





# Hybrid Professional Master's Degree

**Dental Prosthesis** 

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

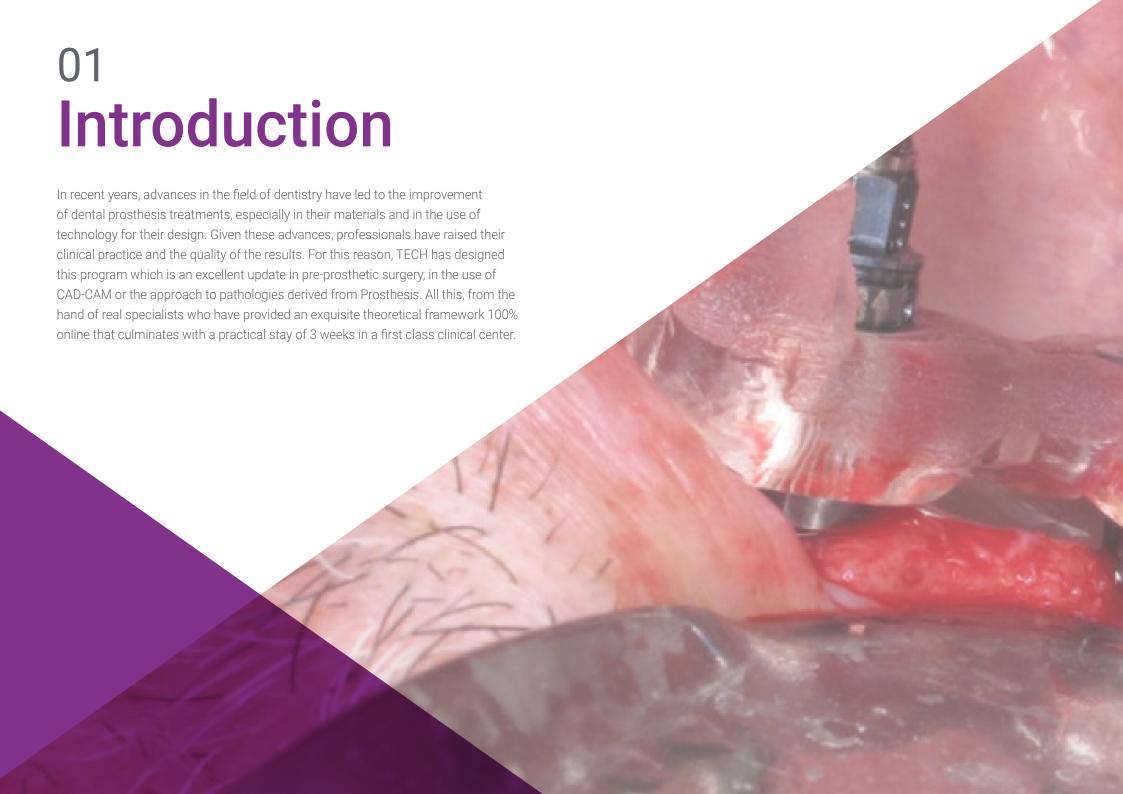
Certificate: TECH Technological University

Teaching Hours: 1,620 h.

 $We bsite: {\color{blue}www.techtitute.com/us/dentistry/hybrid-professional-master-degree-dental-prosthesis}$ 

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# tech 06 | Introduction

The dental field has undergone a true revolution with computer-aided design (CAD) and computer-aided manufacturing (CAM) technology in the field of dental prosthetics. This major breakthrough is coupled with improved materials such as high-end ceramics and composite resins. In this way, the final result is much better and the patient obtains greater satisfaction in recovering his or her smile and improving their oral health.

For this reason, there are many clinical centers that have incorporated in their facilities the most remarkable progress in this area. This leads specialists to continually update their skills. Thus, this 12-month Hybrid Professional Master's Degree in Dental Prosthetics has arisen.

It is a program that brings the graduate up to date with the latest clinical evidence in the use of different types of Prosthesis, analysis, planning and design, as well as the main pathologies and complications derived from dental Prosthesis. For this purpose, the graduate has at his disposal a large amount of multimedia didactic material, accessible 24 hours a day, from any digital device with an internet connection.

Likewise, one of the elements that distinguishes this degree is its practical phase, where the dentist will work with real patients in a leading clinical center. A 100% practical, face-to-face process, where they will be guided and tutored by the best specialists in this field. In this way, TECH responds to the needs of professionals seeking to obtain a complete update of their skills in dental prosthetics.

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With the Relearning method you will be able to reduce the hours of study and consolidate in a simple way the key concepts of this Hybrid Professional Master's Degree" This **Hybrid Professional Master's Degree in Dental Prosthesis** contains the most complete and up-to-date scientific program on the market. The most important features include:

- More than 100 clinical cases presented by professional nursing experts in Dental Prosthesis and Oral Implantology
- 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
- Patient evaluations, taking into consideration the latest recommendations for the realization and inclusion of dental Prosthesis
- Comprehensive action plans for the main pathologies and complications derived from dental Prosthesis
- Presentation of clinical case studies that allow to observe the different clinical situations
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- · Practical clinical guides on approaching different pathologies
- With a special emphasis on evidence-based medicine and research methodologies in Dental Prosthesis
- 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
- Furthermore, you will be able to carry out a clinical internship in one of the best centers on the international scene



TECH brings you closer to a unique and effective academic experience that allows you to spend a practical stay surrounded by the best dentists"

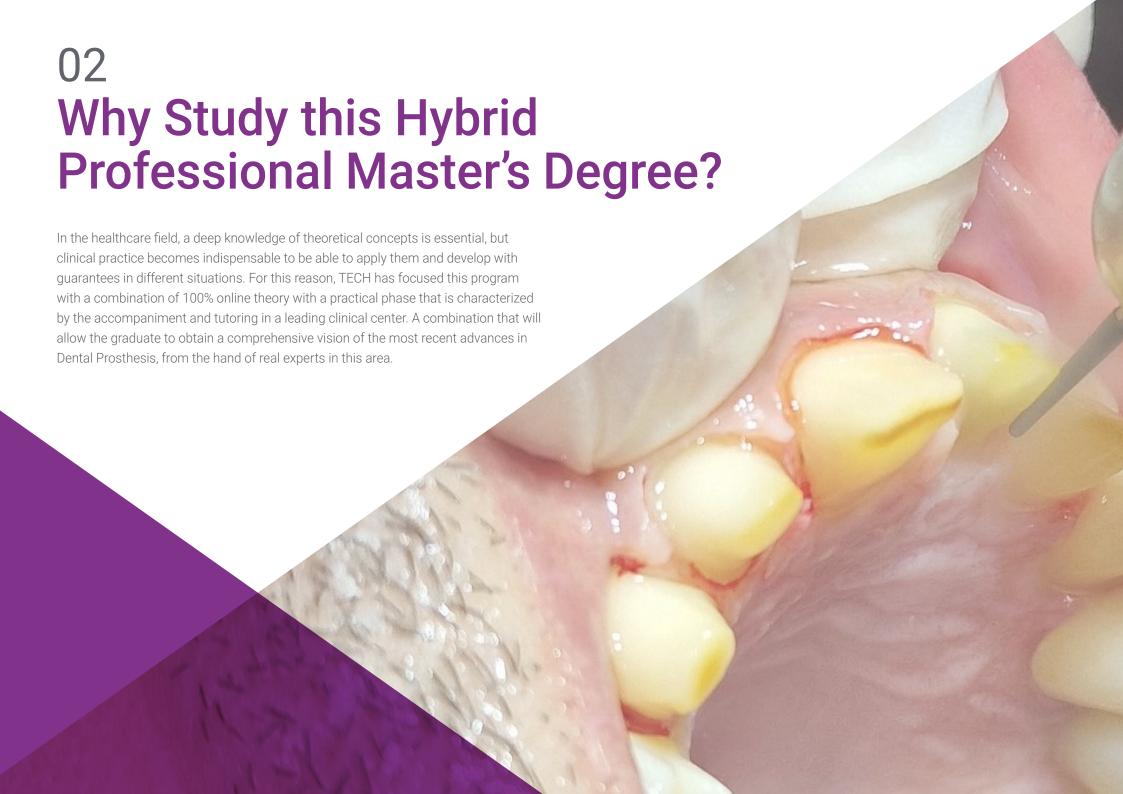
This Hybrid Professional Master's Degree, which has a professionalizing nature and a hybrid learning modality, is aimed at updating medical professionals who perform their functions in aesthetic units, and who require a high level of qualification. The contents are based on the latest scientific evidence, and oriented in a educational way to integrate theoretical knowledge in the medical practice, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision-making in patient management.

Thanks to the multimedia content, developed with the latest educational technology, a contextual and situated learning environment, that is, a simulated environment that will provide immersive learning programmed to train 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 experts.

This Hybrid Professional Master's Degree features clinical case studies facilitated by leading experts in prosthodontics and Oral Implantology.

Update yourself with a cutting-edge academic option that fits your real professional needs.







# tech 10 | Why Study this Hybrid Professional Master's Degree?

### 1. Updating from the latest technology available

The use of computer-aided design (CAD) and computer-aided manufacturing (CAM) technology and the use of 3D printing have transformed the field of dentistry and dental prosthetisis. For this reason, TECH has created a Hybrid Professional Master's Degree that brings together over 12 months the most cutting-edge advances in this field, as well as their direct application in distinguished clinical spaces.

