



## Postgraduate Diploma

Treatment of the Atrophic UpperJaw

» Modality: online

» Duration: 6 months

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

 $We b site: {\color{blue} www.techtitute.com/us/dentistry/postgraduate-diploma/postgraduate-diploma-treatment-atrophic-upper-jaw} \\$ 

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## tech 06 | Introduction

This, along with the great scientific and technical development that has occurred within this field, explains why a large percentage of research and subsequent publications in the dental world have focused on this subject. This makes the overall impact factor much higher than that of any other area of dentistry.

A large percentage of research and subsequent publications in the dental world have focused on this subject. This makes the overall impact factor much higher than that of any other area of dentistry.

This has meant that dental prosthesis treatments have undergone an important conceptual change due to the clinical success and predictability of dental implants. This has provided the possibility of offering the patient, in many cases, a third dentition on the jaws. This is capable of replacing the lost teeth both functionally and aesthetically without treatment or overloading of the neighboring teeth, and in a fixed form.

Tehrefore, in the prosthodontic treatment of patients with tooth loss, we have to combine the classic concepts and knowledge of oral rehabilitation with the new concepts of implant anchorage, distribution of forces (biomechanics) and preservation of osseointegration (the principle by which the titanium implant is joined to the bone).

The knowledge acquired will allow the student to face working life from a more qualified position, giving them a clear advantage when it comes to finding a job, since they will be able to offer the application of the latest technological and scientific advances in implant-prosthetic rehabilitation.

This **Postgraduate Diploma in Treatment of the Atrophic Upper Jaw** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of clinical cases presented by experts in the different dental specialties
- 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.
- New developments on information on the treatment of the atrophic upper jaw
- 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 research methodologies in the treatment of the atrophic upper jaw.
- Content that is accessible from any fixed or portable device with an Internet connection



Expand your knowledge through the Postgraduate Diploma in Treatment of the Atrophic Upper Jaw, in a practical way and adapted to your needs"



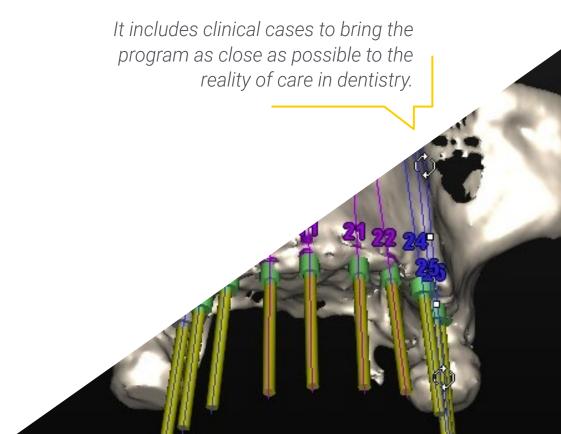
This Postgraduate Diploma is the best investment you can make when selecting a refresher program, for two reasons: in addition to updating your knowledge in Treatment of the Atrophic Upper Jaw, you will obtain a qualification endorsed by TECH Technological University"

The Postgraduate Diploma offers training in simulated environments, which provides an immersive learning experience designed to train for real-life situations.

Its teaching staff includes health professionals belonging to the field of dentistry, who share their work experience in this program, as well as renowned specialists belonging to leading scientific societies.

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 train in real situations.

The design of this program is based on Problem-Based Learning, through which the Dentist must try to solve the different professional practice situations that arise throughout the academic course. For this reason, they will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of radiology with extensive teaching experience.







