

# Postgraduate Certificate

## Digitalization of Dental Equipment





## Postgraduate Certificate

### Digitalization of Dental Equipment

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/dentistry/postgraduate-certificate/digitalization-dental-equipment](http://www.techtute.com/us/dentistry/postgraduate-certificate/digitalization-dental-equipment)

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# 01

# Introduction

Digitization of equipment in Dentistry is an increasingly common and useful trend. In this way, the use of digital technologies allows greater precision in the planning and design of treatments, reduction of time and costs, as well as better communication with patients. All the more reason for the dental professionals to be constantly up-to-date in this area, and with the help of TECH they will be able to master the most innovative digital strategies. Therefore, with this program you will have everything you need about Digitizing equipment, from Digital Photography and Digital Radiology to digital scanning and modeling in this field. Always under a practical online format, the students will have great flexibility to study the program.





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*Enroll in an essential Postgraduate Certificate to get up-to-date in Digitization of Dental equipment”*

The Digitization of Dental equipment has favored a better integration of the different phases of treatment, as well as the possibility of sharing information and collaborating with other health science professionals. In this sense, it is important to master the different technologies available and their limitations in order to select the one that best suits the clinical needs, which is more than enough reason for the dentists to strengthen their update in this demanding field.

In this context, TECH offers you the most complete Postgraduate Certificate to incorporate the latest technological advances to your daily practice. To this end, the fundamental lines of the area of Digital Dentistry are addressed, from the use of digital cameras and cell phones to the use of digital files and their security and privacy. In fact, we will delve into CBCT technology and its multiple applications in Implantology and Endodontics.

This academic opportunity promotes active and highly practical learning to offer the most natural educational cycle. In addition, the students have a great teacher team at their service, formed by experts in Digital Dentistry, which will provide a high quality preparation adapted to the needs of each student. Thanks to its online nature, the student will forget about having to attend teaching centers, and will not have to adhere to predetermined schedules, so the program can be combined with any personal or professional obligation.

This **Postgraduate Certificate in Digitalization of Dental Equipment** 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 Digitization of Dental Equipment.
- ♦ 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



*Do not hesitate and get into the digitization of dental equipment with TECH to master with solvency the applications of Clinical Dental Photography"*

“

*You will be able to expertly interpret PIC phonogramulometric records. Enroll now!”*

*Explore the possibilities of the facial scanner in dentistry by means of explanatory videos or self-knowledge exercises.*

*You will have 24-hour access to the largest multimedia library of dental equipment Digitization.*

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.

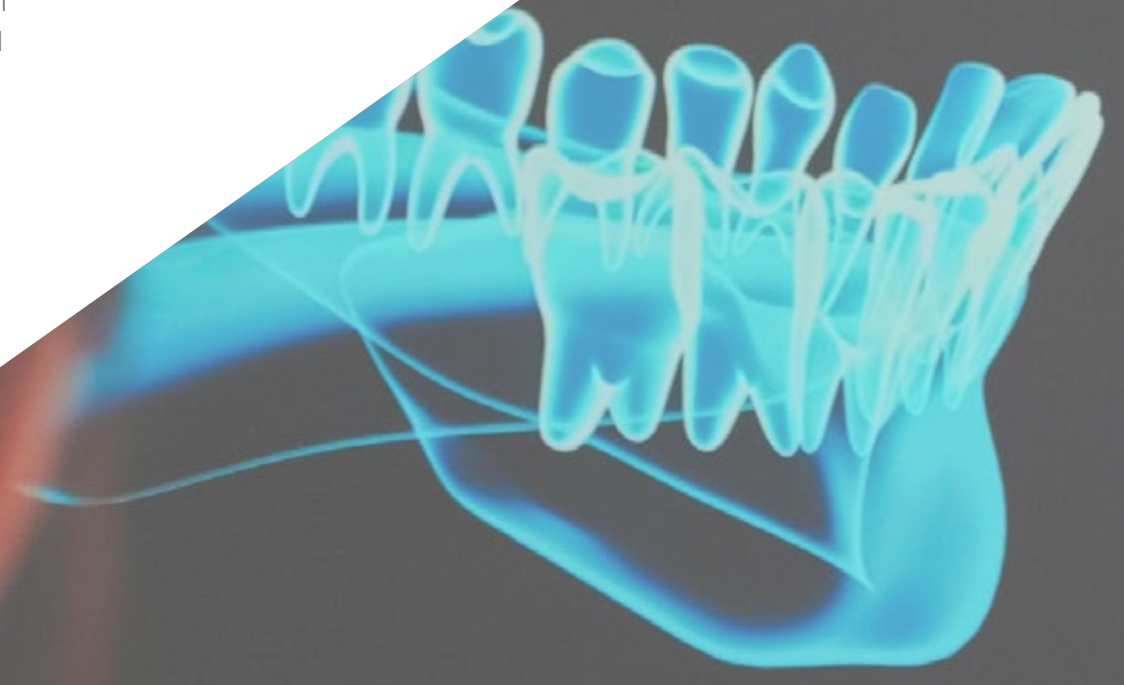
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced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