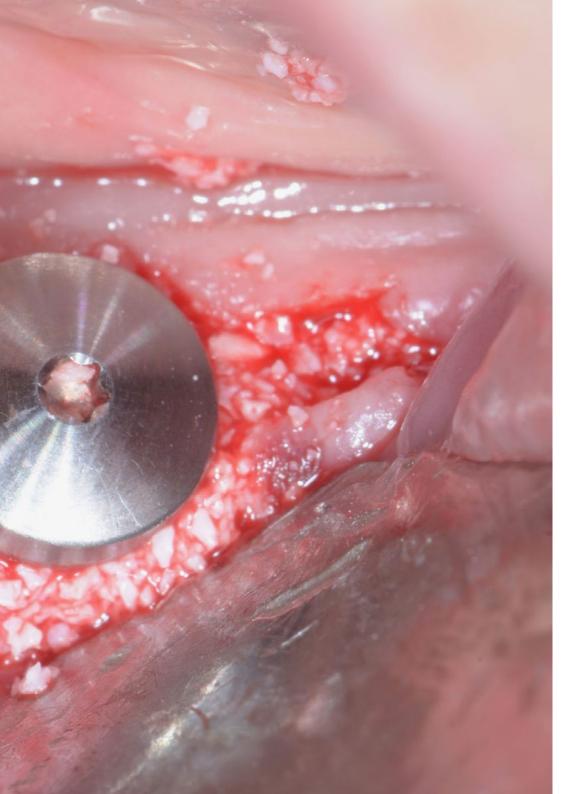
### 2. Gaining In-Depth Knowledge from the Experience of Top Specialists

This Hybrid Professional Master's Degree has the clinical experience of the best experts in Dental Prosthesis and Oral Implantology, which is a guarantee for the graduate who wishes to carry out a complete update with great specialists. Thus, not only does it have a syllabus prepared by a team of dentists with a consolidated trajectory in the sector, but you will also be guided during your stay by active professionals.

### 3. Entering First-Class Clinical Environments

This Hybrid Professional Master's Degree is differentiated by the professional level of the clinical centers, where the graduate will have the opportunity to update their skills. First level environments, where you can check from the first day, the procedures and technologies used for the design and implantation of Prosthesis. All this, in a demanding and rigorous work area, where the latest scientific evidence is applied.





# Why Study this Hybrid Professional Master's Degree? | 11 tech

### 4. Combining the Best Theory with State-of-the-Art Practice

In this program, TECH has made a firm commitment to respond to the needs of professionals seeking an update with a flexible methodology, while at the same time bringing them closer to real clinical cases. For this reason, this academic institution has combined the most advanced theory with a first level practice in the field of Odonthology.

#### 5. Expanding the Boundaries of Knowledge

This Hybrid Professional Master's Degree allows the graduate to extend their field of action by including in their praxis the latest advances in Dental Prosthesis, thanks to the experience of great specialists who have an accumulated national and international trajectory in the sector. A unique opportunity that only TECH, the world's largest Digital University, could offer.







# tech 14 | Objectives



# **General Objective**

• With this Hybrid Professional Master's Degree in Dental Prosthesis, the professional will have the opportunity to update their knowledge on diagnostic and therapeutic procedures in this area, the use of dental materials, clinical and laboratory techniques in the design of Prosthesis of high physiological and esthetic performance. Also, you will be aware of the strategies used for the prevention and treatment of complications related to dental prosthesis and occlusion



A library of teaching resources is available to extend the information in this syllabus 24 hours a day, 7 days a week"





### **Specific Objectives**

#### Module 1. Occlusion

- Delve deeply into the concept and classification of occlusion, as well as the different types of occlusion: physiological, pathological and therapeutic
- Recognize the importance of dental and oral anatomy in occlusion and how it affects occlusion in conventional and implant prosthodontics
- Identify the reference position in occlusion, including habitual position versus centric relation, and learn about the materials and techniques of recording centric relation in dentate, partially dentate, edentulous and dysfunctional patients
- Update the concept of vertical dimension and registration techniques, and to know when the vertical dimension can be varied
- Describe the different occlusal schemes, including bibalanced, group and organic function, and to understand ideal occlusion and the biological and biomechanical advantages of organic occlusion
- Identify disocclusion factors, such as individual anatomical factors, Condylar trajectory, Bennet angle, overbite, overjet, disocclusion angle, Spee and Wilson curves
- Delve into the differences between tripoidism and cuspid/fossa in posterior occlusion
- Update knowledge on the use of the articulator in daily practice, including
  the choice of the ideal articulator, the usefulness and handling of the
  facebow, reference planes, mounting on the semiadjustable articulator
  and techniques to reproduce the disocclusion angle in an articulator
- Delve into the concept of occlusal disease and learn to recognize clinical examples



# tech 16 | Objectives

#### Module 2. ATM: ATM Anatomy, Physiology and dysfunction

- Delve into the anatomy of the temporomandibular joint (TMJ), as well as the definition of its dysfunction, etiology and prevalence of disorders that can affect it
- Identify the signs and symptoms of joint disease in the TMJ, which will allow a proper diagnosis to be made
- Recognize the importance of TMJ dysfunction in daily practice, as it can affect the quality of life of patients and their ability to perform daily activities
- Delve into the biomechanics of the TMJ to understand how the joint functions occur and how disorders can occur in it.
- Classify the different dysfunctions that can affect the TMJ, that will allow identification and differentiation of the different types of disorders
- Identify the muscle disorders that can affect the TMJ, including local myalgia and myofascial pain
- Assimilate the different types of TMJ dislocation
- Investigate the incompatibilities of the articular surfaces that can affect the TMJ, including articular surface disorders, adhesions, hypermobility and spontaneous dislocation
- Delve into the differences between osteoarthritis and osteoarthrosis, and understand how these conditions can affect the TMJ.
- Differentiate between muscle and joint pathology in order to make an accurate and appropriate diagnosis leading to an effective treatment
- Delve into the different treatment options for the different conditions of the myoarticular complex
- Update knowledge on how to take a clinical history aimed at TMJ dysfunction, including the questions that can never be missed to obtain accurate and complete information





### Module 3. Analysis, planning and design in prosthetics

- Delve into the importance of clinical history and anamnesis in the evaluation of the patient for the design of prosthetic treatment
- Systematically collect and document the relevant patient information of the patient
- Delve into the different imaging techniques used in the evaluation of patients for the design of the prosthetic treatment
- Describe how to interpret and use the information obtained from imaging tests for treatment planning
- Investigate the prosthetic diagnostic process and the tools and techniques used in this process
- Formulate a definitive diagnosis and establish an appropriate treatment plan
- Select the appropriate type of prosthetic rehabilitation for each clinical case
- Detect the therapeutic variables to be taken into account in prosthetic treatment planning and design an appropriate treatment plan

#### Module 4. Removable Provisional Prosthesis

- Detail the different aspects of dental Prosthesis, from the biomechanical principles to the fabrication steps
- Delve into the classification and indications of dental prosthesis, concepts
  of retention, support and stability, the basics of classifications in removable
  and mixed partial dentures, and the analysis, planning and design in total
  and removable partial dentures
- Break down topics such as the elements that make up the removable partial denture, the description of the prosthetic and anatomical equator, the principles of planning and design of planning and design in the different types of prosthesis

# tech 18 | Objectives

- Delve into the concept of biostatic preparations and the different types of mouth biostatic preparations in partial and total edentulous, and the steps in the fabrication of prosthetic appliances
- Provide a comprehensive update on dental prosthesis and the processes involved in their design and fabrication

### Module 5. Fixed prosthesis

- Delve into the different preparations of teeth for fixed restorations, including the previous restorations for each type of preparation and their indications
- Delve into inlays in fixed prosthesis, the physical principles that should govern these preparations and their corresponding restorations, as well as the indications and contraindications for each type of preparation
- Approach the restoration of the endodontic tooth with fixed prosthesis, the concept of provisional crown, its design and preparation according to the case
- Strengthen the concept of gingival retraction, the principles that govern it, the indications and contraindications, as well as the procedures for its realization
- Analyze the BOPT technique and cementation in fixed and provisional restauration

#### Module 6. Materials and dental adhesion in rehabilitation

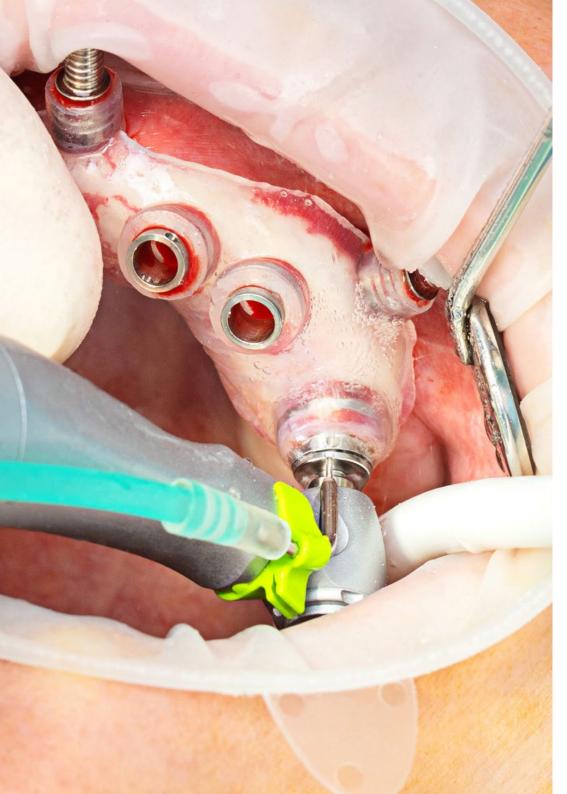
- Refresh the concepts of esthetic dentistry and its principles
- Describe the different types of restorative materials used in dental prosthodontics, including ceramics, composites and resins
- Point out the guidelines for selecting the appropriate shade and color for dental restorations
- Show the different types of shade guides available in the market, advantages and disadvantages in the use of each one of them
- Update knowledge on soft tissue management, impression materials and techniques used in the materials and techniques used in oral rehabilitation

