Advanced Master's Degree Aesthetic Dentistry





## Advanced Master's Degree Aesthetic Dentistry

- » Modality: online
- » Duration: 2 years
- » Certificate: TECH Global University
- » Credits: 120 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/dentistry/advanced-master-degree/advanced-master-degree-esthetic-dentistry

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# 01 Introduction

Dentistry is a growing profession, as more and more people are deciding to take care of their oral health, even with aesthetic interventions that allow them to obtain a better physical appearance. For this reason, at TECH we have set out to train you with this complete program so that you can be among the best in your profession.



Aesthetic dentistry is an area that is increasingly in demand, so having highly qualified training, such as the one we present in this Advanced Master's Degree, is a unique opportunity to be among the best"

# tech 06 | Introduction

There is an increasing demand for highly qualified and experienced cosmetic dentists. Nowadays, patients not only come to the dental office when they have an oral problem that may become a disease, but also to improve those physical aspects in their mouth or teeth that they do not like.

Aesthetic or cosmetic dentistry is a specialty of dentistry that solves problems related to oral health and the aesthetic harmony of the mouth as a whole. Aesthetic dentistry can be defined as an application of art and science aimed at developing or highlighting beauty in the form of a smile.

The growing demand from patients for increasingly complex, less invasive, and more demanding treatments in terms of the final result increasingly justifies a multidisciplinary execution of treatments, where each of the specialties of dentistry can contribute their point of view in search of excellence in the treatment.

The knowledge acquired in this Advanced Master's Degree will give the student the ability to face working life from a position of higher qualification, giving them a clear advantage when it comes to accessing a job, as they will be able to offer the application of the latest technological and scientific advances surrounding the specialty of aesthetic dentistry.

Throughout this specialization, the student will learn all of the current approaches to the different challenges posed by their profession. A high-level step that will become a process of improvement, not only on a professional level, but also on a personal level. We will not only take you through the theoretical knowledge, but we will show you another way of studying and learning, more organic, simpler and more efficient.

This Advanced Master's Degree is designed to give you access to the specific knowledge of this discipline in an intensive and practical way. A great value for any professional. Furthermore, as it is a 100% online specialization, the student decides where and when to study. Without the restrictions of fixed timetables or having to move between classrooms, this course can be combined with work and family life. This **Advanced Master's Degree in Aesthetic Dentistry** contains the most complete and up-to-date academic program on the market. The most important features include:

- The latest technology in e-learning software
- Intensely visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- The development of practical case studies presented by practising experts
- State-of-the-art interactive video systems
- Teaching supported by telepractice
- Continuous updating and recycling systems
- Self-organised learning which makes the course completely compatible with other commitments
- Practical exercises for self-assessment and learning verification
- Support groups and educational synergies: Questions to the expert, discussion forums and knowledge
- Communication with the teacher and individual reflection work
- Content that is accessible from any fixed or portable device with an Internet connection
- The banks of supporting documentation are permanently available, even after the training has been completed

A high-level scientific training program, supported by advanced technological development and the teaching experience of the best professionals"

## Introduction | 07 tech

A training program created for professionals who aspire to excellence that will allow you to acquire new skills and strategies in a smooth and effective way". Take the opportunity to learn about the latest advances in Aesthetic Dentistry and improve your patients' care by offering them the latest treatments and the newest techniques: the surest way to position yourself among the best.

Our teaching staff is made up of working professionals. In this way, we ensure that we provide you with the up-to-date training we are aiming for. A multidisciplinary staff of trained and experienced professionals from a variety of environments, who will develop theoretical knowledge in an efficient manner, but above all, will put at the service of specialization the practical knowledge derived from their own experience.

This command of the subject is complemented by the effectiveness of the methodological design of this Advanced Master's Degree in Esthetic Dentistry. Developed by a multidisciplinary team of e-learning experts, it integrates the latest advances in educational technology. In this way, you will be able to study with a range of easy-to-use and versatile multimedia tools that will give you the necessary skills you need for your specialization.

The design of this program is based on Problem-Based Learning, an approach that conceives learning as a highly practical process. To achieve this remotely, we will use telepractice. With the help of an innovative interactive video system, and learning from an expert, you will be able to acquire the knowledge as if you were actually dealing with the scenario you are learning about. A concept that will allow you to integrate and fix learning in a more realistic and permanent way.

We offer you the best specialization of the moment so that you can carry out a deep study in this field, in such a way that you will be able to develop your profession with total guarantees of success.

# 02 **Objectives**

Our objective is to train highly qualified professionals for the working. An objective that is complemented, moreover, in a global manner, by promoting human development that lays the foundations for a better society. This objective is focused on helping professionals reach a much higher level of expertise and control. A goal that you will be able to achieve thanks to a highly intensive and detailed course.

If your goal is to improve in your profession, to acquire a qualification that will enable you to compete among the best, then look no further: welcome to TECH"

# tech 10 | Objectives



### **General Objectives**

- Update the dentist's knowledge in materials and technology of the main aspects of restorative dentistry, orthodontics and dentofacial orthopedics, from the point of view of scientific evidence
- Train the dentist to plan in a multidisciplinary work concept to perform excellent dental care
- Provide the dentist with the necessary bibliography and documentation to equip them with the necessary diagnostic judgment to select the appropriate work strategy when dealing with any clinical situation
- Encourage the acquisition of technical skills and abilities through a series of online tutorials describing the most frequent techniques of each of the aspects of esthetic dentistry
- Encourage professional stimulation through continuing education and research
- Apply acquired knowledge and problem-solving skills to new or unfamiliar environments, with a multidisciplinary approach within the context of Health Sciences
- Transmit learning skills to students that will allow them to continue their education in an autonomous and self-directed manner, developing habits of excellence and quality in professional practice



## Objectives | 11 tech

### Specific Objectives

- Define the specialty of aesthetic dentistry
- Conduct a needs and demand analysis
- Establish the importance of the psychosocial factor in modern dentistry.
- Perform esthetic analysis from the measurement of different facial, dental and gingival parameters
- Provide the student with tools to correctly measure dental color
- Provide the dentist with analog and digital techniques to communicate the esthetic analysis to their patients
- Update the dentist in the main techniques of analysis and prevention in cariology
- · Perform a detailed analysis of the evolution of modern restorative materials
- Acquire knowledge of the main obturation techniques in restorative dentistry
- Define the etiopathogenesis of erosive processes and dental sensitivity
- Provide the necessary auxiliary tools for the rehabilitation of lost dental tissue
- Update the classification of the different adhesive systems, from the current scientific evolution and under a practical application
- Establish the necessary skills for the adequate selection of the adhesive agent for each clinical situation
- Typify the different bleaching materials and application techniques currently available
- Establish an action protocol for each clinical situation
- Establish the limits, advantages, and disadvantages of each technique
- Be able to apply bleaching techniques in a multidisciplinary context
- Define the main waxing techniques, the appropriate instruments and the different materials
- Establish the main anatomical characteristics of each tooth and their practical implication

- Explain the appropriate procedures for waxing anterior and posterior teeth
- Be able to apply these techniques as key tools in diagnosis and treatment planning
- Expand knowledge in periodontics applied to restorative dentistry and prosthodontics
- Provide the dentist with the adequate analysis tools for the selection of the appropriate technique for each clinical situation
- Establish the most common techniques for clinical crown lengthening procedures
- Establish a practical classification of the different materials found in the industry
- Define the most frequent techniques used in the direct application of composite resins
- Provide the dentist with the tools that will facilitate the application of these techniques
- Explain in detail the techniques for each clinical situation
- Protocolize the finishing and polishing sequences explaining the importance of these procedures for the final perception of the restoration and its longevity
- Provide the dentist with tools that allow them to stereotype the patient and to establish an adequate maintenance schedule for each patient
- Classify in a practical way the different materials available to the dentist for the realization of all-ceramic prostheses
- Clarify the different properties of each one of the materials and the reduction needs they
  require
- Provide the dentist with protocols for the esthetic adhesive rehabilitation by means of laminated fronts
- Provide the dentist with protocols for esthetic adhesive restoration using full veneer crowns
- Establish the advantages of digital workflows and CAD/CAM technology
- Update the classical concepts of occlusion

## tech 12 | Objectives

- Establish which of the anatomical and physiological parameters are determinant for rehabilitation
- Protocolize the cases in which a change of occlusal scheme is required
- Establish the limits of materials for the rehabilitation of posterior sectors with minimal intervention dentistry
- Establish treatment protocols for the definition of the free space and vertical dimension
- Clarify which would be the most appropriate materials for each clinical situation
- Define the main advances in orthodontics
- Clarify which would be the most appropriate techniques for each clinical situation
- Define the main parameters for obtaining a quality dental photograph
- Provide the dentist with the necessary knowledge to select the appropriate acquisition and illumination material
- Establish protocols for each clinical situation
- Clarify the importance of clinical photography as a communicative tool
- Classify the different defects that can be found when facing a rehabilitation on implants
- Provide the necessary tools for the choice of materials and techniques for the different regeneration procedures
- Establish surgical and prosthetic loading protocols for each clinical situation
- Perform an anatomical recall of the main muscle musculoskeletal structures involved in peribuccal esthetics
- Define the limits of each of the techniques to achieve the desired results
- Consolidate structural and radiological anatomical knowledge as well as the practical considerations that the student should apply in the diagnosis, prognosis and therapeutic planning of orthodontic patients

