

Professional Master's Degree

Dental Prosthesis



Professional Master's Degree Dental Prosthesis

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

Website: www.techtitute.com/us/dentistry/professional-master-degree/master-dental-prosthesis

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Skills

p. 16

04

Course Management

p. 20

05

Structure and Content

p. 24

06

Methodology

p. 38

07

Certificate

p. 46

01

Introduction

The success of a prosthetic treatment lies in meeting the aesthetic requirements of a patient. An optimization of results that has been achieved thanks to technological advances that allow a much more personalized design of dental parts and their manufacture in a single session. These advances go hand in hand with scientific studies that support the use of more resistant materials and more precise techniques that improve the effectiveness of rehabilitation procedures in the long term. In this line, this 100% online program is introduced, offering dentists a complete update in the performance of Dental Prostheses and the management of the main pathologies. To this end, they will have at their disposal educational resources accessible at any time of the day.



“

In just 12 months you will be aware of the latest clinical and digital trends in oral rehabilitation”

The various studies on dental loss relate this absence to the appearance of diseases of the stomatognathic apparatus. An effect, on many occasions, unknown to patients who come to the dental office for repair or replacement for aesthetic reasons. Whatever the rehabilitative purpose, in recent years there have been significant advances due to new technologies that have improved the manufacture of dental pieces and their adaptation to the patient's oral characteristics.

These advances have led dental professionals to be aware of them and to include them in their daily clinical practice. In order to promote this update, TECH has developed this online university program, designed and developed by an excellent team of professionals in this area.

It is an advanced program that will take the graduate over 1,500 hours of study to delve into the most relevant digital dental advances, laboratory work, as well as the most effective techniques of prevention, diagnosis and treatment used in the most recurrent pathologies. For this, it also includes video summaries of each topic, videos in detail, specialized readings and clinical cases, provided by the teachers of this program.

Likewise, graduates will be able to balance their daily responsibilities with an education that gives them flexibility and self-management of their study time. And the fact is that, without the need to go to a center in person, or have classes with fixed schedules, students can access the syllabus of this program at any time of the day and from any electronic device with an Internet connection.

Undoubtedly, a unique educational option in accordance with the current times.

This **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:

- ◆ The development of case studies presented by experts in Dental Prosthesis, Implantology and Oral Rehabilitation
- ◆ The graphic, schematic and practical contents with which it is conceived provide scientific and practical information on those disciplines that are essential for professional practice
- ◆ Practical exercises where self-assessment can be used to improve learning
- ◆ Its special emphasis on innovative methodologies
- ◆ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



An educational option that will bring you up to date on the most resistant materials used in the realization of dental prostheses"

“

You will be provided with clinical cases brought by leading experts in Dentistry with which you will be able to update your knowledge in Dental Prosthesis"

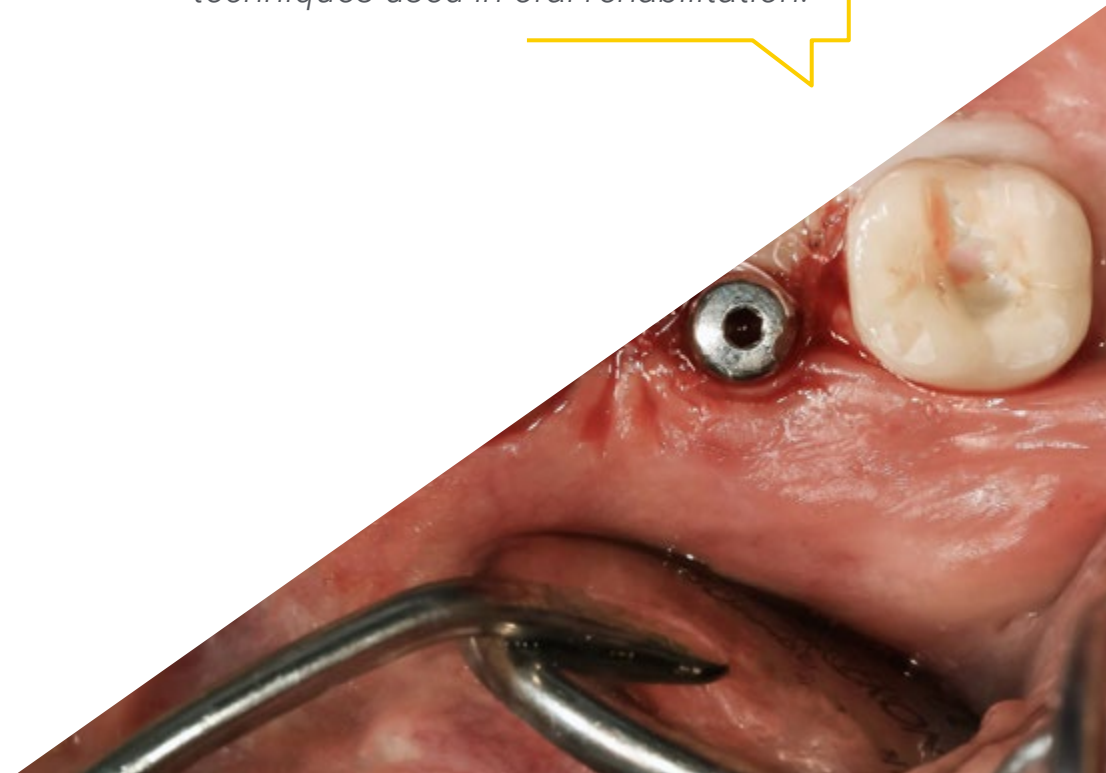
The program's teaching staff includes professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

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 education 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 during the course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Delve into the approach to periprosthetic tissues to maintain their integrity and achieve a successful prosthetic rehabilitation.

