

# Professional Master's Degree

## Orthodontics and Dentofacial Orthopedics





## Professional Master's Degree Orthodontics and Dentofacial Orthopedics

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/in/dentistry/professional-master-degree/master-orthodontics-dentofacial-orthopedics](http://www.techtute.com/in/dentistry/professional-master-degree/master-orthodontics-dentofacial-orthopedics)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 14*

04

Course Management

---

*p. 20*

05

Structure and Content

---

*p. 30*

06

Methodology

---

*p. 42*

07

Certificate

---

*p. 50*

# 01

# Introduction

Orthodontics was the first specialty within dentistry and the second after ophthalmology within the health sciences. In this sense, specialty is understood as the possession of a specific professional organization, literature and education. Its specific features in diagnosis, type of treatment, objectives and scientific basis, require an exclusive professional practice.





“

*Improve your knowledge through this Professional Master's Degree, where you will find the best teaching material with real practical cases. Learn here about the latest advances in the speciality to be able to perform quality dental practice"*

The demand for orthodontic treatment has increased due to the extension of orthodontic treatment to a large part of the growing population and the fact that it is reaching, in increasing numbers, the adult population as well, often as part of an integrated orthodontic treatment. Therefore, the education of specialists in this area is a necessity and a social demand.

The knowledge acquired will provide the student with the ability to face working life from a more qualified position, giving them a clear advantage when it comes to finding a job, since they will be able to offer the application of the latest technological and scientific advances in the field of orthodontics.

The new scenarios in orthodontics and dentofacial orthopedics push TECH to propose new educational programs that meet the real needs of experienced professionals, so that they can incorporate the advances in the specialty into their daily clinical practice.

The program is designed to provide online education, equivalent to 1,500 hours of study. All theoretical and practical knowledge is presented through high-quality multimedia content, analyses of clinical cases prepared by experts, master classes and video techniques that allow the exchange of knowledge and experience. They also enable students to keep up to date, create action protocols and share the most important new developments in the field. With this online program, students can organize their time and pace of learning, adapting it to their schedules, in addition to being able to access the contents from any computer or mobile device.

This **Professional Master's Degree in Orthodontics and Dentofacial Orthopedics** contains the most complete and up-to-date scientific program on the market. Its most notable features are:

- ◆ More than 75 clinical cases presented by experts in Orthodontics
- ◆ The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice
- ◆ Diagnostic and therapeutic developments on assessment, diagnosis, and treatment in Orthodontics and Dentofacial Orthopedics
- ◆ Practical exercises where the self-evaluation process can be carried out to improve learning
- ◆ Iconography of clinical and diagnostic imaging tests and treatment
- ◆ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- ◆ Special emphasis on evidence-based medicine and research methodologies in Orthodontics and Dentofacial Orthopedics
- ◆ All of this will be complemented by theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*Update your knowledge through the Professional Master's Degree in Orthodontics and Dentofacial Orthopedics"*

“

*This program is the best investment in a specialization that you can make for two reasons: you will obtain a Professional Master's Degree from the largest digital university in the world, TECH, and you will acquire the best and most up-to-date education in Orthodontics and Dentofacial Orthopedics”*

The teaching staff includes a team of Orthodontic and Dentofacial Orthopedics specialists, who contribute the experience of their work to this program, as well as renowned specialists from leading scientific societies.

The multimedia content developed with the latest educational technology will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive academic experience programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the orthodontist must try to solve the different professional practice situations that arise during the course. For this purpose, the dentist will be assisted by an innovative interactive video system created by renowned and experienced experts in the field of Orthodontics and Dentofacial Orthopedics with extensive teaching experience.

*This Professional Master's Degree offers learning in simulated environments, which provides an immersive learning experience designed to train for real-life situations.*

*It includes clinical cases to bring the program as close as possible to the reality of care in dentistry.*



# 02 Objectives

The Professional Master's Degree in Orthodontics and Dentofacial Orthopedics is aimed at facilitating the performance of the physician dedicated to orthodontic treatment.