- Training of the student in the field of Diagnostic Imaging of human anatomy and especially in the area of dentistry. To do this, you should familiarize yourself with the various imaging techniques available, with their indications and limitations
- The student will learn about oral, intraoral and extraoral radiology, with special emphasis on lateral and frontal teleradiography of the skull. You will also receive training on other techniques such as simple radiology, ultrasound, CT, CBCT and MRI of the human body and especially of the cervico-facial area
- Train students to obtain sufficient knowledge to enable them to diagnose, describe, classify, transmit and plan the treatment of malocclusions, being able to distinguish between skeletal and dental problems
- Acquire sufficient training to diagnose, classify and treat dental malocclusions caused by osseo-dental discrepancy
- Know and know how to identify the different malocclusive syndromes and craniofacial deformities
- Be able to identify the disorders that require treatment, as well as the ideal age to treat each type of disorder: to determine the specific therapeutic objectives of each treatment
- Determine the individual characteristics of the patient, both physical, psychological and social
- Perform medical history, patient examination and record taking
- Know and know how to identify the different malocclusive syndromes and craniofacial deformities, as well as the functional alterations of the stomatognathic system that accompany morphological alterations
- Know how to take a clinical history and perform the usual examination, as well as to request and interpret the complementary examinations used in the integral diagnosis of the patient

- Understand the indications, contraindications and limits of orthodontics, dentofacial orthopedics and orthognathic surgery
- Be able to predict the efficacy and efficiency of different treatments and the stability of the correction
- Know and know how to apply the retention protocols for the different deformities, as well as the principles and mechanisms involved in the physiological rebound and recurrence of malocclusions
- Be able to identify and prevent or treat the risk factors for recurrence present in each patient
- Review the basic therapeutic principles of the other specialties of Medicine and Dentistry
- Identify alterations, pathologies or special characteristics that should be treated in collaboration with other Health Science specialists
- Know what the competences of the Orthodontic Specialist within a multidisciplinary team for the treatment of special patients with dentofacial deformity and malocclusion are
- Develop competencies related to the search for and organization of documentation, as well as to the presentation and communication of their work in an appropriate manner to the scientific community
- Update research methodologies that allow the implementation of evidence based orthodontics and dentofacial orthopedics
- Know and understand the different parts of the preparation of a scientific article
- Know and know how to handle the different databases in Health Sciences
- Develop strategies for searching and organizing information
- Review the latest developments in advanced treatments in conventional orthodontics and multidisciplinary treatments
- Update on the latest developments in aesthetic and/or invisible orthodontics



Quality Program training for outstanding students. At TECH, we offer the perfect education for high level specialization in your field"

# 03 **Skills**

Once all the contents have been studied and the objectives of the Advanced Master's Degree in Aesthetic Dentistry have been achieved, the health professional will have gained superior expertise and performance in this area. A very complete approach, in a high-level Advanced Master's Degree in Esthetic Dentistry which makes the difference.

Achieving excellence in any profession requires effort and perseverance. But, above all, the support of professionals, who will give you the boost you need, with the necessary means and assistance. At TECH, we offer you everything you need"

# tech 16 | Skills



#### **General Skills**

- Handle the different materials and tools to perform the most frequently used techniques
- Possess a critical capacity based on scientific evidence to discern in each clinical situation which would be the most appropriate procedure
- Apply each of the techniques described
- Provide the student with learning tools that allow them to protocolize each treatment
- Value their skills for proper decision making
- Apply these techniques and knowledge in a multidisciplinary work context
- Possess and understand knowledge in their field of study that builds on the foundation of general secondary education. While relying on advanced textbooks, it also includes some aspects that involve knowledge from the forefront of this field of study
- Apply their knowledge to their work or vocation in a professional manner and possess the skills that are usually demonstrated through the development and defence of arguments and problem solving within their area of study
- Gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues
- Convey information, ideas, problems, and solutions to both specialized and nonspecialized audiences
- Develop the learning skills necessary to undertake further studies with a high degree of
   autonomy



## Specific Skills

- Understand the importance of the psychosocial factor in the perception of aesthetic subjectivity
- Be able to identify the patient's needs based on certain parameters and transmit them to the patient in a way that is understandable to them through an effective and reproducible communication process
- Evaluate tooth color and be able to transmit it to the laboratory technician
- Understand the importance of the dental substrate for decision making
- Know the different materials for their restorative use based on modern concepts of cariology
- Understand all the auxiliary systems for the anatomical conformation of restorations
- Master the techniques of absolute isolation for the realization of all adhesive procedures
- Understand the particularity of the endodontic tooth and to know the different direct and indirect methods of reconstruction
- Know the reality of modern adhesives and thus be able to discern which is the most appropriate technique for each clinical situation and for each type of substrate or material
- Differentiate the different materials and techniques used in teeth whitening procedures integrate whitening procedures in a multidisciplinary dentistry context
- Be able to protocolize the different whitening techniques for each clinical situation
- Provide the student with a deep knowledge of dental anatomy understanding its practical implication
- Train the student in the waxing of all teeth understanding its practical implication as a diagnostic, communication and procedural tool
- Train the dentist in the integration of Mock-up procedures as a communication tool with the patient and the laboratory technician

- · Know the periodontal structures involved in adhesive treatments
- Establish protocols for the standardization of cases regarding the etiopathogenesis of gingival disharmonies
- Provide the dentist with the critical ability to choose the most appropriate technique for each situation of gingival disharmony
- Enable the dentist to perform the different clinical crown lengthening techniques
- Know the characteristics, properties, advantages and disadvantages of the different types of composites for direct restoration
- Explain the most frequently used techniques for the rehabilitation of the anterior sector by means of direct techniques
- Present different clinical cases addressing the situations that can be found in type III, IV and V restorations as well as smile designs
- Indicate to the dentist the finishing and polishing guidelines with the different techniques and their importance in the final result and in the maintenance of the restorations
- Perform a modern and practical classification for the proper selection of restorative ceramic material based on a thorough knowledge of the properties and characteristics
- Establish working protocols for tooth reduction according to the principles of minimal intervention
- + Indicate the steps to be followed for restoration using laminated fronts and full veneer crowns
- Make a detailed description of the appropriate techniques for taking impressions manually and digitally
- Establish updated cementation protocols depending on each clinical situation

# tech 18 | Skills

- Indicate the evolution of current fixed prosthetic techniques from vertical milling to purely digital workflows
- Plan and execute minimal intervention adhesive rehabilitation protocols
- Indicate the most suitable materials for each clinical situation in protocols for vertical dimension recovery
- Clarify the evolution of modern orthodontic systems and how their new dynamics favor other disciplines
- Establish the limits of extrusion and intrusion movements and understand their management in a multidisciplinary context
- Indicate the different protocols of photographic work and know the materials used for it
- Understand digital photography as a tool used to communicate with the patient and as an essential tool for dissemination in the conception of modern dentistry
- Know the different techniques for hard and soft tissue regeneration in implant rehabilitation
- Establish working protocols based on different surgical and prosthetic loading times for rehabilitation
- Differentiate the distinct types of implant prostheses and when provisionalization is necessary
- Recognize the different anatomical structures involved in the design of perioral aesthetics
- Apply the most appropriate filling technique for each clinical situation
- Know the craniofacial anatomical structures as a basis of knowledge to establish dynamic relationships with the functions of the stomatognathic apparatus and dental occlusion
- Know and understand the interpretation of complementary tests through imaging and their application in the differential diagnosis of malocclusions and dentofacial deformities
- Know the biological principles that determine the physiopathology of the processes of bone apposition and resorption, and tooth movement Learn to predict and interpret the response of hard and soft tissues to the application of therapeutic forces
- Know the principles and mechanisms of craniofacial growth and dental eruption, as well as the development of the different functions of the stomatognathic apparatus and the oro-facial region

- Identify the etiological, genetic, epigenetic and environmental factors of the different malocclusions and dentofacial deformities, know their epidemiology, and be able to predict their evolution according to current scientific evidence
- Know the historical origin and evolution of orthodontic and orthopedic appliances, as well as the current scientific evidence supporting their clinical use
- Know, understand and know how to apply the principles and mechanisms of action of the appliances, as well as their indications and contraindications according to the type of malocclusion and/or the individual characteristics of the patient
- Know and know how to perform the clinical and laboratory procedures of design, fabrication, placement and clinical control of prostheses and appliances used in Orthodontics and Dentofacial Orthopedics
- Know and know how to identify the different malocclusive syndromes and craniofacial deformities, as well as the functional alterations of the stomatognathic system that accompany morphological alterations
- Know how to take a clinical history and perform the usual examination, as well as to request and interpret the complementary examinations used in the integral diagnosis of the patient
- Be able to identify the disorders that require treatment, as well as the ideal age to treat each type of disorder: to determine the specific therapeutic objectives of each treatment
- Make a logical treatment plan that integrates all the therapeutic objectives, as well as to design and/or prescribe the appropriate mechanics and therapeutic sequence according to the type of deformity and the individual characteristics of the patient
- Know and understand the indications, contraindications and limits of Orthodontics, Dentofacial Orthopedics and Orthognathic Surgery
- Be able to predict the efficacy and efficiency of different treatments and the stability of the correction
- Know and know how to apply the retention protocols for the different deformities, as well as the principles and mechanisms involved in the physiological rebound and recurrence of malocclusions