The multimedia material in this program will allow you to update you on soft tissue management, impression materials and techniques used in oral rehabilitation.



02 Objectives

This program was developed with the main objective of offering the professional a complete update, addressing the most relevant advances in design improvements, materials and techniques used for the elaboration of dental prostheses. In this way, you will be able to integrate in your clinical practice the most significant advances, besides being able to be up to date with the most effective techniques of prevention, diagnosis and treatment applied to the different oral pathologies.





“

Integrate in your practice the most notorious advances in the restoration of the endodontic tooth with Fixed Prosthesis”

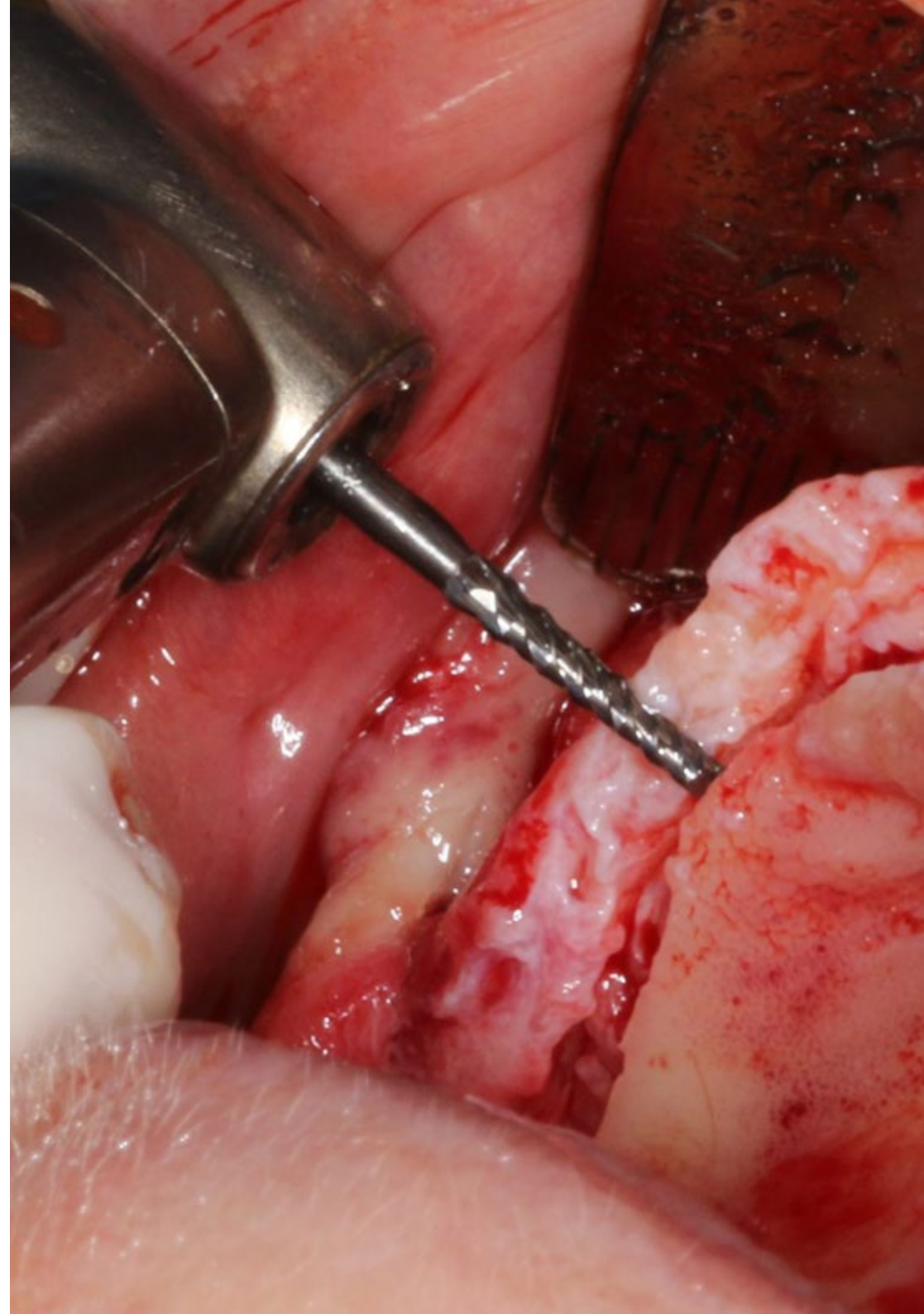


General Objectives

- ◆ Develop your knowledge of anatomy, physiology and orofacial pathology in order to make accurate diagnoses and design appropriate treatment plans
- ◆ Develop skills in the performance of clinical examinations and interpretation of data for an accurate diagnosis and optimal treatment plan
- ◆ Update knowledge in the use of dental materials, clinical and laboratory techniques in the design of prostheses with high physiological and aesthetic performance
- ◆ Acquire knowledge in the prevention and treatment of complications related to dental prosthetics and occlusion
- ◆ Understand the importance of interdisciplinary collaboration for the achievement of ideal results
- ◆ In-depth knowledge of the latest clinical and digital trends in the field of oral rehabilitation