“

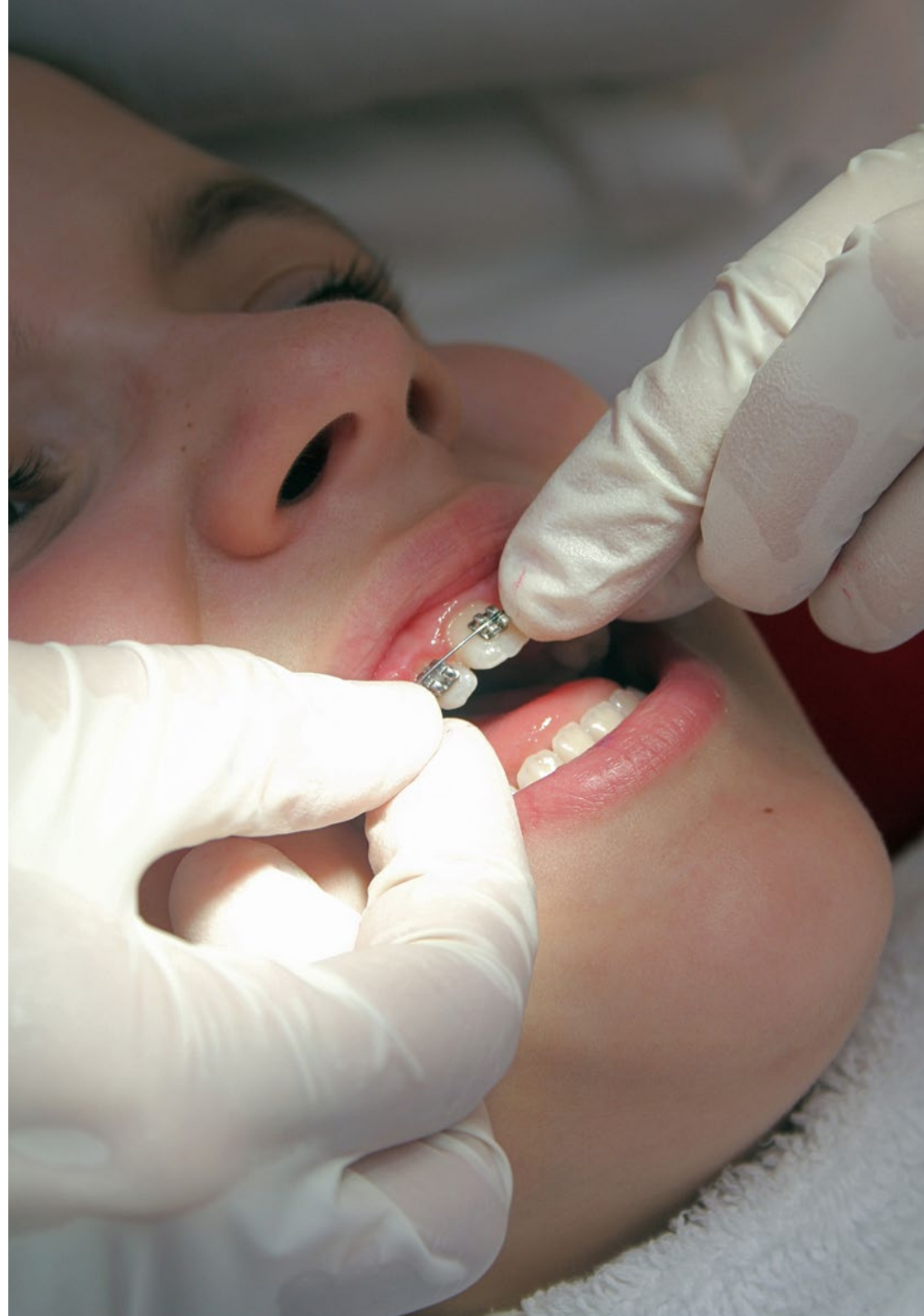
*This Professional Master's Degree is designed to help you update your knowledge in Orthodontics and Dentofacial Orthopedics, with the use of the latest educational technology, to contribute with quality and confidence to decision-making, diagnosis, treatment and patient support"*



