



## Postgraduate Certificate

Dental Care in the Cardiovascular Patient

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/dentistry/postgraduate-certificate/dental-care-cardiovascular-patient

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## tech 06 | Introduction

Dental care is crucial to patients' cardiovascular health. Prevention and treatment of periodontal disease and other oral infections are essential to minimize systemic inflammation and reduce the risk of cardiovascular disease. Such patients require special precautions during dental procedures to minimize the risk of complications.

For this reason, TECH has designed a Diploma in Dental Care in the Cardiovascular Patient with the aim of providing students with the necessary skills to be able to perform their work as specialists as efficiently as possible. Thus, during this program, topics such as Antibiotic Prophylaxis Guidelines, Detection of the Hypertensive Patient, Arrhythmia or Oral Complications are addressed.

All this, through a 100% online modality that allows students to organize their schedules and studies, combining them with their other work and interests. In addition, this degree has the most complete theoretical and practical materials on the market, which facilitates the student's study process and allows them to achieve their goals efficiently.

This **Postgraduate Certificate in Dental Care in the Cardiovascular Patients** 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 Dental Attention in the Cardiovascular Patient
- The graphic, schematic and practical contents of the program provide Sports and practical information on those 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



Become an expert in Dental Care in the Cardiovascular Patient with total freedom to organize your schedule and studies"



Access all the content on Ischemic Cardiopathy and Sinus or Ectopic Rhythm from any device with internet connection"

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

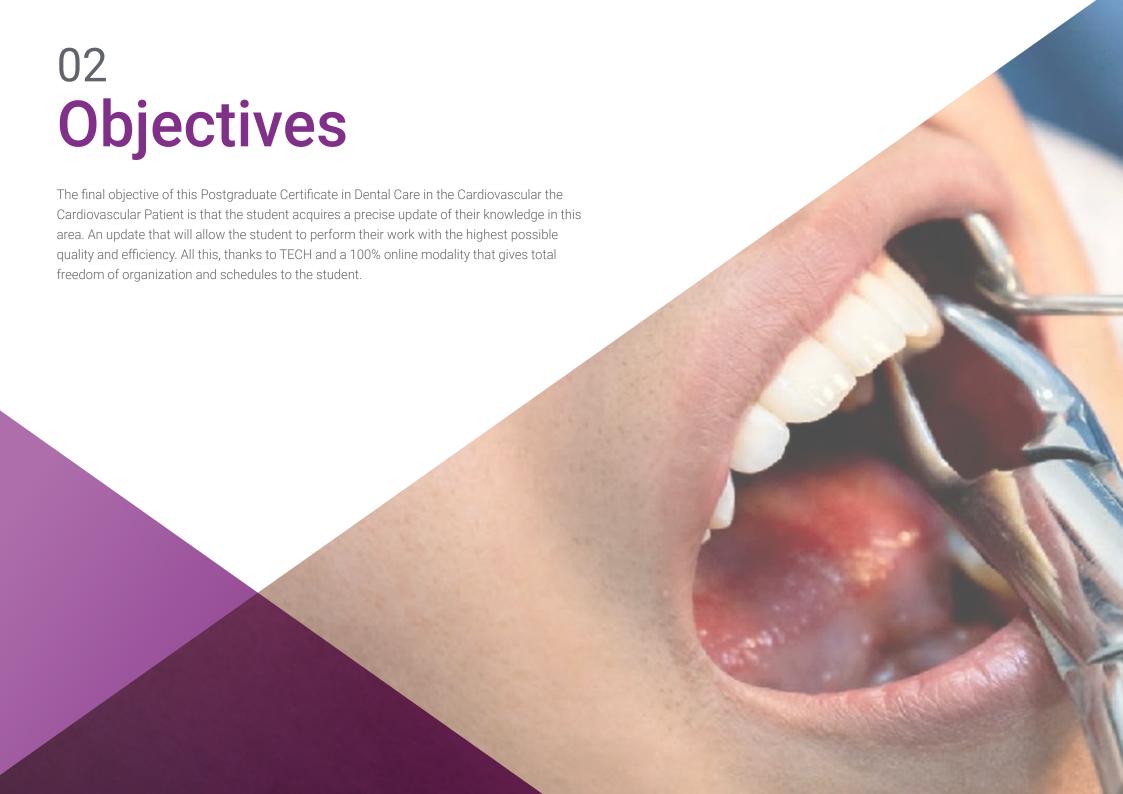
Its multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

Delve into the essential aspects of the Production Mechanisms of Arrhythmias, from the comfort of your home and with your Tablet, computer or cell phone.

