



# Postgraduate Certificate

Guided Surgery and Immediate Loading

» Modality: online

» Duration: 12 weeks

» Certificate: TECH Global University

» Credits: 12 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/dentistry/postgraduate-certificate/guided-surgery-immediate-loading

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# tech 06 | Introduction

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.

Thus, 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 Certificate in Guided Surgery and Immediate Loading** is the most comprehensive and up-to-date scientific program on the market. The most important features of the Postgraduate Certificate are:

- · Clinical cases presented by experts in implantology.
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice.
- The latest diagnostic and therapeutic information on how to approach Guided Surgery and Immediate Loading.
- 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 Guided Surgery and Immediate Loading.
- All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments.
- Content that is accessible from any fixed or portable device with an Internet connection.



Update your knowledge through the Postgraduate Certificate in Guided Surgery and Immediate Loading, in a practical way and adapted to your needs"

# Introduction | 07 tech



This Postgraduate Certificate may be the best investment you can make when choosing a refresher program for two reasons: in addition to updating your knowledge in Guided Surgery and Immediate Loading, you will obtain a qualification from TECH Global University"

Forming part of the teaching staff is a group of professionals in the world of Dentistry, who bring to this course their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

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 an immersive training program to train in real situations.

Problem-Based Learning underpins this program design, and the doctor must use it to try and solve the different professional practice situations that arise throughout the Postgraduate Certificate. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of radiology with extensive teaching experience.

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

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







# tech 10 | Objectives

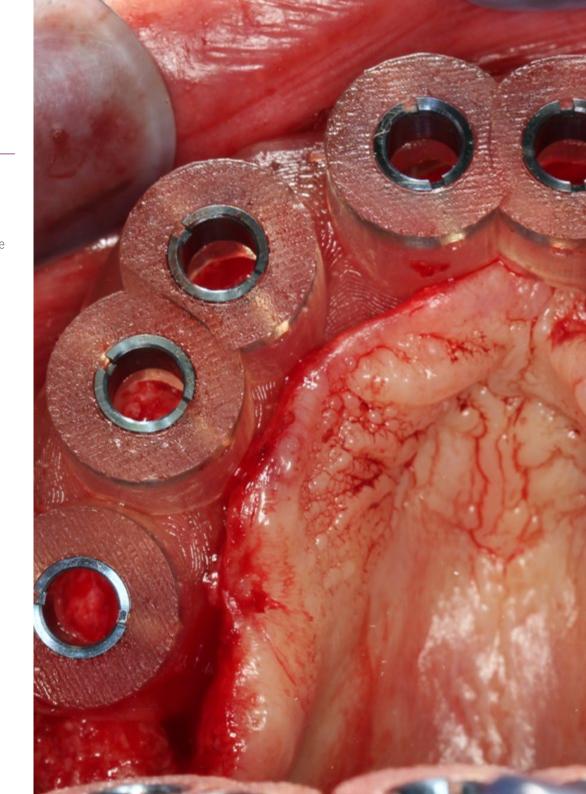


# **General Objectives**

- Update the theoretical and practical knowledge of 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.
- Encourage professional stimulation through continuing education and research.



Make the most of the opportunity and take the step to get up-to-date on the latest developments in the Guided Surgery and Immediate Loading"