## General objectives

---

- ♦ Gain up-to-date theoretical and practical knowledge in the different areas of orthodontics and dentofacial orthopedics, through evidence-based dentistry
- ♦ Apply acquired knowledge and problem-solving skills in new or unfamiliar environments with a multidisciplinary approach within broader contexts related to 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
- ♦ Have the ability to integrate knowledge and face the complexity of making judgments, while reflecting on the social and ethical responsibilities linked to the application of their knowledge and judgments
- ♦ Encourage the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific training
- ♦ Encourage professional stimulation through continuing education and research





## Specific objectives

---

### Module 1. Initial Diagnosis

- ◆ Consolidate structural and radiological anatomical knowledge, as well as the practical considerations that students should apply in the diagnosis, prognosis and therapeutic planning of orthodontic patients and those requiring dentofacial orthopedics

### Module 2. Advanced Diagnosis

- ◆ Prepare students in the field of diagnostic imaging of the human anatomy, especially in the area of dentistry. To do so, students should become familiar with the various imaging techniques available, along with their indications and limitations
- ◆ Learn about oral radiology, intra and extrabuccal, with special emphasis on lateral and frontal skull telerradiography. Students will also receive training in other techniques such as simple radiology, ultrasound, CT, CBCT and MRI, especially for the cervico-facial area

### Module 3. Etiology of Malocclusions and Dentofacial Deformities

- ◆ Train students in the skills to be able to diagnose, describe, classify, transmit and plan malocclusions treatment, being able to distinguish between skeletal and dental problems
- ◆ Acquire sufficient skills to diagnose, classify and treat dental malocclusions caused by osseo-dental discrepancy
- ◆ 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

### Module 4. Treatment Plan

- ◆ Be able to identify 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 patients, both physical, psychological and social
- ◆ Take medical histories, examine patients and take records
- ◆ Know how to take clinical histories and perform usual examinations, as well as request and interpret the complementary examinations used in comprehensive patient diagnosis

### Module 5. Advanced Clinical Biomechanics

- ◆ Know how to apply the retention protocols for different deformities, as well as the principles and mechanisms involved in physiological rebound and malocclusions recurrence
- ◆ Revise the principles of biomechanics applied to orthodontic and the morphofunctional fundamentals
- ◆ Update knowledge of bonding techniques for brackets and bands
- ◆ Classify the different types of microscrews
- ◆ Identify surgical aids to tooth movement, updating microperforation and corticotomy techniques

### **Module 6. Early Dentofacial Orthopedics**

- ♦ Know and understand the indications, contraindications and limits of Orthodontics,
- ♦ Dentofacial Orthodontics and Orthognathic Surgery
- ♦ Be able to identify and prevent or treat risk factors for patient relapse
- ♦ Determine the appropriate interventions in early orthopedics and neuro-occlusal rehabilitation (NOR)
- ♦ Review the planar law of minimum vertical dimension and functional masticatory angle
- ♦ Establish the necessary actions for the implementation of therapeutics during the first year
- ♦ Differentiate between the characteristics of therapy in the first dentition and in the mixed dentition and second dentition
- ♦ Describe the treatments in deciduous dentition and mixed first phase
- ♦ Establish current evidence-based protocols, including indications and contraindications at different treatment ages
- ♦ Gain up-to-date knowledge of the consequences of pathological situations of overbite, posterior crossbite and transversal problems
- ♦ Gain up-to-date knowledge of the diagnostic and therapeutic processes of facial asymmetry in children
- ♦ Describe the alterations in the eruption of canines, incisors, premolars and molars

### **Module 7. Late Dentofacial Orthopedics**

- ♦ Gain up-to-date knowledge of the diagnostic and therapeutic approach to space problems and serial extraction
- ♦ Predict the efficacy and efficiency of different treatments and correction stability