## tech 10 | Objectives

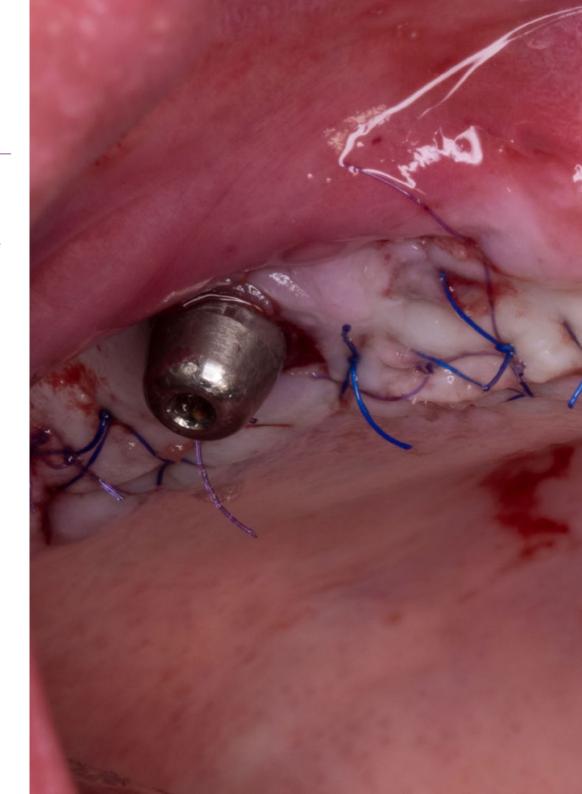


## **General Objectives**

- Update the theoretical and practical knowledge of dental professionals in the different areas of oral surgery and implantology through evidence-based dentistry.
- Promote work strategies based on a multidisciplinary approach towards patients who are potential candidates for oral surgery or restoration with dental implants.
- 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 training courses.
- Encourage professional stimulation through continuing education and research.



Make the most of this opportunity and take the step to get up to date on the latest developments in Treatment of the Atrophic Upper Jaw"





### **Specific Objectives**

#### Module 1. Diagnosis

- Explain the appropriate process for carrying out the pre-surgery medical history of a patient.
- Identify the surgical procedure to be followed once the tests have been performed.
- In-depth analysis of the most common diseases that occur in the oral cavity
- Assist the patient in case of a medical emergency
- Perform analytical processes for correct medical diagnoses that serve as a starting point for the surgical procedure

#### Module 2. Implant Planning

- Describe the anatomy of the cranio-maxillary complex: surgical and implant relevance.
- Identify the pharmacological interactions and explain the radiological techniques necessary for implant diagnosis.
- Analyze the techniques required for correct implant planning
- Organize the necessary tools and medicines required for the implantation procedure

#### Module 3. Implantology and Osseointegration

- Describe the main aspects involved in osseointegration procedures.
- Identify the bony parts involved in oral implantation processes
- Analyze the correct handling of implantation to match each facial bone cavity
- Identify the materials from which the prostheses are made
- Identify oral bone parts that can be replaced by surgical procedures and others that can be replaced by prosthesis

#### Module 4. Maxillary Sinus Lift

• Explain the process for performing sinus lift, ramus bone grafting and mandibular

symphysis surgical techniques.

- Analyze the engraftment procedure in surgical lifting techniques
- Describe the correct process for maxillary sinus elevation
- Delve into the surgical procedure of sinus lift
- Apply post-surgical techniques for the recovery and evolution of sinus lift

#### Module 5. Advanced Surgical Techniques in Implantology

- Apply surgical techniques to obtain primary implant stability in suitable situations with high bone availability.
- Apply pre-implantological alveolar ridge augmentation techniques with both hard and soft tissue regeneration.
- Identify surgical procedures of major complication and implement them taking into account the bases and procedures
- Analyze the new surgical models applied for modern implantation

#### Module 6. Complications in Implantology

- Identify surgical procedures that went wrong in patients with oral difficulties and discomfort
- Be aware of the common complications presented in poorly performed surgical procedures and their possible immediate correction
- Identify materials according to the patient's diagnosis so as not to affect recovery and future complications
- Analyze different proposals for fast-acting and surgical methods to solve complications in implant dentistry