Thanks to this university program you will delve into the BOPT surgical technique for the preservation of the health of the natural tooth"





Specific Objectives

Module 1. Diagnosis, Planning and Design of Prosthesis

- ◆ Delve into the importance of clinical history and anamnesis in the assessment of the patient for the design of prosthetic treatment
- ◆ Systematically collecting and documenting relevant patient information
- ◆ Delve into the different imaging techniques used in the assessment 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 2. Occlusion

- ◆ Delve 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 recording techniques, as well as to know when the vertical dimension can be varied
- ◆ Describe the different occlusal schemes, including bibalanced, group and organic function, and 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 tripodism and cusp/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

Module 3. TMJ. TMJ 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 4. Provisional Prosthesis

- ◆ Detail the different aspects of dental Prosthesis, from the biomechanical principles to the fabrication steps
- ◆ Learn about the classification and indications of dental prostheses, the concepts of retention, support and stability, the fundamentals of classifications in removable and mixed partial prostheses, and the analysis, planning and design of removable partial and total prostheses
- ◆ Break down topics such as the elements that make up the removable partial prosthesis, the description of the prosthetic and anatomical equator, the principles of planning and design in the different types of prostheses
- ◆ Delve into the concept of biostatic preparation and the different types of biostatic preparations of the mouth in partial and total edentulous, and the steps in the preparation 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 implementation
- ◆ Analyze the BOPT technique and cementation in fixed and provisional restoration

Module 6. Materials and Dental Adhesion in Rehabilitation

- ◆ Refresh the concepts of Aesthetic Dentistry and its principles
- ◆ Describe the different types of restorative materials used in dental prosthesis, 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 prosthetics and learn about mechanical and biological complications
- ◆ Describe the different impression techniques, including the selection of the ideal impression 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 selection 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) aesthetics
- ♦ 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 delve into 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 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 effectively
- ♦ Emphasize in the importance of radiological clinical follow-up of rehabilitated patients, as well as the maintenance of prosthetic devices to minimize the occurrence of complications related to these

03 Skills

This Professional Master's Degree has been designed to increase your clinical skills in the realization of Dental Prosthesis. In order to achieve this objective, TECH provides the dental professional with multimedia pills, videos in detail and clinical cases that will provide the graduate with a theoretical-practical and very useful vision for the inclusion of the most outstanding digital advances in this area, as well as the management and approach to the main complications in prosthetic rehabilitations.





“

Delve with this program in the laboratory work and increase your communication skills with essential area for the development of dental prostheses”

