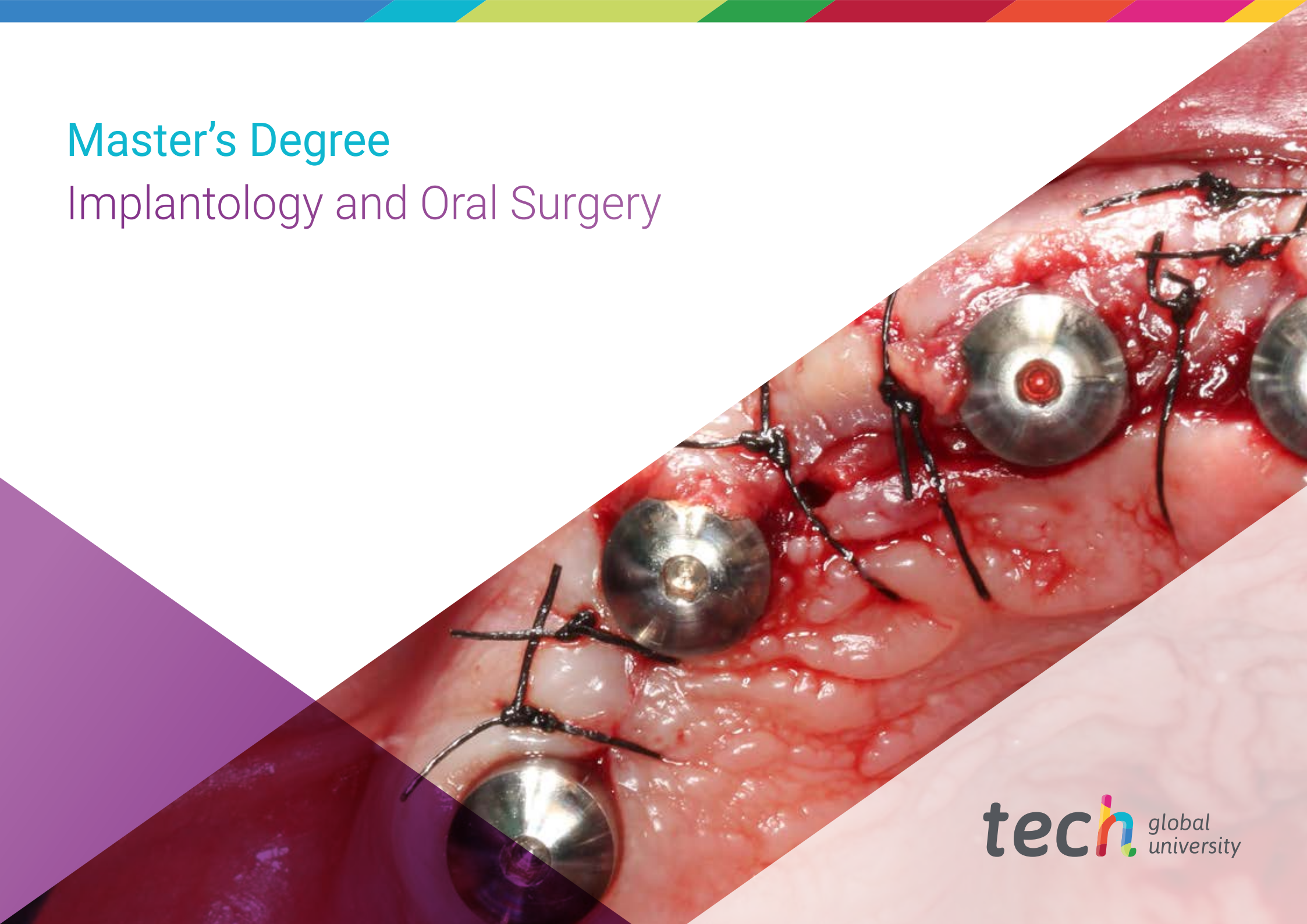


Master's Degree

Implantology and Oral Surgery





## Master's Degree Implantology and Oral Surgery

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/dentistry/master-degree/master-implantology-oral-surgery](http://www.techtute.com/us/dentistry/master-degree/master-implantology-oral-surgery)

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# 01

# Introduction

Technological advances have made it possible for patients who go to the dentist to obtain the most appropriate treatment for their ailment. Advances in biomaterials or implants that reduce treatment time are just the tip of the iceberg in a healthcare field that is increasingly demanding professionals who are up to date with recent scientific developments. This, however, implies that it is the specialists themselves who must constantly update their knowledge. This program was created with the aim of offering the latest information in this field through innovative multimedia content taught 100% online by a teaching team specialized in this area.





A close-up photograph of several dental implants, showing their textured, cylindrical heads and smooth, metallic shafts. The implants are arranged in a row, with the focus on the foreground ones. A large, diagonal purple overlay covers the right side of the image, creating a modern, technical aesthetic.

“

*Thanks to this Master's Degree, you will gain in-depth and up-to-date knowledge of Implantology and Oral Surgery, with an agile and flexible learning system"*

Porcelain, ceramic, composite, zirconium or titanium are just some of the materials most commonly used in Implantology and Oral Surgery. However, major technological advances have favored the use of biomaterials and digital implantology. Developments in the field of oral surgical pathology and implant planning mean that dentists have to keep up to date with the latest techniques in computer-guided surgery and immediate loading or periodontics applied to the treatment of implant patients.

With this Master's Degree, the dental professionals will be able to completely update all their knowledge in this field thanks to the teaching material provided by the specialized teaching team in this degree. A university program taught exclusively online, over a period of 12 months, in which the professional will learn the main surgical techniques used for the approach of different dental lesions. Educational resources using the latest educational technology such as video summaries, detailed videos or interactive outlines will facilitate the updating of their knowledge. Likewise, the clinical case studies and complementary readings will be very useful for professionals who are looking for a program with a theoretical-practical approach.

This university degree is an excellent opportunity for dental professionals who wish to keep abreast of the evolution of their profession in a convenient academic format. The specialist who takes this program only needs an electronic device with internet connection to access the virtual platform where the entire syllabus is hosted. The content is available from the beginning of the course, allowing students to distribute the workload according to their needs. It is, therefore, an ideal Master's Degree for professionals who are looking for a quality education that is compatible with other areas of their personal and/or professional life.

This **Master's Degree in Implantology and Oral Surgery** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ Development of clinical cases presented by experts in Implantology and Oral Surgery
- ♦ 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
- ♦ Diagnostic-therapeutic new developments on assessment, diagnosis, and treatment in Implantology and Oral Surgery
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Iconography of clinical and diagnostic imaging tests
- ♦ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ♦ Special emphasis on evidence-based dentistry and research methodologies in Implantology and Oral Surgery
- ♦ 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 available from any fixed or portable device with internet connection



*Expand your knowledge in Implantology and Oral Surgery with this program, where you will find the best educational material with real clinical cases"*

“

*You will have access to simulations and real cases of the different surgical techniques, prostheses on implants and usual complications, giving you a unique perspective of the field of Implantology and Oral Surgery”*

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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 training 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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Learn with TECH about the latest advances in oral surgical pathology, including extensive topics dedicated to the third molar impacted teeth, impacted canines, as well as the most common dental impactions*