### **Module 8. Conventional Orthodontics**

- ♦ Review the basic therapeutic principles of the other specialties in medicine and dentistry
- ♦ Know and understand the different parts in elaborating scientific articles
- ♦ Know how to handle different databases in Health Sciences
- ♦ Develop strategies for searching and organizing information

### **Module 9. Advanced Treatments in Conventional Orthodontics**

- ♦ Identify disorders, pathologies or special characteristics that should be treated in collaboration with other Health Science specialists
- ♦ Know Orthodontic Specialist skills within a multidisciplinary team for treating special patients with dentofacial deformity and malocclusion
- ♦ Describe the techniques for dental implantology and the use of anchor screws
- ♦ Classify the different tools and materials for carrying out an implant procedure
- ♦ Distinguish the different types of anchor screws
- ♦ Gain up-to-date knowledge of clinical and laboratory techniques to improve system efficacy and efficiency
- ♦ Revise current evidence-based protocols
- ♦ Determine surgical and non-surgical aids to speed up dental movement
- ♦ Determine the therapeutic options for impacted teeth and other eruption disorders
- ♦ Describe the therapeutic options for open bite situations
- ♦ Gain up-to-date knowledge of the steps involved in the multipass technique

### **Module 10. Multidisciplinary Treatments**

- ♦ Develop skills in the search and organization of documentation, and in presenting and communicating their work adequately to the scientific community
- ♦ Create action plans that complement the different treatments in a comprehensive overview of any complications in orthodontics
- ♦ Determine the main characteristics of periodontal patients
- ♦ Describe the characteristics of the anterior front and its relationship to therapeutic options and the aesthetic component
- ♦ Classify the different types of orthodontics and prosthetics in multidisciplinary treatment
- ♦ Gain up-to-date knowledge of orthodontic techniques and the therapeutic options for SAHS in pediatric patients

- ♦ Gain up-to-date knowledge of orthodontic techniques and the therapeutic options for SAHS in adult patients
- ♦ Revise the MAD fundamentals for the treatment of SAHS in adult patients
- ♦ Describe record taking in the candidate patient
- ♦ Distinguish the different types of devices in multidisciplinary orthodontic therapy and describe their main characteristics
- ♦ Gain up-to-date knowledge on action protocols in orthodontics

### **Module 11. Lingual Orthodontics**

- ♦ Review the latest developments in advanced treatments in conventional orthodontics and multidisciplinary treatments
- ♦ Review the historical milestones of lingual orthodontics
- ♦ Classify the different types of lingual orthodontics
- ♦ Determine the most relevant differences between vestibular orthodontics and lingual orthodontics
- ♦ Gain up-to-date knowledge of the laboratory procedures in lingual orthodontics
- ♦ Gain up-to-date knowledge of the cementing and recementing procedure in the orthodontic patient
- ♦ Determine the protocols and classical arch sequences
- ♦ Identify the types of ligatures and their use
- ♦ Review the reasons for emergencies and the most frequent complications in lingual orthodontics
- ♦ Gain up-to-date knowledge of the combined use of microscrews

### **Module 12. Orthodontics and Orthognathic Surgery**

- ♦ Diagnose which are the main causes of orthognathic surgery
- ♦ Identify the correct procedure for the surgical procedure
- ♦ Postoperative Care
- ♦ Establish the objectives of orthognathic surgery
- ♦ Revise the morphofunctional fundamentals of the temporal-mandibular joint
- ♦ Gain up-to-date knowledge of the orthognathic surgery techniques and the fixed splints
- ♦ Gain up-to-date knowledge of the pre-surgical approach techniques used in orthognathic surgery
- ♦ Determine the pre-surgical planning phases and the functions of the dentist
- ♦ Identify and classify the different types of orthognathic surgery models
- ♦ Gain up-to-date knowledge of the different therapeutic options in the postoperative phase