## Skills | 19 tech

- Identify and prevent or treat the risk factors for recurrence present in each patient (predisposing and/or triggering)
- Know and understand the basic therapeutic principles of the other specialties of Medicine and Dentistry
- Identify alterations, pathologies or special characteristics that should be treated in collaboration with other Health Science specialists
- Know what the competences of the Orthodontic Specialist within a multidisciplinary team for the treatment of special patients with dentofacial deformity and malocclusion are
- Perform all clinical procedures for the diagnosis of malocclusions and dentofacial deformities: clinical history, inspection, palpation, auscultation of the temporomandibular joint, functional manipulation, etc
- Be able to identify the patient's individual characteristics, physical, psychological and/or social, that may condition the treatment plan and/or the timeliness of treatment
- Plan an adequate treatment plan and a logical therapeutic sequence for real patients, as well as to acquire the ability to present and defend, in a clinical session, the results of their work
- Apply treatment protocols and clinical follow-up on real patients, as well as to acquire the ability to systematically collect clinical data on each patient
- Know and know how to identify the adverse effects and/or clinical complications of orthodontic and dentofacial orthopedic treatments, as well as the clinical protocols for the resolution and treatment of these problems
- Identify patient cooperation failures and their possible causes
- Know and know how to treat the medical emergencies characteristic of orthodontic treatments
- + Know and understand the functions of the orthodontic specialist within a multidisciplinary team
- Know the different therapeutic orientations and/or the different therapeutic protocols that are possible when planning the treatment of a specific deformity
- Acquire adequate interprofessional communication skills

- Develop competencies related to the search for and organization of documentation, as well as to the presentation and communication of their work in an appropriate manner to the scientific community
- Know research methodologies that allow the implementation of evidencebased orthodontics and dentofacial orthopedics
- Know and understand the different parts of the preparation of a scientific article
- Know and know how to handle the different databases in Health Sciences
- Develop strategies for searching and organizing information
- + Incorporate scientific research and evidencebased practice as part of the professional culture
- Develop communication strategies and adequate presentation of their work to the scientific community
- Develop an attitude of learning and improvement by constantly seeking information and professional improvement
- Develop an attitude of autonomous learning that allows to maintain the fundamentals of knowledge, abilities, skills and professional aptitudes up to date

# 04 Course Management

For our master's degree to be of the highest quality, we are proud to work with a teaching staff of the highest level, chosen for their proven track record in the field of education. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.

Our professors bring their vast experience and their teaching skills to offer you a stimulating and creative specialized training program"

# tech 22 | Course Management

#### Management



#### Mr. Ilzarbe Ripoll, Luis María

- Degree in Dentistry from the University of Valencia
- Professional Master's Degree in university research training at the Catholic University of Valencia
- Master's Degree in Prosthodontics and Occlusion at E.S.O.R.I.B
- Master's Degree in Comprehensive Periodontics with Dr. Caffesse in CGFormación
- Master's Degree in Oral Rehabilitation and Implantology at E.S.O.R.I.B
- D.U.I. in Maxillofacial Surgery and Implantology from the Université Paul Sabatier de Toulousse, France
- Expert in all-ceramic prosthetics from the ComplutenseUniversity of Madrid. Spain
- Courses in esthetics with professors Fernando Autran, Newton Fahl, Ronaldo Hirata, Paulo Kano, Vicente Berbis, Dan Lazar, and August Bruguera
- Exclusive privatepracticein cosmeticdentistryat Ilzarbe Garcia-Dental ClinicRoom. Valencia Spain



#### Mr. Martínez Font, Juan

- PhD in Dentistry from CEU Cardenal Herrera University (PhD)
- Professor of the Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- Professor of the Specialization in Orthodontics (CEU Cardenal Herrera University)
- Associate Professor of Orthodontics II, III and IV in the Department of Dentistry at CEU Cardenal Herrera University
- Master's Degree in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- Courses of the Third Cycle Research Period at CEU Cardenal Herrera University Valencia
- Degree in Dentistry from CEU Cardenal Herrera University
- Affiliate member of the Spanish Society of Orthodontics (SEDO)
- Invisalign Certification

## Course Management | 23 tech



#### Mr. Veres Jordá, Jesús

- Collaborating Professor for the Master's Degree in Orthodontics and DentofaciaL
- Degree in Dentistry from Cardenal Herrera CEU University
- Expert Degree in Orthodontics at Cardenal Herrera University.-CEU
- Postgraduate in Dentistry, The Charles H. Tweed Internacional Foundation for Orthodontic Research. Tucson, Arizona USA
- Master's Degree in Orthodontics and Dentofacial Orthopedics at Cardenal Herrera University. CEU
- Certificate of Lingual Orthodontics, Incognito 3M System
- Master in Invisalign Invisible Orthodontics, Invisalign System
- Postgraduate in Neuro-Occlusal Rehabilitation and orofacial pain Member of the Spanish Society of Orthodontics (SEDO)
- Member of the Spanish Association of specialists in Orthodontics (AESOR)
- Member of the Spanish Society of Aligners (SEDA)

#### Professors

#### Ms. Alfonso Chulvi, Purificación

- Professor of the Specialization in Orthodontics (Catholic University of Valencia)
- Associate Professor of Orthodontics I and II in the Department of Dentistry in English (Catholic University of Valencia)
- Postgraduate Course in Orthodontics. Center for Orthodontic Studies, Gnathos, Madrid, Spain

#### Mr. Arias De Luxán, Santiago

- Graduate in Medicine and Surgery from the Universidad de Navarra
- Specialist in Stomatology from the Complutense University of Madrid
- Postgraduate Specialization in Orthodontics at the University of Valencia

#### Ms. Bolás Colvée, Belén

- PhD in Dentistry from the University of Valencia
- Associate Professor of Orthodontics, Universidad Europea
- Master's Degree in orthodontics and dentofacial orthopedics. UCH CEU

#### Ms. Cañada Luna, Isabel

- Professor of Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- Master's Degree in Orthodontics and Dentofacial Orthopedics at Cardenal Herrera
   University. CEU
- Courses of the Third Cycle Research Period at CEU Cardenal Herrera University Valencia

# tech 24 | Course Management

#### Ms. Castañer Peiro, Amparo

- D. in Medicine and Surgery of from CEU Cardenal Herrera University
- Degree in medical and Surgery from the University of Valencia
- Specialty in Stomatology from the University of Valencia

#### Ms. Ferrer Serrador, Clara María

- Professor of the Master's Degree in Comprehensive Orthodontics at the Catholic University of Valencia
- Professor of the Master's Degree in Comprehensive Comprehensive Dentistry at the Catholic University, Valencia
- Professor of Orthodontics I and II in the Degree of Dentistry at Catholic University of Valencia

#### Ms. Galan López, Lidia

- PhD in Dentistry from the Catholic University of Valencia
- Professor of the Master's Degree in Comprehensive Orthodontics and Master's Degree in Comprehensive Orthodontics
- Professor of Orthodontics I and II in the Department of Dentistry at Catholic University of Valencia

#### Ms. Guinot Baron, Clara

- Degree in Dentistry from the University of Valencia
- Currently studying a PhD in Dentistry from the UCH- CEU
- Expert Degree in Orthodontics at CEU University- Cardenal Herrera

#### Mr. Iñaki Orozco, Aparicio

- Degree in Dentistry from the University of Valencia
- Master's Degree in Orthodontics and Dentofacial Orthopedics from the University of Valencia
- Professor of the Master's Degree in Orthodontics and Dentofacial Orthopedics and Specialization in Orthodontics at UCH CEU

#### Ms. Laparra Hernández, Raquel

- PhD in Dentistry from the University of Valencia
- Associate Professor of Orthodontics at the UCH-CEU
- Professor of the Master's Degree in Orthodontics and Dentofacial Orthopedics at UCH-CEU.

#### Ms. Molina Villar, Sara

- PhD in Dentistry from CEU Cardenal Herrera University (PhD)
- Master'Official s Degree in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- Expert Degree in Orthodontics and Dentofacial Orthopedics CEU Cardenal Herrera University

#### Mr. Perez-Barquero, Jorge Alonso

- Degree in Dentistry from the University of Valencia
- Associate Professor, University of Valencia
- Collaborating Professor of the Master's Degree in Dental Prosthesis at the University of Valencia

## Course Management | 25 tech

#### Ms. Primo Trullenque, Anna

- Master's Degree in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera
   University
- Expert Degree in Orthodontics and Dentofacial Orthopedics at Ceu Cardenal Herrera University
- Master's Degree in Aesthetic and Adhesive Dentistry (University of Valencia)

#### Ms. Sanz-Orrio Soler, Icíar

- Associate Professor of Orthodontics I and II in the Degree of Dentistry at Catholic University of Valencia
- Professor of the Specialization in Orthodontics (CEU Cardenal Herrera University)
- Master's Degree in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera
   University

#### Ms. Sánchez Albero, Ana

- D. in Dentistry from CEU Cardenal Herrera University
- Professor of the Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- Professor of the Specialization in Orthodontics (CEU Cardenal Herrera University)

#### Ms. Sánchez García, María José

- PhD in Dentistry at the University of Murcia
- Degree in Dentistry from the University of Murcia
- Expert in Periodontics from the University of Murcia

#### Ms. Torrella Girbés, Mar

- Exclusive dedication to the practice of the specialty of Orthodontics and Dentofacial Orthopedics
- Professor in charge of Orthodontics II at UCH-CEU
- Collaborating professor of the Department of Dentistry in the subject of Orthodontics at the UCH-CEU
- Professor of the UCH-CEU Master's Degree in Orthodontics Specialization
- Professor of the Master's Degree in Orthodontics and Dentofacial Orthopedics at UCH-CEU
- Degree in Dentistry from the University of Valencia

#### Ms. Valero Remohi, Paloma

- Professor of the Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- Professor of the Specialization in Orthodontics (CEU Cardenal Herrera University)
- Associate Professor responsible for the subjects Orthodontics I and Orthodontis II in the Department of Dentistry at the CEU Cardenal Herrera University



A high-level team for top-quality training"

# 05 Structure and Content

The contents of this Advanced Master's Degree have been developed by the different experts on this course, with a clear purpose: to ensure that our students acquire each and every one of the necessary skills to become true experts in this field. The content of this course enables you to learn all aspects of the different disciplines involved in this field. A complete and well-structured program that will take you to the highest standards of quality and success.