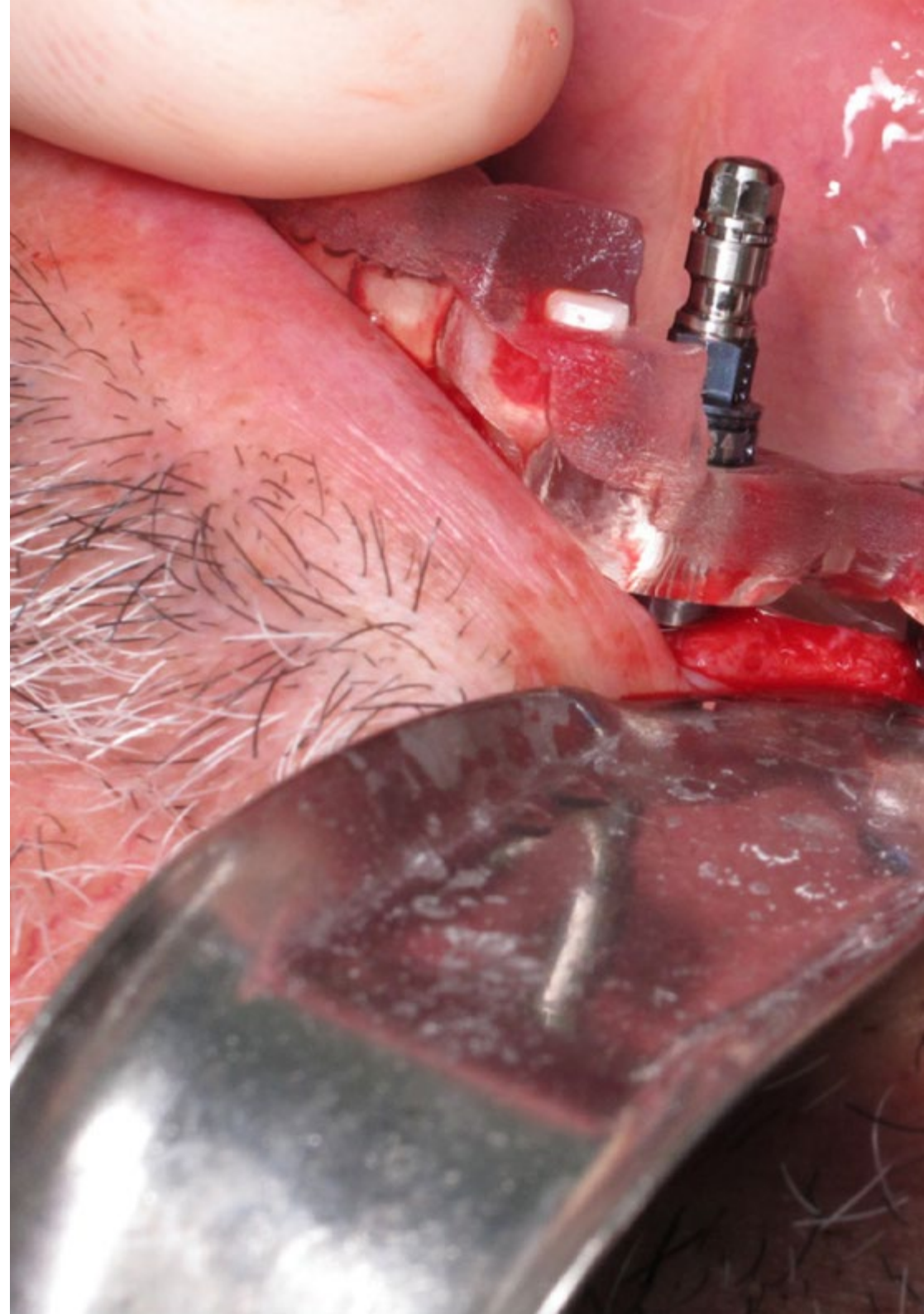


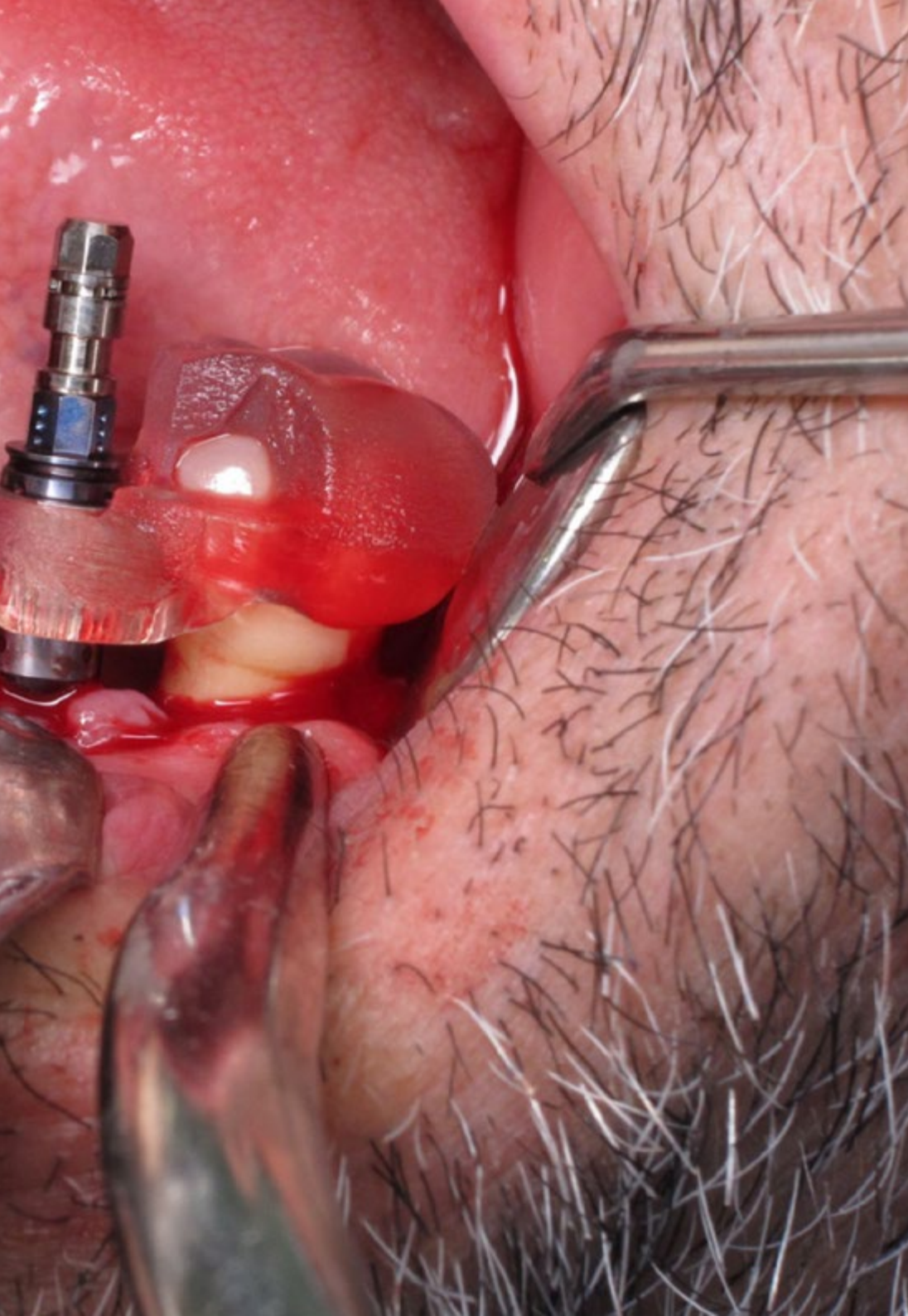
General Skills

- 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 prosthetic treatments
- Integrate the latest technological advances in Dental Prosthesis in the dental office
- Apply the latest clinical and laboratory protocols in Dental Prosthesis

“

Incorporate the latest technological advances in CAD-CAM into your practice and achieve first class dental restorations”





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

04

Course Management

In its commitment to offer a quality program, TECH has brought together in this Professional Master's Degree an outstanding faculty of experts in Implantology and Oral Rehabilitation. Therefore, professionals who access this program will have before them an advanced syllabus developed by a specialized team, with extensive knowledge of the Dental Prosthesis field and with practice in private clinics. Likewise, thanks to their proximity, they will be able to solve any doubts you may have about the content of the study plan.





“

*Get a complete vision of digital dentistry
thanks to prestigious dental professionals”*

Management



Mr. Ruiz Agenjo, Manuel

- ♦ Director of the School of Higher Vocational Training in Dental Prosthesis
- ♦ Judicial expert for dental prosthesis awarded by the Basque Government
- ♦ Specialized in Oral Rehabilitation and Aesthetics
- ♦ Degree in Dentistry from CESPU University
- ♦ Degree in Dental Prosthetics from CESPU University

Professors

Dr. Ruiz Agenjo, Miguel Ángel

- ♦ Medical Director of the Dental Clinic Miguel Angel Ruiz Agenjo
- ♦ Specialist in Functional Design of Protheses, Fixed Protheses and Implant-Supported Protheses
- ♦ Vice-president of the Illustrious College of Dentists and Stomatologists of Cantabria
- ♦ Degree in Stomatology from the Complutense University of Madrid
- ♦ Degree in Medicine and Surgery from the University of Cantabria
- ♦ Member of the scientific societies SEPES, SEPA and AEDE

Ms. Ruiz Mendiguren, Andrea

- ♦ Director and Dentist at Multidisciplinary Dentistry Clinic
- ♦ Orthodontist Dentist
- ♦ MBA in Dental Management at DentalDoctors