#### Module 7. Implant Prosthesis

- Delve into the importance of biomechanics in implant prosthodontics and to know the mechanical and biological complications
- Describe the different impression techniques, including the choice of the ideal tray type, impression materials (silicone versus polyester)
- Delve into the importance of the implant design and its characteristics in relation to its future rehabilitative treatment
- Strengthen knowledge in the choice of the appropriate attachment in each case
- Differentiate the various types of implant Prosthesis available, such as screw-retained, cemented and cement-retained Prosthesis, as well as the BOPT technique
- Describe characteristics, indications and contraindications of each type of prosthesis, in addition to the presentation of clinical and laboratory protocols

### Module 8. Prosthetic Laboratory

- Delve into the different processes of prosthesis elaboration which will lead the student to understand and select the most adequate process for each case
- Explain the different materials currently available for the elaboration of conventional and implant Prosthesis
- Assimilate the importance of aesthetics in the fabrication of dental prosthesis and know the key aspects of white (teeth) and pink (soft tissues) esthetics
- Update knowledge on the correct diagnostic wax-ups and study models, which will enable the student to plan and visualize the final result of the prosthetic treatment
- Introduce the student to the technology of lathes for ceramic blocks and their advantages
- Delve into the necessary relationship between the clinician and the laboratory for the realization of cases with immediate loading



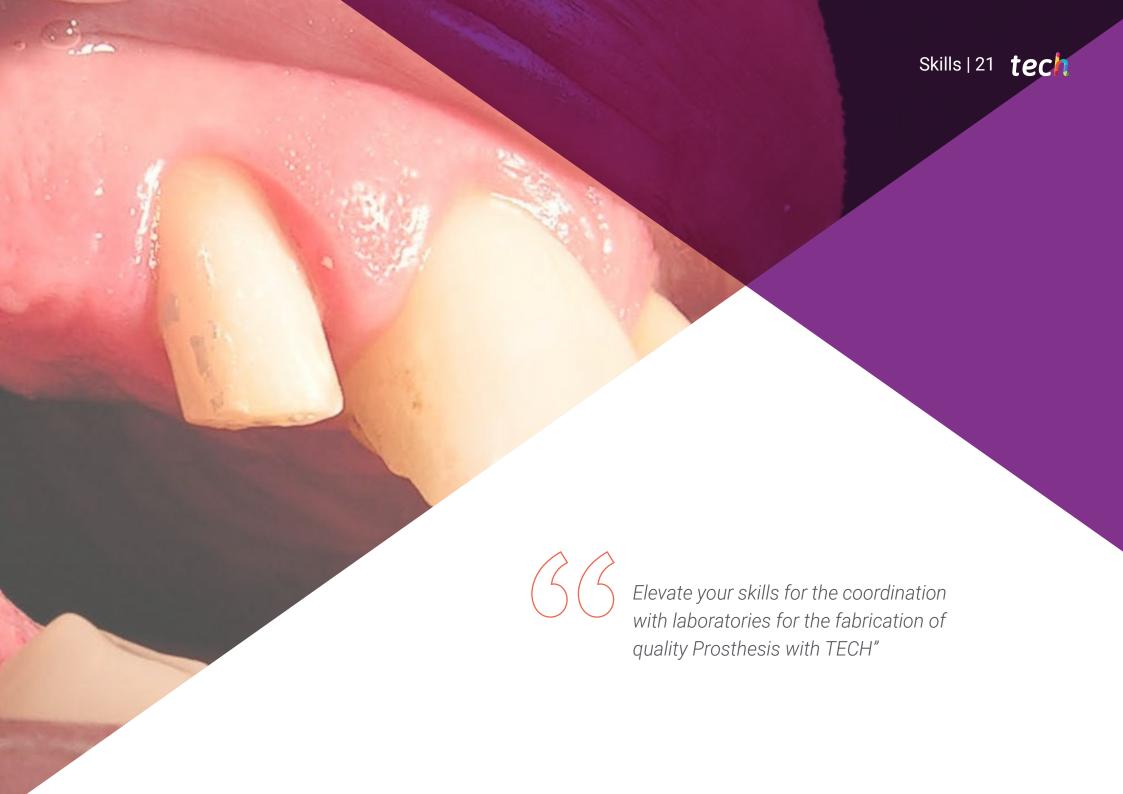
#### Module 9. CAD-CAM and Digital Flow

- Investigate common digital terms and tools used in dentistry
- Explain the capabilities and limitations of CAD-CAM and its use in restorations
- Update knowledge of the different materials used in CAD-CAM and their characteristics, as well as the indications for each material
- Inquire into the advantages and disadvantages of using CAD-CAM compared to traditional methods of dental restoration
- Delve into the introduction of the intraoral scanner in day-to-day practice and deepen the use of a digital workflow that can cover the entire operation of a practice
- Apply knowledge through the presentation of cases

# Module 10. Pre-prosthetic Surgery Pathologies and complications derived from of dental prosthesis

- Delve into the knowledge of the signs and symptoms of the different paraprosthetic lesions and the clinical and radiological tests necessary for an early and correct diagnosis
- Delve into the pathologies and complications that can arise from the use of dental prosthesis
- Update knowledge on the clinical protocols necessary to prevent and treat these pathologies and treat these Prosthesis effectively
- Emphasize the importance of radiological clinical follow-up of rehabilitated patients, as well as the maintenance of prosthetic appliances to minimize the occurrence of complications related to them





# tech 22 | Skills

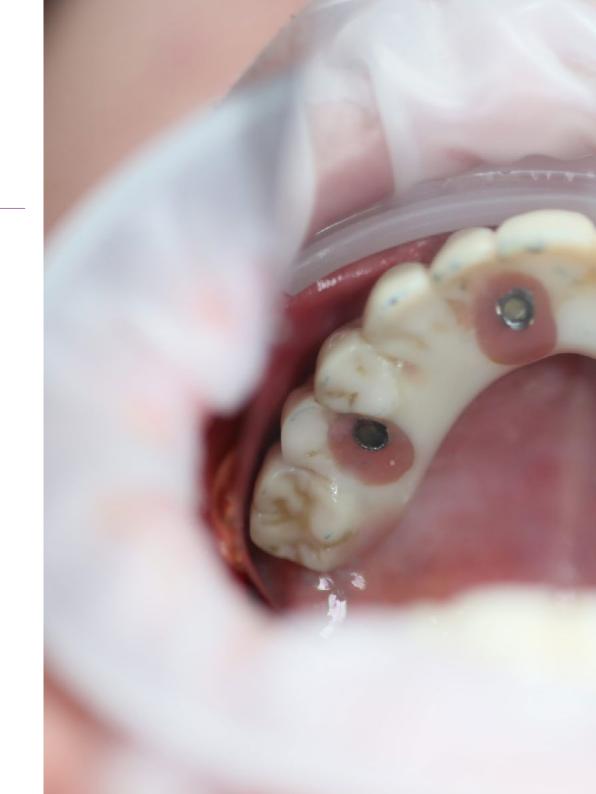


### **General Skills**

- Enhance skills for effective communication between the prosthetic laboratory and the dental clinic
- Improve coordination and treatment planning with the dental laboratory team
- Manage the most advanced diagnostic and therapeutic techniques for the main complications of dental Prosthesis
- Increase the skills to provide detailed information to the patient about the prosthetic treatments
- Integrate the latest technological advances in Dental Prosthesis in the dental office
- Apply the latest clinical and laboratory protocols in Dental Prosthesis



Through this program you will be aware of the current possibilities of CAD-CAM in the creation of dental Prosthesis"







# **Specific Skills**

- Master the procedures for the fabrication of temporary crowns
- Manufacture prosthetic appliances
- Approach biostatic preparations in partial and total edentulous patients
- Perform analysis, planning and design of dental Prosthesis with the most current methodologies
- Promote the ability for the differential diagnosis between muscular and articular pathology
- Treat occlusion disease with the most current techniques
- Employ the most recent materials and dental adhesion used in aesthetic dental rehabilitation
- Select the appropriate shade and color for a natural restoration
- Use the most advanced techniques for proper finishing, placement and occlusal adjustment of the final restoration
- Employ current CAD-CAM capabilities





### Management



### Dr. Visiedo Corvillo, Rosabel

- Executive CEO of the House of Implants OI-TECH
- Consultant for prosthetic attachments for the international dental implant manufacturer AVENIR SRL
- Degree in Dentistry from the International University of Catalonia
- Master's Degree in Occlusion and Implant Prosthetics from the School of Implantology and Oral Rehabilitation



### Dr. Dueñas Carrillo, Alfredo L

- CEO in the Research and Development Area of the OI-TECH implant brand
- Advisor to the international dental implant manufacturer AVENIR SRL
- Own Dental Practice at Gabident Dental Clinic. Cardedeu, Barcelona
- Instructor at the Department of Oral and Maxillofacial Surgery of the Faculty of Dentistry of the University of Havana
- First Degree Specialist in Oral and Maxillofacial Surgery from the University of Havana
- Master's Degree in Implantology from the University of Florida
- Member of: Spanish Society of Oral Surgery and Implantology, Committee of Experts of the OXTEIN implant house

#### **Professors**

#### Dr. Manzanares, Alba

- Specialist in Implant Dentistry and Oral Rehabilitation
- Lecturer in Implantology and Oral Rehabilitation at the University of Barcelona
- Degree in Dentistry from the International University of Catalonia
- Master's Degree in Occlusion and Rehabilitation on Implants in ESI Barcelona
- Professional Master's Degree in Implantology and Oral Rehabilitation at the University of Barcelona
- Professional Master's Degree in Dental Esthetics and Oral Rehabilitation by ESIRO
- Postgraduate Certificate in Dental Aesthetics in Composite and Dental Ceramics by Institut Joan Autrán