### **Module 13. Thermoplastic Orthodontics**

- ♦ Gain up-to-date knowledge on research methodologies that allow for evidence-based orthodontics and dentofacial orthopedics

### **Module 14. Dental Aligner Correction in 3 Planes of Space**

- ♦ Identify and analyze the correct use of aligners for corrective benefit in orthodontics
- ♦ Identify the correct placement of the aligners

### **Module 15. Transparent Splints in Orthognathic and Oral Surgery**

- ♦ Review the latest developments in advanced treatments in conventional orthodontics and multidisciplinary treatments

### **Module 16. Multidisciplinary Thermoplastic Orthodontics and Case Completion**

- ♦ Gain up-to-date knowledge on the latest developments in aesthetic and/or invisible orthodontics
- ♦ Gain in-depth knowledge of multidisciplinary thermoplastic orthodontics

# 03 Skills

After passing the assessments of the Professional Master's Degree in Orthodontics and Dentofacial Orthopedics, the dentist will have acquired the professional skills required for quality and up-to-date practice based on the latest scientific evidence.





“

*With this program, you will be able to master new treatment procedures in Orthodontics and Dentofacial Orthopedics”*



## General skills

---

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



*Make the most of the opportunity and take the step to get up to date on the latest developments in Orthodontics and Dental Orthopedics”*







## Specific skills

---

- ◆ Know the anatomical craniofacial structures in order to establish dynamic relationships with the stomatognathic apparatus and dental occlusion functions
- ◆ Know and understand the interpretation of complementary tests through imaging and their application in differential diagnosis for malocclusions and dentofacial deformities
- ◆ Know the biological principles that determine the pathophysiology of bone apposition and resorption processes, and tooth movement. Learn to predict and interpret hard and soft tissues response to the application of therapeutic forces
- ◆ Know the principles and mechanisms of craniofacial growth and dental eruption, as well as the different functions of the stomatognathic apparatus and the oro-facial region
- ◆ Identify the etiological, genetic, epigenetic and environmental factors of 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 that supports their clinical use
- ◆ Understand and know how to apply the action principles and mechanisms of the appliances, as well as their indications and contraindications according to the type of malocclusion and/or the individual characteristics of patients
- ◆ Know how to perform the clinical and laboratory procedures for the design, manufacture, fitting and clinical control of prostheses and appliances used in orthodontics and dentofacial orthopedics
- ◆ 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 clinical histories and perform usual examinations, as well as request and interpret the complementary examinations used in comprehensive patient diagnosis
- ◆ Be able to identify 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
- ◆ Be able to make logical treatment plans integrating all therapeutic objectives, and design and/or prescribe the appropriate mechanics and therapeutic sequencing 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 the different treatments and correction stability
- ◆ Know how to apply the retention protocols for different deformities, as well as the principles and mechanisms involved in physiological rebound and malocclusions recurrence
- ◆ Be able to identify and prevent or treat recurrence risk factors (predisposing and/or triggering)
- ◆ Know and understand the basic therapeutic principles of other specialties in medicine and dentistry
- ◆ Be able to identify the alterations, pathologies or special characteristics that must be treated in collaboration with other Health Science specialists
- ◆ Know Orthodontic Specialist skills within a multidisciplinary team for treating special patients with dentofacial deformity and malocclusion