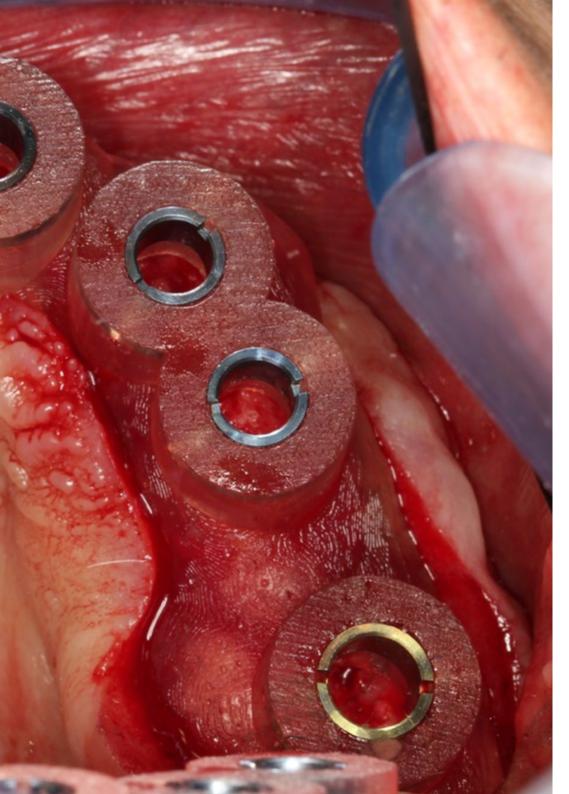




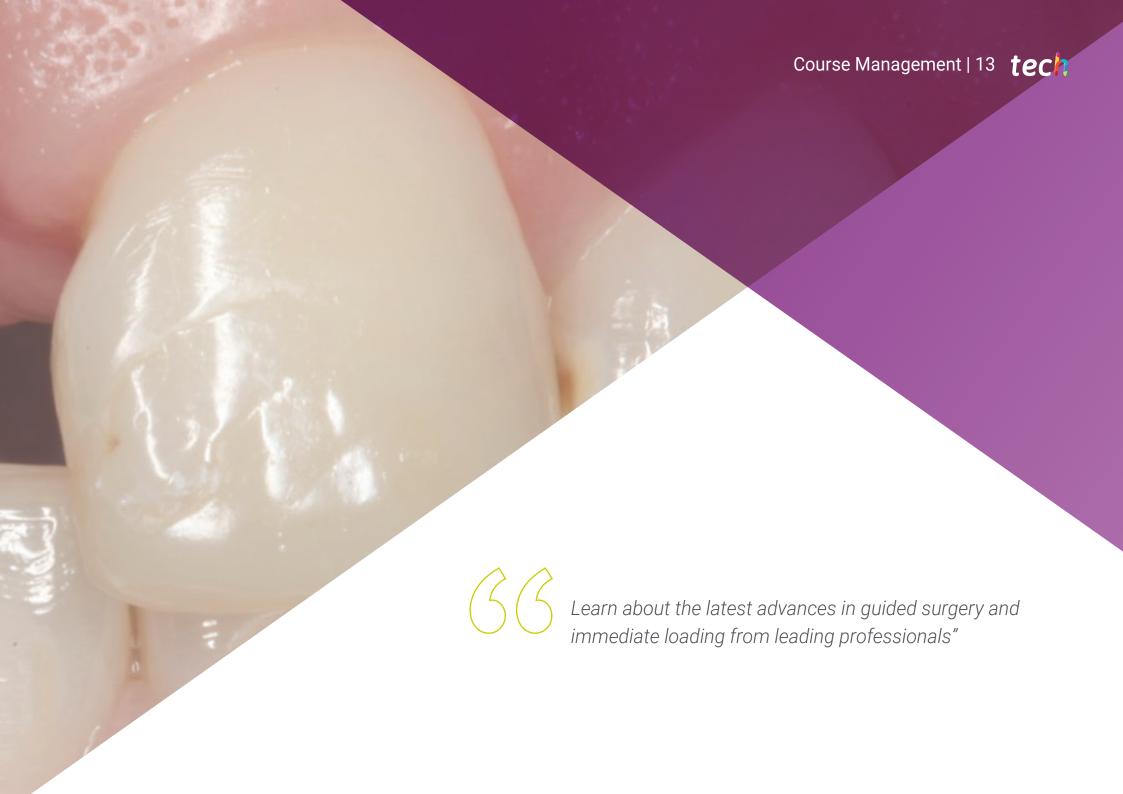


# **Specific Objectives**

- Describe the anatomy of the cranio-maxillary complex: surgical and implant relevance.
- Describe the main aspects involved in osseointegration procedures.
- Explain the appropriate process for carrying out the pre-surgery medical history of a patient, identify the pharmacological interactions and explain the radiological techniques necessary for implant diagnosis.
- Interrelate Implantology with the patient's medical pathologies and the rest of the dental specialties as well as to take samples.
- Apply surgical techniques to obtain primary implant stability in suitable situations with high bone availability.
- Apply techniques in Immediate Implant Dentistry.
- Apply your knowledge to single teeth, partial bridges and immediately loaded restorations.







#### **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. Tenenbaum, Howard C.

- 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

# Management



# 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. De Barutell Castillo, Alfonso

- Degree in Dentistry 1998-2003
- Associate professor in Dental Prosthetics I, Univeristy of Valencia, since 2007.
- Professor of the Master's Degree in Dental Prosthetics at the University of Valencia
- Master's Degree in Dental Prosthesis and Implant Prosthesis at the University of Valencia 2004-2005
- Author of several national publications and papers
- Member of the Spanish Society of Dental Prosthetics (SEPES) since 2005
- Clinical residencies in San Sebastian, Madrid, Lisbon, New York.
- Exclusive Private Practice Aesthetic Prosthetics and Implant Prosthetics in Valencia