- ♦ Master's Degree in Teacher Training in High School Education at UNIR
- ♦ Degree in Dentistry from the University of the Basque Country

Mr. Ruiz Mendiguren, Manuel

- ◆ Dental Technical Manager in Laboratorio de Procesos en Prostodoncia SL
- ◆ Higher Technician in Dental Prosthesis
- ◆ Specialist in Scanning and the Digital Design of Structures and Crowns
- ◆ Assistant Specialist in Prosthodontics
- ◆ Member of the Ytrio Group

Mr. Ruiz Mendiguren, Ramiro

- ◆ Technical Laboratory Manager at Laboratorio en Procesos de Prostodoncia SL
- ◆ Higher Technician in Dental Prosthesis
- ◆ Specialist in Scanning and Digital Design of Structures and Crowns
- ◆ Superior Technician in Dental Prosthesis in Dental Mastery
- ◆ Lecturer at Dental Tècnic 2022

Ms. Sánchez Santillán, Raquel

- ◆ Oral Surgeon and Periodontist at the Andrea Ruiz Dental Clinic
- ◆ Specialist in Endodontics
- ◆ Master's Degree in Surgery, Periodontics and Implantology at the University of Mississippi
- ◆ Degree in Dentistry at the University Alfonso X El Sabio
- ◆ Higher Technician in Dental Prosthesis

Mr. Salceda, Wladimiro

- ◆ General Dentist at Wladimiro Salceda Dental Clinic
- ◆ Founder of the Clinic Wladimiro Salceda Dental Clinic SL
- ◆ Degree in Dentistry from the University Alfonso X el Sabio
- ◆ Member of SEPES, SEPA, and SOCE

Mr. Torro, Miguel

- ◆ Specialist Technician in Dental Prosthesis
- ◆ Laboratory Director
- ◆ Master's Degree in Dental Medicine at Instituto Universitário De Ciências da Saúde
- ◆ Degree in Dental Prosthesis



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

05

Structure and Content

Thanks to the effectiveness of the *Relearning* method, TECH has included it in all its programs. In this way, students who take this Professional Master's Degree will be able to progress naturally through the syllabus as they consolidate the latest concepts. Therefore, in only 12 months they will obtain a complete update in Dental Prosthesis and reduce the long hours of study and memorization. In addition, with the Virtual Library, the graduate will have additional teaching material with which to further extend the rigorous information provided in this university program.