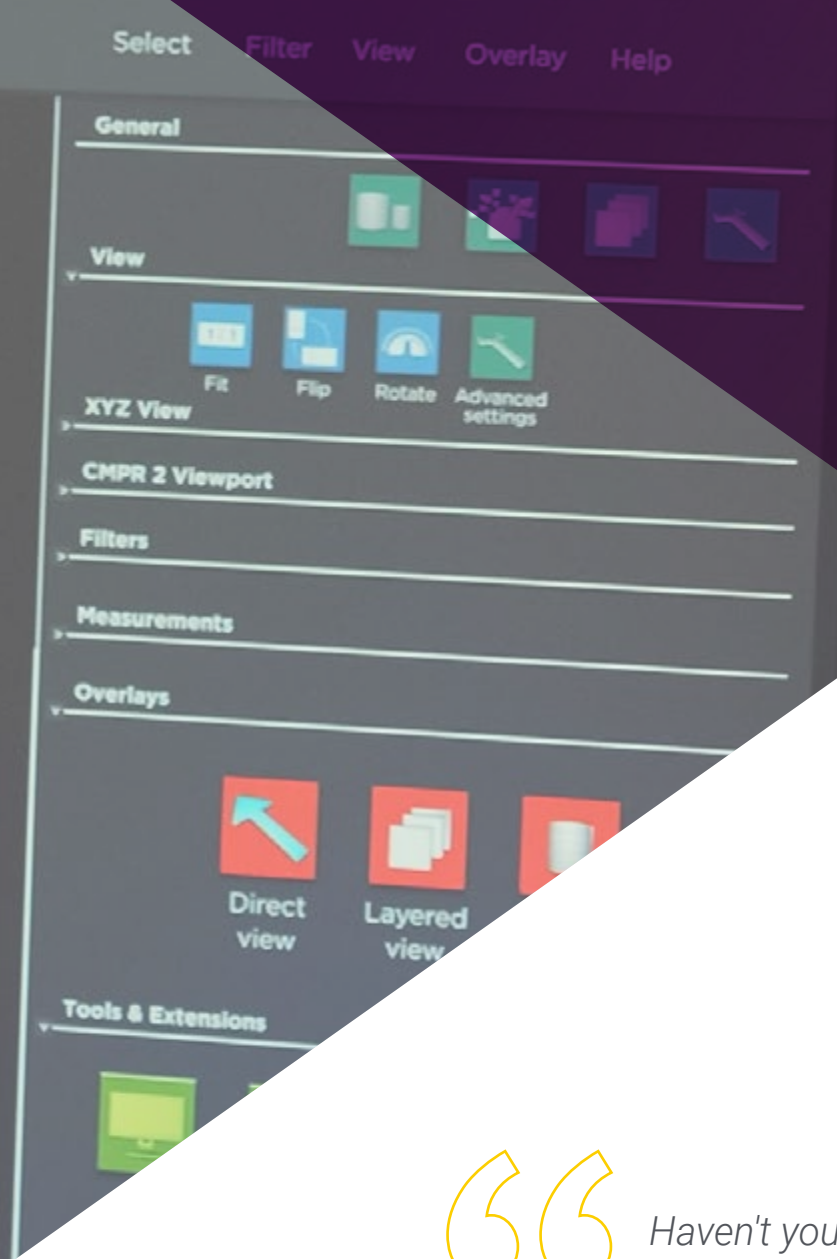
# 02

# Objectives

The Postgraduate Certificate in Digitization of Dental Equipment has as its main objective to prepare dentists in the use of digital technologies applied to their daily practice. Through a multidisciplinary approach, students will acquire state-of-the-art theoretical and practical knowledge that will enable them to provide greater precision in their clinical procedures. This, in turn, will help reduce costs and improve the patient's experience in the practice.