### 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)

#### 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. 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. Barberá Millán, Javier

- Master's Degree in Oral Implantology from the Catholic University of Valencia (UCV).
- Professor and researcher at (UCV).
- Currently studying a PhD in Dentistry at the UCV.
- Exclusive private practice in Implantology.

### Dr. Mellado Valero, Ana

- Degree in Dentistry University of Valencia
- PhD in Dentistry University of Valencia
- Specialist Diploma in Aesthetic Medicine from the Complutense University of Madrid. (1998-1999)
- University Diploma in Prosthodontics from the University of Valencia (2000-2001)
- Associate Professor of the Prosthodontics and Occlusion Unit Faculty of Dentistry, University of Valencia.
- Professor of the Master's Degree in Prosthetics at the Faculty of Dentistry, University of Valencia.
- Professor of the Master's Degree in Advanced Oral Implantology, European University of Valencia (2015-2016)
- Master's Degree in Dental Sciences (2011)
- Member of the Board of Directors of the Spanish Society of Stomatological and Aesthetic Prosthetics (SEPES)
- Coordinator of the online training for SEPES.
- Member of the Board of Directors for the Center for Odontostomatological Studies of Valencia

### 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. Rodriguez-Bronchú, Javier

- Degree in Dentistry from Cardenal Herrera University (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

#### Dr. Sierra Sanchez, Jose Luis

- Degree in Dentsitry from the Complutense University Madrid (1996 2001)
- Master's Degree in Advanced Oral Implantology from the European University of Madrid (2010-2012)
- Certificate in Advances in Implantology and Oral Rehabilitation from the New York University
- Certficate 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