Our curriculum has been designed with teaching effectiveness in mind: so that you learn faster, more efficiently, and on a more permanent basis"

## tech 28 | Structure and Content

#### Module 1. Aesthetic Dentistry

- 1.1. Definition of Aesthetic Dentistry. Therapeutic Tools in a Multidisciplinary Concept
  - 1.1.1. Armamentarium Specialties
  - 1.1.2. Multidisciplinary Work Protocols
  - 1.1.3. Patient Standardization
- 1.2. Psychosocial Influence, Patients' Needs. Treatment Demand Statistics
  - 1.2.1. Demand Analysis
  - 1.2.2. Treatments and Perspectives
  - 1.2.3. The Concept of Minimally Invasive

#### Module 2. Aesthetic Diagnosis

- 2.1. Aesthetic Analysis. Principles of Biomimetics
  - 2.1.1. Facial Analysis
  - 2.1.2. Smile Analysis
- 2.2. Color Theory Diagnostic Tools
  - 2.2.1. The Nature of Color
  - 2.2.2. Color Parameters
  - 2.2.3. Estimation Technique (subjective) with Analog Guidance
  - 2.2.4. Other Factors that Influence Perception
  - 2.2.5. Color Matching Clinical Process
  - 2.2.6. Clinical Process of Color Imaging
- 2.3. Practical Application of Color
  - 2.3.1. Practical Application of Color and Tooth Shade Guides
  - 2.3.2. Clinical Protocol for Successful Color Imaging
  - 2.3.3. Dental Stains
  - 2.3.4. Color as a Key Factor in Decision-Making with Composite Resins
  - 2.3.5. Color as a Key Factor in Decision-Making with Dental Ceramics
- 2.4. Communication with the Patient
  - 2.4.1. Current Diagnostic Tools Communication Software
  - 2.4.2. Direct Application Mockup Vs. Digital Simulation

#### Module 3. Conservative/Cariology/Endodontic Tooth

- 3.1. Introduction to Modern Cariology
  - 3.1.1. Classification and Etiopathogenesis
  - 3.1.2. Diagnostic and Early Detection Tools
- 3.2. Nature of Materials for Direct Restoration
  - 3.2.1. Introduction: Dental Composites as Direct Restorative Materials
  - 3.2.2. History and Background of Dental Composites
  - 3.2.3. Evolution and Classifications
  - 3.2.4. Other Types of Dental Composites
  - 3.2.5. Properties of Dental Composites
  - 3.2.6. Core Build-Up Type Composites
- 3.3. Auxiliary Methods for Direct Restoration
  - 3.3.1. Biomechanics Concepts
  - 3.3.2. Classification of Posts
  - 3.3.3. Evolution of the Concepts of Retention and Resistance
  - 3.3.4. Restoration
  - 3.3.5. Clinical Use of Fiber Posts
  - 3.3.6. Aspects to Consider
  - 3.3.7. Preparing the Space for the Post
- 3.4. Absolute Isolation as a Standard in Restoration
  - 3.4.1. Dental Dam
  - 3.4.2. Instruments and Accessories
- 3.5. Tooth Sensitivity and Erosion Realities
  - 3.5.1. Tooth Sensitivity (Dental Hypersensitivity)
  - 3.5.2. Aetiopathogenesis.
  - 3.5.3. Physiological and Pathological Mechanisms of Pulp Response
  - 3.5.4. Patient Treatment and Education
  - 3.5.5. Erosive Pathology Etiopathogenesis. Pediatric Dentistry
- 3.6. Reconstruction of Endodontic Teeth
  - 3.6.1. Biological Properties of Devitalized Teeth
  - 3.6.2. Intraconduit Restraint Systems
  - 3.6.3. Viability Criteria



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- 3.7. Rehabilitation of Endodontic Teeth
  - 3.7.1. Rehabilitation of Anterior Endodontic Teeth
  - 3.7.2. Rehabilitation of Posterior Endodontic Teeth
- 3.8. Polymerization Units
  - 3.8.1. The Effect of Lamps Objective Measurement
  - 3.8.2. Restorative and Prosthodontic Perspectives

#### Module 4. Principles of Adhesion

- 4.1. Adhesive Dentistry. Background and Perspectives
  - 4.1.1. Classification of Adhesives by Generations
  - 4.1.2. Classical Classification of Dental Adhesives based on the Time of Appearance
  - 4.1.3. Mechanisms of Adhesion of Conventional Adhesives
  - 4.1.4. Mechanism of Adhesion of Self-Etching Adhesives
- 4.2. Adhesion to Different Substrates
  - 4.2.1. Mechanisms of Adhesion
  - 4.2.2. Adhesion to Dental Tissues
- 4.3. Adhesive Dentistry for Different Materials
  - 4.3.1. Intraductal Adhesion
  - 4.3.2. Adhesion to Materials for Indirect Restoration
- 4.4. Cements in Dentistry
  - 4.4.1. Classification of Cements
  - 4.4.2. Decision Making
  - 4.4.3. Equipment and Techniques

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#### Module 5. Whitening

- 5.1. Teeth Whitening
  - 5.1.1. Etiopathogenesis of the Different Dental Discolorations
  - 5.1.2. Tooth Whitening Techniques and Materials Therapeutic Protocols
- 5.2. Vital Tooth Whitening
  - 5.2.1. Techniques in the Consultation
  - 5.2.2. Home Techniques
- 5.3. Non-Vital Tooth Whitening
  - 5.3.1. Non-Vital Techniques in the Clinic and at Home
  - 5.3.2. Other Measures to Consider in Non-Vital Whitening Techniques
- 5.4. Multidisciplinary Treatment Protocols and Future Perspectives
  - 5.4.1. Tooth Whitening as a Therapeutic Support
  - 5.4.2. New Treatment Perspectives

#### Module 6. Waxing

- 6.1. Waxing Techniques Materials and Instruments
  - 6.1.1. Waxes
    - 6.1.1.1. Properties of Waxes
    - 6.1.1.2. Types of Waxes
    - 6.1.1.3. Features of Waxes
  - 6.1.2. Techniques and Equipment for Wax Pattern Making 6.1.2.1. Terminology.
    - 6.1.2.2. Parameters
    - 6.1.2.3. Tooth Trajectory
  - 6.1.3. Principles Required for the Technique
- 6.2. Anatomy and Wax-Up of Posterosuperior Teeth
  - 6.2.1. Anatomy and Wax-Up of the First and Second Upper Premolars
    - 6.2.1.1. Common Features
    - 6.2.1.2. Maxillary First Premolar
    - 6.2.1.3. Maxillary Second Premolar

- 6.2.2. Anatomy and Wax-Up of the First and Second Lower Molars6.2.2.1. Common Features6.2.2.2. Maxillary First Molar
  - 6.2.2.3. Maxillary Second Molar
- 6.3. Anatomy and Wax-Up of Posteroinferior Teeth
  - 6.3.1. Anatomy and Wax-Up of the First and Second Upper Premolars6.3.1.1. Common Features6.2.1.0. Mandibular First Premolar
    - 6.3.1.2. Mandibular First Premolar
    - 6.3.1.3. Mandibular Second Premolar
  - 6.3.2. Anatomy and Wax-Up of the First and Second Lower Molars6.3.2.1. Common Features6.3.2.2. Mandibular First Molar
    - 6.3.2.3. Mandibular Second Molar
- 6.4. Anatomy and Wax-Up of Anterosuperior Teeth
  - 6.4.1. Anatomy and Wax-Up of the Maxillary Central Incisors
  - 6.4.2. Anatomy and Wax-Up of the Maxillary Lateral Incisors
  - 6.4.3. Anatomy and Wax-Up of the Maxillary Canines
- 6.5. Anatomy and Wax-Up of Anteroinferior Teeth
  - 6.5.1. Anatomy and Wax-Up of the Mandibular Incisors
  - 6.5.2. Anatomy and Wax-Up of the Mandibular Canines
- 6.6. Practical Application of Anatomical Waxing
  - 6.6.1. Effective Clinical-Laboratory Communication
  - 6.6.2. Technique for Creating the Mock-up
  - 6.6.3. The Mock-Up as a Communicative and Technical Tool
  - 6.6.4. The Mock-Up as a Diagnostic and Technical Tool

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#### Module 7. Applied Periodontology

- 7.1. Aesthetic Gingival Analysis Symmetries/Asymmetries
  - 7.1.1. Modern Concept of Gingival Biotype Update on the Definition of Biological Space
  - 7.1.2. Horizontal and Vertical Disharmonies Classification
  - 7.1.3. Gingival Discoloration
- 7.2. Etiopathogenesis of Gingival Disharmonies
  - 7.2.1. Gingival Analysis
  - 7.2.2. Predisposing Factors and Causal Factors
- 7.3. Basic and Advanced Periodontal Stabilization
  - 7.3.1. Introduction and Classification
  - 7.3.2. Causes of Periodontal Disease
  - 7.3.3. Basic Periodontal Treatment
  - 7.3.4. Resection Techniques
  - 7.3.5. Predictability and Long-Term Results
- 7.4. Alternative Treatments
  - 7.4.1. Indications
  - 7.4.2. Surgical Techniques
  - 7.4.3. Gingivectomy
  - 7.4.4. Crown Lengthening
  - 7.4.5. Instruments and Materials
  - 7.4.6. Limits and Perspectives
- 7.5. Multidisciplinary Treatment of Gingival Smile
  - 7.5.1. Causes of Gingival Smile
  - 7.5.2. Predisposing Bone Factors
  - 7.5.3. Orthodontic Movements
  - 7.5.4. Applicable Surgical Treatments