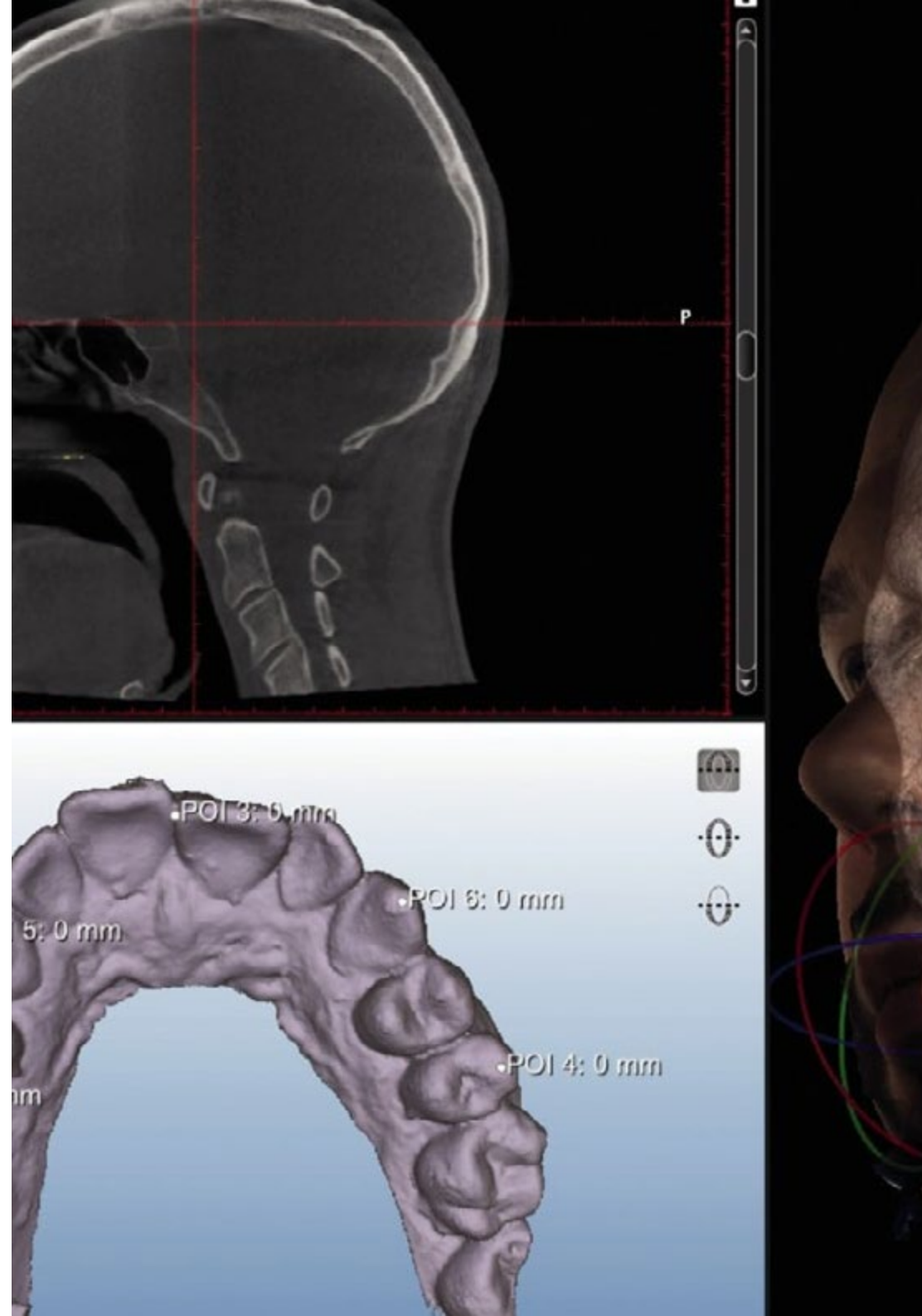
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*Haven't you enrolled yet in the program that will boost your skills in using 3D scanners or digital cameras in the clinic?"*