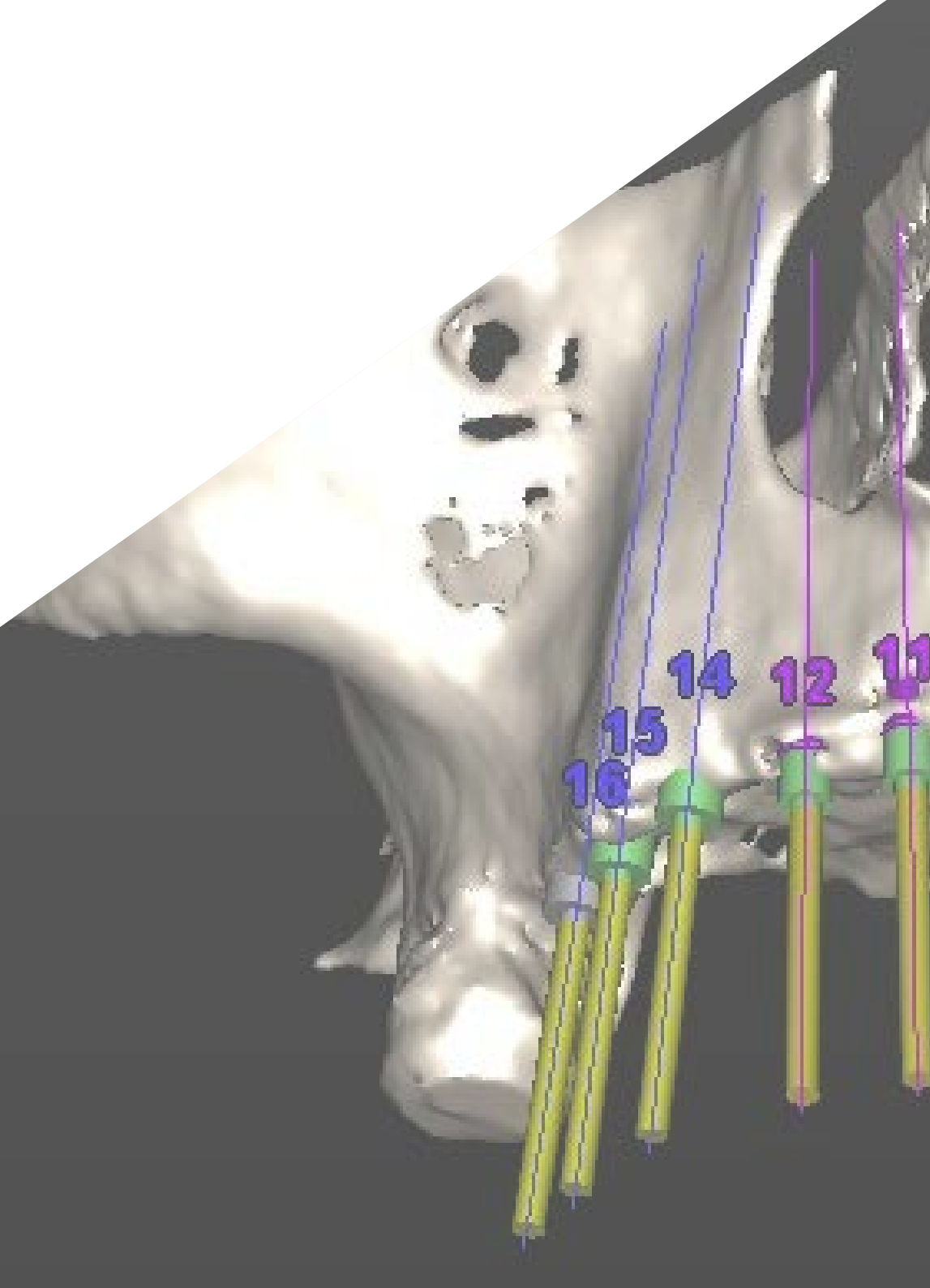
*This program delves into the main software used in guided surgery and immediate loading, with an exhaustive review of the most modern dental work methodology*



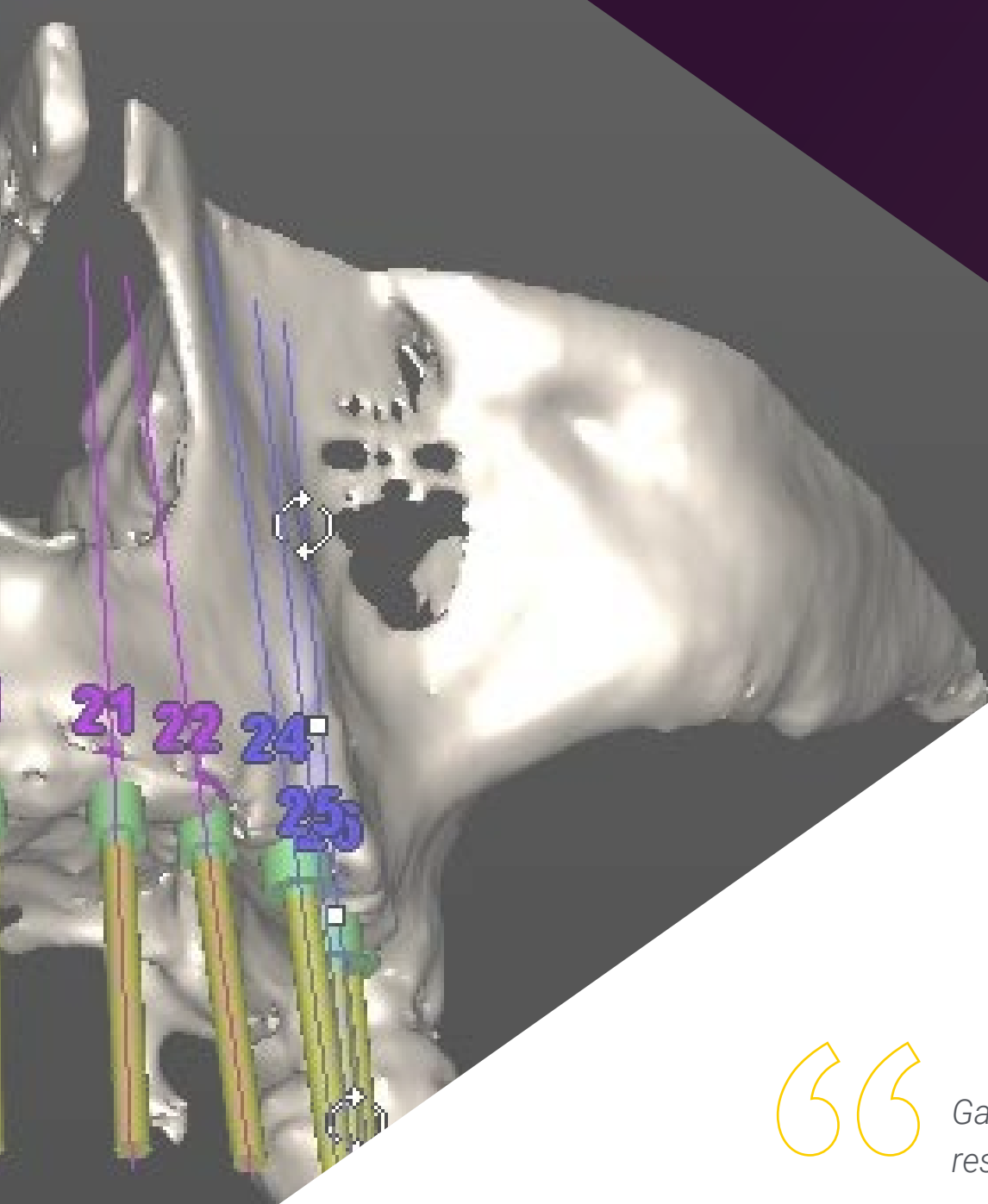
# 02

## Objectives

The aim of this program is to update the dentist's knowledge, offering an advanced program in Implantology and Oral Surgery that includes the main techniques, materials and surgical models applied to the different diagnoses of each patient. The Relearning system will make it easier for the professional to achieve these goals, by reiterating the content, so that progress through the online program will be much more natural and progressive.







“

*Gain 24-hour access to the library of multimedia resources offered by TECH in this degree"*