Achieve professional success in one of the most promising areas of Dentistry, thanks to TECH and the most innovative didactic materials.





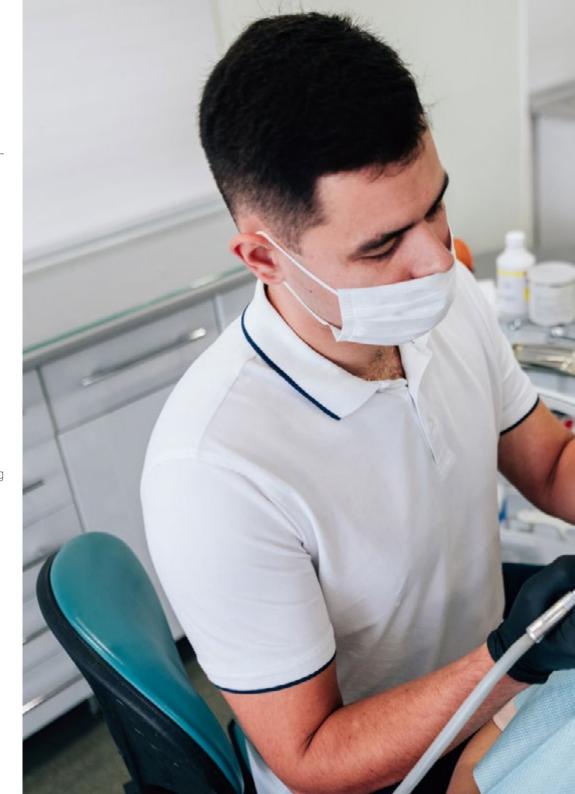


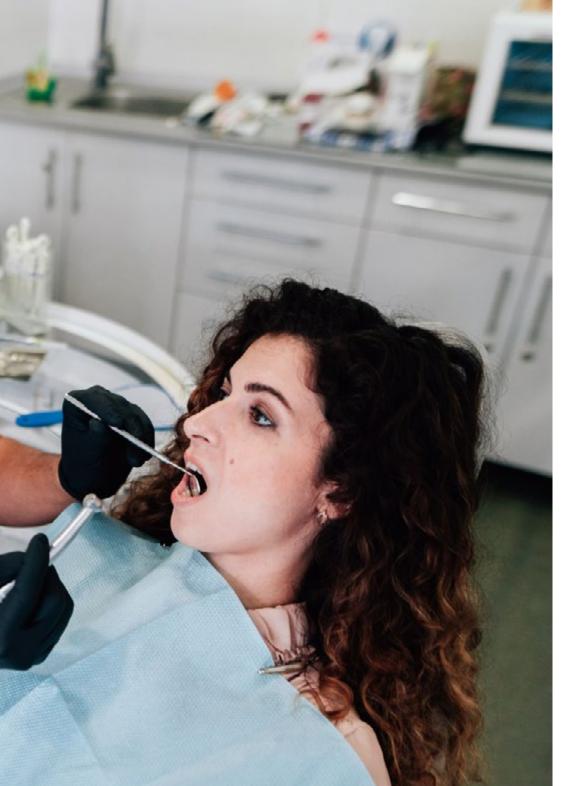
## tech 10 | Objectives



## **General Objectives**

- Update knowledge on the identification of pathologies that may affect the normal development of dental treatment
- Analyze pathologies that may hinder dental treatment
- Define the pharmacological guidelines for patients
- Define and analyze the basic and advanced aspects that define the actions to be taken in case of the main urgent and emergent conditions in a dental office
- Address the most common medical complications in patients
- Provide updated recommendations based on scientific evidence for an adequate dental approach to patients
- Identify the main Oral characteristics of Patients
- Update knowledge on the medical conditions and medication necessary
- Deepen in the main complications derived from the different medical pathologies
- Delve into the possible interactions derived from the medical pathology in the dental setting