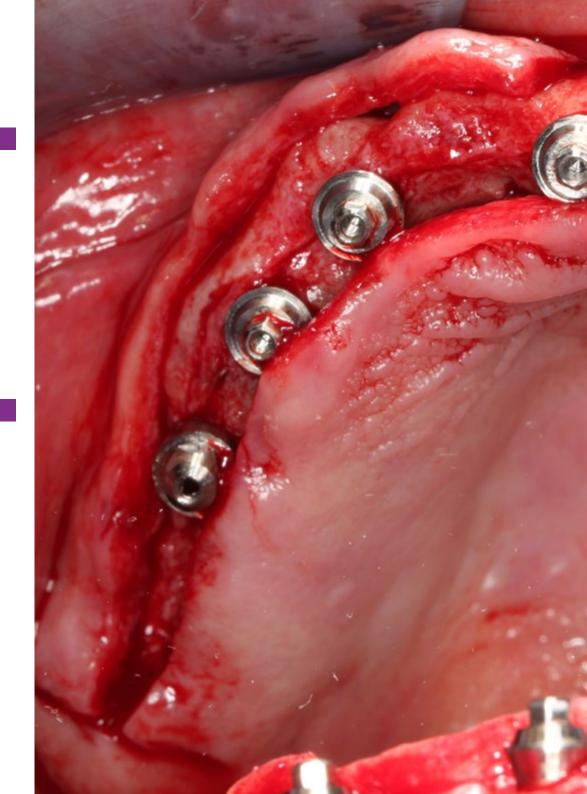
# tech 22 | Structure and Content

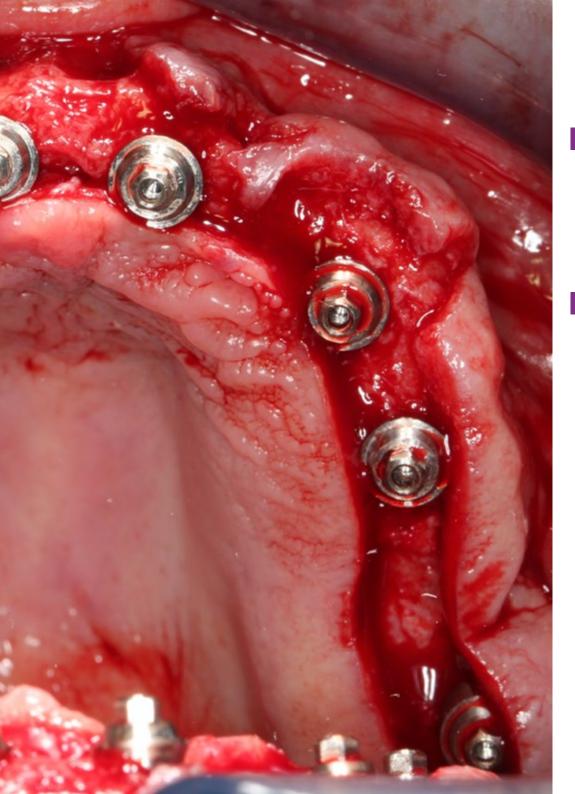
# Module 1. Diagnosis

- 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





# Structure and Content | 23 tech

### Module 3. Computer Guided Surgery and Immediate Loading

- 3.1. Introduction and General Considerations in Immediate Loading
  - 3.1.1. Parameters and Selection of Patient with Immediate Loading
- 3.2. Computer-Guided Surgery
  - 3.2.1. Guided Surgery Software
  - 3.2.2. Guided Surgery Splints: Mucosal, Dental and Bone Support
  - 3.2.3. Surgical Components Adapted to Computer-Guided Surgery
  - 3.2.4. Surgical Techniques in Computer-Guided Surgery

### Module 4. Occlusion in Implantology

- 4.1. Occlusal Patterns in Implant Dentistry
  - 4.1.1. Occlusion in a Totally Edentulous Patient
  - 4.1.2. Occlusion in a Partially Edentulous Patient
- 4.2. Occlusal Splints
- 4.3. Occlusal Adjustment and Selective Grinding



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 clinical situation, what would you do? Throughout the program you will be presented with multiple simulated clinical cases based on real patients, where you will have to investigate, establish hypotheses and, finally, resolve the situation. There is abundant scientific evidence on the effectiveness of the method. Dentists learn better, faster, and more sustainably over time.

With TECH you can 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 potential 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. Students 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. The learning process has a clear focus on 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.