### Dr. De Antonio Torres, Cristina

- Implantology, Mucogingival Surgery and Digital Prosthodontics Specialist
- Associate Professor of the Degree of Dentistry at CEU San Pablo University
- Official Master's Degree in Implantology, Advanced Oral Surgery and Implantoprosthodontics CEU San Pablo University
- Postgraduate Certificate in Prosthodontics from the Catalan Society of Dentistry and Stomatology
- Degree in Dentistry from the International University of Catalonia

### Dr. Ladrón De Guevara Hernández, Elba

- \* Dentist Specializing in Aesthetic and Cosmetic Dentistry
- \* Degree in Dentistry from the University Alfonso X el Sabio
- Postgraduate in Dental Aesthetics and Cosmetic Dentistry by Institut Joan Autrán
- Postgraduate in Fixed Prosthesis by Doctor Mallat
- Professional Master's Degree in Occlusion and Oral Rehabilitation from the University of Barcelona

#### Dr. Pizarro Sanceledonio, Helena

- Specialist in Implant Dentistry and Oral Rehabilitation
- Degree in Dentistry from the International University of Catalonia
- Postgraduate in Advanced Orthodontics and Occlusion at Ladent Formación
- Professional Master's Degree in Implantology and Oral Rehabilitation at the University of Barcelona
- Postgraduate Certificate in Prosthesis and Oral Rehabilitation by the Catalan Society of Odontostomatology (SCOE)







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#### Module 1. Occlusion

- 1.1. Occlusion
  - 1.1.1. Concept
  - 1.1.2. Classification
  - 1.1.3. Principles
- 1.2. Types of Occlusion
  - 1.2.1. Physiological occlusion
  - 1.2.2. Pathological occlusion
  - 1.2.3. Therapeutic occlusion
  - 1.2.4. Different Schools
- 1.3. Dental and oral anatomy importance in occlusion
  - 1.3.1. Cusps and fossae
  - 1.3.2. Wear facets
  - 1.3.3. Anatomy of the Different Tooth Groups
- 1.4. Importance of occlusion in conventional and implant Prosthesis
  - 1.4.1. Occlusion and its effects on dental function
  - 1.4.2. Effects of malocclusion on the TMJ and masticatory
  - 1.4.3. Consequences of inadequate occlusion on teeth and implants
- 1.5. Reference position: Usual position versus centric relation, Materials and techniques for registration of centric relation in the dentate, partially dentate, edentulous and dysfunctional patient
  - 1.5.1. Habitual position and centric relation: concepts and differences
  - 1.5.2. Materials and techniques for recording centric relation in dentate patients
  - 1.5.3. Materials and techniques for recording centric relation in dentate patients edentulous
  - 1.5.4. Materials and techniques for registration of centric relation in patients with temporomandibular dysfunction
- 1.6. Vertical dimension. Can the vertical dimension be varied?
  - 1.6.1. Concept and importance of the vertical dimension in occlusion
  - 1.6.2. Techniques for recording the vertical dimension
  - 1.6.3. Physiological and pathological variations of the vertical dimension
  - 1.6.4. Modifications of the vertical dimension in dental prosthetics

- 1.7. Occlusal scheme: Bibalanced, group function and organic. What is the ideal occlusion. Biological and biomechanical advantages of organic occlusion
  - 1.7.1. Concept and types of occlusal schemes: bibalanced, group function and organic
  - 1.7.2. Ideal occlusion and its biological and biomechanical advantages
  - 1.7.3. Advantages and disadvantages of each type of occlusal scheme
  - 1.7.4. How to apply the different types of occlusal schemes in clinical practice
- Disocclusion factors: individual anatomical, posterior (condylar path and Bennet's angle), anterior (overbite, overjet and disocclusion angle) and intermediate (Spee and Wilsson curves)
  - 1.8.1. Anatomical Factors Individual that Affect disocclusion
  - 1.8.2. Posterior factors influencing disocclusion: condylar trajectory and Bennet's angle
  - 1.8.3. Anterior factors influencing disocclusion: overbite, protrusion and disocclusion angle
  - 1.8.4. Intermediate factors influencing disocclusion
- 1.9. Posterior occlusion: tripoid vs. cuspid vs. fossa
  - 1.9.1. Trypoidism: characteristics, diagnosis and treatment
  - 1.9.2. Cusp/fossa: definition, function and its importance in posterior occlusion
  - 1.9.3. Pathologies associated with posterior occlusion
- 1.10. The articulator in daily practice. Choice of the ideal articulator. Utility and management of the facebow. The reference planes. Assembly in the semi-adjustable articulator. Programming of the semi-adjustable articulator. Techniques to reproduce the disocclusion angle in an articulator
  - 1.10.1. Articulator types: semi-adjustable articulators and fully adjustable articulators
  - 1.10.2. Choice of the ideal articulator: criteria for the selection of the appropriate articulator according to the clinical case
  - 1.10.3. Handling of the facebow: facebow registration technique for taking occlusal records
  - 1.10.4. Semi-adjustable articulator programming: procedures for adjusting the articulator and programming the mandibular movements
  - 1.10.5. Techniques to reproduce the disocclusion angle in an articulator: steps for recording and transferring the disocclusion angle in the articulator

### Module 2. ATM: ATM Anatomy, Physiology and dysfunction

- 2.1. Anatomy of the TMJ, definition, etiology and prevalence of TMJ disorders
  - 2.1.1. Anatomical structures involved in the temporomandibular joint (TMJ)
  - 2.1.2. TMJ functions in mastication and speech
  - 2.1.3. Muscular and ligamentous connections of the TMJ
- 2.2. Signs and symptoms of joint disease
  - 2.2.1. Associated pain
  - 2.2.2. Types of joint noises
  - 2.2.3. Limitations
  - 2.2.4. Deviations
- 2.3. Importance of the dysfunction in daily practice
  - 2.3.1. Difficulties in chewing and speaking
  - 2.3.2. Chronic Pain
  - 2.3.3. Dental and orthodontic problems
  - 2.3.4. Sleep Disorders
- 2.4 TMJ Biomechanics
  - 2.4.1. Mechanisms of jaw movement
  - 2.4.2. Factors influencing TMJ stability and functionality
  - 2.4.3. Forces and loads applied to the TMJ during mastication
- 2.5. Classification of dysfunction
  - 2.5.1. Joint dysfunction
  - 2.5.2. Muscular Dysfunction
  - 2.5.3. Mixed dysfunction
- 2.6. Muscular alterations. Local myalgia. Myofascial Pain
  - 2.6.1. Localized myalgia
  - 2.6.2. Myofascial Pain
  - 2.6.3. Muscle Spasms
- 2.7. Condyle-disc complex alterations. Dislocation with reduction with intermittent locking. Dislocation without reduction with limitation of opening. Dislocation without reduction without limitation of opening
  - 2.7.1. Dislocation with reduction
  - 2.7.2. Dislocation with reduction with intermittent locking
  - 2.7.3. Dislocation without reduction with limitation of opening
  - 2.7.4. Dislocation without reduction without limitation of opening

- 2.8. Incompatibility of articular surfaces
  - 2.8.1. Alterations of the articular surfaces
  - 2.8.2. Adhesions
  - 2.8.3. Hypermobility
  - 2.8.4. Spontaneous dislocation
- 2.9. Osteoarthritis and osteoarthrosis
  - 2.9.1. Causes and Risk Factors
  - 2.9.2. Signs and Symptoms
  - 2.9.3. Treatment and Prevention
- 2.10. Differential diagnosis between muscle and joint pathology
  - 2.10.1. Clinical Assessment
  - 2.10.2. Radiological Studies
  - 2.10.3. Electromyographic studies
  - 2.10.4. Treatment of the different conditions of the myoarticular complex
    - 2.10.4.1. Physical Therapy and rehabilitation
    - 2.10.4.2. Pharmacology
    - 2.10.4.3. Surgery

### Module 3. Analysis, planning and design in prosthetics

- 3.1. Medical History
  - 3.1.1. Elements to consider when compiling the medical record
  - 3.1.2. Importance of the anamnesis in the diagnosis and treatment
  - 3.1.3. Relevant techniques to obtain relevant information in the anamnesis
  - 3.1.4. Special considerations in the clinical history of patients with disabilities
- 3.2. Imaging tests
  - 3.2.1. Types of imaging tests used in dentistry
  - 3.2.2. Indications and contraindications of imaging tests
  - 3.2.3. Interpretation of Test Results
  - 3.2.4. Recent advances in imaging tests for dental Prosthesis
- 3.3. Firm Diagnosis
  - 3.3.1. Diagnostic process in prosthetic rehabilitation
  - 3.3.2. Importance of the diagnosis in the choice of appropriate treatment
  - 3.3.3. Techniques and tools used in the definitive diagnosis
  - 3.3.4. Different approaches to definitive diagnosis in prosthodontics