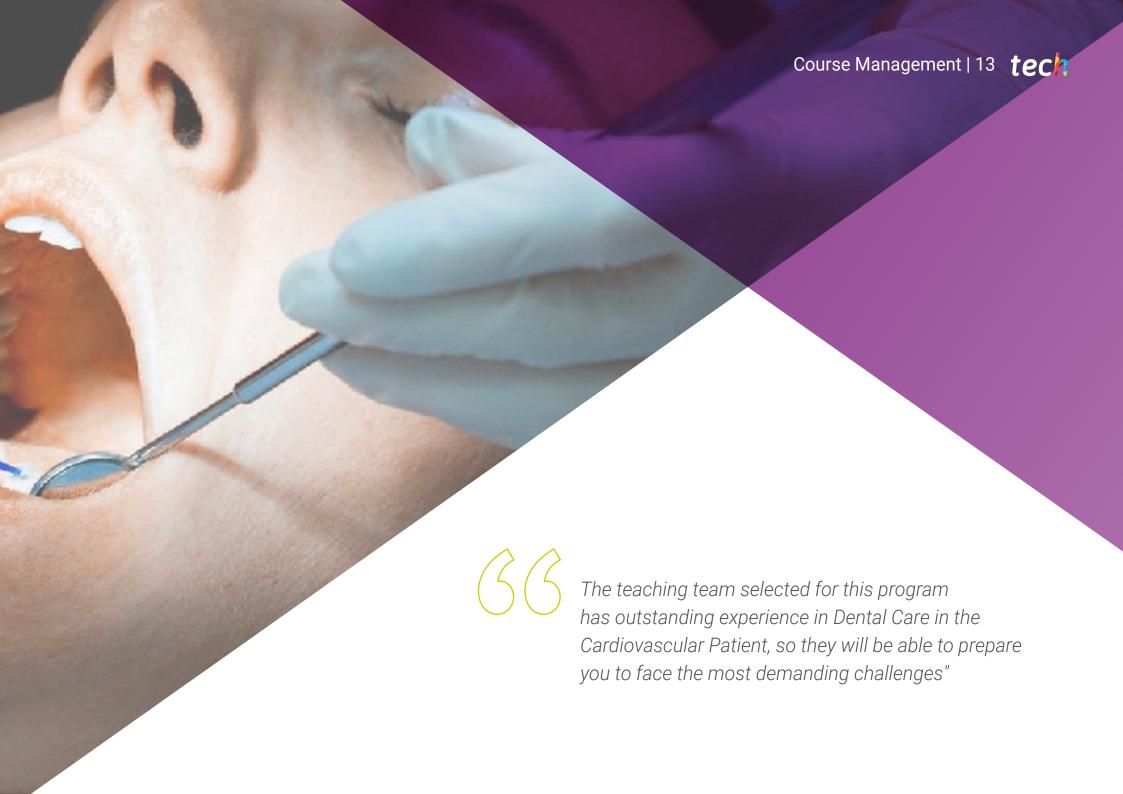
## **Specific Objectives**

- Identify the medical complications associated with cardiovascular pathologies and their treatment
- Present a protocol for dental care in patients with Heart Failure
- Expose a protocol for dental management in patients with ischemic heart disease
- Guideline a protocol for dental management in patients with Cardiac Arrhythmias disease
- Establish a protocol for dental management in patients with arterial hypertension
- Present a protocol for dental management in patients at risk of bacterial endocarditis
- Propose a protocol for the medical-dental management of possible emergencies that we may have with patients with cardiovascular pathology in the dental office



Reach your most demanding goals and achieve a successful position, thanks to a unique program with the most complete theoretical and practical materials in the academic market"





#### **International Guest Director**

Dr. Elena Maria Varoni is considered a true international eminence in the field of Dentistry and Oral Medicine. Her career has been focused on research and scientific innovation with Biomaterials, and she is co-inventor of a European patent for the manufacture of self-supporting films. At the same time, her work has contributed significantly to the development of biosensor technologies, setting new biomedical standards.

Therefore, throughout her prolific career, the expert has been awarded several distinctions at national, regional and international level. Among them is the "Fucina of the Future" Award, given by the Milan Society of Medicine and Dentistry to researchers under the age of 40 who have made unique contributions to science. Moreover, she frequently participates in world-renowned conferences and congresses where she has presented her discoveries and received some specific awards for these celebrations.