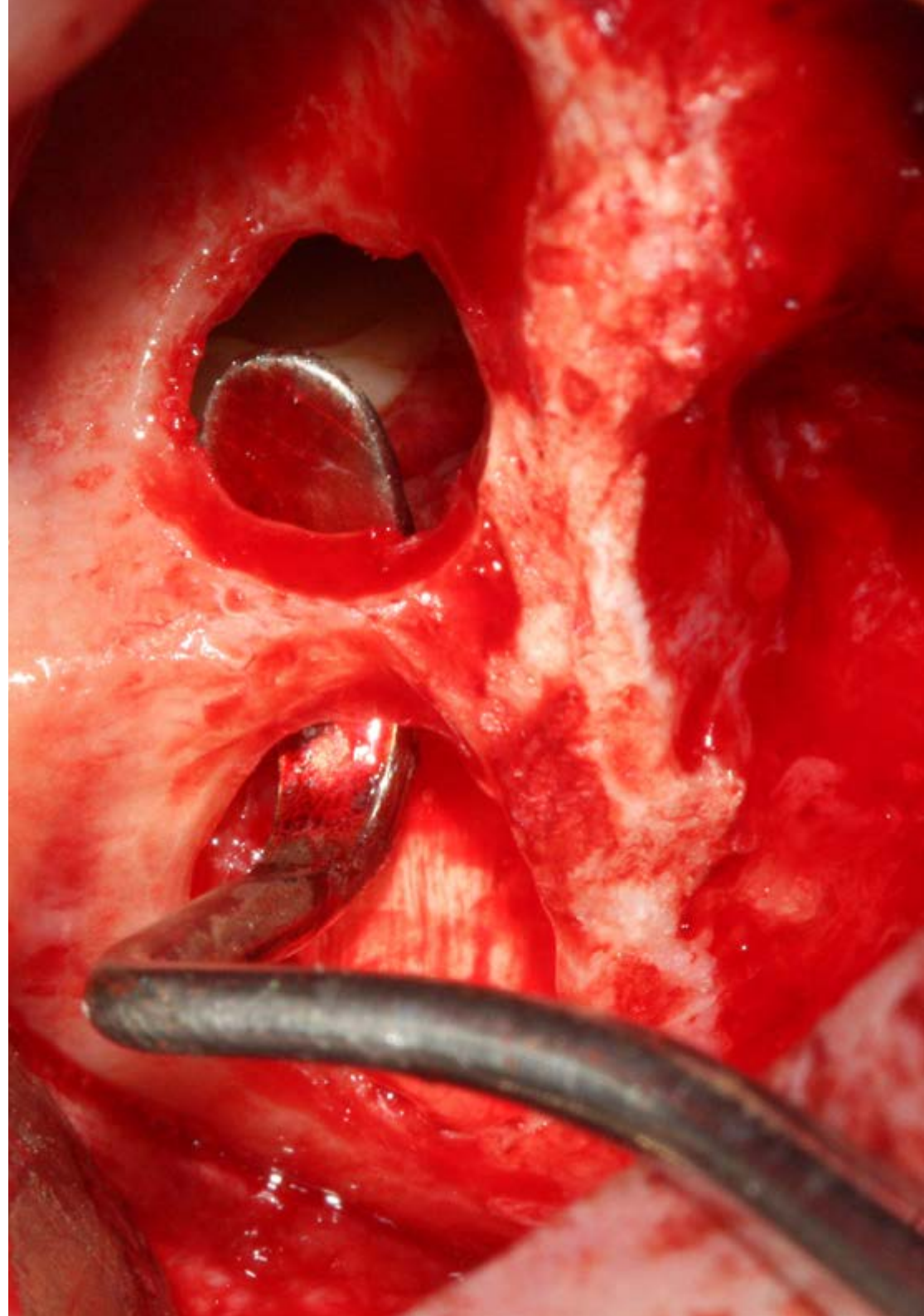
## General Objectives

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- 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 continuous education and research



*A program that will make you aware of the most commonly used materials such as porcelain, resin or zirconium, according to the condition of each patient"*





## 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
- ♦ Perform an in-depth analysis of the most common diseases that occur in the oral cavity
- ♦ Assist the patient in the case of a medical emergency
- ♦ Perform analytical processes for correct medical diagnoses that serve as a starting point for the surgical procedure

### Module 2. Oral Surgery Pathology

- ♦ Identify the main pathologies that commonly occur in patients
- ♦ Delve into the surgical processes and their mode of execution for a correct use of the surgical process
- ♦ Describe the possible pathologies that may occur after the oral surgery process
- ♦ Describe recommendations to be followed and use of drugs for pain relief
- ♦ Diagnose counterproductive causes of poorly carried out processes

### Module 3. Implant Planning

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

### Module 4. 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 5. Basic Surgical Technique and Implantology

- ♦ Describe basic surgical procedures: incisions, types of flaps, sutures, etc
- ♦ Explain the surgical procedures of extractions, frenectomies
- ♦ Explain one- and two-stage surgical procedures, prepare the surgical area and master sterilization protocols

### Module 6. Biomaterials and Guided Bone Regeneration

- ♦ Define bone biological mechanisms in guided bone regeneration
- ♦ Analyze the materials and composition of prostheses to avoid the use of processes that affect bone regeneration
- ♦ Describe the care to be taken after a surgical procedure
- ♦ Identify the amount of time it takes for a bone system to fully regenerate after the oral implantation procedure

### **Module 7. 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 8. Immediate Implantology**

- ♦ Interrelate Implantology with the patient's medical pathologies and the rest of the dental specialties, as well as to take samples
- ♦ Apply techniques in Immediate Implant Dentistry
- ♦ Apply your knowledge to single teeth, partial bridges and immediately loaded restorations

### **Module 9. 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 10. Periodontics Applied to the Treatment of the Implantology Patient**

- ♦ Describe maintenance techniques as well as peri-implant alterations and their treatment
- ♦ Describe the different soft tissue management techniques used during implant and regenerative surgery

### **Module 11. Implant Prosthesis**

- ♦ Perform complete rehabilitation processes, vertical dimension alterations, etc.
- ♦ Identify materials used for the creation of prostheses and their proper use on implants
- ♦ Develop medical samples to identify the bone gear for implanting prostheses on natural parts

### **Module 12. Implant Prosthesis in a Totally Edentulous Patient**

- ♦ Explain the dental implantation process to the edentulous patient
- ♦ Identify the dental implantation procedure and the appropriate prosthesis models for each particular patient
- ♦ Delve into the surgical procedure and describe the medical materials used to perform the procedure
- ♦ Perform surgical procedures that allow the implantation of prosthesis to the edentulous patient
- ♦ Follow the post-surgical process

**Module 13. Implant Prosthesis in the Anterior Aesthetic Sector**

- ♦ Explain the process for performing advanced implant prosthodontic procedures
- ♦ Conduct a prosthesis study to identify the best and most modern prosthesis models
- ♦ Aesthetically identify the appropriate prosthesis for each specific surgical procedure
- ♦ Perform a post-surgical smile and design study
- ♦ Perform recovery and rehabilitation process

**Module 14. Computer-Guided Surgery and Immediate Loading**

- ♦ Implement the new use of technology in surgical procedures
- ♦ Analyze the new handling techniques for computerized surgery and immediate loading
- ♦ Identify the shortcomings of the surgical procedure by computer and immediate loading to solve during surgery
- ♦ Identify the care to be taken when undergoing guided surgery
- ♦ Analyze the surgical process and make a diagnosis of possible surgical corrections if applicable

**Module 15. Occlusion in Implantology**

- ♦ Describe the steps for the surgical, prosthetic and occlusal adjustment of single teeth and partial bridges
- ♦ Explain the process to perform the basic aspects of implant prosthesis: impression taking, casting, articulator mounting and occlusal adjustment of the prosthesis

**Module 16. 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 implantology



*A unique, key, and decisive experience to boost your professional development”*



# 03 Skills

Upon completion of this Master's Degree in Implantology and Oral Surgery, the dental professional will have expanded their professional skills required to maintain quality and up-to-date practice based on the latest scientific evidence. This will be possible thanks to the innovative educational material that makes up this university degree, which the professional will be able to access 24 hours a day from a computer or tablet.



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*This Master's Degree will allow you to update your knowledge on the most commonly used surgical techniques for lateral and crestal sinus elevation"*



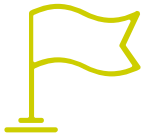


## General Skills

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- ♦ Possess and understand knowledge in their field of study that builds on the foundation of general secondary education. While relying on advanced textbooks, it also includes some aspects that involve knowledge from the forefront of this field of study
- ♦ Apply their knowledge to their work or vocation in a professional manner and possess the skills that are usually demonstrated through the development and defence of arguments and problem solving within their area of study
- ♦ Gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues
- ♦ Convey information, ideas, problems, and solutions to both specialized and non-specialized audiences
- ♦ Develop the necessary learning skills to undertake further studies with a high degree of autonomy





## Specific Skills

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- ♦ Explain the evolution of Implantology
- ♦ Describe and analyze the anatomy of the cranio-maxillary complex and the biology of osseointegration
- ♦ Perform data collection and examination of the patient for the medical history
- ♦ Identify the drugs needed in implant treatment
- ♦ Know how to apply radiological techniques for implant diagnosis
- ♦ Describe and perform the process for taking an impression of patients with osteointegrated implants and the process for casting the impressions taken on dental implants
- ♦ Know how to assemble clinical cases in the articulator
- ♦ Perform occlusal adjustment of implant prostheses
- ♦ Explain the aesthetic parameters and adjust them to the needs of each patient
- ♦ Explain the biological mechanisms of bone formation
- ♦ Describe and apply guided bone regeneration with membranes and lyophilized bone, as well as the technique of obtaining plasma which is rich in growth factors
- ♦ Perform surgical techniques for sinus lift, from both a lateral and crestal approach
- ♦ Perform immediate post-extraction implantology
- ♦ Perform the technique of bone grafting on the mandibular ramus and symphysis
- ♦ Explain the application of transitional implants
- ♦ Interrelate Implantology with the patient's medical pathologies and the rest of the dental specialties
- ♦ Manage complex and demanding clinical situations whether they are aesthetic or functional
- ♦ Apply surgical techniques to obtain primary stability of an implant
- ♦ Apply your knowledge to single teeth, partial bridges and immediately loaded restorations
- ♦ Perform the necessary occlusal adjustment in immediate loading
- ♦ Diagnose the periodontal alterations that can occur around implants
- ♦ Apply the techniques of soft tissue alveolar ridge augmentation and preprosthetic periodontal surgery
- ♦ Master the mucoperiosteal flap technique, the epithelium and connective tissue free gingival graft technique, pedicle grafting and aesthetic periodontal surgery
- ♦ Explain peri-implant maintenance techniques
- ♦ Know how to properly perform a diagnostic wax-up on the anatomy of the teeth
- ♦ Know how to make the necessary height plates for prosthetic rehabilitation
- ♦ Apply the necessary techniques for the preparation of working models
- ♦ Describe one- and two-stage surgical procedures, prepare the surgical field and master sterilization protocols