#### Module 8. Composites

- 8.1. Materials for Direct and Indirect Restoration
  - 8.1.1. Biocompatibility and Future Prospects
  - 8.1.2. Physical and Aesthetic Properties Ceramics and Composites
- 8.2. Techniques
  - 8.2.1. Freehand Technique
  - 8.2.2. Layering Technique through the use of Palatal Keys in the Anterior Sector
  - 8.2.3. Injection Technique
  - 8.2.4. Indirect Aesthetic Rehabilitation Techniques
- 8.3. Direct Layering in the Anterior Sector Using Palatal Keys
  - 8.3.1. The Importance of Waxing Communication and Treatment Guide
  - 8.3.2. Silicone Guide and Reduction Wrenches
  - 8.3.3. Step by Step Technique, Classes III, IV, and V
- 8.4. Direct Stratification Technique for Single Cases
  - 8.4.1. Changes in Proportions
  - 8.4.2. Agenesis of Maxillary Lateral Incisors
  - 8.4.3. Discoloration
  - 8.4.4. Closure of Diastemas
- 8.5. Smile Design with Direct Composites
  - 8.5.1. Smile Design
  - 8.5.2. Treatment Protocols
- 8.6. Finishing and Polishing
  - 8.6.1. Determining and Instrumental Factors
  - 8.6.2. Finishing and Polishing Sequence and Procedure
- 8.7. Maintenance
  - 8.7.1. Influence of Certain Extrinsic Factors on Long-Term Outcome
  - 8.7.2. Action Protocols and Maintenance Guidelines

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- 8.8. Exemplification with Different Restorative Systems
  - 8.8.1. American Systems
  - 8.8.2. European Systems
  - 8.8.3. Japanese Systems
  - 8.8.4. Selection Criteria
- 8.9. Direct Restoration as a Support to the Other Specialties
  - 8.9.1. Composite Resins in Anterior Teeth
  - 8.9.2. Techniques for Compensating Proportions and Spaces
    - 8.9.2.1. Conservative or Non-Restoration Techniques
    - 8.9.2.2. Additive/Restoration Techniques
    - 8.9.2.3. Non-Conservative Techniques
  - 8.9.3. Aesthetic Dentistry as a Support to the Other Specialties 8.9.3.1. Cosmetics as a Complement to Orthodontics
    - 8.9.3.2. Cosmetics as a Complement in Periodontal Treatments
    - 8.9.3.3. Cosmetics as a Complement in Rehabilitation Treatments
- 8.10. Indirect Composites. Techniques and Protocols
  - 8.10.1. Materials and Methodology
  - 8.10.2. Provisionalization and Measures
  - 8.10.3. Advantages and Disadvantages

#### Module 9. Porcelain

- 9.1. Materials for Rehabilitation in All-Ceramic Prosthetics
  - 9.1.1. Classical Classification and Properties of Porcelains for Dental Use
  - 9.1.2. Modern Classification and Properties of New Materials
- 9.2. Technical Specifications of the Materials
  - 9.2.1. Reduction Requirements for Preparing Teeth for Restoration with Different Materials
  - 9.2.2. Rotary Instruments for Tooth Reduction
  - 9.2.3. Anatomo-Physiological and Optical Conditions of the Materials
- 9.3. Impressions for Fixed Prosthesis Rehabilitation
  - 9.3.1. Definition and Classification of Materials
  - 9.3.2. Impression Techniques
  - 9.3.3. Displacement of Gingival Tissues

- 9.4. Aesthetic Rehabilitation Using Laminates
  - 9.4.1. Step-by-Step Technique
  - 9.4.2. Material Selection The Importance of the Substrate
  - 9.4.3. Tooth Preparation, Intraoperative Tooth Treatment, and Provisionalization
  - 9.4.4. Definitive Cementation Materials and Techniques
- 9.5. Laboratory Procedures for Producing Laminates
  - 9.5.1. Definitive Impressions and Communication with the Laboratory
  - 9.5.2. Laboratory Techniques for Manufacturing Laminates
- 9.6. Aesthetic Rehabilitation with Full Veneer Crowns
  - 9.6.1. Step-by-Step Technique
  - 9.6.2. Material Selection The Importance of the Substrate
  - 9.6.3. Tooth Preparation, Intraoperative Tooth Treatment, and Provisionalization
  - 9.6.4. Definitive Cementation Materials and Techniques
- 9.7. Laboratory Procedures for Producing Full Veneer Crowns
  - 9.7.1. Definitive Impressions and Communication with the Laboratory
  - 9.7.2. Laboratory Techniques for Manufacturing Full Veneer Crowns
- 9.8. Computer Assisted Aesthetic Dentistry
  - 9.8.1. Main CAD/CAM Systems, Properties and Characteristics
  - 9.8.2. The Power of Biocopy, Biomimetic Applications
  - 9.8.3. Future Trends and 3D Printing
- 9.9. Monolithic Techniques
  - 9.9.1. Indications and Protocols
  - 9.9.2. Make-Up and Subsequent Characterization
- 9.10. New Trends in Ceramic Prosthetics
  - 9.10.1. Vertical Carving Indications and Disadvantages of the Technique
  - 9.10.2. Biologically Oriented Tooth Preparation Technique (BOPT)

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#### Module 10. Practical Occlusion

- 10.1. Modern Concepts of Occlusion
  - 10.1.1. Anterior and Canine Guided and Group Function
  - 10.1.2. Lateral Occlusal Interferences: On the Working Side
  - 10.1.3. Lateral Occlusal Interferences: On the Balance Side
  - 10.1.4. Protrusive Interferences
  - 10.1.5. Centric Relation
  - 10.1.6. Premature Contact, Retracted Contact Position (RC), Centric Relation Occlusion or Centric Relation Interference
- 10.2. Implication of Occlusion in Rehabilitation
  - 10.2.1. Etiological Factors Implicated in CMD
  - 10.2.2. Systemic Pathophysiological Factors
  - 10.2.3. Psychosocial Factors and Emotional Tension
  - 10.2.4. Parafunctions
  - 10.2.5. Trauma
  - 10.2.6. Constant Deep Pain
  - 10.2.7. Relation between Occlusion and CMD
- 10.3. Selective Milling
  - 10.3.1. The Rule of Thirds
  - 10.3.2. Indications
  - 10.3.3. Sequence of Selective Milling in Centric
  - 10.3.4. Sequence of Milling in Eccentric Movements
  - 10.3.5. Protrusive Milling Sequence
  - 10.3.6. Therapeutic Objectives

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#### Module 11. Minimally Invasive Rehabilitation

- 11.1. Concepts in Oral Adhesive Rehabilitation
  - 11.1.1. Principles of Rehabilitations with Minimally Invasive Restorations
  - 11.1.2. Vertical Dimension of Occlusion
- 11.2. Occlusion in Adhesive Rehabilitation
  - 11.2.1. Record Taking and Diagnostic Model Management
  - 11.2.2. Need for Articulator and Face-Bow Mounting
  - 11.2.3. Deprogramming and Provisionalization as a Control Tool
  - 11.2.4. Stabilization for Long-Term Maintenance
- 11.3. Materials and Indications
  - 11.3.1. Update on Tooth Reduction for Inlays and Onlays
  - 11.3.2. Criteria for Selecting Restoration Material Restoration Systems for Posterior Sectors
- 11.4. Techniques to Increase the Vertical Dimension of Occlusion with Direct Resins
  - 11.4.1. Material and Protocols
  - 11.4.2. Technical Procedure
  - 11.4.3. Limits, Advantages, and Disadvantages
- 11.5. Techniques to Increase the Vertical Dimension of Occlusion with Indirect Resins
  - 11.5.1. Material and Protocols
  - 11.5.2. Technical Procedure
  - 11.5.3. Limits, Advantages, and Disadvantages
- 11.6. Techniques to Increase the Vertical Dimension of Occlusion with Porcelain
  - 11.6.1. Material and Protocols
  - 11.6.2. Technical Procedure
  - 11.6.3. Limits, Advantages, and Disadvantages
- 11.7. Laboratory Procedures for Changes in Vertical Dimension
  - 11.7.1. Procedures for Rehabilitation with Composites
  - 11.7.2. Procedures for Rehabilitation with Porcelain

#### Module 12. Applied Orthodontics

- 12.1. New Orthodontic or Orthodontic Systems Update
  - 12.1.1. History of Aligners
  - 12.1.2. Current Use of Transparent Retainers
- 12.2. Dynamic Principles of Torque and the Biological Consequences
  - 12.2.1. Practical Applications
  - 12.2.2. The Orthodontic Specialty as a Value Generator
- 12.3. Intrusion Extrusion Parameters
  - 12.3.1. Pressure Points
  - 12.3.2. Introduction to Attachments
    - 12.3.2.1. Optimized Attachments
    - 12.3.2.2. Conventional Attachments

12.3.2.3. Hierarchy of Attachment Placement according to the Movement to be Performed per Tooth

- 12.3.2.4. Usual Movements which Prevent the Placement of Attachments
- 12.3.2.5. Attachment Placement
- 12.4. The Use of Invisible Aligners in Aesthetic Dentistry
  - 12.4.1. Protocols and Limits
  - 12.4.2. Integration in Other Specialties