Dr. Varoni also maintains scientific collaborations with institutions of the highest prestige. One of them is through the Cochrane project, belonging to the World Oral Health Group, dedicated to the prevention of oral cancer. She also maintains joint initiatives with the Biointerface Laboratory of the Department of Mining and Materials Engineering at McGill University in Canada. In addition, she is a consultant to the Phytochemistry Research Center at Shahid Beheshti University and the Department of Pharmacognosy at Zabol University of Medical Sciences, both based in Iran. She also advises other entities based in countries such as Poland, United Kingdom, Spain and Japan.

In addition to her research work, the specialist maintains a rigorous clinical practice in private centers, including the Dental Clinic of the San Paolo Hospital in Milan. She is also a member of the Odontostomatological Diagnosis and Treatment Team (DOT), led by Professor Giovanni Lodi.



## Dr. Elena Maria Varoni

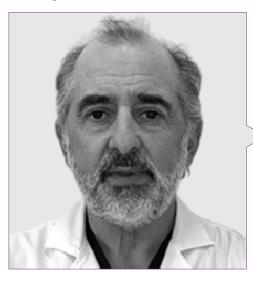
- Director of the Dental Hygiene Program, Department of Biomedicine, University of Milan, Milan, Italy
- Co-inventor of the European patent for the development of self-supporting films
- Specialist of the Diagnostic and Odontostomatological Treatment Team (DOT)
- Dentist at the Clinica Odontoiatrica Ospedale San Paolo, Milan, Italy
- Collaborator in the Cochrane Project of the Global Oral Health Group Researcher and collaborator at the Biointerface Laboratory, Department of Mining and Materials Engineering, McGill University
- Collaborator at the Phytochemistry Research Center, Shahid Beheshti University
- Advisor to the Department of Pharmacognosy, Zabol University of Medical Sciences
- Consultant to the Advisory Board of Sunovion Pharmaceuticals Company
- Consultant to Jonhson & Jonhson Company in Italy

- Publisher and translator of scientific articles in Odont News
- Author of several popular scientific articles for the Italian Dental Magazine
- Doctor in Biotechnology and Human Health at the University of Eastern Piedmont "A. Avogadro"
- Degree in Dentistry at the University of Milan
   Member of: European Association of Oral Medicine
   (EAOM) European Association of Biomaterials (ESB) Italian
   Society of Oral Medicine and Pathology (SIPMO) Italian Society of
   Biomaterials (SIB)Italian Society of Human Nutrition (SINU)Italian
   Society of Periodontology (SIdP)



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

#### Management



#### Dr. Gil Montoya, José Antonio

- General Dentist in private practice Coordinator of the Doctoral Program in Clinical Medicine and Public Health of the University of Granada
- Director of the Stomatology Department of the University of Granada
- Head Teacher of Dentistry in Special Patients at the University of Granada
- Gerodontology Professor at the University of Granada
- Invited professor of online Masters in Special Patients and Gerodontology
- Degree in Dentistry from the University of Granada
- PhD in Dentistry from the University of Granada
- Master's Degree in Social Gerontology from the University of Granada
- Master in Health Research Methodology by the Andalusian School of Public Health