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- 3.4. General classification of prosthetic restorations
  - 3.4.1. Types of Prosthesis according to the number of teeth to be replaced
  - 3.4.2. Fixed vs. removable Prosthesis
  - 3.4.3. Materials used in dental prosthesis
  - 3.4.4. Evolution of prosthetic rehabilitations in the history of dentistry
- 3.5. Therapeutic variables
  - 3.5.1. Factors influencing the choice of prosthetic treatment
  - 3.5.2. Variables to consider when planning prosthetic rehabilitation
  - 3.5.3. Aesthetic Considerations the choice of prosthetic treatment
  - 3.5.4. Variables affecting the durability of dental Prosthesis
- 3.6. Advantages and disadvantages of the different methods of prosthetic rehabilitation Indications
  - 3.6.1. Advantages and Disadvantages of Fixed prosthesis
  - 3.6.2. Advantages and disadvantages of removable prosthesis
  - 3.6.3. Indications for fixed Prosthesis
  - 3.6.4. Indications for removable Prosthesis
- 3.7. Management of periprosthetic tissues in implant dentistry
  - 3.7.1. Techniques for preservation of peri-implant tissues
  - 3.7.2. Treatment of peri-implantitis and its implications in the management of periprosthetic tissues
  - 3.7.3. Use of biomaterials for soft tissue management in implant dentistry
- 3.8. Periprosthetic tissue management in conventional rehabilitation
  - 3.8.1. Alveoloplasty Indications and Contraindications
  - 3.8.2. Exostosis and Torus, its resection, Indications and Contraindications
  - 3.8.3. Retained teeth, when they can influence the final results of the rehabilitation
- 3.9. Photography in dental prosthetics, its importance in the treatment design
  - 3.9.1. Types of photographs used in dental prosthetics
  - 3.9.2. Importance of photography in diagnosis and prosthetic treatment planning
  - 3.9.3. How to use photography in communication with the dental laboratory and the patient
- 3.10. General and specific contraindications of the different types of prosthetic rehabilitation
  - 3.10.1. Contraindications for removable prosthesis
  - 3.10.2. Contraindications for Fixed prosthesis
  - 3.10.3. Contraindications for implant-supported prosthesis
  - 3.10.4. Specific contraindications for prosthetic rehabilitation in patients with systemic diseases

### Module 4. Removable Provisional Prosthesis

- 4.1. Classification and indications
  - 4.1.1. Total Removable Prosthesis
  - 4.1.2. Parcial Removable Prosthesis
  - 4.1.3. Indications
- 4.2. Biomechanical principles of prosthesis
  - 4.2.1. Load and force distribution in the mouth
  - 4.2.2. Mechanisms of stability and retention of removable prosthesis
  - 4.2.3. Materials and techniques used for the fabrication of removable prosthesis
- 4.3. Retention, support and stability in prosthesis. Types and factors that determine them
  - 4.3.1. Types of retention
  - 4.3.2. Factors that influence the retention of the prosthesis
  - 4.3.3. Types of support: mucosal, dentinal, mixed
  - 4.3.4. Factors influencing the support of the prosthesis
  - 4.3.5. Stability of the prosthesis: definition and factors that influence it
- 4.4. Basics of the classifications in removable partial prosthesis. Mixed prosthesis
  - 4.4.1. Classifications in removable partial prosthesis
  - 4.4.2. Mixed prosthesis: concept and applications
  - 4.4.3. Indications for Mixed La Prosthesis
- 4.5. Analysis, planning and design in total and partial removable prosthesis
  - 4.5.1. Clinical and radiographic analysis of the patient
  - 4.5.2. Planning and design of the complete and partial removable prosthesis
  - 4.5.3. Impression methods and elaboration of the working model
- 4.6. Elements that integrate the removable partial prosthesis. Basics Connectors Retainers
  - 4.6.1. Basics: types, materials and design
  - 4.6.2. Connectors: types, materials and design
  - 4.6.3. Retainers: types, materials and design
- 1.7. Description of the prosthetic and anatomical equator
  - 4.7.1. Concept of prosthetic and anatomical equator
  - 4.7.2. Methods for locating the prosthetic equator
  - 4.7.3. Importance of the prosthetic equator in the esthetics and function of the prosthesis

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- 4.8. Principles of planning and design in the different classes of prosthesis according to the functional and topographical classifications Prosthetic design in intercalary and free end
  - 4.8.1. Functional and topographical classifications of Prosthesis
  - 4.8.2. Prosthesis design in intercalary and free-end cases
  - 4.8.3. Aesthetic and functional considerations in the design of removable prosthesis in patients with specific conditions, such as the presence of braces or prominent alveolar ridges
- 4.9. Biostatic preparation
  - 4.9.1. Definition and concept of biostatic preparation in removable prosthesis
  - 4.9.2. Importance of the biostatic preparation to guarantee the oral health and stability of the prosthesis
  - 4.9.3. Techniques and materials used in the biostatic preparation of the patient's mouth
  - 4.9.4. Types of biostatic preparations for removable prosthesis in partial edentulous patients
  - 4.9.5. Special considerations for the biostatic preparation in total edentulous patients
  - 4.9.6. Preparation of the mouth for implant-supported removable prosthesis
- 4.10. Steps in the fabrication of prosthetic appliances
  - 4.10.1. Stages in the process of fabrication of removable Prosthesis, from impression taking to delivery to the patient
  - 4.10.2. Techniques and Material used in the fabrication of removable prosthesis
  - 4.10.3. Considerations for the selection of the right type of removable prosthesis suitable for each patient

### Module 5. Fixed prosthesis

- 5.1. Different tooth preparations for fixed restorations
  - 5.1.1. Total crown preparation: technique and requirements for its use
  - 5.1.2. Partial crown preparation: indications and advantages
  - 5.1.3. Preparation of dental veneers: techniques and materials used
- 5.2. Preliminary restorations for each of the preparations and their indications
  - 5.2.1. Inlays and Onlays: indications and differences between the two types of restorations
  - 5.2.2. Dental bridges: types and materials used in their fabrication
  - 5.2.3. Dental crowns: materials and fabrication techniques

- 5.3. Inlays and onlays in fixed prosthesis: concept and types
  - 5.3.1. Ceramic inlays: advantages and disadvantages
  - 5.3.2. Metal inlays: materials used and processing techniques
  - 5.3.3. Composite Inlays: Indications and Contraindications
- 5.4. Restoration of the endodontic tooth with Fixed Prosthesis
  - 5.4.1. Preparation and design of restorations for endodontic teeth
  - 5.4.2. Use of intraradicular posts in the restoration of endodontic teeth
  - 5.4.3. Techniques for the selection of restorative materials in endodontic teeth
- 5.5. Physical principles that should govern these preparations and their corresponding restorations
  - 5.5.1. Dental adhesion: techniques and materials used
  - 5.5.2. Dental esthetics: factors to be taken into account in esthetic restorations.
  - 5.5.3. Dental occlusion: importance of occlusion in dental preparation and restoration
- 5.6. Indications and contraindications for each type of preparation
  - 5.6.1. Indications and contraindications of Dental crowns
  - 5.6.2. Indications and contraindications of dental veneers
  - 5.6.3. Indications and contraindications of bridges on teeth
- 5.7. Temporary crown. Design and preparation according to the case
  - 5.7.1. Importance of the temporary crown in dental preparation and restoration
  - 5.7.2. Design and materials used in the preparation of temporary crowns
  - 5.7.3. Techniques for the preparation of the temporary crown
- Gingival retraction, principles that govern it, indications and contraindications.
   Procedures for its realization
  - 5.8.1. Importance of the gingival retraction in dental preparation and restoration
  - 5.8.2. Techniques for gingival retraction: chemical and mechanical
  - 5.8.3. Indications and Contraindications of gingival retraction
- 5.9. Cementation of fixed and temporary restoration
  - 5.9.1. Types of cements used in fixed and provisional restoration
  - 5.9.2. Techniques for the cementation of fixed and provisional restorations
  - 5.9.3. important for the Cementation of fixed and temporary restoration
- 5.10. Milling for BOPT technique
  - 5.10.1. Concept of the BOPT technique in dental preparation and restoration
  - 5.10.2. Techniques for dental milling in the BOPT technique
  - 5.10.3. Advantages and disadvantages of the BOPT technique in tooth preparation and restoration

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#### Module 6. Materials and dental adhesion in rehabilitation

- 6.1. Aesthetic Dentistry and its Principles. Canons of beauty, symmetries, study of the smile
  - 6.1.1. Canons of beauty in Aesthetic Dentistry: dental proportions, ideal shapes and positions
  - 6.1.2. Dental symmetry: how to achieve harmony in the smile and its impact on facial esthetics
  - 6.1.3. Smile study: key elements for the diagnosis and planning of aesthetic treatment planning
- 6.2. Dental photography in esthetic dentistry and initial study of the patient. Patient Expectations
  - 6.2.1. Dental photography: techniques and uses in diagnosis and treatment monitoring
  - 6.2.2. Initial patient study: how to perform a complete and detailed evaluation for aesthetic treatment planning
  - 6.2.3. Patient expectations: how to manage expectations and communicate effectively with the patient about the outcome of treatment
- 6.3. Restorative materials in dental prosthetics. Ceramics, composites, resins
  - 6.3.1. Ceramics: types, characteristics and clinical applications
  - 6.3.2. Composites: properties, indications and application techniques
  - 6.3.3. Resins: types, uses and necessary care
- 6.4. Color and shade selection
  - 6.4.1. Selection of the dental color: techniques and tools to choose the right color for esthetic restorations
  - 6.4.2. Types of color guides
  - 6.4.3. Tooth shade: how to achieve a natural and harmonious shade with the rest of the teeth
- 6.5. Handling of soft tissues, impression materials and techniques
  - 6.5.1. Soft tissue management: techniques to preserve the health and esthetics of periodontal and gingival tissues
  - 6.5.2. Impression materials: types, uses and application techniques
  - 6.5.3. Impression techniques: how to obtain an accurate and detailed impression
- 6.6. Temporary restorations
  - 6.6.1. Temporary restorations: types, indications and application techniques
  - 6.6.2. Care and maintenance of temporary restorations
  - 5.6.3. Importance of provisional restorations in the success of esthetic treatment

- 6.7. Laboratory fabrication of esthetic restorations
  - 6.7.1. Dental laboratory: types of restorations, materials and fabrication techniques
  - 6.7.2. Communication between the dentist and the dental technician: how to achieve an effective collaboration to obtain the desired result
  - 5.7.3. Quality control in the fabrication of esthetic restorations
- 6.8. Sealing agents for dental restorations
  - 6.8.1. Sealing agents: types, indications
  - 6.8.2. Sealants application techniques
  - 6.8.3. Importance of sealing agents in the prevention of caries and in prolonging the life of restorations
- 6.9. Finishing, placement and occlusal adjustment of the final restoration
  - 6.9.1. Finishing the restoration: techniques to achieve a smooth and polished surface
  - 6.9.2. Placement of the restoration: cementation and bonding techniques
  - 6.9.3. Occlusal adjustment: how to achieve proper occlusion
- 6.10. Latest generation materials in dental adhesion
  - 6.10.1. Types of Adhesives
  - 6.10.2. Features
  - 6.10.3. Applications