#### Module 13. Photography

- 13.1. Digital Photography
  - 13.1.1. Light Theory

13.1.1.1. How is a Photograph Created?

13.1.2. Technical Concepts

13.1.2.1. Aperture Opening ("F")

- 13.1.2.2. Depth of Field
- 13.1.2.3. Exposure Modes
- 13.1.2.4. Focus
- 13.1.2.5. Focal Length
- 13.1.2.6. Shutter Speed ("SS")
- 13.1.2.7. Sensitivity ("ISO")
- 13.1.2.8. Exhibition
- 13.1.2.9. Configuring the File Format

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#### 13.1.3. Color Theory

- 13.1.3.1. Color Space
- 13.1.3.2. Color Dimensions
- 13.1.3.3. Optical Phenomena
- 13.2. Equipment
  - 13.2.1. Cameras
  - 13.2.2. Artificial Illumination Methods
  - 13.2.3. Photography Support Systems
- 13.3. Applied Dental Photography
  - 13.3.1. Extraoral Dental Photography
  - 13.3.2. Intraoral Dental Photography
  - 13.3.3. Laboratory Photography and Models
- 13.4. The Importance of Photography as a Communication Tool
  - 13.4.1. Communication with the Patient
  - 13.4.2. Communication with the Laboratory

#### Module 14. Aesthetic Implantology

- 14.1. Current Concepts in Dental Implantology
  - 14.1.1. Influence of Macroscopic Design
  - 14.1.2. Prosthodontic Connections
  - 14.1.3. Types of Implant Prostheses
- 14.2. Standards of Success in Implant Dentistry
  - 14.2.1. Pink and White Aesthetic Indexes
  - 14.2.2. Classifications of the Different Volumetric Defects
  - 14.2.3. Definition of Surgical Times Techniques, Advantages, and Disadvantages
  - 14.2.4. Prosthetic Loading Times Techniques, Advantages, and Disadvantages
- 14.3. Tissue Regeneration
  - 14.3.1. Bone Regeneration Techniques and Application
    - 14.3.1.1. Types of Membranes
    - 14.3.1.2. Bone Regeneration Techniques in the Aesthetic Sector
  - 14.3.2. Regeneration of Soft Tissues Techniques and Application
    - 14.3.2.1. Free Gingival Grafting
    - 14.3.2.2. Connective Tissue Grafting for Increased Volume
    - 14.3.2.3. Connective Tissue Grafting to Cover a Recession in Implants

- 14.4. Integration of Implantology in a Multidisciplinary Context
  - 14.4.1. Spatial and Volumetric Decision-Making
  - 14.4.2. Lateral Incisor Agenesis
    - 14.4.2.1. Types of Membranes
    - 14.4.2.2. Bone Regeneration Techniques in the Aesthetic Sector
  - 14.4.3. Provisionalization and Manufacturing Techniques
    - 14.4.3.1. Provisional Fixed Prosthesis on Teeth
    - 14.4.3.2. Removable Provisional Prosthesis
    - 14.4.3.3. Provisional Fixed Prosthesis on Implants
    - 14.4.3.4. Materials in Provisional Prosthesis

#### Module 15. Peribucal Aesthetics

- 15.1. Anatomy of the Facial, Labial, and Perioral Region
  - 15.1.1. Facial Bones
  - 15.1.2. Masticatory and Facial Muscles
  - 15.1.3. Superficial Musculoaponeurotic System (SMAS)
- 15.2. Filler Materials and Infiltration Techniques
  - 15.2.1. Classification of Filler Materials
- 15.3. Basic Infiltration Techniques with Medium Density Filler Materials
  - 15.3.1. Patient Selection
  - 15.3.2. Methodology
  - 15.3.3. Basic Infiltration Techniques
  - 15.3.4. Barcode Treatment (Perioral Wrinkles)
  - 15.3.5. Lip Treatment: Profiling Projection Eversion
  - 15.3.6. Treatment of the Nasolabial Fold and Marionette Fold
- 15.4. Basic Infiltration Techniques with High Density Filler Materials
  - 15.4.1. General Rules
  - 15.4.2. Anesthesia Nerve Blocker
  - 15.4.3. Infraorbital Nerve
  - 15.4.4. Mental Nerve

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15.4.5. Common Indications with High Density Filler Materials

- 15.4.6. Nasolabial Folds
- 15.4.7. Lip
- 15.4.8. Marionette Lines
- 15.4.9. The Jaw and the Chin

#### Module 16. Initial Diagnosis

- 16.1. Systematic Diagnosis in Orthodontics
  - 16.1.1. First Visit and Clinical History
  - 16.1.2. Patient Assessment
  - 16.1.3. Ordinary Records
  - 16.1.4. Complementary Records
  - 16.1.5. Myofunctional Records
- 16.2. Orthodontic Diagnosis by Stages
  - 16.2.1. Establishment Problem Listing
  - 16.2.2. Establishment Therapeutic Objectives
  - 16.2.3. Mechanotherapy and Equipment Planning

#### Module 17. Advanced Diagnosis

- 17.1. Cephalometric Analysis 3D Diagnosis CBCT and TC
  - 17.1.1. Cephalometric Analysis
    - 17.1.1.1. Introduction
    - 17.1.1.2. Description of the Craniometric Points
    - 17.1.1.3. Steiner's Cephalometric Analysis
    - 17.1.1.4. Ricketts Cephalometric Analysis

#### 17.1.2. 3D Diagnosis

- 17.1.2.1. Introduction
- 17.1.2.2. System Fundamentals
- 17.1.2.3. CBCT Computed Tomography
- 17.1.2.4. Advantages
- 17.1.2.5. Disadvantages
- 17.1.2.6. The Voxel
- 17.1.2.7. Image Processing
- 17.1.2.8. Radiation
- 17.1.2.9. Clinical Application of CBCT



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- 17.2. Diagnosis and Habits Treatment
  - 17.2.1. Introduction
  - 17.2.2. Atypical Swallowing Children
  - 17.2.3. Nutritional Sucking Habits
    - 17.2.3.1. Breastfeeding
    - 17.2.3.2. Bottle
  - 17.2.4. Non-nutritional Sucking Habits 17.2.4.1. Thumb Sucking 17.2.4.2. Pacifier Habit
  - 17.2.5. Breathing through the Mouth
  - 17.2.6. Dyslalia
  - 17.2.7. Other Habits
- 17.3. Early Diagnosis of Patients at Risk
  - 17.3.1. Caries and White Marks Current Techniques Preventive Treatment of Enamel Demineralization
  - 17.3.2. Root Resorption Current Techniques Preventative Treatment of Root Resorption
  - 17.3.3. Differential Diagnosis of the Most Frequent Temporomandibular Disorders in the Orthodontic Patient
  - 17.3.4. Idiopathic Condylar Reabsorption Current Diagnostic Techniques Preventive Treatment of Severe Progressive Open Biting

### Module 18. Etiology of Malocclusions and Dentofacial Deformities

- 18.1 Growth and Craniofacial Development
  - 18.1.1. Types of Postnatal Growth
  - 18.1.2. Integration of Facial Development
  - 18.1.3. Growth the Upper Jaw
  - 18.1.4. Jaw Growth
- 18.2. Pathophysiology of Tooth Eruption
  - 18.2.1. Eruptive Phases
  - 18.2.2. Tooth Eruption in Adults
  - 18.2.3. Eruption Mechanisms
  - 18.2.4. General Dentition Development

- 18.3. Dentoalveolar Growth and Adaptation in Different Malocclusions and Dentofacial Deformities
  - 18.3.1. Dentoalveolar Growth and Adaptation of Transverse Malocclusions
  - 18.3.2. Dentoalveolar Growth and Adaptation of Vertical Malocclusions
  - 18.3.3. Growth and Dentoalveolar Adaptation of Sagittal Malocclusions
- 18.4. Differential Diagnosis of Etiologic Factors
  - 18.4.1. Etiological Factors of Malocclusion
  - 18.4.2. Specific Causes of Malocclusion
  - 18.4.3. Genetic Influences
  - 18.4.4. Environmental Influences
  - 18.4.5. Current Etiologic Perspective

### Module 19. Treatment Plan

- 19.1. Concepts and Objectives
  - 19.1.1. Prioritization of the List of Orthodontic Problems
  - 19.1.2. Establishment of Treatment Possibilities and Therapeutic Sequence
  - 19.1.3. Factors to Be Evaluated in the Possibilities of Treatment
  - 19.1.4. Types of Treatment
  - 19.1.5. Orthodontic Treatment and Disorder
- 19.2. Evidence-Based Orthodontics PICO, Databases, Critical Reading of Articles
  - 19.2.1. Formulation of Clinical Questions
  - 19.2.2. Consulting Literature
  - 19.2.3. Types of Clinical Studies
  - 19.2.4. Biases and Confusion Factors
  - 19.2.5. Evidence Levels and Degrees of Recommendation
  - 19.2.6. Critical Evaluation of the Results
- 19.3. Limits of Orthodontics and Dentofacial Orthopedics According to the Type of Malocclusion and the Age of the Patient
  - 19.3.1. Growth Modification in the Treatment of Skeletal Problems
  - 19.3.2. Biological Limitations
  - 19.3.3. Soft Tissue Limitations

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- 19.4. Indications for Early or Delayed Treatment
  - 19.4.1. Determination of Skeletal Maturity
  - 19.4.2. Evolution of Malocclusions During Growth
  - 19.4.3. Early Treatment of Malocclusions
- 19.5. Determination of the Need to Perform Therapeutic Extractions
  - 19.5.1. Definition of Volumetric Malocclusions
  - 19.5.2. Therapeutic Extraction of Premolars
  - 19.5.3. Special Extraction Cases
  - 19.5.4. Stripping Technique as an Alternative to Tooth Extractions
- 19.6. Preparation of the Individualized Treatment Plan
  - 19.6.1. General Considerations in Individualized Treatment Planning
  - 19.6.2. Determination of the Individualized Treatment Plan
  - 19.6.3. Auxiliary Tools to Determine the Individual Treatment Plan: Steiner's Box