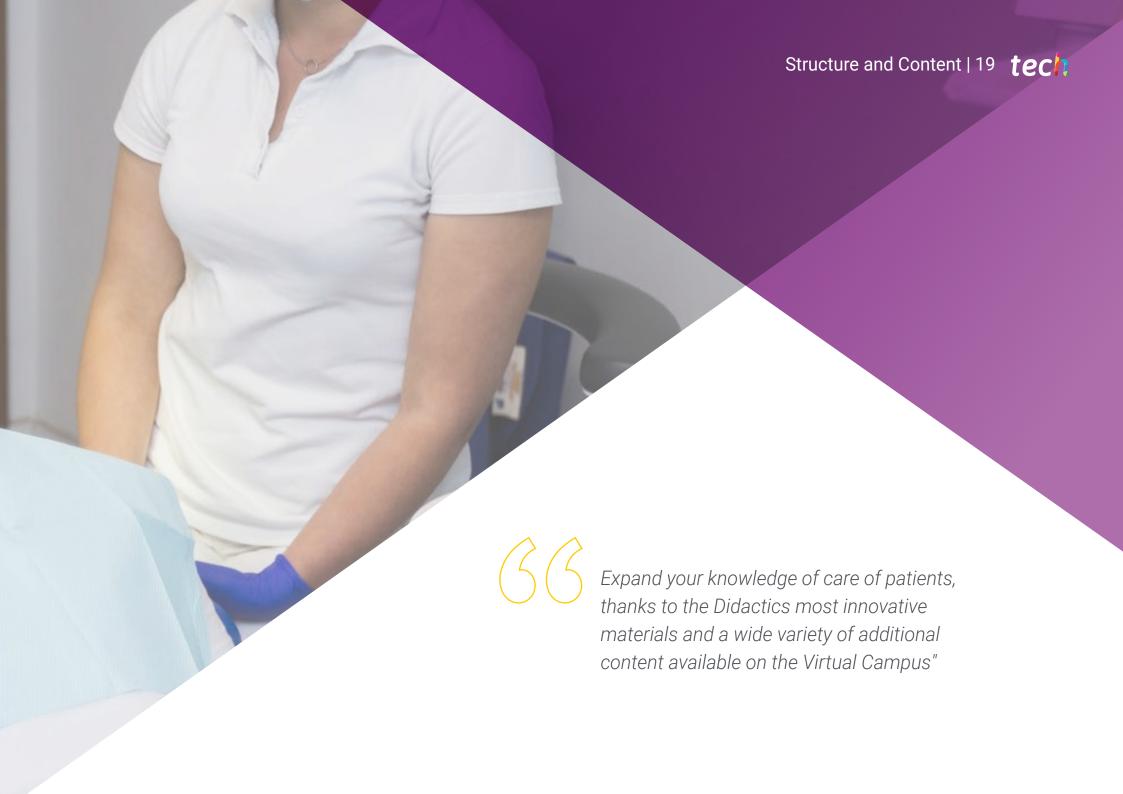
## Course Management | 17 tech

#### **Professors**

#### Dr. Federico Martínez López

- Head of the Murcia Floridablanca Oral Health Unit
- Dentist in private clinic
- Collaborating Professor in Special Patients and Gerodontology at the University of Murcia
- PhD in Medicine and Surgery from the University of Murcia
- Degree in Medicine and Surgery, Autonomous University of Barcelona, Teaching Unit in Vall Hebron
- Degree in Odontology from the University of Seville
- Master's of Special Patients from the University of Murcia