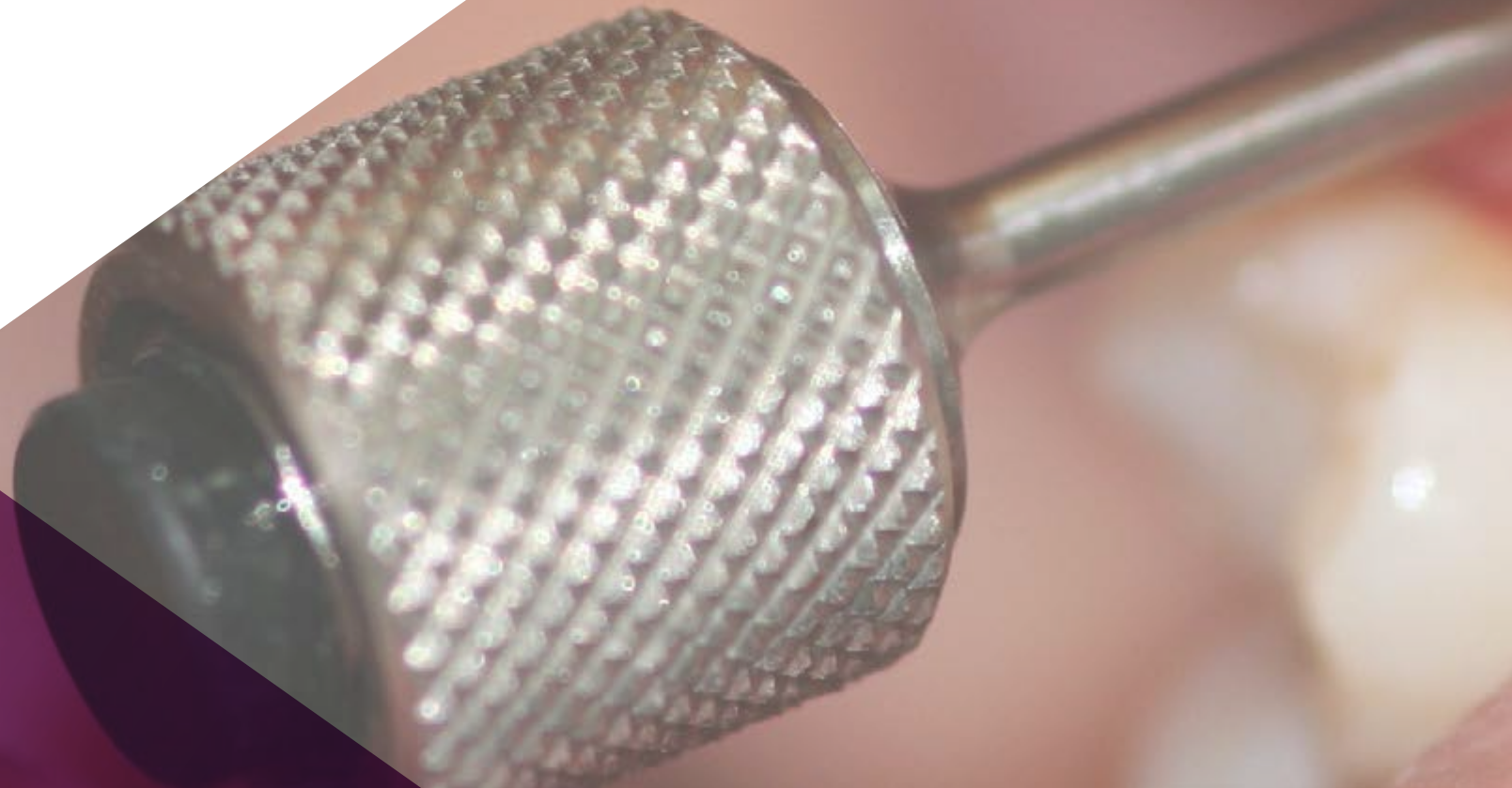


*This program is designed for you to update your knowledge in Implantology and Oral Surgery, with the use of the latest educational technology"*

04

# Course Management

TECH maintains a maximum commitment to quality teaching, which is why it carefully selects all the staff that make up each of its qualifications. As such, in this Master's Degree, the dentist will find management and teaching staff specialized in Surgery, Periodontics and Implants, with extensive professional experience in this area, as well as in the field of teaching. Likewise, they will be available to resolve any doubts that may arise during the course of this program.





A close-up photograph of a dental procedure. A hand is holding a white, curved dental instrument, possibly a retractor or a part of a dental chair, near a patient's mouth. The patient's teeth and gums are visible. The background is a solid purple color.

“

*A specialized and experienced teaching team will be in charge of guiding you during the 12 months of this degree"*

## 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

- ♦ Specialist in Surgery, Periodontics and Implants
- ♦ Associate Professor, University of Valencia, Department of Stomatology
- ♦ Co-director of the Master's Degree in Advanced Oral Implantology at the European University of Valencia
- ♦ Professor of Oral Surgical Pathology at the European University of Valencia
- ♦ ITI (International team Implantology) member
- ♦ Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (SEPES)
- ♦ Master's Degree in Advanced Oral Implantology from the European University of Madrid
- ♦ Training in Dr Zucchelli Mucogingival Surgery at the University of Bologna Italy
- ♦ Training in Bone Regeneration, Dr Urban Budapest, Hungary
- ♦ Certificate in Advances in Implantology and Oral Rehabilitation from the New York University College of Dentistry New York, USA
- ♦ Degree in Dentistry

## Professors

### Dr. Plaza Espi, Andrés

- ♦ Associate Professor of Prosthesis II at the Faculty of Dentistry, University of Valencia
- ♦ Collaborating Professor of the Master's Degree in Dental Prosthetics at the University of Valencia
- ♦ 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

### Dr. Cabo Nadal, Alberto

- ♦ Associate Professor of the Teaching Unit of Prosthodontics and Occlusion, University of Valencia
- ♦ Teacher of the Master's Degree in Dental Prosthesis at UV
- ♦ Professor in charge of dental clinical practice at the European University of Valencia
- ♦ Degree in Dentistry from the University of Valencia
- ♦ Postgraduate Master's Degree in Dental Prosthesis from the University of Valencia

**Dr. Mellado Valero, Ana**

- ◆ Degree in Dentistry University of Valencia
- ◆ PhD in Dentistry University of Valencia
- ◆ Postgraduate Diploma in Medicine from the Complutense University, 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. De Barutell Castillo, Alfonso**

- ◆ Specialist in Aesthetic Prosthetics and Implant Prosthetics
- ◆ Associate Professor of the subject Dental Prosthesis at the University of Valencia
- ◆ 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
- ◆ Member of the Spanish Society of Dental Prosthetics (SEPES)
- ◆ Clinical residencies in San Sebastian, Madrid, Lisbon, New York
- ◆ Degree in Dentistry

**Dr. Rodriguez-Bronchú, Javier**

- ◆ Specialist in Surgery and Advanced Oral Implantology
- ◆ Medical Director of RB Dental Clinic
- ◆ Degree in Dentistry from Cardenal Herrera University
- ◆ Master's Degree in Advanced Oral Implantology from the European University of Madrid
- ◆ Master's Degree in "Current Concepts in American Dentistry: Advances in Implantology and Oral Rehabilitation" New York College of Dentistry, New York

**Dr. Barberá Millán, Javier**

- ◆ Exclusive specialist in Implantology
- ◆ 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

**Dr. Brotons Oliver, Alejandro**

- ◆ Specialist in Surgery, Periodontics and Implants
- ◆ Co-director of the Master's Degree in Advanced Oral Implantology at the European University of Valencia
- ◆ Professor of Oral Surgical Pathology at the European University of Valencia
- ◆ Professor of Oral Surgical Pathology at UCV-Cardenal Herrera University
- ◆ Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (SEPES) and the Spanish Society of Oral Surgery (SECIB)
- ◆ Dr. Urban Bone Regeneration Training in Budapest, Hungary
- ◆ 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