### Module 20. Advanced Clinical Biomechanics

- 20.1. Biomechanics Applied to Orthodontics and Orthopedics
  - 20.1.1. Active Removable Plates
  - 20.1.2. Functional Appliances
  - 20.1.3. Ways of Action
  - 20.1.4. Orthopedic Action
  - 20.1.5. Tooth Action
- 20.2. Brackets and Bands Cementing Techniques
  - 20.2.1. Direct Cementing
  - 20.2.2. Indirect Cementing
  - 20.2.3. Indications and Limitations
- 20.3. Micro-screws
  - 20.3.1. General Indications
  - 20.3.2. Use Limitations
- 20.4. Surgical Aids to Tooth Movement
  - 20.4.1. Periodontium Anatomy
  - 20.4.2. Physiology of Orthodontic Tooth Movement
  - 20.4.3. Why Do Teeth Move Faster?
  - 20.4.4. Types of Surgical Aids

### Module 21. Early Dentofacial Orthopedics

- 21.1. Early Orthopedics: Neuro-occlusal Rehabilitation
  - 21.1.1. Concept and Justification
  - 21.1.2. Planas' Law of Minimum Vertical Dimension and Planas' Functional Masticatory Angle
  - 21.1.3. Plana's Law of Development of the Stomatognathic System
  - 21.1.4. Therapeutics During the First Year
  - 21.1.5. Therapeutics in the First Dentition
  - 21.1.6. Therapeutics in Mixed Dentition and Second Dentition
- 21.2. Treatment in Deciduous and Mixed First Phase Dentition
  - 21.2.1. Class III and Anterior Crossbite
  - 21.2.2. Class II
  - 21.2.3. Anterior Open Bite
  - 21.2.4. Overbite
  - 21.2.5. Posterior Crossbite and Transverse Problems Facial Asymmetry in Children Treatment of Children with OSA
  - 21.2.6. Eruption Alterations Canines Incisors Premolars and Molars
  - 21.2.7. Space Problems

### Module 22. Late Dentofacial Orthopedics

- 22.1. Treatment in Permanent Dentition: Late Orthopedics
  - 22.1.1. Etiology
  - 22.1.2. Treatment Indications
  - 22.1.3. Limitations
- 22.2. Class III Treatment
  - 22.2.1. Etiology
  - 22.2.2. Treatment Indications
  - 22.2.3. Limitations
- 22.3. Class II Treatment
  - 22.3.1. Etiology
  - 22.3.2. Treatment Indications
  - 22.3.3. Limitations

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- 22.4. Treatment of Anterior Open Bite
  - 22.4.1. Definition of Anterior Open Bite (AOM)
  - 22.4.2. Treatment of Anterior Open Bite (AOM)
  - 22.4.3. Late Therapies of Anterior Open Bite (AOM)
- 22.5. Treatment of Overbite
  - 22.5.1. Etiology
  - 22.5.2. Treatment Indications
  - 22.5.3. Limitations
- 22.6. Treatment of a Posterior Crossbite and Transverse Problems
  - 22.6.1. Concept and Classification
  - 22.6.2. Epidemiology
  - 22.6.3. Etiology
  - 22.6.4. Microbiological
  - 22.6.5. Pediatric Dentistry
  - 22.6.6. New Technologies

### Module 23. Conventional Orthodontics

- 23.1. Treatments in 2 Stage Mixed Dentition and Early Permanent Dentition
  - 23.1.1. Treatment Protocols
  - 23.1.2. Indications and Contraindications Fixed Appliances
    - 23.1.2.1. Advantages and Disadvantages Fixed Appliances
  - 23.1.3. Malocclusions
    - 23.1.3.1. Transversal Malocclusions
    - 23.1.3.2. Vertical Malocclusions
  - 23.1.4. Retention/Recidivism
- 23.2. Specifications in the Cementation of Brackets According to the Type of Malocclusion and/or Therapeutic Objectives
  - 23.2.1. Installation of the Preadjusted Equipment
    - 23.2.1.1. Bracket and Tube Placement
    - 23.2.1.2. Mesiodistal Location
    - 23.2.1.3. Vertical Position ("Height")
    - 23.2.1.4. Inclination
    - 23.2.1.5. Adjustment to the Vestibular Face

- 23.2.2. Cementing in Case of Deep Spee's Curve
- 23.2.3. Cementing in Case of Class II Molars
  - 23.2.3.1. Cementing Fractured or Abraded Teeth
- 23.3. First Phase: Alignment and Leveling Types of Intrusion
  - 23.3.1. Alignment
    - 23.3.1.1. Principles for the Choice of Alignment Arches
    - 23.3.1.2. Symmetrical Crowding Alignment
    - 23.3.1.3. Alignment in the Case of Premolar Extraction
    - 23.3.1.4. Alignment in Case of Non-extraction
  - 23.3.2. Leveling
    - 23.3.2.1. Leveling Due to Extrusion (Relative Intrusion)
    - 23.3.2.2. Leveling Due to Intrusion
- 23.4. Second Phase: Work, Closing Extraction Spaces
  - 23.4.1. Correction of Molar Ratio
    - 23.4.1.1. Differential Growth in Class II Patients
    - 23.4.1.2. Differential Anchorage of the Extraction Spaces 23.4.1.3. Distalization
  - 23.4.2. Closing of Extraction or Residual Spaces23.4.2.1. Continuous Arch with Locking Handles or DKL Arch23.4.2.2. Sliding
  - 23.4.3. Correction of Overjet and Overbite
  - 23.4.4. Centering of Median Lines
- 23.5. Third Phase: Termination Retention Design
  - 23.5.1. Retention Definition
  - 23.5.2. Types of Retainers
    - 23.5.2.1. Fixed Retainers
    - 23.5.2.2. Removable Retainers
  - 23.5.3. Duration of the Retention
    - 23.5.3.1. Cases that Can Require Retention
    - 23.5.3.2. Cases that Require Permanent or Semipermanent Retention
    - 23.5.3.3. Cases Requiring a Variable Retention Period

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### Module 24. Advanced Treatments in Conventional Orthodontics

- 24.1. Implants and Microscrews as Anchorage
  - 24.1.1. Indications and Limitations of Micro-screws 24.1.1. Main Indications
    - 24.1.1.2. Limitations and Complications of Skeletal Anchorage
  - 24.1.2. Clinical and Laboratory Techniques to Improve System Effectiveness and Efficiency Current Evidence Based Protocols
    - 24.1.2.1. Placement of Micro-screws
    - 24.1.2.2. Activating Micro-screws
- 24.2. Surgical and Nonsurgical Aids to Accelerate Movement
  - 24.2.1. Chemical Techniques
  - 24.2.2. Physical Techniques
  - 24.2.3. Surgical Techniques
  - 24.2.4. Indications for Micro-osteoperforations
- 24.3. Treatment of Included Teeth and Other Eruption Disorders
  - 24.3.1. Impacted or Unerupted Teeth
  - 24.3.2. Retained Canines
  - 24.3.3. Treatment of Other Eruption Disorders
- 24.4. Treatment of Open Bites: Multiloop Technique
  - 24.4.1. Structure and Function of the Multiloop
  - 24.4.2. Diagnosis in Multiloop Technique
  - 24.4.3. Treatment of Class III High Angle
  - 24.4.4. Treatment of Class III Low Angle
  - 24.4.5. Treatment of Class I Open Bite
  - 24.4.6. Treatment of Class II Open Bite

### Module 25. Multidisciplinary Treatment

- 25.1. Treatment in the Periodontal Patient
  - 25.1.1. The Adult Patient and its Specific Characteristics
  - 25.1.2. Anatomy of the Periodontium
  - 25.1.3. Multidisciplinary or Treatment
  - 25.1.4. Diagnosis of the Adult Patient and Determination of Treatment Goals

- 25.1.5. Preparation of the Adult Patient Who is Going to Receive Orthodontic Treatment
- 25.1.6. The Stripping Tool as Essential Element in Adult Periodontal Patients
- 25.1.7. Special Entity The Adult Patient with Posterior Bite Collapse
- 25.2. Treatment and Aesthetics of the Anterior Front Orthodontics and Prosthetics
  - 25.2.1. Fundamental Requirements for Successful Occlusal Therapy, Proposed by Dawson
  - 25.2.2. The 6 Decisions Affecting the Functional Anatomy Matrix
  - 25.2.3. The Anterior Guide
  - 25.2.4. Fundamental Aesthetic Criteria
- 25.3. Orthodontics and Treatment of SAHS in Children
  - 25.3.1. Anatomy of the Respiratory System
  - 25.3.2. Lymphatic System
  - 25.3.3. General Concepts of Sleep: Sleep and Breathing
  - 25.3.4. Clinical Examination in Children with Suspected SAHS
- 25.4. Orthodontics and Treatment of SAHS in Adults
  - 25.4.1. Sleep Medicine
  - 25.4.2. Sleep Apnea-Hypopnea Syndrome (SAHS)
  - 25.4.3. Efficacy of Mandibular Advancement Devices (MAD)
  - 25.4.4. Therapy Management and Follow-up Protocol