## General Objectives

- 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 concepts of digitization and its importance in clinical practice
- ◆ Know the different types of equipment that can be digitized and the technologies used for this purpose
- ◆ Examine the use of specialized digitizing equipment and software, such as 3D scanners, digital cameras, CAD/CAM software, among others
- ◆ Develop skills in editing and manipulating digital data obtained from digitized equipment.
- ◆ Understand the ethical and legal implications of digitization of equipment, including data privacy and intellectual property
- ◆ Integrate digitized equipment into clinical practice
- ◆ Interpret and use digital data obtained from digitized equipment for clinical decision making



*Improve your decision making in consulting with new skills in interpretation and use of digital data"*

03

# Course Management

The teacher team of the Postgraduate Certificate is a statement of intent on the part of TECH. In this sense, the faculty has extensive experience in the field of Digital Dentistry. In this way, it is made up of professionals who are experts in different areas, such as Digital Radiology, Dental Photography, Implantology, Orthodontics and Endodontics, among others. In addition, they are professors of recognized prestige who have worked in dental centers of international reference.





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*Succeed with the best experts in Implant Dentistry and Digital Dentistry that you will find in the educational market"*

## Management



### Mr. 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



### Mr. Roisental, 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



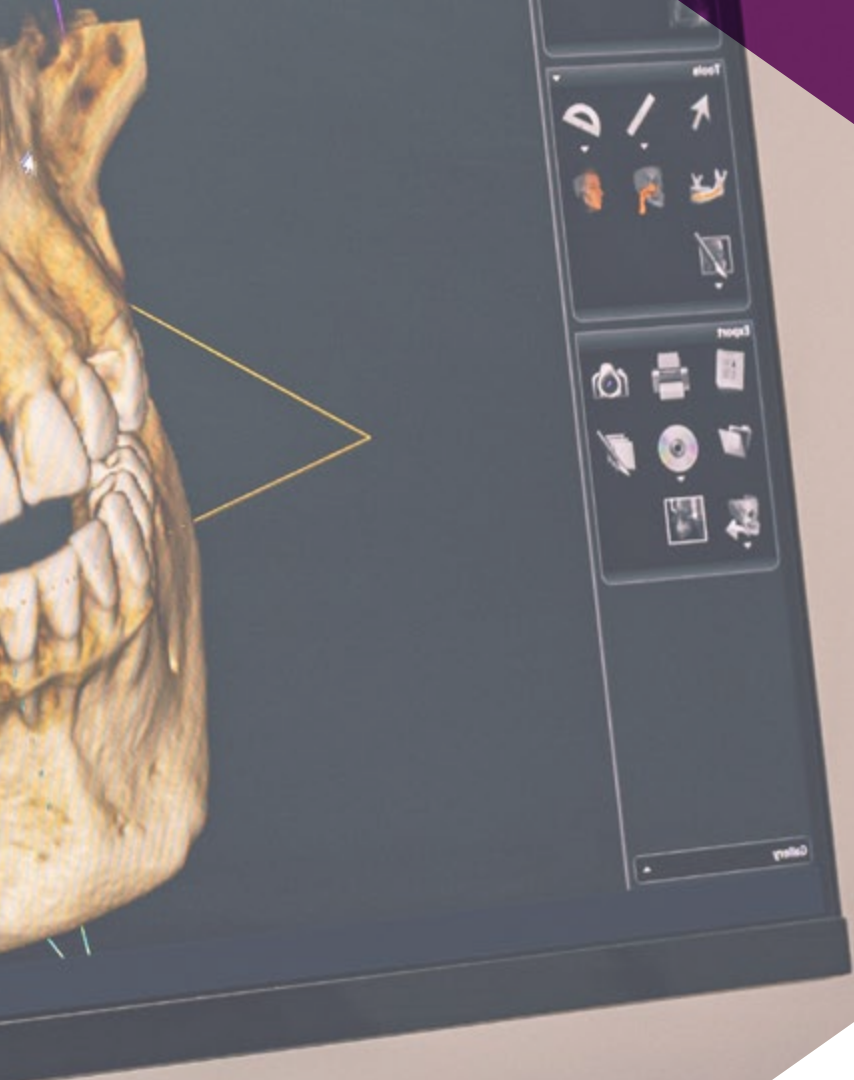
# 04

## Structure and Content

The Postgraduate Certificate in Digitization of Dental Equipment has been designed to offer the maximum possible flexibility to students. Not only is it 100% online, but it also has an innovative pedagogical methodology based on Relearning, which focuses on the directed reiteration of the concepts of the syllabus through resources such as explanatory videos or interactive diagrams. This allows students to access the content in an autonomous and personalized way and to internalize the ideas more quickly.







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*This is the syllabus you're looking for if you want to see how Digital Flow has transformed Dentistry"*

## Module 1. Equipment digitalization

- 1.1. Video Evolution
  - 1.1.1. Why Be Digital
  - 1.1.2. Multidisciplinary
  - 1.1.3. Time/Expenses
  - 1.1.4. Advantages/Costs