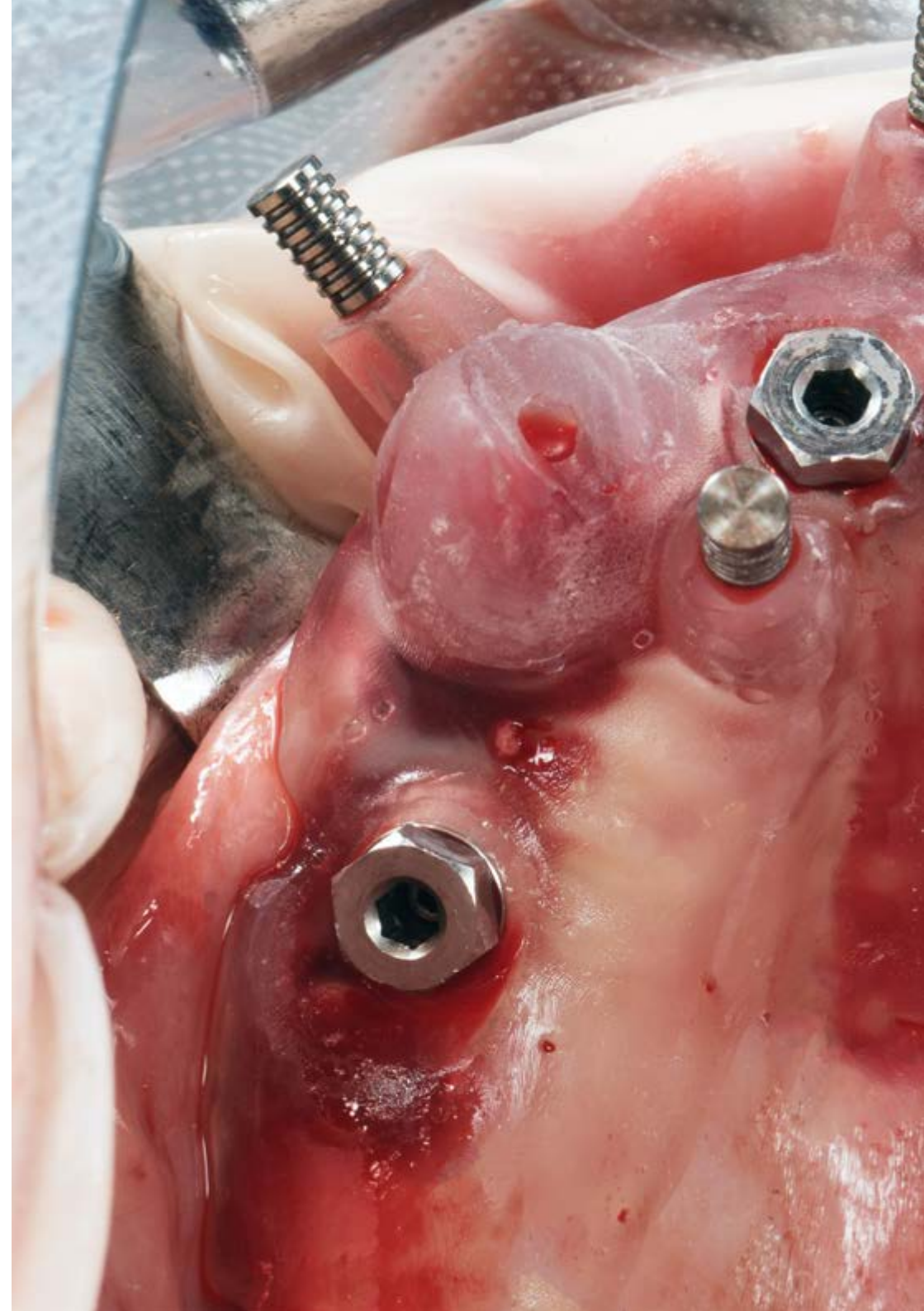


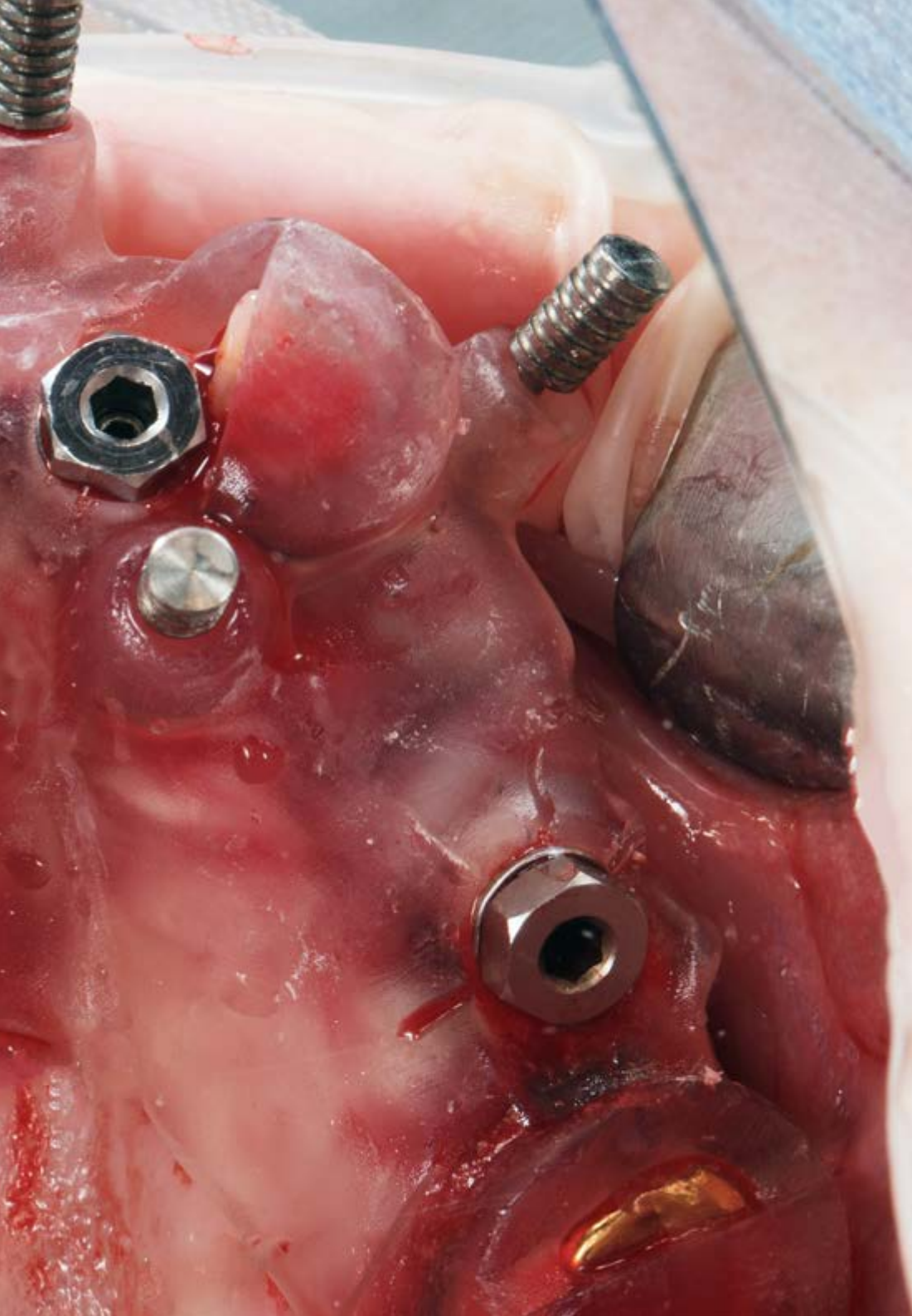
**Dr. Sierra Sanchez, Jose Luis**

- ◆ Specialist in Surgery and Advanced Oral Implantology
- ◆ Degree in Dentistry from the European University of Madrid
- ◆ Master's Degree in Advanced Oral Implantology from the European University of Madrid
- ◆ Certificate in Oral Surgery and Implantology from the Faculty of Dentistry at the University of Valencia
- ◆ Continuing Education Program in Implant Dentistry BTI Institute

**Dr. Manzanera Pastor, Ester**

- ◆ Specialist in Surgery, Implantology and Aesthetics
- ◆ Professor of Surgical Pathology at the European University of Valencia
- ◆ Teachers of the Master's Degree in Prosthetics at the Faculty of Dentistry, University of Valencia
- ◆ Director of the Master's Degree in Advanced Oral Implantology at the European University of Valencia
- ◆ Master's Degree in Dental Sciences
- ◆ 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
- ◆ 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





**Dr. Plaza Espi, Andrés**

- ◆ Associate Professor of Prosthesis II at the Faculty of Dentistry, University of Valencia
- ◆ Collaborating Professor of the Master's Degree in Dental Prosthetics at the University of Valencia
- ◆ 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

“

*Make the most of this opportunity to learn about the latest advances in this subject to apply it to your daily practice”*



# 05

## Structure and Content

The entire structure of the contents has been created by a professional team who are aware of the most relevant dental reality. Their experience in clinical centers and universities gives the syllabus a unique theoretical-practical approach, combined with the best educational technology offered by TECH. In this way, students who take this Master's Degree will have access to a syllabus consisting of 16 modules in which they will learn about diagnosis, oral surgical pathology, implantology and osseointegration or the main surgical techniques used. Case study simulations will be of great use and direct application in clinical practices.