### Module 26. Lingual Orthodontics

- 26.1. History and Introduction to Lingual Appliances
- 26.2. Why Lingual Orthodontics?
  - 26.2.1. Review of the Different Overall Systems Available
- 26.3. Basic Materials Required for Predetermined Systems
  - 26.3.1. Expendable Material
  - 26.3.2. Nonexpendable Material
- 26.4. Patient Selection and Making Records
  - 26.4.1. Characteristics of Lingual Patients
  - 26.4.2. Silicone Impressions: Procedure
  - 26.4.3. Digital Jump: Scanner
  - 26.4.4. Elaboration of the Lab Sheet and Selection of the Prescription



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- 26.5. Keys to Keep in Mind in Lingual Orthodontic Treatment
- 26.6. Vestibular Vs. Lingual Biomechanical Differences Updating of the Aparatology in the 3 Planes of Space
- 26.7. Laboratory Procedures
  - 26.7.1. Preparation of the Aparatology with the Hiro System
    - 26.7.1.1. Introduction
    - 26.7.1.2. Step-by-Step Procedure
    - 26.7.1.3. Maxillary Arch
    - 26.7.1.4. Jaw Arch
    - 26.7.1.5. Use a Full Arch Archwire
    - 26.7.1.6. Fixing Brackets
    - 26.7.1.7. Individual Tray Making
    - 26.7.1.8. Customize the Bracket Base
  - 26.7.2. Fabrication of the Incognito<sup>™</sup> System Apparatus
  - 26.7.2.1. Manufacturing Process
    26.7.2.2. Set-up
    26.7.2.3. Computer Assisted Bracket Design
    26.7.2.4. Prototyping
    26.7.2.5. Casting and Quality Control
    26.7.2.6. Bending of the Arches
    - 26.7.2.7. Cementing and Individualization Tray
- 26.8. Receipt and Approval of the Set-up
  - 26.8.1. Manual Set-up
  - 26.8.2. Digital Set-up
- 26.9. Reception of the Case and Preparation of the Cabinet
  - 26.9.1. Reception of the Case
  - 26.9.2. Preparing the Appointment in the Dairy
  - 26.9.3. Table Preparation
- 26.10. Indirect Cementing According to the Selected Individual Tray Selection26.10.1. Indirect Cementing with Transparent Silicone Tray26.10.2. Indirect Cementing with Opaque Silicone Tray

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26.11. Type and Use of Basic Ligatures

26.11.1. Self-Retaining Slot

26.11.2. Conventional Elastic Ligature

26.11.3. Metallic Ligature

26.11.4. Overtie

- 26.11.5. Steel Overtie
- 26.11.6. Power Tie
- 26.11.7. Elastic Lasso
- 26.11.8. Conventional Lasso
- 26.11.9. O-Lasso
- 26.11.10. Chicane
- 26.12. Selection and Placement of the Arch
  - 26.12.1. Characteristics of the Slot in Lingual Brackets
  - 26.12.2. Arch Sequences
  - 26.12.3. Overextended Arches
  - 26.12.4. Initial Arch Placement and Manipulation of the Arch in the Mouth
- 26.13. Prevention and Solutions of Emergencies and Frequent Complications
  - 26.13.1. Prevention and Urgent Solutions
  - 26.13.2. Recementing of Brackets
  - 26.13.3. Bracket Removal
- 26.14. Lingual Orthodontics and Periodontics
- 26.15. Lingual Orthodontics and Micro-screws
- 26.16. Lingual Orthodontics Retention

### Module 27. Orthodontics and Orthognathic Surgery

- 27.1. Introduction and Diagnosis
  - 27.1.1. Aesthetic and Functional Treatment Objectives
  - 27.1.2. Age and Treatment Opportunity
  - 27.1.3. Motives, Demands and Patient Psychology
  - 27.1.4. Clinical Examination
  - 27.1.5. Records Required for Orthognathic Surgery, Sagittal and Frontal Analysis

- 27.2. Temporomandibular Joint
  - 27.2.1. TMJ and Surgical Orthodontics
  - 27.2.2. Centric Relation and Orthognathic Surgery
  - 27.2.3. Radiographic Study of the TMJ
  - 27.2.4. Progressive Condylar Resorption: Concept, Diagnosis and Management
  - 27.2.5. Condylar Hyperplasia as a Cause of Facial Asymmetries: Concept, Diagnosis and Management
- 27.3. Splints and Orthognathic Surgery
  - 27.3.1. Prediagnostic Splint for Joint Pathology
  - 27.3.2. Presurgical Splint to Find True Hinge Axis
  - 27.3.3. Presurgical Splint to Stabilize Condyles and Ligaments
  - 27.3.4. Presurgical Splint to Diagnose the Mandibular Midline
- 27.4. Pre-surgical Orthodontics
  - 27.4.1. Diagnosis and Keys
  - 27.4.2. Sagittal Problems
  - 27.4.3. Vertical Problems
  - 27.4.4. Asymmetric Patients
- 27.5. Pre-surgical Planning
  - 27.5.1. Introduction to Cephalometric Predictions
  - 27.5.2. Treatment Prediction VTO, STO
  - 27.5.3. Dentoalveolar and Gingival Biotype: Need for Grafting?
  - 27.5.4. Bone Mobilizations: Repercussions on Soft Tissues
  - 27.5.5. SARPE: Indications and Limitations
- 27.6. Model Surgery
  - 27.6.1. Presurgical Working Models
  - 27.6.2. Model Surgery for Monomaxillary Surgery
  - 27.6.3. Model Surgery for Bi-maxillary Surgery
  - 27.6.4. Articulator and Axiography
- 27.7. Post-surgical Treatment and Completion
  - 27.7.1. Immediate Surgical Postoperative Period
  - 27.7.2. Immediate Orthodontic Postoperative Period
  - 27.7.3. Post-surgical Orthodontic Objectives and Case Completion

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### Module 28. Thermoplastic Orthodontics

- 28.1. Introduction Clear Splints or Dental Aligners
  - 28.1.1. History of Aligners
  - 28.1.2. Current Use of Transparent Retainers
- 28.2. Record Taking
  - 28.2.1. Prior to Registrations for Aligners
  - 28.2.2. Extraoral and Intraoral Photography
  - 28.2.3. Rx Orthopantomography and Lateral Teleradiography of Skull
  - 28.2.4. Printouts
  - 28.2.5. Intraoral Scanner
- 28.3. Coatings and Pressure Points
  - 28.3.1. Pressure Points
  - 28.3.2. Introduction to Attachments
  - 28.3.3. Optimized Attachments
  - 28.3.4. Conventional Attachments
  - 28.3.5. Hierarchy of Attachment Placement according to the Movement to be Performed per Tooth
  - 28.3.6. Usual Movements which Prevent the Placement of Attachments
  - 28.3.7. Attachment Placement
- 28.4. Movements with Aligners
  - 28.4.1. Introduction to Movements with Aligners
  - 28.4.2. Predictable and Nonpredictable Movements with Aligners
  - 28.4.3. Comparison of Different Movements According their Predictability
  - 28.4.4. Predictable Malocclusions with Aligners
- 28.5. Revision and Correction of the Virtual Video
  - 28.5.1. What Does the Virtual Video Allow You to See?
  - 28.5.2. What to Do Once You Receive the Virtual Video?
  - 28.5.3. Modifying the Virtual Video
  - 28.5.4. Indirect Virtual Video Modification

### Module 29. Correction in 3 Planes of Space with Dental Aligners

- 29.1. Correction of Malocclusions in the Sagittal Plane
  - 29.1.1. Correction of Malocclusions in the Sagittal Plane Class II
  - 29.1.2. Correction of Malocclusions in the Sagittal Plane Class III
- 29.2. Correction of Malocclusions in the Vertical Plane
  - 29.2.1. Overbite
  - 29.2.2. Open Bite
- 29.3. Correction of Malocclusions in the Transverse Plane
  - 29.3.1. Tooth Crossbite
  - 29.3.2. Unilateral Posterior Crossbite
  - 29.3.3. Bilateral Posterior Crossbite
  - 29.3.4. Scissor Bite
  - 29.3.5. Midline Discrepancy

## **Module 30.** Use of Transparent Splints in Orthognathic Surgery and Oral Surgery

- 30.1. Introduction to the Preparation of Surgical Patients with Transparent Splints
- 30.2. Canines Included
- 30.3. Teeth Included

## **Module 31.** Multidisciplinary Thermoplastic Orthodontics and Case Completion

- 31.1. Aligners Along with Other Dental Specialties
- 31.2. Management of Extractions with Thermoplastic Orthodontics
- 31.3. Completion of Cases
- 31.4. Auxiliary Appliances

# 06 **Methodology**

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning.** 

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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### At TECH we use the Case Method

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

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



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

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

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

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



## tech 48 | Methodology

### **Relearning Methodology**

At TECH we enhance the Harvard 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 | 49 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.



## tech 50 | Methodology

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.

20%

15%

3

15%

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.

## Methodology | 51 tech



### **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.

20%

7%

3%

17%



### **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 Advanced Master's Degree in Aesthetic Dentistryguarantees you, in addition to the most rigorous and updated training, access to a Advanced Master's Degree issued by TECH Global University.



Successfully complete this training and receive your university degree without travel or laborious paperwork"

## tech 54 | Certificate

This program will allow you to obtain your **Advanced Master's Degree diploma in Aesthetic Dentistry** 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: Advanced Master's Degree in Aesthetic Dentistry Modality: online Duration: 2 years Accreditation: 120 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.

tecn global university **Advanced Master's** Degree Aesthetic Dentistry » Modality: online

- » Duration: 2 years
- » Certificate: TECH Global University
- » Credits: 120 ECTS
- » Schedule: at your own pace
- » Exams: online

Advanced Master's Degree Aesthetic Dentistry