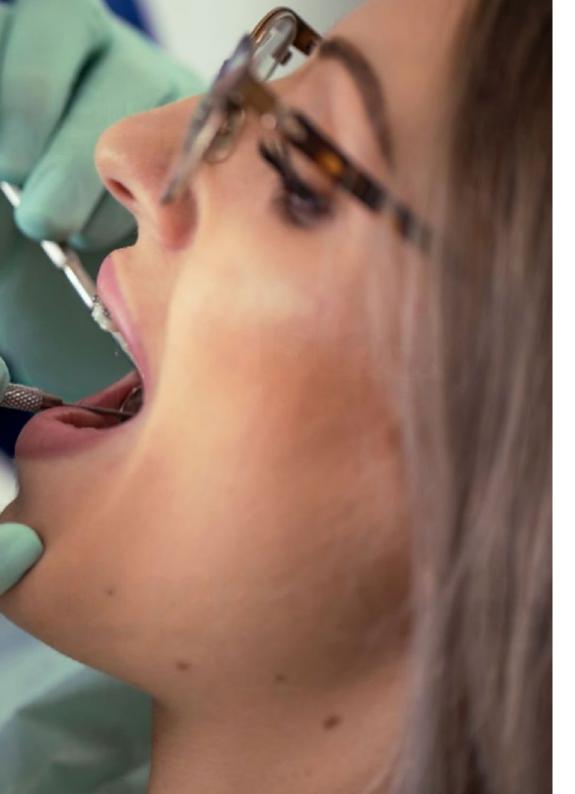


## tech 20 | Structure and Content

#### Module 1. Dental Care in Patients with Cardiovascular Pathology

- 1.1. Cardiovascular System
  - 1.1.1. Components of the Cardiovascular System
  - 1.1.2. Physiology
  - 1.1.3. Regulatory Mechanisms
- 1.2. Heart Failure
  - 1.2.1. Heart Failure Concept
  - 1.2.2. Types
  - 1.2.3. Compensating mechanisms
  - 1.2.4. Etiopathogenesis of Heart Failure
  - 1.2.5. Classification
  - 1.2.6. Treatment
- 1.3. Heart failure: clinical and dental management
  - 1.3.1. Clinical signs and symptoms
  - 1.3.2. Oral complications
  - 1.3.3. Dental Management Protocols
- 1.4. Ischemic Heart Disease
  - 1.4.1. Ischaemic heart disease. Concept
  - 1.4.2. Etiopathogenesis
  - 1.4.3. Risk Factors
  - 1.4.4. Clinical signs and symptoms
  - 1.4.5. Diagnosis and Treatment
- 1.5. Ischemic heart disease: dental management
  - 1.5.1. Potential problems
  - 1.5.2. Dental management: action protocol
  - 1.5.3. Management of Chest Pain during dental treatment
  - 1.5.4. Management of patients with pacemakers
- 1.6. Cardiac Arrhythmias
  - 1.6.1. Cardiac Electrophysiology
  - 1.6.2. Arrhythmia concept
  - 1.6.3. Sinus rhythm and ectopic rhythm
  - 1.6.4. Production Mechanisms of Arrhythmias
  - 1.6.5. Classification





## Structure and Content | 21 tech

- 1.7. Heart Arrhythmias: clinical and dental management
  - 1.7.1. Clinical Symptoms
  - 1.7.2. Diagnostic
  - 1.7.3. Classification
  - 1.7.4. Dental management of patients with arrhythmias
- 1.8. Arterial Hypertension
  - 1.8.1. High Blood Pressure Concept
  - 1.8.2. Etiopathogenesis
  - 1.8.3. Classification
  - 1.8.4. Treatment
  - 1.8.5. Detection of hypertensive patients
- 1.9. Arterial hypertension: dental management
  - 1.9.1. Treatment algorithm for hypertensive patients
  - 1.9.2. Dental Management
  - 1.9.3. Management of hypertensive crisis during dental treatment
- 1.10. Bacterial Endocarditis
  - 1.10.1. Endocarditis Concept
  - 1.10.2. Guidelines of Antibiotic Prophylaxis
  - 1.10.3. Prophylaxis according to cardiac conditions
  - 1.10.4. Prophylaxis according to dental procedures



Thanks to the most efficient teaching methodology, TECH Relearning, you will be able to acquire new knowledge in a precise and natural way, without spending too much time studying"



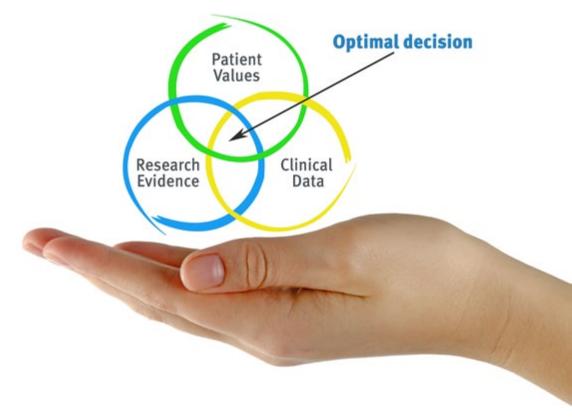


## tech 24 | Methodology

#### 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 | 27 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**

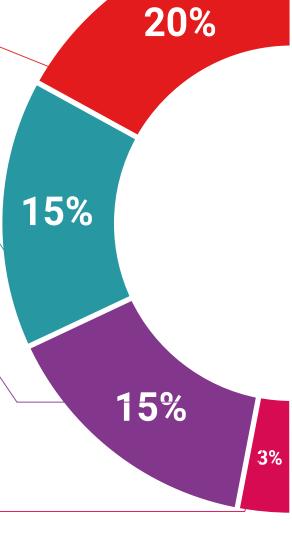
TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times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

# 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



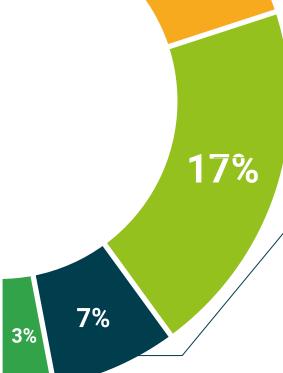
There is scientific evidence suggesting that observing third-party experts can be useful.

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.



20%





## tech 32 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Dental Care in the Cardiovascular Patient** 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 Dental Care in the Cardiovascular Patient

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

#### Postgraduate Certificate in Dental Care in the Cardiovascular Patient

This is a program of 180 hours of duration equivalent to 6 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



<sup>\*</sup>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.

tech global university



## Postgraduate Certificate

Dental Care in the Cardiovascular Patient

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