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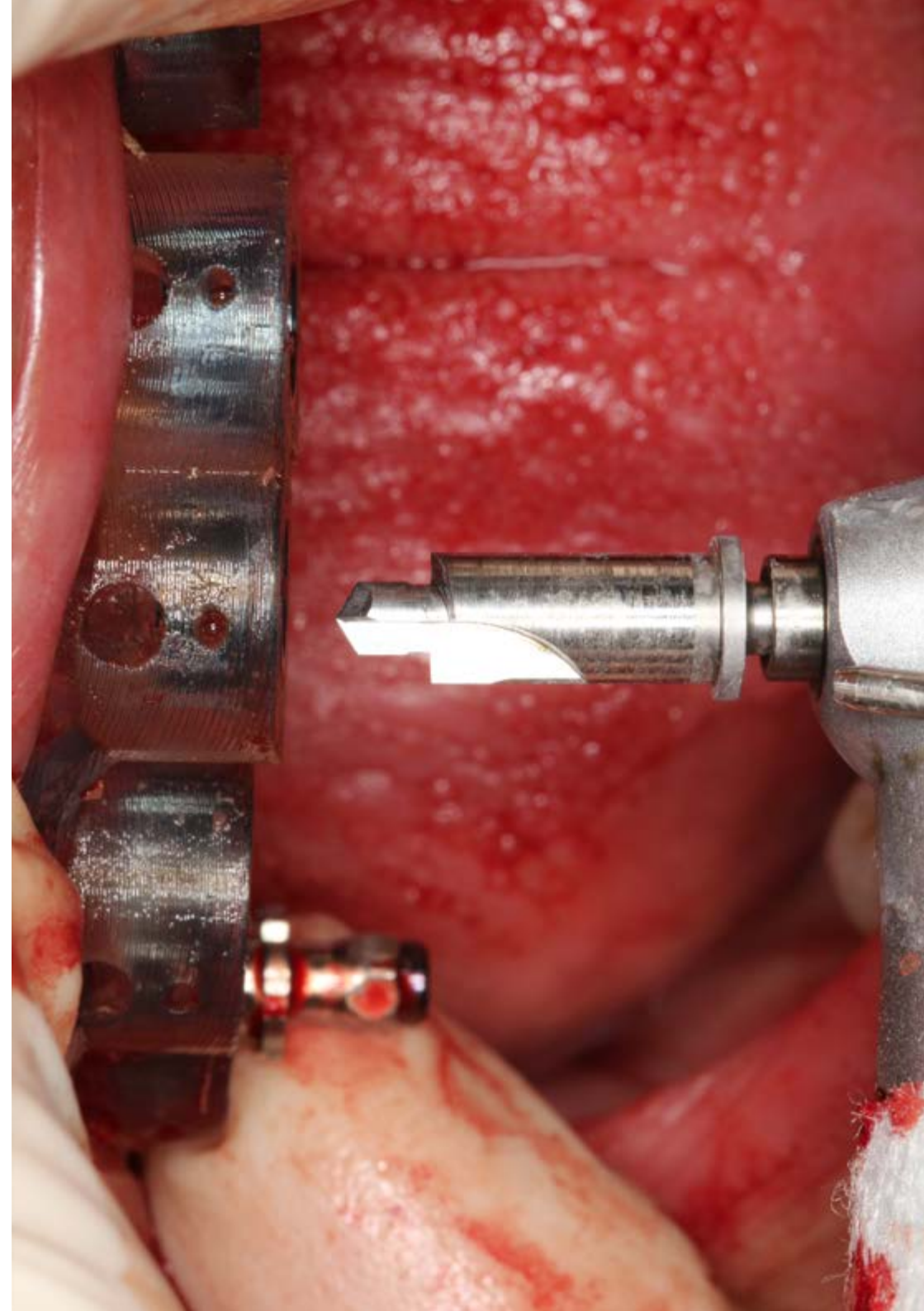
*The clinical cases provided by the specialized teaching team will help you to get even closer to real situations in which to put guided bone regeneration into practice”*

## 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. Anesthetic Techniques in Surgery and Implantology
  - 1.4.1. Drugs
  - 1.4.2. Loco-Regional Anesthesia Techniques in Surgery and Implantology
- 1.5. Sedation and General Anesthesia

## Module 2. Oral Surgery Pathology

- 2.1. Tooth Retention
  - 2.1.1. Concept, Etiology and Possible Treatment
- 2.2. Third Molar Included
  - 2.2.1. Pathology and Clinical Manifestations
  - 2.2.2. Diagnosis and Treatment
- 2.3. Pathology and Treatment of Included Canines
  - 2.3.1. Diagnosis
  - 2.3.2. Surgical Management
  - 2.3.3. Surgical-Orthodontic Treatment
- 2.4. Pre-Prosthetic Surgery Techniques on Soft and Hard Tissue
  - 2.4.1. Laser in Surgery
  - 2.4.2. Types of Laser in Oral Surgery
- 2.5. Periapical Surgery
  - 2.5.1. Materials
  - 2.5.2. Techniques



### Module 3. Implant Planning

- 3.1. Extraoral and Intraoral Examination
  - 3.1.1. Extraoral Examination: Symmetry, Facial Thirds, Extraoral Aesthetic Parameters
  - 3.1.2. Intraoral Examination: Hard Tissue, Soft Tissue, Occlusion and TMJ
- 3.2. Impression Taking and Study Models in Implantology
  - 3.2.1. Materials and Impression Techniques in Implant Diagnosis
  - 3.2.2. Facebow and Mounting on a Semi-Adjustable Articulator
- 3.3. Diagnostic Wax-Up and Radiological Splints
  - 3.3.1. Waxing Techniques and Clinical Considerations
  - 3.3.2. Radiological Splints: Classification and Laboratory Manufacturing
- 3.4. Radiological Diagnosis in Implantology
  - 3.4.1. Classification of Techniques
  - 3.4.2. Planning in 2D
  - 3.4.3. Cone Beam Computed Tomography (CBCT): Planning Software
- 3.5. Photographic Records in Implantology
- 3.6. Presentation of a Treatment Plan Strategies

### Module 4. Implantology and Osseointegration

- 4.1. Historical Review and Generic Terminology of Dental Implants
  - 4.1.1. Evolution of Implantology up to the 21st Century
  - 4.1.2. Generic Terminology of Dental Implants: Components and Nomenclature
- 4.2. Biology of Osseointegration
  - 4.2.1. Inflammatory Phase
  - 4.2.2. Proliferative Phase
  - 4.2.3. Maturation Phase
  - 4.2.4. Contact and Remote Osteogenesis
- 4.3. Anatomy in Implantology
  - 4.3.1. Anatomy of the Upper Jaw
  - 4.3.2. Anatomy of the Mandible
- 4.4. Histology of Bone Tissue, Periodontium and Peri-Implant Tissue
- 4.5. Bone Availability in Implantology
- 4.6. Preparation of the Surgical Field, Sterilization and Premedication Protocols
  - 4.6.1. Table Preparation
  - 4.6.2. Surgical Asepsis of the Patient: Premedication
  - 4.6.3. Surgical Asepsis of the Surgeon and Assistants

### Module 5. Basic Surgical Technique and Implantology

- 5.1. Incision Techniques in Implantology
  - 5.1.1. Incisions in a Total Edentulous Patient
  - 5.1.2. Incisions in a Partial Edentulous Patient
  - 5.1.3. Incisions in the Aesthetic Sector
  - 5.1.4. Incisions in Bone Guided Regeneration Techniques
  - 5.1.5. Flapless
- 5.2. Surgical Instruments Detachment, Separation and Bone Regulation
- 5.3. Drilling Techniques in Implantology
  - 5.3.1. Drills and Components of the Surgical Trays
  - 5.3.2. Sequential Drilling
  - 5.3.3. Biological Drilling
- 5.4. Single-Stage Implants and Two-Stage Implants
- 5.5. Sutures in Implantology
  - 5.5.1. Suture Instruments and Materials
  - 5.5.2. Suture Techniques