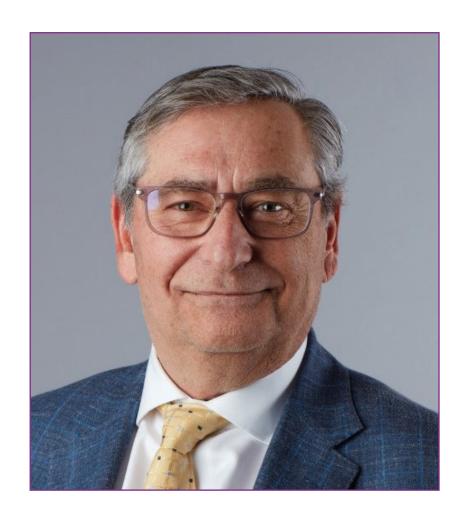


#### **International Guest Director**

As one of the foremost members of the dental field, Dr. Howard C. Tenenbaum has lectured internationally on topics as diverse as Orofacial Pain, Bone Cell Biology and the treatment of Refractory Periodontal Disease. He has received numerous recognitions, including distinguished fellowships from the International College of Dentists, the Academy of Dentistry International, the American College of Dentists and the Pierre Fauchard Academy.

He has also received several awards for his research work, distinguished by Johnson & Johnson, as well as for his teaching at Mount Sinai Hospital. Precisely her dental research accumulates an H index of 52, with thousands of citations to his articles, highlighting his work in the study of the effects of resveratrol on oxidative stress during experimental periodontitis in rats subjected to cigarette smoke inhalation.

He combines his academic responsibilities as professor of dentistry at the University of Toronto with his work as a dental specialist at the Mount Sinai Hospital in Canada. It was in this same center where he held various management positions, being head of research of the dental service and at the same time responsible for the same service. Throughout his career he has served on various committees and associations, including the editorial boards of The Open Orthopaedics Journal and The Open Journal of Dentistry.



## Dr. C. Tenenbaum, Howard

- Professor of Dentistry, University of Toronto, Canada.
- Head of Research at the Mount Sinai Hospital Dental Service, Mount Sinai Hospital, Canada
- Professor of Periodontology, Tel Aviv University, Israel
- Professor of Periodontology, University of Manitoba, Canada
- Specialist at Princess Margaret Hospital, Toronto, Canada
- Head of Dentistry, Mount Sinai Hospital, Toronto, Canada
- Consultant to the U.S. Food and Drug Administration (FDA), U.S.A.
- Vice-Chairman of the Federal Advisory Committee on Dental Care of Canada
- Ph.D. in Oral Biology, University of Toronto, Canada
- Doctor of Dental Surgery from the University of Toronto, Canada
- Diploma in Periodontics, University of Toronto, Canada
- Fellowship of the International College of Dentists
- Fellowship of the Academy of Dentistry International

- Fellowship of the American College of Dentists
- Fellowship of the Pierre Fauchard Academy
- Member of: Editorial Board of The Open Orthopaedics Journal, Editorial Board of The Open Journal of Dentistry, College of Reviewers for the CIHR Canada Research Chairs Program, Canadian Dental Association, Canadian and International Association for Dental Research, American Society for Bone and Mineral Research, American Academy of Periodontology, Ontario Society of Periodontists



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

#### Management



#### Dr. García-Sala Bonmatí, Fernando

- Degree in Dentistry
- Associate Professor, University of Valencia, Department of Stomatology
- Master's Degree in Advanced Oral Implantology from the European University of Madrid
- Certificate in Advances in Implantology and Oral Rehabilitation from the New York University College of Dentistry New York, USA
- Former professor and codirector of the Master's Degree in Advanced Oral Implantology at the European University of Valencia Valencia, Spain
- Former professor of Oral Surgical Pathology at the European University of Valencia. Valencia, Spain
- ITI (International team Implantology) member
- Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (SEPES)
- Fellowship in bone regeneration with Dr Carlo Tinti Brescia, Italy
- Training in Dr Zucchelli Mucogingival Surgery at the University of Bologna Bologna, Italy
- Training in Periodontal Regeneration, Dr Cortellini Florence, Italy
- Training in Bone Regeneration, Dr Urban Budapest, Hungary
- Various publications in JCR, national and international speaker
- Private Practice Surgery, Periodontics and Implants