- ◆ Be able to perform all the clinical procedures for malocclusions and dentofacial deformities diagnosis. Clinical history, inspection, palpation, auscultation of the temporomandibular joint, functional manipulation, etc.
- ◆ Be able to identify individual patient characteristics, physical, psychic and/or social, which may condition the treatment plan and/or the opportunity for treatment
- ◆ Be able to create an adequate treatment plan and a logical therapeutic sequence for real patients, and acquire the ability to present and defend the results in a clinical session
- ◆ Be able to apply treatment protocols and clinical monitoring on real patients, and acquire the ability to systematically collect clinical data on each patient
- ◆ 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 failure to cooperate and possible causes
- ◆ Know how to deal with medical emergencies characteristic of orthodontic treatments
- ◆ Know and understand the functions of orthodontic specialists within a multidisciplinary team
- ◆ Know the different therapeutic guidelines and/or the different possible therapeutic protocols when planning treatments for specific deformities
- ◆ Acquire adequate interprofessional communication skills
- ◆ Develop competences in the search and organization of documentation, and in presenting and communicating their work adequately to the scientific community
- ◆ Know the research methodologies that allow for evidence-based orthodontics and dentofacial orthopedics
- ◆ Know and understand the different parts in elaborating scientific articles
- ◆ Know how to handle different databases in Health Sciences
- ◆ Develop strategies for searching and organizing information
- ◆ Incorporate scientific research and evidence-based practice as part of professional culture
- ◆ Develop adequate communication and presentation strategies to inform the scientific community
- ◆ Develop an educational attitude toward improvement by constantly searching for information and professional progress
- ◆ Develop autonomous learning to keep professional knowledge, skills, abilities and aptitudes up to date

# 04

# Course Management

The program's teaching staff includes leading specialists in Orthodontics and Dentofacial Orthopedics and other related areas, who contribute their years of work experience to this program. Additionally, other recognized specialists participate in its design and preparation, which means that the program is developed in an interdisciplinary manner.



“

*Learn the latest advances in Orthodontics  
and Dentofacial Orthopedics procedures  
from leading professionals"*

## Management



### Dr. Martínez Font, Juan

- ♦ PhD in Dentistry from CEU Cardenal Herrera University
- ♦ Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- ♦ Professor for the Specialization Degree in Orthodontics (CEU Cardenal Herrera University)
- ♦ Associate Professor of Orthodontics II, III IV in the Department of Dentistry at the CEU Cardenal Herrera University
- ♦ Master's Degree in Orthodontics and Dentofacial Orthopedics from the CEU Cardenal Herrera University
- ♦ Postgraduate Diploma in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- ♦ Degree in Dentistry from CEU Cardenal Herrera University
- ♦ Member of the Spanish Society of Orthodontics (SEDO)
- ♦ Invisalign Certification
- ♦ Orthodontics and Dentofacial Orthopedics Private Practice



### Mr. Veres Jordá, Jesús

- ♦ Collaborating professor of the Master's Degree in Orthodontics, CEU Cardenal Herrera University
- ♦ Degree in Dentistry from Cardenal Herrera-CEU University
- ♦ Postgraduate Diploma in Orthodontics at the Cardenal Herrera-CEU University
- ♦ Postgraduate Degree in Orthodontics, The Charles H. Tweed International Foundation for Orthodontic Research. Tucson, Arizona EEUU
- ♦ Master's Degree in Orthodontics, CEU Cardenal Herrera University
- ♦ Certificate of Lingual Orthodontics, Incognito 3M System
- ♦ Master's Degree in Invisalign Invisible Orthodontics System
- ♦ Postgraduate Degree in NeuroOcclusal Rehabilitation and Orofacial Pain
- ♦ Member of the Spanish Society of Orthodontics (SEDO)

## Professors

### Mr. Alonso Pérez-Barquero, Jorge

- ◆ Degree in Dentistry from the University of Valencia
- ◆ Associate Professor, University of Valencia
- ◆ Collaborating Professor for the Master's Degree in Dental Prosthesis at the University of Valencia
- ◆ Master's Degree in Dental Prosthesis from the University of Valencia
- ◆ Master's Degree in Dental Sciences from the University of Valencia
- ◆ Diploma in Esthetic Dentistry Aparicio Clinic
- ◆ Diploma in Oral Rehabilitation and Occlusion Dawson Academy Spain
- ◆ Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (SEPES)
- ◆ SEPES Gascón Award 2013
- ◆ Best Oral Communication of the 2012 Annual Meeting of the Center for Odontostomatological Studies.
- ◆ Author and co-author of publications in national and international journals