### Module 6. Biomaterials and Guided Bone Regeneration

- 6.1. Types of Bone Grafts and Biological Mechanisms of Bone Formation
  - 6.1.1. Classification, Advantages and Disadvantages
  - 6.1.2. Osteogenesis, Osteoconduction and Osteoinduction
- 6.2. Autologous Bone Grafts: Chin and Mandibular Ramus
- 6.3. Other Biomaterials in Bone Regeneration
  - 6.3.1. Homologous Grafts
  - 6.3.2. Heterologous Grafts
  - 6.3.3. Alloplastic Grafts
  - 6.3.4. Plasma Which Is Rich in Growth Factors
- 6.4. Membranes and Bone Guided Regeneration
  - 6.4.1. Non-Reabsorbable Membranes
  - 6.4.2. Resorbable Membranes



### Module 7. Maxillary Sinus Lift

- 7.1. Diagnosis and Anatomical Recall of the Sinus Lift
- 7.2. Sinus Lift Technique Via the Crestal Approach
  - 7.2.1. Sinus Lift with Osteotome Technique
  - 7.2.2. Minimally Invasive Crestal Sinus Lift
    - 7.2.2.1. Atraumatic Drilling Kits
    - 7.2.2.2. Balloon Technique
- 7.3. Sinus Lift Technique Via the Lateral Approach
  - 7.3.1. Step by Step Description of the Technique
  - 7.3.2. Piezoelectric Systems
  - 7.3.3. Biomaterials in Maxillary Sinus Elevation

### Module 8. Immediate Implantology

- 8.1. Post-Extraction Implants
  - 8.1.1. Surgical Aspects of Immediate Implants
    - 8.1.1.1. Immediate Implant
    - 8.1.1.2. Early Implant Placement
- 8.2. Immediate Implants in Posterior Sectors
- 8.3. Immediate Aesthetic
  - 8.3.1. Emergency Profile Transmission
  - 8.3.2. Immediate Provisional

### Module 9. Advanced Surgical Techniques in Implantology

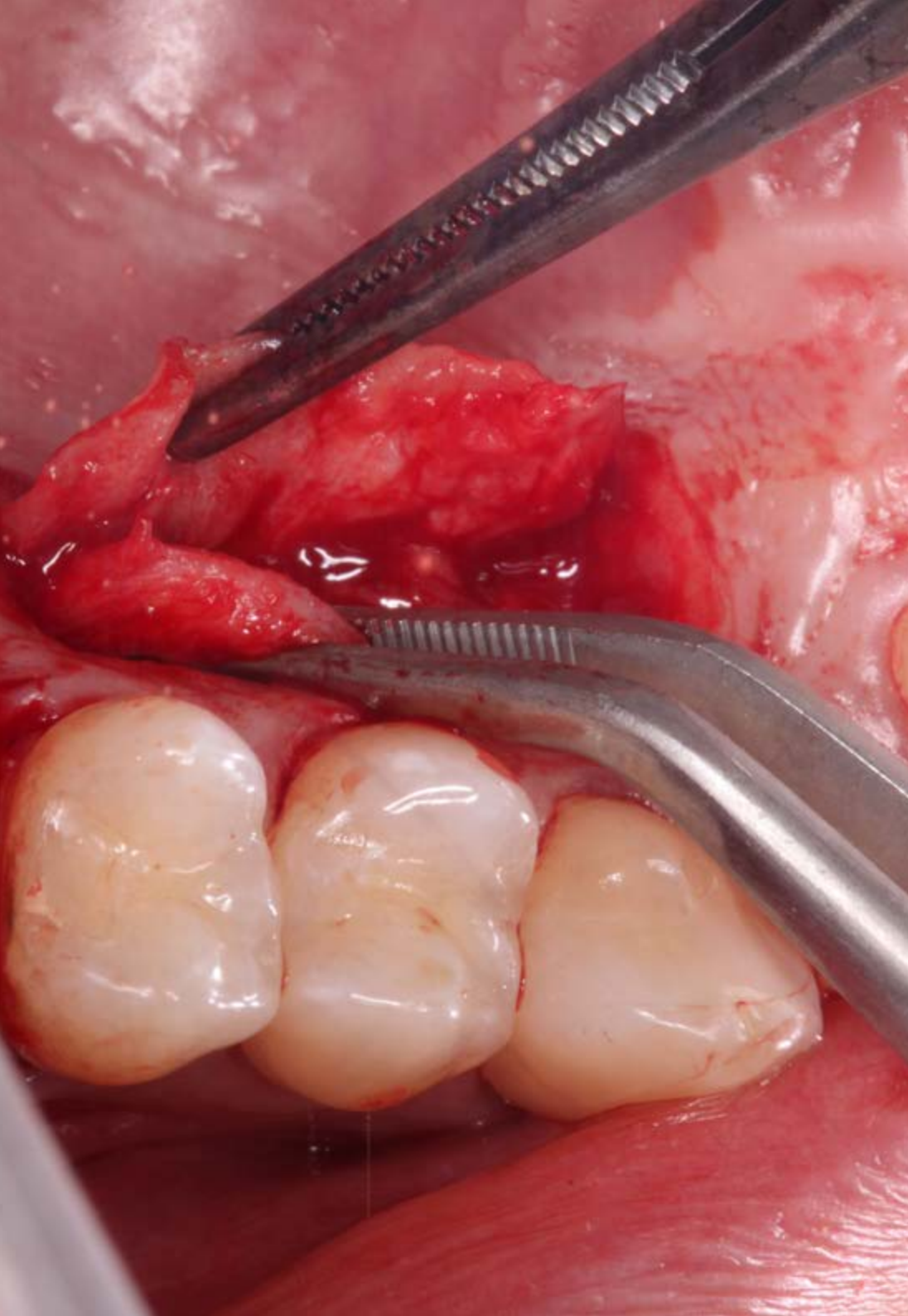
- 9.1. Crest Expansion
  - 9.1.1. Crest Expansion with Manual Instruments
  - 9.1.2. Crest Expansion with Motorized Instruments
- 9.2. Pterygoid Implants
- 9.3. Zygomatic Implants
- 9.4. Treatment with Dental Implants without Grafts
  - 9.4.1. Short Implants
  - 9.4.2. Narrow Implants
  - 9.4.3. Angled Implants

### Module 10. Periodontics Applied to the Treatment of the Implantology Patient

- 10.1. Basic Concepts of Periodontics Applied to a Patient With Implants
  - 10.1.1. Periodontal Diagnosis
  - 10.1.2. Prognosis and Treatment Plan
- 10.2. Mucogingival Procedures to Increase Keratinized Tissue
  - 10.2.1. Free Gingival Grafting
  - 10.2.2. Bilaminar Grafts
- 10.3. Mucogingival Procedures to Increase the Volume of Connective Tissue
  - 10.3.1. Subepithelial Free Grafts
  - 10.3.2. Pedicled Grafts
- 10.4. Alveolar Ridge Preservation Techniques
- 10.5. Implant Maintenance
  - 10.5.1. Hygiene Techniques
  - 10.5.2. Revisions and Maintenance in Implantology

### Module 11. Implant Prosthesis

- 11.1. Restoration as a Guide to Global Implantology Treatment
  - 11.1.1. Nomenclature
- 11.2. Impression Taking in Implantology Work Models
  - 11.2.1. Impression Materials in Implantology
  - 11.2.2. Impression Techniques: Open or Closed Cuvette Impressions
  - 11.2.3. Pouring Impressions and Obtaining the Working Model
- 11.3. Selection of Abutments in Implantology
  - 11.3.1. Preformed Abutments
  - 11.3.2. Calcifiable Abutments
  - 11.3.3. Cad/Cam Abutments
  - 11.3.4. Direct Prosthesis to Implant or on Transepithelials
- 11.4. Materials for Implant Prosthesis
  - 11.4.1. Porcelain Metal Prostheses
  - 11.4.2. Resin Metal Prostheses
  - 11.4.3. Zirconium Prosthesis



- 11.5. Screw-Retained Prosthesis vs. Cement-Retained Prosthesis
  - 11.5.1. Indications
  - 11.5.2. Advantages and Disadvantages
- 11.6. Color Acquisition
  - 11.6.1. Color Map, Color Guides and Colorimeters
  - 11.6.2. Color Acquisition Technique
- 11.7. Clinical Sequence for Implant Prosthetics on Single Crowns and Partial Bridges