### Module 7. Implant Prosthesis

- 7.1. Importance of biomechanics in implant prosthetics. Mechanical and biological complications of biomechanical origin
  - 7.1.1. Biomechanical forces influence on the success of implant treatment
  - 7.1.2. Biomechanical considerations in implant treatment planning
  - 7.1.3. Implant prosthesis design to maximize stability and longevity
  - 7.1.4. Mechanical and biological complications of biomechanical origin.:
    - 7.1.4.1. Fractures of implants and prosthetic components
    - 7.1.4.2. Bone loss around the implants due to excessive biomechanical loads
    - 7.1.4.3. Soft tissue damage due to friction and loading
- 7.2. Biomechanics of the implant/bone interface. Biomechanical characteristics of the maxilla and jaw. The paradox of poor quality bone
  - 7.2.1. Force distribution at the implant/bone interface
  - 7.2.2. Factors affecting primary and secondary implant stability
  - 7.2.3. Adaptation of the implant/bone interface to biomechanical loads

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- 7.2.4. Biomechanical characteristics of the maxilla and jaw
  - 7.2.4.1. Differences in the density and thickness of the maxillary and mandibular bone
  - 7.2.4.2. Effect of implant location on biomechanical loading in the maxilla and jaw
  - 7.2.4.3. Biomechanical considerations in implant placement in aesthetic areas
- 7.2.5. Biomechanical differences between cortical bone and cancellous bone
  - 7.2.5.1. Structure and density of cortical and cancellous bone
  - 7.2.5.2. Biomechanical responses of cortical and cancellous bone to loading
  - 7.2.5.3. Implications for implant selection and treatment planning
  - 7.2.5.4. Contributing factors to poor bone quality
  - 7.2.5.5. Implications of poor bone quality in implant placement
  - 7.2.5.6. Strategies of preprosthetic surgery to improve the quality of the future implant base
- 7.3. Implant design. Microscopic and macroscopic characteristics
  - 7.3.1. Macroscopic and microscopic characteristics of the implant
  - 7.3.2. Materials used in the fabrication of implants
  - 7.3.3. Design considerations to maximize stability and osseous integration
- 7.4. Surface treatment: addition, subtraction and mixed techniques. Bioactive surfaces. Ideal implant surface roughness. The future of surface treatments
  - 7.4.1. Addition, subtraction and mixed techniques to modify the implant surface
  - 7.4.2. Effect of bioactive surfaces on implant osseointegration
  - 7.4.3. Ideal implant surface roughness to promote osseointegration
  - 7.4.4. New technologies and materials to improve surface treatments
  - 7.4.5. Customized surface treatment development
  - 7.4.6. Potential applications of tissue engineering in surface treatments
- 7.5. Macroscopic characteristics Threaded versus impacted. Tapered versus cylindrical. Design of the coils. Cortical zone design. Soft tissue sealing zone design. The long implant. The wide implant. The short implant. The narrow implant
  - 7.5.1. Threaded versus impacted
    - 7.5.1.1. Advantages and disadvantages of the threaded system
    - 7.5.1.2. Advantages and disadvantages impact system
    - 7.5.1.3. Advantages and disadvantages of the impacted system

- 7.5.2. Conical versus cylindrical
  - 7.5.2.1. Differences between conical and cylindrical implants
  - 7.5.2.2. Advantages and disadvantages of each implant shape
  - 7.5.2.3. Indications for the use of each implant shape
- 7.5.3. Design of the coils
  - 7.5.3.1. Importance of the design of the coils in the implant stability
  - 7.5.3.2. Types of coils and their function
  - 7.5.3.3. Considerations for the design of the coils
- 7.5.4. Design of the cortical zone and for soft tissue sealing
  - 7.5.4.1. Importance of the cortical and soft tissue sealing zone for implant success
  - 7.5.4.2. Design of the cortical zone to increase implant stability
  - 7.5.4.3. Zone design for soft tissue sealing to prevent bone loss and improve esthetics
- 7.5.5. Types of Implants According to Their Size
  - 7.5.5.1. The wide implant and its indications
  - 7.5.5.2. The wide implant and its indications
  - 7.5.5.3. The short implant and its indications
  - 7.5.5.4. The wide implant and its indications
- 7.6. Biomechanics of the implant/abutment/prosthetic interface
  - 7.6.1. Connection Types
  - 7.6.2. Evolution of connections in implantology
  - 7.6.3. Concept, characteristics, types and biomechanics of the external connections
  - 7.6.4. Concept, characteristics, types and biomechanics of internal connections: internal hexagon and cone
- 7.7. Pillars for Implant Prosthesis
  - 7.7.1. Platform change
  - 7.7.2. One abutment one time protocol
  - 7.7.3. Tilted implants
  - 7.7.4. Biomechanical protocol for minimizing marginal bone loss
  - 7.7.5. Biomechanical protocol for the choice of the number of implants required depending on the type of prosthesis

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7.0			
7.8.	Impress	ion	ısm

- 7.8.1. Choice of the ideal tray type
- 7.8.2. Impression materials: silicone versus polyester
- 7.8.3. Indirect or closed-tray technique. Direct or open-tray technique. When to splint impression transfers. Prints with coping snaps. How to choose the ideal printing technique
- 7.8.4. Taking an impression of the emergence profile and of the pontics
- 7.8.5. Pouring of models for implant Prosthesis
- 7.9. Screw-retained, cement-retained and cement-screw-retained Prosthesis
  - 7.9.1. Cement-Retained Prosthesis
    - 7.9.1.1. Concept and characteristics of the cemented prosthesis
    - 7.9.1.2. Indications and contraindications of the cemented prosthesis
    - 7.9.1.3. Types and characteristics of the abutments to be cemented. Choice of the ideal abutment
    - 7.9.1.4. Cement. Choice of the ideal Cement
    - 7.9.1.5. Clinical and Laboratory Protocol
  - 7.9.2. Screw-retained prosthesis
    - 7.9.2.1. Concept and characteristics of the cemented prosthesis
    - 7.9.2.2. Direct screw-retained prosthesis
    - 7.9.2.3. Indirect screw-retained prosthesis. The intermediate abutment
    - 7.9.2.4. Indications and contraindications of screw-retained Prosthesis
    - 7.9.2.5. Clinical and Laboratory Protocol
  - 7.9.3. Cement-screw-retained prosthesis
    - 7.9.3.1. Concept and characteristics of the cementation cemented prosthesis
    - 7.9.3.2. Choice and characteristics of the ideal abutment
    - 7.9.3.3. Clinical and Laboratory Protocol
  - 7.9.4. BOPT technique
    - 7.9.4.1. Concept and Characteristics
    - 7.9.4.2. Choice and characteristics of the ideal abutment
    - 7.9.4.3. Clinical and Laboratory Protocol
    - 7.9.4.4. Presentation of clinical cases

#### 7.10. Overdentures and Hybrids

- 7.10.1. Concept and types of overdentures and hybrids: implant-supported vs. implant-retained
- 7.10.2. Indications and contraindications of overdentures and hybrids.

  Main advantages and complications
- 7.10.3. Clinical protocol for differential diagnosis between fixed, hybrid and overdenture Prosthesis: analog and digital
- 7.10.4. Types of retention: bars and individual anchors. Choice of retainer depending on each case
- 7.10.5. Biomechanics of overdentures and hybrids. Number of implants required for an overdenture and for a hybrid
- 7.10.6. Clinical protocol and tips. Laboratory protocol
- 7.10.7. Clinical Cases

#### Module 8. Prosthetic Laboratory

- 8.1. Clinical-Laboratory Communication
  - 8.1.1. Importance of effective communication between the clinician and the dental laboratory
  - 8.1.2. Tools and resources to improve communication (photographs, models, occlusal records, etc.)
  - 8.1.3. Protocols for the transmission of information and specifications of dental work
  - 8.1.4. Resolution of problems and conflicts in clinical-laboratory communication
- 8.2. The different processes for the elaboration of the prosthesis: Casting, prototype casting (overcasting), synthesized, pre-synthesized milling, machined synthesized, machining
  - 8.2.1. Casting and overcasting: differences, advantages and disadvantages
  - 8.2.2. Synthesizing and pre-synthesizing milling processes: characteristics and applications
  - 8.2.3. Machined and machined synthetizing: comparison and selection according to patient needs according to the patient's needs
  - 8.2.4. Finishing and polishing techniques of the prosthesis
- 8.3. Types of materials currently available for implant prosthetics: ceramics, composites, zirconia
  - 8.3.1. Ceramics: types, Properties and clinical applications
  - 8.3.2. Composites: characteristics, advantages and disadvantages in implant prosthodontics
  - 8.3.3. Zirconium: properties and clinical applications in implant prosthetics
  - 8.3.4. Clinical considerations in the selection of material for implant prosthetics