“

Access from your laptop with an Internet connection to the best teaching material of the current educational field and investigate the most recent advances in Dental Prosthesis"

Module 1. Analysis, Planning and Design in Prosthesis

- 1.1. Concept
- 1.2. Medical History
- 1.3. Imaging Tests
 - 1.3.1. Types of Imaging Tests Used in Dentistry
 - 1.3.2. Indications and Contraindications of Imaging Tests
 - 1.3.3. Interpretation of Imaging Tests Results
 - 1.3.4. Recent Advances in Imaging Tests for Dental Prosthesis
- 1.4. Firm Diagnosis
 - 1.4.1. Diagnostic Process in Prosthetic Rehabilitation
 - 1.4.2. Importance of the Diagnosis in the Selection of Appropriate Treatment
 - 1.4.3. Techniques and Tools Used in the Definitive Diagnosis
 - 1.4.4. Different Approaches to Definitive Diagnosis in Dental Prosthesis
- 1.5. General Classification of Prosthetic Restorations
 - 1.5.1. Types of Prosthesis According to the Number of Teeth to be Replaced
 - 1.5.2. Fixed vs. Removable Prosthesis
 - 1.5.3. Materials Used in Dental Prosthesis
 - 1.5.4. Evolution of Prosthetic Rehabilitations in the History of Dentistry
- 1.6. Therapeutic Variables
 - 1.6.1. Factors Influencing the Selection of Prosthetic Treatment
 - 1.6.2. Variables to Consider when Planning Prosthetic Rehabilitation
 - 1.6.3. Aesthetic Considerations in the Selection of Prosthetic Treatment
 - 1.6.4. Variables Affecting the Durability of Dental Prosthesis
- 1.7. Advantages and Disadvantages of the Different Methods of Prosthetic Rehabilitation Indications
 - 1.7.1. Advantages and Disadvantages of Fixed Prosthesis
 - 1.7.2. Advantages and Disadvantages of Removable Prosthesis
 - 1.7.3. Indications for Fixed Prosthesis
 - 1.7.4. Indications for Removable Prosthesis



- 1.8. Periprosthetic Tissue Management in Conventional Rehabilitation
- 1.9. Photography in Dental Prosthesis, its Importance on the Treatment Design
 - 1.9.1. Types of Photographs Used in Dental Prosthesis
 - 1.9.2. Importance of Photography in Diagnosis and Prosthetic Treatment Planning
 - 1.9.3. How to Use Photography in Communication with the Dental Laboratory and the Patient
- 1.10. General and Specific Contraindications of the Different Types of Prosthetic Rehabilitation
 - 1.10.1. Contraindications for Removable Prosthesis
 - 1.10.2. Contraindications for Fixed Prosthesis
 - 1.10.3. Contraindications for Implant-Supported Prosthesis
 - 1.10.4. Specific Contraindications for Prosthetic Rehabilitation in Patients with Systemic Diseases

Module 2. Occlusion

- 2.1. Occlusion
 - 2.1.1. Concept
 - 2.1.2. Classification
 - 2.1.3. Principles
- 2.2. Types of Occlusion
 - 2.2.1. Physiological Occlusion
 - 2.2.2. Pathological Occlusion
 - 2.2.3. Therapeutic Occlusion
 - 2.2.4. Different Schools
- 2.3. Dental and Oral Anatomy Importance in Occlusion
 - 2.3.1. Cusps and Fossa
 - 2.3.2. Wear Facets
 - 2.3.3. Anatomy of the Different Tooth Groups
- 2.4. Importance of Occlusion in Conventional and Implant Prosthesis
 - 2.4.1. Occlusion and its Effects on Dental Function
 - 2.4.2. Effects of Malocclusion on the TMJ and Masticatory Muscles
 - 2.4.3. Consequences of Inadequate Occlusion on Teeth and Implants
- 2.5. Reference Position: Usual Position versus Centric Relation, Materials and Techniques for Recording Centric Relation in the Dentate, Partially Dentate, Edentulous, and Dysfunctional Patient
 - 2.5.1. Habitual Position and Centric Relation: Concepts and Differences
 - 2.5.2. Materials and Techniques for Recording Centric Relation in Dentate Patients
 - 2.5.3. Materials and Techniques for Recording Centric Relation in Partially Dentate and Edentulous Patients
 - 2.5.4. Materials and Techniques for Recording of Centric Relation in Patients with Temporomandibular Dysfunction
- 2.6. Vertical Dimension. Can the Vertical Dimension be Varied?
 - 2.6.1. Concept and Importance of the Vertical Dimension in Occlusion
 - 2.6.2. Techniques for Recording the Vertical Dimension
 - 2.6.3. Physiological and Pathological Variations of the Vertical Dimension
 - 2.6.4. Modifications of the Vertical Dimension in Dental Prosthesis
- 2.7. Occlusal Scheme: Bibalanced, Group and Organic Function. What is the Ideal Occlusion. Biological and Biomechanical Advantages of Organic Occlusion
 - 2.7.1. Concept and Types of Occlusal Schemes: Bibalanced, Group Function and Organic
 - 2.7.2. Ideal Occlusion and its Biological and Biomechanical Advantages
 - 2.7.3. Advantages and Disadvantages of Each Type of Occlusal Scheme
 - 2.7.4. How to Apply the Different Types of Occlusal Schemes in Clinical Practice
- 2.8. Disocclusion Factors: Individual Anatomical, Posterior (Condylar Path and Bennet's Angle), Anterior (Overbite, Overjet and Disocclusion Angle) and Intermediate (Spee and Wilsson Curves)
 - 2.8.1. Individual Anatomical Factors Influencing Disocclusion
 - 2.8.2. Posterior Factors Influencing Disocclusion: Condylar Trajectory and Bennet's Angle
 - 2.8.3. Anterior Factors Influencing Disocclusion: Overbite, Protrusion and Disocclusion Angle
 - 2.8.4. Intermediate Factors Influencing Disocclusion
- 2.9. Posterior Occlusion: Trypoidism vs. Cusp/Fossa
 - 2.9.1. Trypoidism: Characteristics, Diagnosis and Treatment
 - 2.9.2. Cusp/Fossa: Definition, Function and its Importance in Posterior Occlusion
 - 2.9.3. Pathologies Associated with Posterior Occlusion