### Dr. Brotons Oliver, Alejandro

- Degree in Dentistry
- PhD in Dentistry from the University of Valencia
- Master's Degree in Oral Surgery and Implantology from the University of Valencia
- Certificate in Advances in Implantology and Oral Rehabilitation from the New York University College of Dentistry New York, USA
- Former professor and codirector of the Master's Degree in Advanced Oral Implantology at the European University of Valencia Valencia, Spain
- Former professor of Oral Surgical Pathology at the European University of Valencia. Valencia, Spain
- Former professor of Oral Surgery Pathology UCV Cardenal Herrera University. Valencia, Spain
- Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (SEPES) and the Spanish Society of Oral Surgery (SECIB)
- Fellowship in bone regeneration with Dr Carlo Tinti Brescia, Italy
- Training in Bone Regeneration, Dr Urban Budapest, Hungary
- Various publications in JCR, national and international speaker
- Private Practice Surgery, Periodontics and Implants

## tech 18 | Course Management

#### **Professors**

#### Dr. Plaza Espi, Andrés

- Degree in Dentistry from Cardenal Herrera University CEU in Valencia
- Master's Degree in Oral Medicine and Surgery from the University of Valencia 2010-2011
- Master's Degree in Dental Sciences from the University of Valencia 2011-2012
- Master's Degree in Dental Prosthesis from the University of Valencia 2009
- Associate professor of Prosthesis II at the Faculty of Dentistry, University of Valencia
- Professor of the Master's Degree in Dental Prosthesis at the University of Valencia

#### Dr. Manzanera Pastor, Ester

- Degree in Dentistry from the University of Valencia
- Master's Degree in Integrated Dentistry, Implantology and Biomaterials from the University
  of Murcia
- Master's Degree in Advanced Implantology from the University of Murcia
- Master's Degree in Dental Sciences from the University of Valencia
- Professor of Surgical Pathology at the European University of Valencia
- Private Practice in Surgery, Implantology and Aesthetics

#### Dr. Sierra Sanchez, Jose Luis

- Degree in Dentistry from the Complutense University Madrid (1996 2001)
- Master's Degree in Advanced Oral Implantology from the European University of Madrid.
   CAV 2010-2012
- Certificate in Advances in Implantology and Oral Rehabilitation from the New York University
- Certificate in Oral Surgery and Implantology from the Faculty of Dentistry at the University of Valencia (2009)

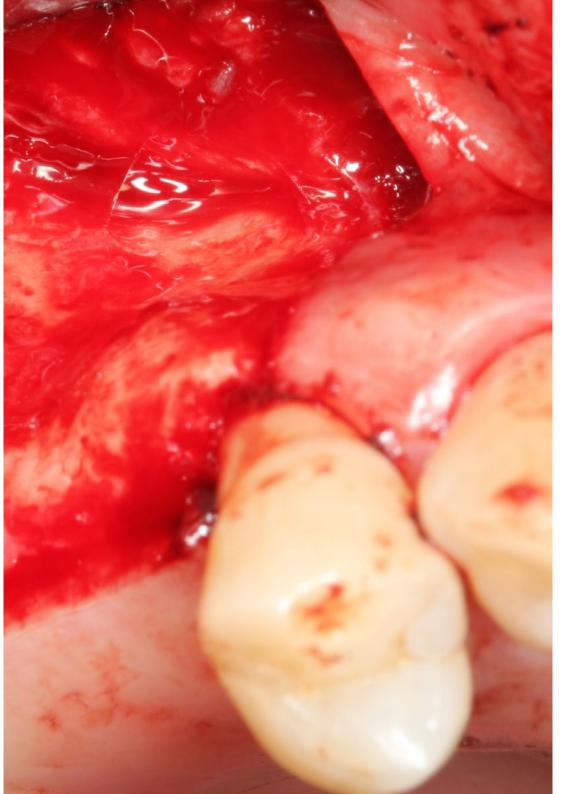
- Continuing education program in Implant Dentistry BTI institute (2002-2003)
- Private Practice in Surgery and Advanced Oral Implantology