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- 8.4. White aesthetics and pink aesthetics
  - 8.4.1. Concepts and definitions of white aesthetics and pink aesthetics
  - 8.4.2. Factors to consider in the esthetic planning of implant prosthesis
  - 8.4.3. Techniques to improve white and pink esthetics
  - 8.4.4. Clinical evaluation and assessment of patient satisfaction
- 8.5. Castings and wax-ups
  - 8.5.1. Techniques and materials for the casting and waxing of dental Prosthesis
  - 8.5.2. Clinical and laboratory considerations in the selection of the type of casting or wax-up
  - 8.5.3. Common problems in casting and waxing and how to solve them
  - 8.5.4. Techniques to improve the accuracy and quality of the casting and waxing process
- 8.6. Machined and/or customized attachments
  - 8.6.1. Concept and definition of machined and customized attachments
  - 8.6.2. Advantages and disadvantages of machined and customized attachments in implant
  - 8.6.3. Types of machined and customized attachments (abutments, pins, bars, etc.)
  - 8.6.4. Clinical and laboratory considerations in the selection and application of machined and customized
- 8.7. Diagnostic wax-ups and study models
  - 8.7.1. Definition and objectives of diagnostic wax-ups and study models
  - 8.7.2. Techniques and materials for diagnostic wax-ups and study models
  - 8.7.3. Clinical and laboratory interpretation of the results of diagnostic wax-ups and study models
  - 8.7.4. Clinical applications of diagnostic wax-ups and study models in the planning of implant prosthetics
- 8.8. Ceramic lathes, immediacy in the realization of definitive restorations
  - 8.8.1. Types of ceramic lathes and their operation
  - 8.8.2. Advantages and disadvantages of the use of ceramic lathes in the realization of definitive dental restorations
  - 8.8.3. Procedures and protocols for the use of ceramic lathes in the fabrication of dental prostheses

- 8.9. Immediate loading and clinical-laboratory collaboration for the achievement of optimal results
  - 8.9.1. Concept of immediate loading
  - 8.9.2. The role of the dental laboratory in the clinical-laboratory collaboration for immediate loading
  - 8.9.3. Procedures and techniques for the realization of immediate loading
  - 8.9.4. Considerations and precautions to be taken into account in immediate loading
- 8.10. How to select your laboratory for daily practice
  - 8.10.1. Practitioner skill and currency
  - 8.10.2. Machinery and conditions of the dental laboratory
  - 8.10.3. Adequate supply to the market
  - 8.10.4. Price-quality relationships

## Module 9. CAD-CAM and Digital Flow

- 9.1. Digital Dentistry (stl, inchair, inlab...)
  - 9.1.1. Digital dentistry and its importance in modern dental practice
  - 9.1.2. Common digital technologies in dentistry
  - 9.1.3. Applications of digital dentistry
- 9.2. Digital flowchart, from the scanning of the mouth and sending of digital files, to the laboratory design and subsequent mechanized production of the prosthetic structure
  - 9.2.1. Digital scanning and data capture techniques
  - 9.2.2. Processing and sending of digital files for the design of dental prosthesis
  - 9.2.3. Use of software for design and mechanized production of prosthetic structures
  - 9.2.4. Integration of digital workflows in daily dental practice
- 9.3. Current CAD-CAM possibilities. When, how and why
  - 9.3.1. Description of CAD-CAM technologies and their role in digital dentistry
  - 9.3.2. Advantages and disadvantages of using CAD-CAM for the fabrication of dental prosthesis
  - 9.3.3. Indications for the use of CAD-CAM in different types of dental restorations
  - 9.3.4. Clinical Cases
- 9.4. Current materials: characteristics and indications
  - 9.4.1. Description of common materials used in digital dentistry
  - 9.4.2. Characteristics of the different materials and their applications
  - 9.4.3. Indications and contraindications for the use of different materials in dental restorations

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- 9.5. Advantages/ Disadvantages. Limitations of the Different Systems Available
  - 9.5.1. Comparison of different systems and technologies used in digital dentistry
  - 9.5.2. Advantages and disadvantages of intraoral, external scanning and conventional impression systems
  - 9.5.3. Limitations and restrictions of each system in terms of accuracy, cost and ease of use
- 9.6. Choice of abutments
  - 9.6.1. Description of the different types of abutments used in digital dentistry, including prefabricated and customized abutments
  - 9.6.2. Indications for the choice of different types of abutments
  - 9.6.3. Advantages and Disadvantages of different types of abutments in terms of accuracy, cost and ease of use
- 9.7. Intraoral scanner vs. conventional impression
  - 9.7.1. Comparison of intraoral scanning and conventional impression technologies in digital dentistry
  - 9.7.2. Advantages and Disadvantages
  - 9.7.3. Indications for the use of each technology in different types of dental restorations
- 9.8. Digital flow protocol and data protection
  - 9.8.1. Digital flow protocol description in digital dentistry, including data capture, prosthetic design and mechanized production
  - 9.8.2. Necessary security and data protection measures to ensure the patient privacy
  - 9.8.3. Compliance with relevant standards and regulations regarding data protection in dentistry
- 9.9. Ceramic lathe and digitization
  - 9.9.1. Crown designs for machining on the ceramic lathe
  - 9.9.2. Advantages and disadvantages of the machining of porcelain crowns
  - 9.9.3. The immediacy of machined prosthetic restorations
  - 9.9.4. Digital communication between the intraoral scanner and the ceramic lathe
- 9.10. Presentation of cases
  - 9.10.1. Clinical Cases
  - 9.10.2. Alternatives
  - 9.10.3. Expectations of digital dentistry vs. Reality

# **Module 10.** Pre-prosthetic Surgery Pathologies and complications derived from of dental prosthesis

- 10.1. Risk factors for the development of prosthesis rehabilitation-related
  - 10.1.1. Poor oral hygiene and its relationship with prosthesis pathology
  - 10.1.2. Systemic diseases and their relation to prosthetic failure
  - 10.1.3. Types of prosthesis and their relationship with the occurrence of oral prostheses
  - 10.1.4. Patient-related factors that increase the risk of dental prosthesis complications
- 10.2. Subprosthetic stomatitis
  - 10.2.1. Definition of subprosthetic stomatitis and its relation to dental prosthesis
  - 10.2.2. Prevalence of subprosthetic stomatitis in patients to dental prosthesis
  - 10.2.3. Diagnosis of subprosthetic stomatitis: signs and symptoms
  - 10.2.4. Treatment of subprosthetic stomatitis: available treatment options
- 10.3. Treatment of fissured epulis
  - 10.3.1. Definition of fissured epulis and its relation to dental prosthesis
  - 10.3.2. Prevalence of fissured epulis in patients with dental prosthesis
  - 10.3.3. Diagnosis of fissured episthesis: signs and symptoms
  - 10.3.4. Treatment of fissured epulis: available therapeutic options
- 10.4. Peri-Implantitis Clinical protocols
  - 10.4.1. Definition of peri-implantitis and its relation to implant prosthetics
  - 10.4.2. Prevalence of peri-implantitis in patients with implant prostheses
  - 10.4.3. Diagnosis of peri-implantitis: signs and symptoms
  - 10.4.4. Treatment of peri-implantitis: available therapeutic options and clinical protocols
- 10.5. Ideal design of conventional and implant-supported prosthesis
  - 10.5.1. Ideal design of conventional prosthesis
  - 10.5.2. Ideal design of implant prosthesis
  - 10.5.3. Ideal materials for the fabrication of dental prosthesis
- 10.6. Maintenance of conventional fixed and removable prostheses and implant prosthesis: clinical protocol
  - 10.6.1. Maintenance protocol for conventional dental prosthesis
  - 10.6.2. Maintenance protocol for implant prosthesis
  - 10.6.3. Importance of dental prosthesis maintenance to prevent complications



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- 10.7. Other rarer lesions that may be caused by iatrogenic prosthetic treatment
  - 10.7.1. Less frequent oral lesions related to prosthetic treatment
  - 10.7.2. Identification and Diagnosis of lesions
  - 10.7.3. Treatment of Lesions
- 10.8. Systemic diseases and their effect on the non-achievement of optimal results in dental prosthetics
  - 10.8.1. Systemic diseases that can affect prosthetic rehabilitation
  - 10.8.2. Impact of systemic diseases on the prosthetic patient's quality of life
  - 10.8.3. Treatment protocol for patients with systemic diseases and dental prosthesis
- 10.9. Pre-prosthetic Surgery
  - 10.9.1. Concept of preprosthetic surgery
  - 10.9.2. Indications and Contraindications of Proctological La Surgery
  - 10.9.3. Techniques for the preparation of the stomatognathic apparatus
- 10.10. Relationship of the preprosthetic surgery with the appearance of prosthesis associated pathologies to oral rehabilitation
  - 10.10.1. Complications of the preprosthetic surgery
  - 10.10.2. Preprosthetic Surgery and hard tissues
  - 10.10.3. Preprosthetic Surgery and Soft tissues
  - 10.10.4. Pre-prosthetic treatment of the extreme patient







## tech 42 | Clinical Internship

Students who enter this phase of the program will spend 3 weeks, from Monday to Friday, working 8 consecutive Monday to Friday, in consecutive 8-hour days, developing activities in a prestigious clinical center. A leading environment in its sector, which will allow them to be with professionals with extensive experience in Dental Prosthetics. Thanks to the tutoring of this specialist you will be able to check the methodology used in diagnostic and therapeutic procedures, as well as the most advanced materials and technology applied to this field.

In this training proposal, completely practical in nature, the activities are aimed at the development and improvement of the skills necessary for the provision of quality care, in order to promote the oral health of patients and improve their oral aesthetics

TECH offers a unique practical methodology that converts a clinic into an environment of exceptional updating when dealing with real patients, with the most current techniques and procedures. Thus, through an innovative experience, the graduate achieves an improvement in his or her care skills and broadens his or her field of action in his or her sector.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of the professors and other fellow trainees who facilitate teamwork and multidisciplinary integration as transversal competencies for dental practice (learning to be and learning to relate).

