patient"*

03

# Course Management

The Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry is taught by highly qualified dentists with extensive experience in the field of digital dentistry and minimally invasive preparations. These professionals are able to provide a practical and rigorous update, based on their clinical experience and theoretical knowledge, to ensure that the students are fully up-to-date on the latest techniques and technologies in this constantly evolving field.





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*You will rely on the expertise of highly trained professionals versed in the field of digital dentistry”*

## Management



### Dr. Ulman, Darío

- ◆ Dentist Specializing in Implant Dentistry and Orthodontics
- ◆ Dentist in own practice
- ◆ *International Intraoral Scanner* Trainer
- ◆ Speaker Corner FONA
- ◆ Director of training courses for dentists
- ◆ Degree in Dentistry



### Dr. Roisentul, Alejandro

- ◆ Director of the Oral and Maxillofacial Surgery Unit of Ziv Medical Center
- ◆ Clinical Instructor, Bar-Ilan University School of Medicine
- ◆ Regional Delegate for Asia of the Latin American Association of Buccomaxillofacial Surgery and Traumatology
- ◆ President of the Israeli Association of Oral and Maxillofacial Surgeons
- ◆ Winner of numerous awards and honorable mentions



# 04

## Structure and Content

The program includes high quality multimedia material, with detailed videos and detailed clinical analyses that allow the student to delve deeper into the topics and put them into practice. In addition, it is complemented with additional readings that broaden the student's perspective on the subject and allow the student to continue researching those issues of greatest interest to them. All this, together with the highly experienced teachers and the online format, makes the Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry an excellent option for professionals who wish to update their knowledge in the field.