- 2.10. The Articulator in Daily Practice. Selection of the Ideal Articulator. Utility and Handling 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
 - 2.10.1. Articulator Types: Semi-Adjustable Articulators and Fully Adjustable Articulators
 - 2.10.2. Selection of the Ideal Articulator: Criteria for the Selection of the Appropriate Articulator According to the Clinical Case
 - 2.10.3. Handling of the Facebow: Facebow Registration Technique for Taking Occlusal Records
 - 2.10.4. Semi-Adjustable Articulator Programming: Procedures for Adjusting the Articulator and Programming the Mandibular Movements
 - 2.10.5. Techniques for Reproducing the Disocclusion Angle in an Articulator: Steps for Recording and Transferring the Disocclusion Angle in the Articulator

Module 3. TMJ. TMJ Anatomy, Physiology and Dysfunction

- 3.1. Anatomy of the TMJ, Definition, Etiology and Prevalence of TMJ Disorders
 - 3.1.1. Anatomical Structures Involved in the Temporomandibular Joint (TMJ)
 - 3.1.2. TMJ Functions in Chewing and Speech
 - 3.1.3. Muscular and Ligamentous Connections of the TMJ
- 3.2. Signs and Symptoms of Joint Disease
 - 3.2.1. Associated Pain
 - 3.2.2. Types of Joint Noises
 - 3.2.3. Limitations
 - 3.2.4. Deviations
- 3.3. Importance of the Dysfunction in Daily Practice
 - 3.3.1. Difficulties in Chewing and Speaking
 - 3.3.2. Chronic Pain
 - 3.3.3. Dental and Orthodontic Problems
 - 3.3.4. Sleep Disorders
- 3.4. TMJ Biomechanics
 - 3.4.1. Mechanisms of Jaw Movement
 - 3.4.2. Factors Influencing TMJ Stability and Functionality
 - 3.4.3. Forces and Loads Applied to the TMJ During Chewing
- 3.5. Classification of Dysfunction
 - 3.5.1. Joint Dysfunction
 - 3.5.2. Muscular Dysfunction
 - 3.5.3. Mixed Dysfunction
- 3.6. Muscular Alterations. Local Myalgia. Myofascial Pain
 - 3.6.1. Localized Myalgia
 - 3.6.2. Myofascial Pain
 - 3.6.3. Muscle Spasms
- 3.7. Condyle-Disc Complex Alterations. Dislocation with Reduction. Dislocation with Reduction with Intermittent Locking. Dislocation without Reduction with Limitation of Opening. Dislocation without Reduction without Limitation of Opening
 - 3.7.1. Dislocation with Reduction
 - 3.7.2. Dislocation with Reduction with Intermittent Locking
 - 3.7.3. Dislocation without Reduction with Limitation of Opening
 - 3.7.4. Dislocation without Reduction without Limitation of Opening
- 3.8. Incompatibility of Articular Surfaces
 - 3.8.1. Alterations of the Articular Surfaces
 - 3.8.2. Adhesions
 - 3.8.3. Hypermobility
 - 3.8.4. Spontaneous Dislocation
- 3.9. Osteoarthritis and Osteoarthrosis
 - 3.9.1. Causes and Risk Factors
 - 3.9.2. Signs and Symptoms
 - 3.9.3. Treatment and Prevention
- 3.10. Differential Diagnosis between Muscle and Joint Pathology
 - 3.10.1. Clinical Assessment
 - 3.10.2. Radiological Studies
 - 3.10.3. Electromyographic Studies
 - 3.10.4. Treatment of the Different Conditions of the Myoarticular Complex
 - 3.10.4.1. Physical Therapy and Rehabilitation
 - 3.10.4.2. Pharmacology
 - 3.10.4.3. Surgery