The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:





# Clinical Internship | 43 **tech**

Module	Practical Activity
Occlusion Techniques	Evaluate the patient's occlusion with a clinical examination and including palpation of the masticatory muscles and the temporomandibular joint (TMJ)
	Identify and correct occlusal interferences by selective adjustments of natural teeth or dentures
	Make occlusal adjustments to fixed prosthetic restorations to achieve a proper and balanced occlusion
	Treat occlusal disorders such as bruxism, TMJ disorders and malocclusions
Planning and Design of Dental Prosthesis	Diagnosing oral conditions, including missing or damaged teeth
	Develop a customized treatment plan, considering dental prosthetic options
	Utilize computer-aided design (CAD) software to create a digital model of the prosthesis
	Adjust the esthetics and functionality of the prosthesis according to the patient's preferences and needs of the patient
Clinical Case Approach	Perform clinical and radiographic examinations to assess dental health and determine the need for dentures
	Explain the benefits and limitations of each type of prosthesis (removable, fixed or implant-supported)
	Collaborate with dental laboratory technicians to accurately fabricate prosthesis, whether by milling, 3D printing or traditional techniques
	Instruct patients on proper care of dentures, including oral hygiene techniques and cleaning of dentures
Pre-prosthetic Surgery	Assist in the performance of dental radiographs or CT scans to assess the quality and quantity of available bone and to determine the important location
	Determine the need for tooth extractions, soft tissue surgery, bone augmentation or other pre-prosthetic procedures
	Extract compromised or damaged teeth atraumatically, using appropriate techniques such as flap elevation, osteotomy and odontosection if necessary
	Perform suturing of surgical wounds and provide postoperative instructions to the patient



## **Civil Liability Insurance**

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchase a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the program at the center.



## **General Conditions of the Internship Program**

The general terms and conditions of the internship agreement for the program are as follows:

- 1. TUTOR: During the Internship Program, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor, whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.
- 2. DURATION: The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.
- 3. ABSENCE: If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor.

- **4. CERTIFICATION:** Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.
- **5. EMPLOYMENT RELATIONSHIP:** The Internship Program shall not constitute an employment relationship of any kind.
- 6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.
- 7. DOES NOT INCLUDE: The Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.





## tech 48 | Where Can I Do the Clinical Internship?

The student will be able to complete the practical part of this Hybrid Professional Master's Degree at The following centers:



#### Clínica Chamberí Dental

Country City
Spain Madrid

Management: Calle Palafox 11, Madrid

Specialized clinic in Dentistry and Aesthetic Medicine

#### Related internship programs:

- Dental Clinic Management and Direction - Integral Aesthetic Medicine for Dentists



### Centro Médico López & Muñoz

Country City
Spain Almería

Management: C. San Leonardo, 6, 04800 Albox, Almería

Clinical center focused on the multidisciplinary promotion of physical and oral health.

#### Related internship programs:

- Integral Aesthetic Medicine for Dentists - Adhesive Aesthetic Dentistry



#### CT Medical

Country City
Spain Madrid

Management: C. Lonja de la Seda, 41, 28054 Madrid

Clinical center offering multidisciplinary of medical specialties

#### Related internship programs:

- Clinical, Medical and Welfare Management Pediatric Nursing



#### Centro Médico Dental Orense

Country City
Spain Madrid

Management: C. de Orense, 69, 28020 Madrid

Oral care center for adults and juvenile and infantojuvenile patients

#### Related internship programs:

- Implantology and Oral Surgery



#### DentalSalud

Country City
Spain Madrid

Management: Calle Francos Rodríguez, 48, 28039, Madrid

Specialized dental clinic in various dental areas

#### Related internship programs:

- Dental Clinic Management and Direction - Periodontics and Mucogingival Surgery



### **Dental Rojas**

Country City
Spain Madrid

Management:

Avenida Doctor García Tapia 157. 28030 Moratalaz

Dental Rojas is a clinical space specialized in Implantology, Oral Surgery, Aesthetics and Orthodontics.

#### Related internship programs:

- Implantology and Oral Surgery - Endodontics and Apical Microsurgery



#### Estudio dental Dra. Katherine Durán

Country City
Spain Madrid

Management:

Calle de Montesa, 24, 28006 Madrid

Specialized clinic in high aesthetic dentistry, dental implants and orthodontics.

#### Related internship programs:

- Integral Aesthetic Medicine for Dentists - Adhesive Aesthetic Dentistry



### Clínica dental Origen (Torrelodones)

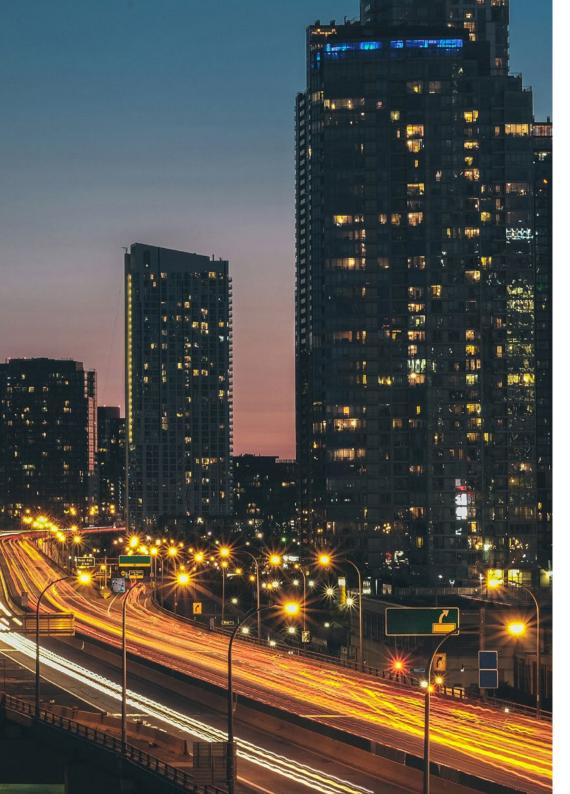
Country City
Spain Madrid

Management: Plaza del Caño, 3, 28250 Torrelodones, Madrid

At Origen Dental, we offer innovative dental hygiene and periodontal treatments to maintain healthy teeth and gums and prevent dental problems.

#### Related internship programs:

- Endodontics and Apical Microsurgery - Implantology and Oral Surgery



## Where Can I Do the Clinical Internship? | 49 tech



## Clínica dental Origen (Villaviciosa de Odón)

Country Spain City

Madrid

Management: Calle Cueva de la Mora, 7, 28670 Villaviciosa de Odón, Madrid

At Origen Dental, we offer innovative dental hygiene and periodontal treatments to maintain healthy teeth and gums and prevent dental problems.

#### Related internship programs:

- Endodontics and Apical Microsurgery - Implantology and Oral Surgery



### Ferreiroa & Ramos

Country Spain

Madrid

Management: C. de Sangenjo, 16, 28034 Madrid

Ferreiroa & Ramos, specialists in Conservative Dentistry and Prosthodontics.

#### Related internship programs:

- Dental Prosthesis -Aesthetic Bonding Dentistry





## tech 52 | Methodology

### At TECH we use the Case Method

In a given situation, what should a professional do? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the dentist's professional practice.



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

### The effectiveness of the method is justified by four fundamental achievements:

- Dentists who follow this method not only grasp concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply their knowledge.
- 2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
- 3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
- **4.** Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.





## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

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

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



## Methodology | 55 tech

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

With this methodology we have trained more than 115,000 dentists with unprecedented success, in all specialties regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

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

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

This program offers the best educational material, prepared with professionals in mind:



### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### **Educational Techniques and Procedures on Video**

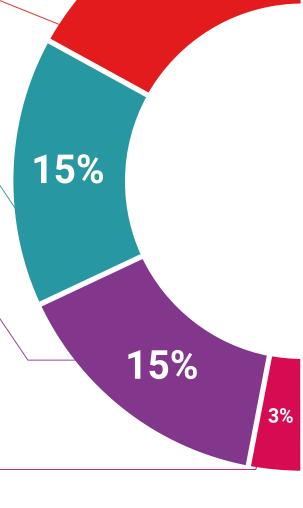
TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times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



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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





### **Additional Reading**

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.

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

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.

## **Testing & Retesting**



We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

### Classes

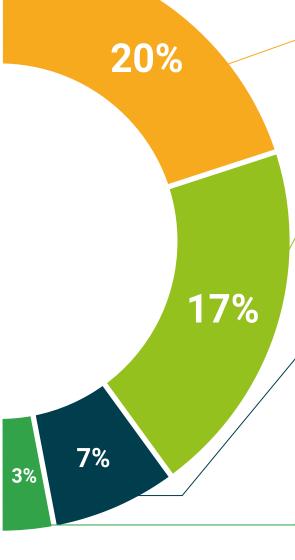


There is scientific evidence suggesting that observing third-party experts can be useful. Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

#### **Quick Action Guides**



TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.







## tech 60 | Certificate

This **Hybrid Professional Master's Degree in Dental Prosthesis** contains the most complete and up-to-date program on the professional and educational field.

After the student has passed the assessments, they will receive their corresponding Hybrid Professional Master's Degree diploma issued by TECH Technological University via tracked delivery\*.

In addition to the diploma, students will be able to obtain an academic transcript, as well as a certificate outlining the contents of the program. In order to do so, students should contact their academic advisor, who will provide them with all the necessary information.

Title: Hybrid Professional Master's Degree in Dental Prosthesis

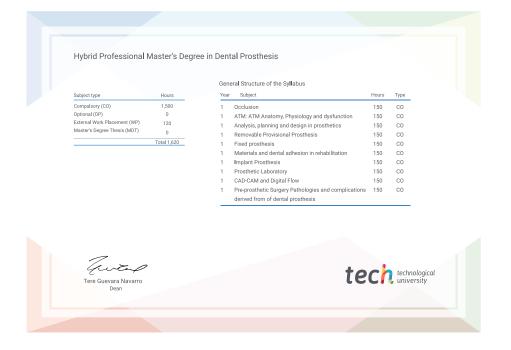
Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.





<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



# Hybrid Professional Master's Degree

**Dental Prosthesis** 

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