### Ms. Alfonso Chulbi, Puri

- ◆ Professor for the Specialization Degree in Orthodontics (Catholic University of Valencia)
- ◆ Associate Professor of Ortho I and II in the Department of Dentistry in English (Catholic University of Valencia)
- ◆ Postgraduate Course in Orthodontics. Center for Orthodontic Studies, Gnathos, Madrid
- ◆ Orthodontics techniques in Dental Smiles Dublin, Irlanda
- ◆ Invisible Orthodontics Certification 3D Orthodontics Madrid
- ◆ Win Lingual Orthodontics Certification
- ◆ Pathology and Oral Medicine Course. University of Valencia
- ◆ Degree in Dentistry from the University of Valencia
- ◆ Orthodontics and Dentofacial Orthopedics Private Practice

### Dr. Castañer Peiro, Amparo

- ◆ PhD in Medicine and Surgery from the Cardenal Herrera CEU University
- ◆ Degree in Medicine and Surgery from the University of Valencia
- ◆ Speciality in Stomatology from the University of Valencia
- ◆ Master's Degree in Dentistry from the Complutense University of Madrid
- ◆ Associate Professor of Orthodontics, CEU Cardenal Herrera University
- ◆ Dentistry Professor of Orthodontics II and III, CEU Cardenal Herrera University
- ◆ Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics, CEU Cardenal Herrera University
- ◆ Professor for the Expert Diploma in Orthodontics and Dentofacial Orthopedics, CEU Cardenal Herrera University
- ◆ Certificate in Invisiling and Lingual Orthodontics
- ◆ Professional Degree in Oral-Dental Public Health certified by the UCM
- ◆ Member of the following associations: SEDO, AAO, EOS, WFO, AESOR, CIRNO
- ◆ Member of the Board of Directors of the Center for Odonto-Estomatologic Studies of the College of Dentists of Valencia
- ◆ Membership of the Committee of Experts of the ANECA in the Community of Madrid
- ◆ Orthodontics and Dentofacial Orthopedics Private Practice

**Dr. 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 from the University of Valencia
- ♦ PhD in Medicine and Surgery from the University of Valencia
- ♦ Former Associate professor attached to the Stomatology Department in the Faculty of Medicine and Dentistry, University of Valencia
- ♦ Former Professor for the Master's Degree in Orthodontics at the Faculty of Medicine and Dentistry, University of Valencia
- ♦ Former Professor for the Master's Degree in Temporomandibular Joint Pathology at the Faculty of Medicine and Dentistry, University of Valencia
- ♦ Associate Professor, responsible for the subjects Orthodontics III and IV of the Faculty of Health Sciences at Cardenal Herrera Ceu University.
- ♦ Coordinator and Professor of the Postgraduate Diploma in Orthodontics, CEU Cardenal Herrera University
- ♦ Coordinator and professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics, CEU Cardenal Herrera University
- ♦ Various national and international publications
- ♦ Directed ten doctoral theses
- ♦ Former Secretary of the Center for Odonto-Estomatological Studies III Region
- ♦ Former Scientific Member of the Spanish Association of Orthodontic Specialists
- ♦ Former Editor of the Bulletin of AESOR (Official Journal of the Spanish Association of Orthodontic Specialists)
- ♦ Invited speaker at numerous national and international congresses
- ♦ Orthodontics and Dentofacial Orthopedics Private Practice

- ♦ Certification in the Lingual Orthodontics System, Incognito
- ♦ Theoretical and practical Postgraduate Course in Advanced Multidisciplinary Orthodontics, Face Roth Williams philosophy
- ♦ Master's Degree in Transparent Orthodontics Invisalign Rivero System
- ♦ Member of the Spanish Society of Orthodontics
- ♦ Private Clinical Practice

**Dr. Bolás Colvée, Belén**

- ♦ PhD in Dentistry from the University of Valencia
- ♦ Associate Professor of Orthodontics at the European University
- ♦ Master's Degree in Orthodontics and Dentofacial Orthopedics CEU Cardenal Herrera University
- ♦ Expert Diploma in Orthodontics and Dentofacial Orthopedics CEU Cardenal Herrera University
- ♦ PhD in Dentistry from the University of Valencia
- ♦ Member of the Spanish Society of Orthodontics
- ♦ Member of the Spanish Society of Aligners
- ♦ Invisalign Certification
- ♦ Orthodontics and Dentofacial Orthopedics Private Practice