Module 4. Provisional Prosthesis

- 4.1. Classification and Indications
 - 4.1.1. Total Removable Prosthesis
 - 4.1.2. Partial 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 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. Connectors. Retainers
 - 4.6.1. Basis: Types, Materials and Design
 - 4.6.2. Connectors: Types, Materials and Design
 - 4.6.3. Retainers: Types, Materials and Design
- 4.7. 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 Aesthetics and Function of the Prosthesis

- 4.8. Principles of Planning and Design in the Different Classes of Prosthesis According to the Functional and Topographical Classifications. Prosthesis Design in Intercalary and Free-End Cases
 - 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 Aesthetics: Factors to be Taken into Account in Aesthetic 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
- 5.8. 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 Considerations for Cementation of Fixed and Temporary Restorations
- 5.10. Carving for BOPT Technique
 - 5.10.1. Concept of the BOPT Technique in Dental Preparation and Restoration
 - 5.10.2. Techniques for Dental Carving in the BOPT Technique
 - 5.10.3. Advantages and Disadvantages of the BOPT Technique in Tooth Preparation and Restoration

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 Aesthetics
 - 6.1.3. Smile study: key elements for the diagnosis and planning of aesthetic treatment planning
- 6.2. Dental Photography in Aesthetic 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 Assessment 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 Prosthesis. 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 Tooth Color: Techniques and Tools to Choose the Right Color for Aesthetic 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 Aesthetics 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
 - 6.6.3. Importance of provisional restorations in the success of esthetic treatment

- 6.7. Laboratory Fabrication of Aesthetic 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
 - 6.7.3. Quality Control in the Fabrication of Aesthetic 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. Next-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 Prosthesis. 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. Biomechanical Differences between Cortical Bone and Cancellous Bone 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
 - 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 vs. Impacted. Tapered vs. 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 vs. 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 vs. 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 Aesthetics
 - 7.5.5. Types of Implants According to Their Size
 - 7.5.5.1. The Long 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 Narrow 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 Selection of the Number of Implants Required Depending on the Type of Prosthesis
- 7.8. Impressionism
 - 7.8.1. Selection of the Ideal Tray Type
 - 7.8.2. Impression Materials: Silicone vs. Polyester
 - 7.8.3. Indirect or Closed-Tray Technique. Direct or Open-Tray Technique. When to Splint Impression Transfers. Prints with *Snaps Coping*. How to Choose the Ideal Printing Technique
 - 7.8.4. Taking an Impression of the Emergency 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. Selection of the Ideal Abutment
 - 7.9.1.4. Cement. Selection 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 Cement-Screwed Prosthesis
 - 7.9.3.2. Selection 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. Selection 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: Analog and Digital
 - 7.10.4. Types of Retention: Bars and Individual Anchors. Selection 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
- 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 synthesizing: 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 Prosthesis: Ceramics, Composites, Zirconia
 - 8.3.1. Ceramics: Types, Properties and Clinical Applications
 - 8.3.2. Composites: Characteristics, Advantages and Disadvantages in Implant Prosthesis
 - 8.3.3. Zirconium: Properties and Clinical Applications in Implant Prosthesis
 - 8.3.4. Clinical considerations in the selection of material for implant prosthetics
- 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 Aesthetic Planning of Implant Prosthesis
 - 8.4.3. Techniques to Improve White and Pink Aesthetics
 - 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

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

- 8.6. 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. Skill and Updating of the Professional
 - 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, etc)
 - 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
- 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. Selection 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 Selection 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 Dental Prosthesis

- 10.1. Risk Factors for the Development of Pathologies Related to Prosthetic Rehabilitation
 - 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 Prostheses and Their Relation to the Occurrence of Oral Pathologies
 - 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 with 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 Prosthesis
 - 10.4.2. Prevalence of Peri-Implantitis in Patients with Implant Prosthesis
 - 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 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 Prosthesis 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
- 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 Pre-Prosthetic Surgery
 - 10.9.2. Indications and Contraindications of Pre-Prosthetic Surgery
 - 10.9.3. Techniques for the Preparation of the Stomatognathic Apparatus
- 10.10. Relationship between Pre-Prosthetic Surgery and the Appearance of Pathologies Associated with Oral Rehabilitation
 - 10.10.1. Complications of the Pre-Prosthetic Surgery
 - 10.10.2. Pre-Prosthetic Surgery and Hard Tissues
 - 10.10.3. Pre-Prosthetic Surgery and Soft Tissues
 - 10.10.4. Pre-Prosthetic Treatment of the Extreme Patient



“

Perform a complete update on prevention, diagnosis and treatment of pathologies and complications related to Dental Prosthesis”

05

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. Gervas, 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 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.



07

Certificate

The Professional Master's Degree in Dental Prosthesis guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 **Professional Master's Degree diploma in Dental Prosthesis** 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: **Professional Master's Degree in Dental Prosthesis**

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
development language
virtual classroom



Professional Master's
Degree
Dental Prosthesis

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

Professional Master's Degree

Dental Prosthesis