## Module 12. Implant Prosthesis in a Totally Edentulous Patient

- 12.1. Treatment Options for a Totally Edentulous Patient
  - 12.1.1. Key Positions of Implants
- 12.2. Removable Complete Restorations
  - 12.2.1. Concept
  - 12.2.2. Overdenture with Single Anchors
  - 12.2.3. Overdentures on Bars
  - 12.2.4. Clinical Sequence of Implant Prostheses in Totally Edentulous Patients Treated with Overdentures
- 12.3. Complete Fixed Restorations with Hybrid Prosthesis
  - 12.3.1. Concept
  - 12.3.2. Materials: Metal Composite and Metal Resin Fixed Prosthesis
  - 12.3.3. Clinical Sequence of Implant Prostheses in Totally Edentulous Patients Treated with Hybrid Prosthesis
- 12.4. Complete Fixed Restorations with Fixed Prosthesis
  - 12.4.1. Concept
  - 12.4.2. Materials: Metal, Porcelain, Zirconium
  - 12.4.3. Clinical Sequence of Implant Prostheses in Totally Edentulous Patients Treated with Fixed Prosthesis

### Module 13. Implant Prosthesis in the Anterior Aesthetic Sector

- 13.1. Problems of the Anterior Single Tooth
- 13.2. Aesthetics in Oral Restoration with Dental Implants
  - 13.2.1. Pink Aesthetic
  - 13.2.2. White Aesthetic
- 13.3. Aesthetic Parameters in Implantology
  - 13.3.1. Shape, Color, Dental Size
  - 13.3.2. Gingival Symmetry
- 13.4. Prosthodontic Management of the Immediate Post-Extraction Implant
  - 13.4.1. Indications and Contraindications
  - 13.4.2. Management of Temporaries in the Anterior Aesthetic Sector
  - 13.4.3. Prosthodontic Aspects of Immediate Provisionalization in Single Teeth: Immediate Aesthetics

### Module 14. Computer-Guided Surgery and Immediate Loading

- 14.1. Introduction and General Considerations in Immediate Loading
  - 14.1.1. Parameters and Selection of Patient with Immediate Loading
- 14.2. Computer-Guided Surgery
  - 14.2.1. Guided Surgery Software
  - 14.2.2. Guided Surgery Splints: Mucosal, Dental and Bone Support
  - 14.2.3. Surgical Components Adapted to Computer-Guided Surgery
  - 14.2.4. Surgical Techniques in Computer-Guided Surgery
- 14.3. Transitional Implants, Implants as Anchorage in Orthodontics and Mini Implants
  - 14.3.1. Implants as an Anchorage in Orthodontics
  - 14.3.2. Mini Implants

### Module 15. Occlusion in Implantology

- 15.1. Occlusal Patterns in Implant Dentistry
  - 15.1.1. Occlusion in a Totally Edentulous Patient
  - 15.1.2. Occlusion in a Partially Edentulous Patient
- 15.2. Occlusal Splints
- 15.3. Occlusal Adjustment and Selective Grinding





## Module 16. Complications in Implantology

- 16.1. Emergencies and Complications in Implant Surgery: What Are They and How Do You Solve Them?
  - 16.1.1. Immediate Complications
  - 16.1.2. Late Complications
- 16.2. Prosthetic Complications in Implantology
- 16.3. Biological Complications: Peri-Implantitis
  - 16.3.1. Concept
  - 16.3.2. Diagnosis
  - 16.3.3. Non-Surgical and Surgical Treatment
  - 16.3.4. Informed Consent and Legal Consequences

“*A unique, key and decisive training experience to boost your professional development*”



06

# 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.







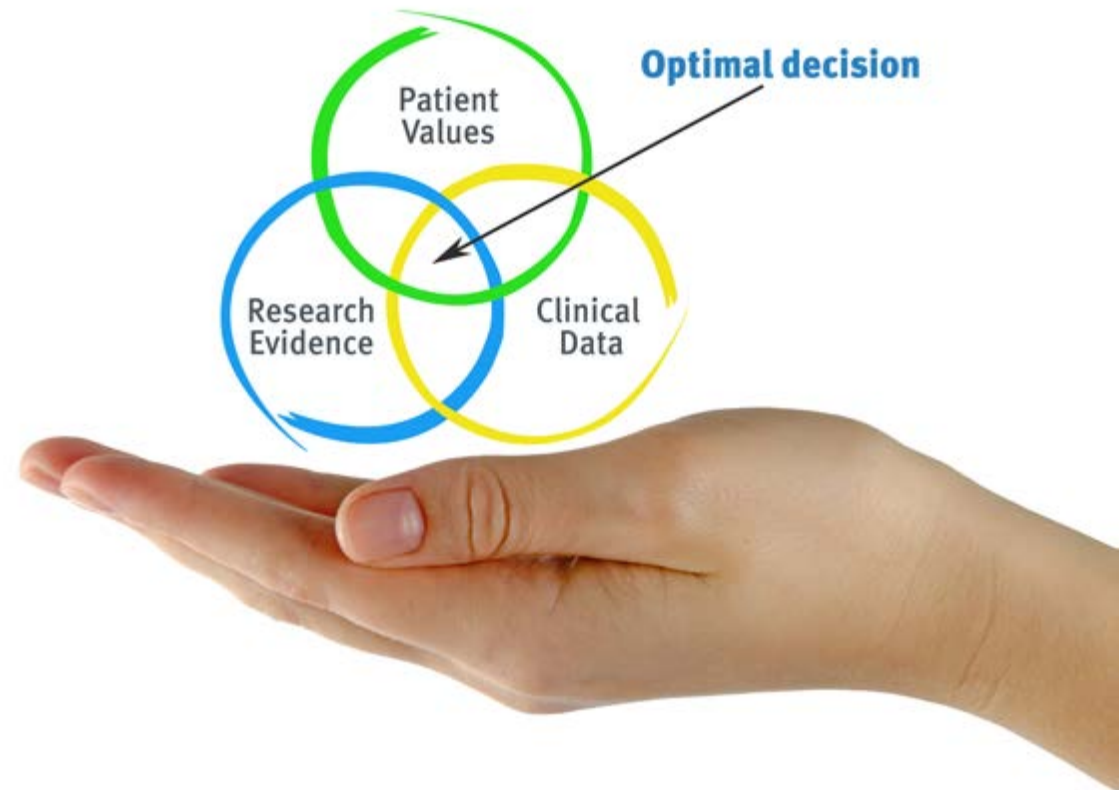
“

*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.

“

*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 learning, 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.



07

# Certificate

The Master's Degree in Implantology and Oral Surgery guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree issued by TECH Global University.



“

*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 **Master's Degree diploma in Implantology and Oral Surgery** 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.

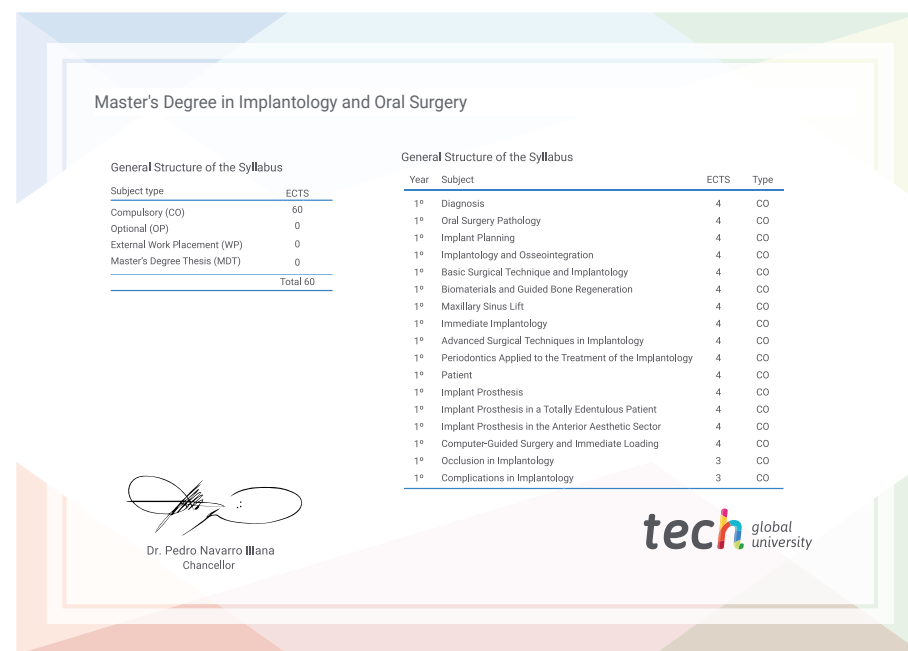
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Master's Degree in Implantology and Oral Surgery**

Modality: **online**

Duration: **12 months**

Accreditation: **60 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 quality

online training

development language

virtual classroom

**tech** global  
university

## Master's Degree Implantology and Oral Surgery

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

# Master's Degree

## Implantology and Oral Surgery