- 1.2. Digital Flow
  - 1.2.1. File Types
  - 1.2.2. Types of Meshes
  - 1.2.3. Reliability
  - 1.2.4. Comparison of Systems
- 1.3. Digital Camera and Cell Phone
  - 1.3.1. Lighting Techniques in Dentistry
  - 1.3.2. Clinical Dental Photography
  - 1.3.3. Aesthetic Dental Photography Techniques
  - 1.3.4. Image Editing
- 1.4. Digital Radiology
  - 1.4.1. Types of Dental Radiographs
  - 1.4.2. Digital Radiology Technology
  - 1.4.3. Take Digital Dental Radiographs
  - 1.4.4. AI Interpretation of Dental Radiographs
- 1.5. CBCT
  - 1.5.1. CBCT Technology
  - 1.5.2. Interpretation of CBCT Images
  - 1.5.3. Diagnostic CBCT Imaging
  - 1.5.4. CBCT Applications in Implant Dentistry
  - 1.5.5. CBCT Applications in Endodontics
- 1.6. Dental Scanner
  - 1.6.1. Scanning of the Dentition and Soft Tissues
  - 1.6.2. Digital Modeling in Dentistry
  - 1.6.3. Design and Fabrication of Digital Dental Prostheses
  - 1.6.4. Applications of the Dental Scanner in Orthodontics





- 1.7. Dynamic Stereoscopy
  - 1.7.1. Dynamic Stereoscopic Imaging
  - 1.7.2. Interpretation of Dynamic Stereoscopic Images
  - 1.7.3. Integration of Dynamic Stereoscopy into the Dental Work Flow
  - 1.7.4. Ethics and Safety in the Use of Dynamic Stereoscopy
- 1.8. PIC Photogrammetry
  - 1.8.1. PIC Phonogrammetry Technology
  - 1.8.2. Interpretation of Phonogrammetric Records PIC
  - 1.8.3. Applications of PIC Phonogrammetry in Dental Occlusion
  - 1.8.4. Advantages and Disadvantages of the PIC Phonogrammetry
- 1.9. Facial Scanner
  - 1.9.1. Facial Scanner Recording
  - 1.9.2. Facial Data Analysis and Assessment
  - 1.9.3. Integration of the Facial Scanner in the Dental Work Flow
  - 1.9.4. Future of Facial Scanning in Dentistry
- 1.10. Files
  - 1.10.1. Types of Digital Files in Dentistry
  - 1.10.2. Digital File Formats
  - 1.10.3. File Storage and Management
  - 1.10.4. Security and Privacy of Digital Files



*Enjoy an absolutely up-to-date educational experience that addresses all aspects of digital file security and privacy"*

# 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 Digitalization of Dental Equipment guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



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

This program will allow you to obtain your **Postgraduate Certificate in Digitalization of Dental Equipment** 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 Digitalization of Dental Equipment**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



\*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.

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



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