#### Dr. García Dalmau, Carlos

- Degree in Medicine and Surgery. University of Valencia
- Degree in Dentistry University of Valencia
- Master's Degree in Oral Surgery and Implantology University of Valencia
- Professor of the Master's Degree in Advanced Oral Implantology, European University of
- Valencia (2010-2016)
- Professor of Oral Surgery Pathology European University of Valencia (2010-2016)
- Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (SECIB)
- Private Practice Surgery, Periodontics and Implants

#### Dr. Cabo Nadal, Alberto

- Degree in Dentistry University of Valencia 1994- 1999
- Postgraduate Degree Diploma in Dental Prosthesis, 3rd Edition 1999-2000, University of Valencia
- Further training in Surgery, Implant Prosthesis and Oral Reconstruction
- Dr. Eduardo Anitua. Vitoria, 2001
- Associate Professor of the Teaching Unit of Prosthodontics and Occlusion. University of Valencia
- Professor of Master's Degree in Dental Prosthesis University of Valencia
- Professor in charge of dental clinical practice at the European University of Valencia (2012-2015)



## Course Management | 19 tech

#### Dr. Lagos Flores, Elena

- Degree in Dentistry from the University of Valencia in 2004
- Master's Degree in Dental Prosthetics at the U.V. 2005-2006
- Collaborating professor of the Teaching Unit of Prosthodontics and Occlusion in the period 2004-2008 and associate professor from 2008 to 2016.

#### Rodriguez-Bronchú, Javier

- Degree in Dentistry from Cardenal Herrera University (CEU) (2002-2007)
- Master's Degree in Advanced Oral Implantology European University of Madrid. (2008-2010)
- Master's Degree in "Current Concepts in American Dentistry: Advances in Implantology and Oral
- Rehabilitation" New York College of Dentistry. New York. (2008-2010)
- Medical Director of RB Dental Clinic
- Private Practice in Surgery and Advanced Oral Implantology

#### Mellado Valero, Ana

- PhD in Dentistry U.V
- Private Practice in Prosthodontics and Implants. Valencia
- Collaborating professor in different post-graduate programs





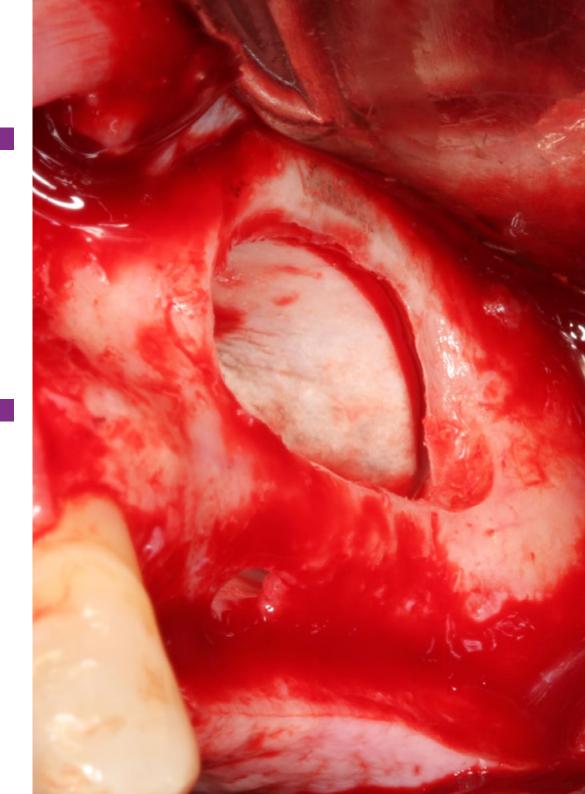
## tech 22 | Structure and Content

#### Module 1. Diagnosis

- 1.1. Clinical History: First Visit, Anamnesis and Patient's Expectations
- 1.2. Medical Assessment of the Surgical Patient
  - 1.2.1. Complementary Tests in Implantology and Oral Surgery
- 1.3. Patient With Diseases of Risk in Implant Dentistry and Surgery: Medical Considerations and Dental Management
  - 1.3.1. Diabetic Patients
  - 1.3.2. Immunosuppressed Patients
  - 1.3.3. Patients Taking Anticoagulants
  - 1.3.4. The Medically Compromised Patient: Bisphosphonates
- 1.4. Anaesthetic Techniques in Surgery and Implantology
  - 1.4.1. Drugs
  - 1.4.2. Loco-regional Anaesthesia Techniques in Surgery and Implantology
- 1.5. Sedation and General Anaesthesia