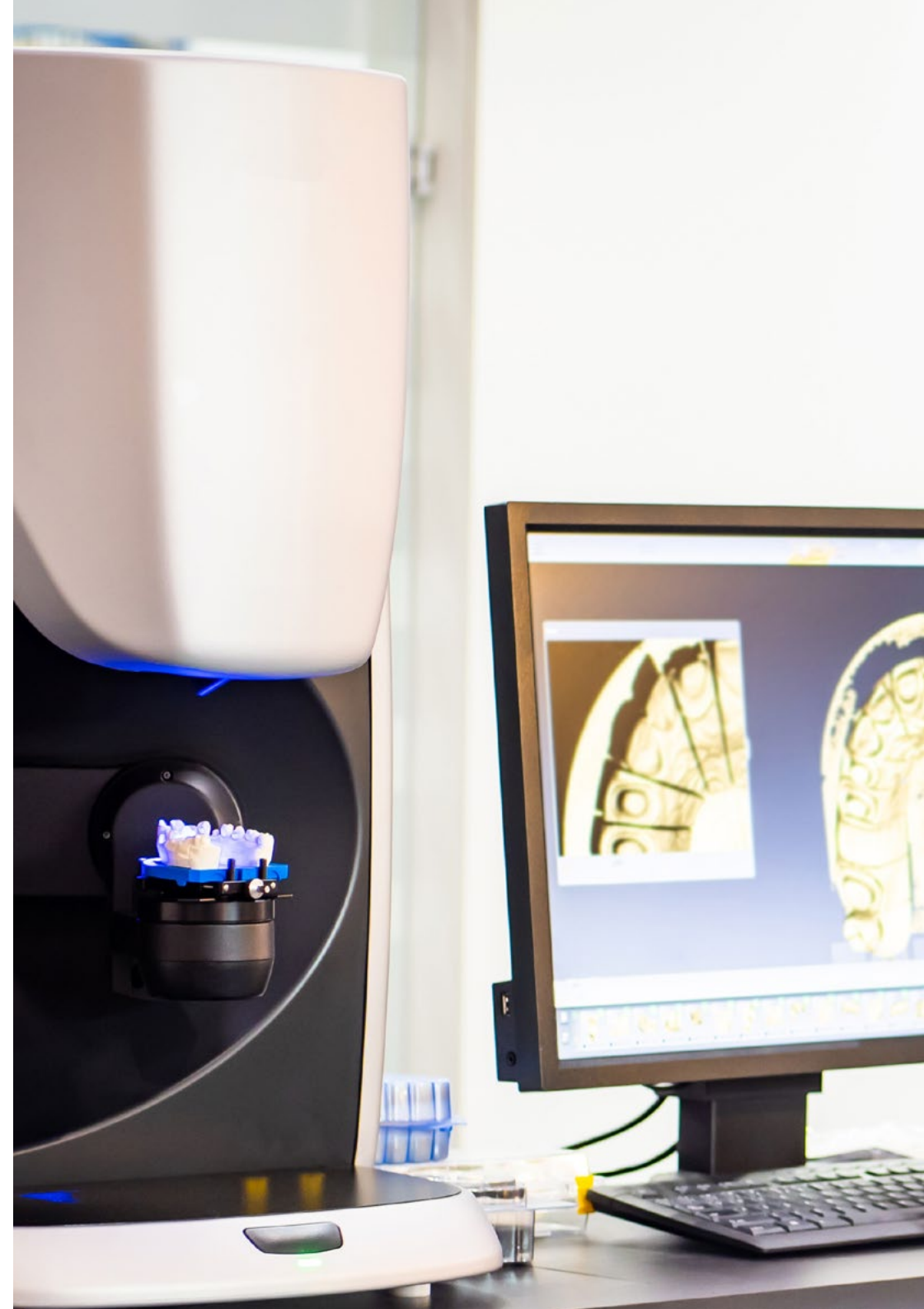


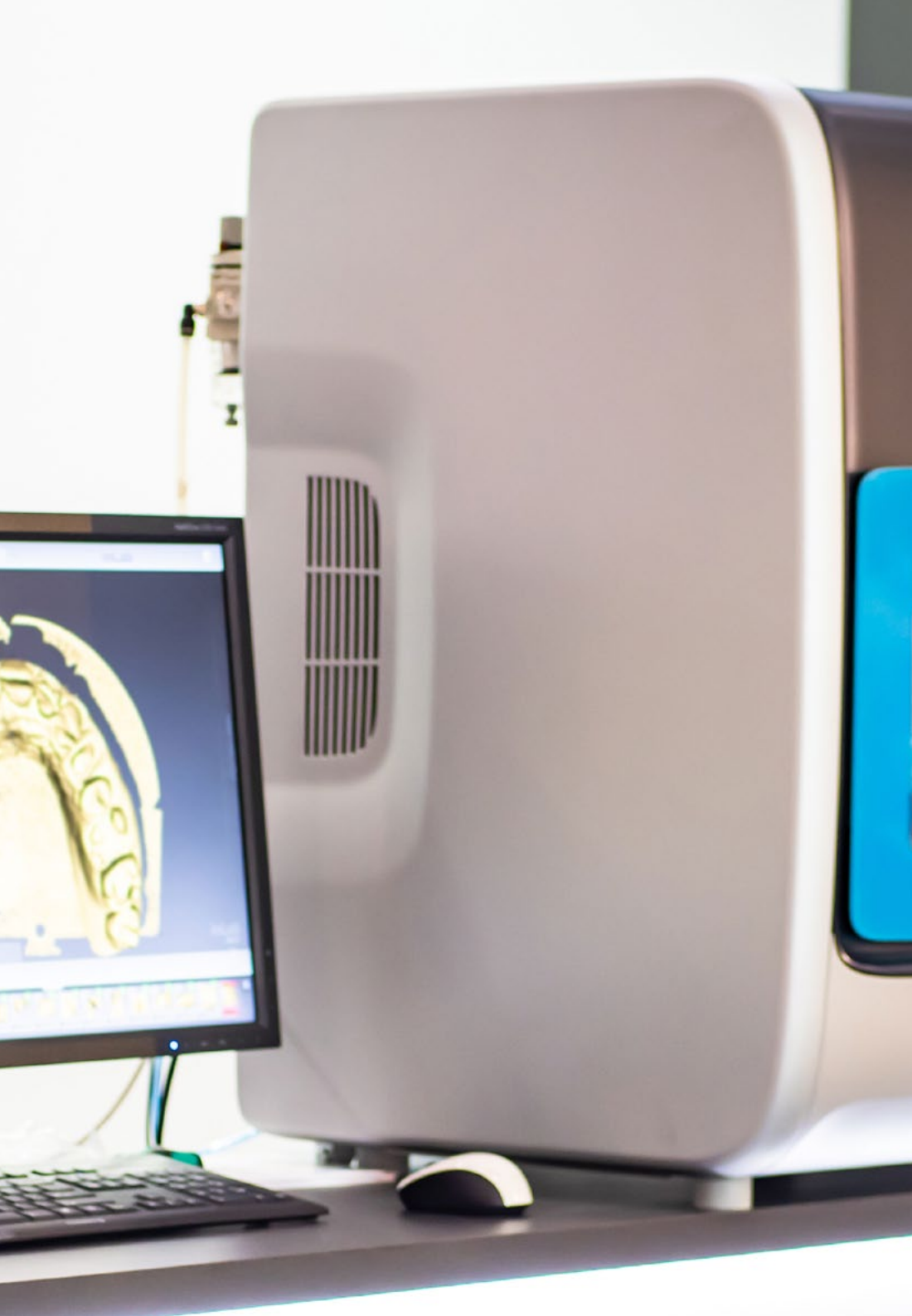
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*Master the different tools and materials used in minimally invasive preparations and learn how to select them appropriately for each case”*