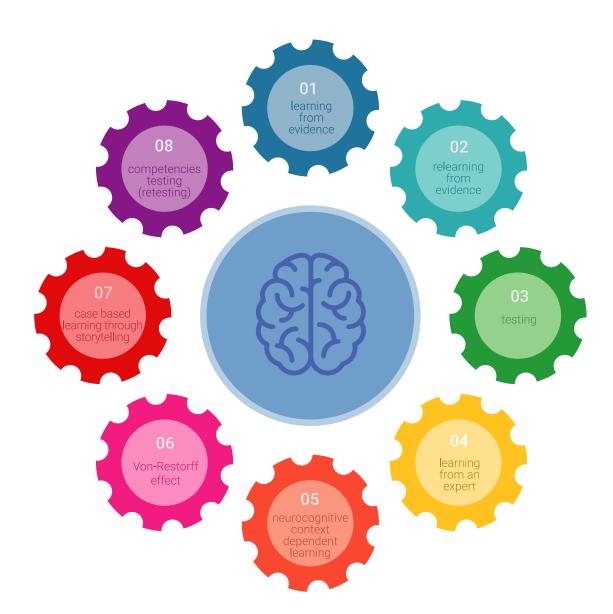
# **Re-Learning Methodology**

At TECH we enhance the Harvard case method with the best 100% online teaching methodology available: Re-learning.

Our 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, which represent a real revolution with respect to simply studying and analyzing cases.

The student will learn through real cases and by solving complex situations in simulated learning environments.

These simulations are developed using state-of-the-art software to facilitate immersive learning



# Methodology | 29 tech

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

With this methodology we have trained more than 115,000 students with unprecedented success, in all clinical specialties regardless of the surgical load. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Re-learning 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 to success

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

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

In this program you will have access to the best educational material, prepared with you in mind:



#### **Study Material**

All the teaching materials are specifically created for the course, by specialists who teach on the course, so that the teaching content is highly specific and precise.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



### **Surgical Techniques and Procedures on Video**

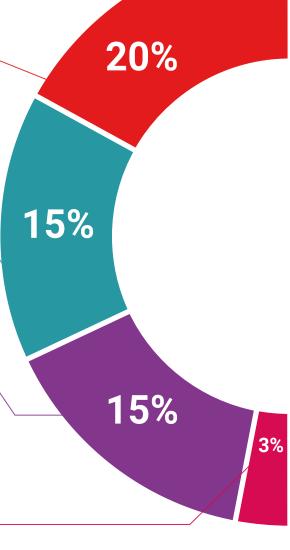
We introduce you to the latest techniques, to the latest educational advances, to the forefront of current dental techniques. All this, in first person, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **Interactive Summaries**

We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

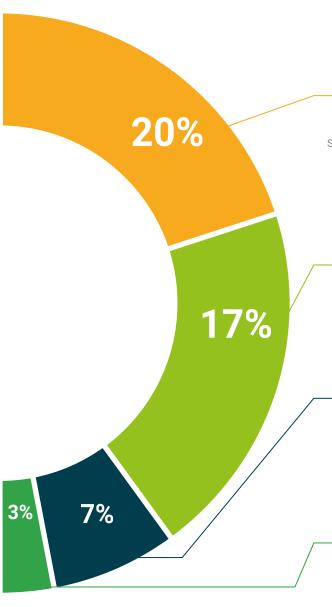
This multimedia content presentation training system was awarded by Microsoft as a "European Success Story".





#### **Additional Reading**

Recent articles, consensus documents, international guides. in our virtual library you will have access to everything you need to complete your training.



### **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, we will present you with real case developments in which the expert will guide you through focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### **Testing & Re-Testing**

We periodically evaluate and re-evaluate your knowledge throughout the program, through assessment and self-assessment activities and exercises: so that you can see how you are achieving your 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 our future difficult decisions.

#### **Quick Action Guides**

We offer you the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help you progress in your learning.







# tech 34 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Guided Surgery and Immediate Loading** 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 Guided Surgery and Immediate Loading

Modality: online

Duration: 12 weeks

Accreditation: 12 ECTS



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

#### Postgraduate Certificate in Guided Surgery and Immediate Loading

This is a program of 360 hours of duration equivalent to 12 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

Guided Surgery and Immediate Loading

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Credits: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