#### Module 2. Implant Planning

- 2.1. Extraoral and Intraoral Examination
  - 2.1.1. Extraoral Examination: Symmetry, Facial Thirds, Extraoral Aesthetic Parameters
  - 2.1.2. Intraoral Examination: Hard Tissue, Soft Tissue, Occlusion and TMJ
- 2.2. Impression Taking and Study Models in Implantology
  - 2.2.1. Materials and Impression Techniques in Implant Diagnosis
  - 2.2.2. Facebow and Mounting on a Semi-Adjustable Articulator
- 2.3. Diagnostic Wax-Up and Radiological Splints
  - 2.3.1. Waxing Techniques and Clinical Considerations
  - 2.3.2. Radiological Splints: Classification and Laboratory Manufacturing
- 2.4. Radiological Diagnosis in Implantology
  - 2.4.1. Classification of Techniques
  - 2.4.2. Planning in 2D
  - 2.4.3. Cone Beam Computed Tomography (CBCT): Planning Software
- 2.5. Photographic Records in Implantology
- 2.6. Presentation of a Treatment Plan Strategies



#### Module 3. Implantology and Osseointegration

- 3.1. Historical Review and Generic Terminology of Dental Implants
  - 3.1.1. Evolution of Implantology up to the 21st Century
  - 3.1.2. Generic Terminology of Dental Implants: Components and Nomenclature
- 3.2. Biology of Osseointegration
  - 3.2.1. Inflammatory Phase
  - 3.2.2. Proliferative Phase
  - 3.2.3. Maturation Phase
  - 3.2.4. Contact and Remote Osteogenesis
- 3.3. Anatomy in Implantology
  - 3.3.1. Anatomy of the Upper Jaw
  - 3.3.2. Anatomy of the Mandible
- 3.4. Histology of Bone Tissue, Periodontium and Peri-implant Tissue
- 3.5. Bone Availability in Implantology
- 3.6. Preparation of the Surgical Field, Sterilization and Premedication Protocols
  - 3.6.1. Table Preparation
  - 3.6.2. Surgical Asepsis of the Patient: Premedication
  - 3.6.3. Surgical Asepsis of the Surgeon and Assistants

#### Module 4. Maxillary Sinus Lift

- 4.1. Diagnosis and Anatomical Recall of the Sinus Lift
- 4.2. Sinus Lift Technique Via the Crestal Approach
  - 4.2.1. Sinus Lift with Osteotome Technique
  - 4.2.2. Minimally Invasive Crestal Sinus Lift
    - 4.2.2.1. Atraumatic Drilling Kits
    - 4.2.2.2. Balloon Technique
- 4.3. Sinus Lift Technique Via the Lateral Approach
  - 4.3.1. Step by Step Description of the Technique
  - 4.3.2. Piezoelectric Systems
  - 4.3.3. Biomaterials in Maxillary Sinus Elevation

#### Module 5. Advanced Surgical Techniques in Implantology

- 5.1. Crest Expansion
  - 5.1.1. Crest Expansion with Manual Instruments
  - 5.1.2. Crest Expansion with Motorized Instruments
- 5.2. Pterygoid Implants
- 5.3. Zygomatic Implants
- 5.4. Treatment with Dental Implants without Grafts
  - 5.4.1. Short Implants
  - 5.4.2. Narrow Implants
  - 5.4.3. Angled Implants