**Module 1.** Digital Flow Minimally invasive preparations, cam systems, laboratory and chairside

- 1.1. First Fit Veneer System
  - 1.1.1. Record Taking
  - 1.1.2. Web Loading
  - 1.1.3. Mockup
  - 1.1.4. Milling Sequence
- 1.2. Cementation in the Clinic
  - 1.2.1. Types of Dental Cements and Their Properties
  - 1.2.2. Selection of the Appropriate Dental Cement for Each Clinical Case
  - 1.2.3. Cementation Protocol for Veneers, Crowns and Bridges
  - 1.2.4. Preparation of the Tooth Surface Prior to Cementation
- 1.3. Laboratory
  - 1.3.1. Digital Dental Materials: Types, Properties and Applications in Dentistry
  - 1.3.2. Fabrication of Ceramic Veneers and Crowns with CAD/CAM Systems
  - 1.3.3. Fabrication of Fixed Bridges Using CAD/CAM Systems
  - 1.3.4. Fabrication of Removable Prosthesis Using CAD/CAM Systems
- 1.4. 3D Printing
  - 1.4.1. Types of 3D Printers Used in Digital Dentistry
  - 1.4.2. Design and 3D Printing of Studio and Working Models
  - 1.4.3. 3D Printing of Surgical Guides and Surgical Splints
  - 1.4.4. 3D Printing of Models for the Manufacture of Surgical Guides and Surgical Splints
  - 1.4.5. 3D Printing of Models for the Fabrication of Dental Prosthesis
- 1.5. XY Resolution and Z Resolution
  - 1.5.1. Selection and Use of Materials for Digital Dental Restorations
  - 1.5.2. Integration of Digital Dentistry in the Clinic
  - 1.5.3. XY Resolution and Z Resolution 3D Printers
  - 1.5.4. Virtual Planning of Dental Restoration





- 1.6. Resin Types
  - 1.6.1. Model Resins
  - 1.6.2. Sterilizable Resins
  - 1.6.3. Temporary Tooth Resins
  - 1.6.4. Resins for Definitive Teeth
- 1.7. Millers
  - 1.7.1. Milling Machines for Direct Restorations
  - 1.7.2. Milling Machines for Indirect Restorations
  - 1.7.3. Milling Cutters for Fissure Sealing and Caries Prevention
  - 1.7.4. Orthodontic Milling Cutters
- 1.8. Sinterizers
  - 1.8.1. Synthesizers and Their Role in the Preparation of Conservative Dental Crowns
  - 1.8.2. Application of CAD/CAM Technology for the Preparation of Minimally Invasive Preparations in Digital Dentistry
  - 1.8.3. New Digital Techniques and Technologies for Minimally Invasive Preparation of Dental Inlays and Onlays
  - 1.8.4. Virtual Tooth Preparation Software Systems and Their Use in Minimally Invasive Preparation Planning
- 1.9. Model Pro Model Manufacturing
  - 1.9.1. Accurate Model Fabrication Using Intraoral Scanning Technology for Minimally Invasive Preparations
  - 1.9.2. Minimally Invasive Preparation Planning Using Digital Models and CAD/CAM Technology
  - 1.9.3. Fabrication of Models for the Preparation of Minimally Invasive Dental Veneers
  - 1.9.4. Digital Modes and Their Role in the Preparation of Conservative Dental Crowns
- 1.10. Dental Printers vs. Generic Printers
  - 1.10.1. Dental Printers versus Generic Printers
  - 1.10.2. Comparison of the Technical Characteristics of Dental and Generic Printers for the Fabrication of Dental Restorations
  - 1.10.3. Dental Printers and Their Role in Minimally Invasive Preparation of Customized Dentures
  - 1.10.4. Generic Printers and Their Adaptability to the Fabrication of Dental Prostheses

# 05

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, 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 Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

In a given situation, what 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.

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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. 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.*





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.





#### 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.  
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### 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.



06

# Certificate

The Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this program  
and receive your university qualification  
without having to travel or fill out  
laborious paperwork”*

This **Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Certificate in Minimally Invasive Preparations for Digital Dentistry**

Official N° of Hours: **150 h.**



\*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.

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



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