#### Module 6. Complications in Implantology

- 6.1. Emergencies and Complications in Implant Surgery: What They Are and How to Solve Them
  - 6.1.1. Immediate Complications
  - 6.1.2. Late Complications
- 5.2. Prosthesis Complications in Implantology
- 6.3. Biological Complications: Peri-implantitis.
  - 6.3.1. Concept
  - 6.3.2. Diagnosis
  - 6.3.3. Non-Surgical and Surgical Treatment
  - 6.3.4. Informed Consent and Legal Consequences



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



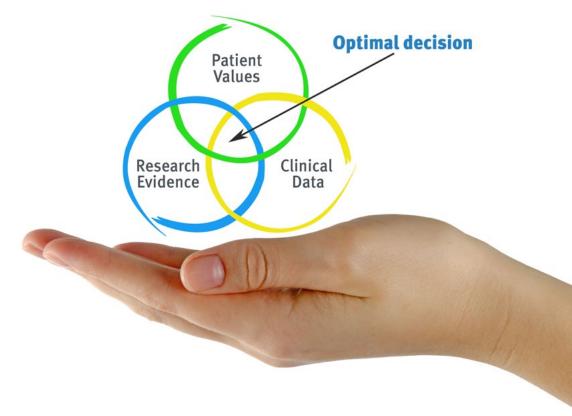


## tech 26 | Methodology

#### 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:

- 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.



## tech 28 | Methodology

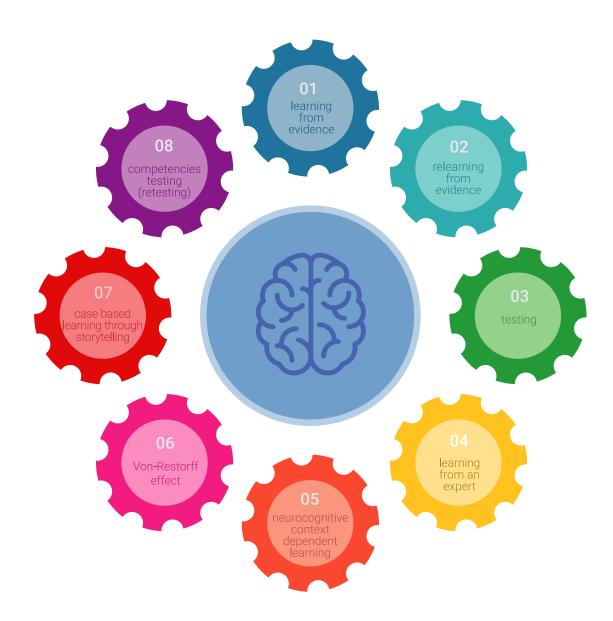
### Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

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 adapted in 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**

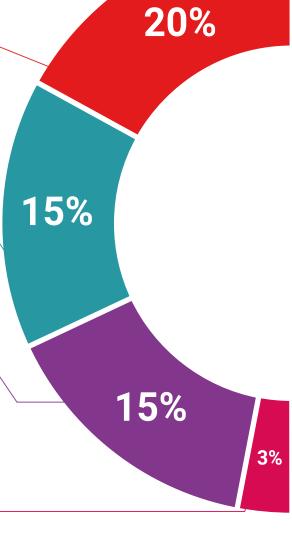
TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times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

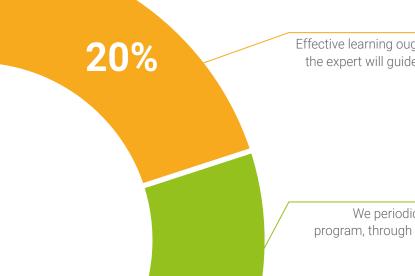
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".





#### **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.







## tech 34 | Certificate

This Postgraduate Diploma in Treatment of the Atrophic Upper Jaw contains the most complete and up-to-date scientific program on the market.

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

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

Title: Postgraduate Diploma in Treatment of the Atrophic Upper Jaw

Official No of Hours: 450 hours.



#### Treatment of the Atrophic Upper Jaw

This is a qualification awarded by this University, equivalent to 500 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as

June 17, 2020

technological university Postgraduate Diploma

Treatment of the Atrophic Upper Jaw

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