**Ms. Cañada Luna, Isabel**

- ◆ Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics from the CEU Cardenal Herrera University
- ◆ Postgraduate Diploma in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- ◆ Courses belong to the Third Cycle Research period, CEU Cardenal Herrera University (Valencia, Spain)
- ◆ Degree in Dentistry from CEU Cardenal Herrera University
- ◆ Member of the Spanish Society of Orthodontics (SEDO) Member of the Study Center of the Official College of Dentists and Stomatologists of Aragon
- ◆ Orthodontics and Dentofacial Orthopedics, Exclusive Private Practice

**Ms. Primo Trullenque, Anna**

- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics( CEU Cardenal Herrera University)
- ◆ Postgraduate Diploma in Orthodontics and Dentofacial Orthopedics at (CEU Cardenal Herrera University)
- ◆ Master's Degree in Adhesive and Aesthetic Dentistry, University of Valencia
- ◆ Degree in Dentistry from CEU Cardenal Herrera University
- ◆ Member of the Spanish SEDO (Society of Orthodontics)
- ◆ Invisalign Certification
- ◆ Orthodontics and Dentofacial Orthopedics Private Practice

**Ms. Ferrer Serrador, Clara María**

- ◆ Professor for the Master's Degree in Comprehensive Orthodontics at the Catholic University of Valencia
- ◆ Professor for the Master's Degree in Comprehensive Orthodontics at the Catholic University of Valencia
- ◆ Professor of Orthodontics I and II for the Degree in Dentistry at the Catholic University of Valencia
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics from the University of Alcalá (UAH)
- ◆ Degree in Dentistry from the University of Valencia
- ◆ WIN Certification
- ◆ Invisalign Certification Master's Degree in Invisible Orthodontics based on Dr. Román's Invisalign system
- ◆ Myofunctional Orthodontics Course (Myobrace)
- ◆ Damon Master (Drs. García Espejo and Perera Grau)
- ◆ Member of the Spanish Society of Orthodontics (SEDO)
- ◆ Orthodontics and Dentofacial Orthopedics Private Practice

#### **Dr. Galán López, Lidia**

- ♦ PhD in Dentistry from the Catholic University of Valencia
- ♦ Professor for the Masters Degrees in Comprehensive Orthodontics and in Comprehensive Orthodontics
- ♦ Professor of Orthodontics I and II in the Department of Dentistry at the Catholic University of Valencia
- ♦ Master's Degree in Orthodontics and Dentofacial Orthopedics from the CEU Cardenal Herrera University
- ♦ Postgraduate Diploma in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- ♦ Degree in Dentistry, International University of Catalonia
- ♦ Member of the Spanish Society of Orthodontics (SEDO)
- ♦ Active Member of the Spanish Association of Specialists in Orthodontics (AESOR)
- ♦ Invisalign and Incognito Certification
- ♦ Orthodontics and Dentofacial Orthopedics, Exclusive Practice

#### **Dr. Guinot Barona, Clara**

- ♦ Degree in Dentistry from the University of Valencia
- ♦ PhD in Dentistry from CEU Cardenal Herrera University
- ♦ Postgraduate Diploma in Orthodontics from CEU Cardenal Herrera University
- ♦ Master's Degree in Orthodontics and Dentofacial Orthopedics from the CEU - Cardenal Herrera University
- ♦ Associate Professor for the Dentistry Degree, CEU Cardenal Herrera University (Valencia, Spain)
- ♦ Collaborating Professor for the Master's Degree in Pediatric Dentistry at CEU Cardenal Herrera University
- ♦ Collaborating Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics, CEU Cardenal Herrera University

#### **Ms. Ilzarbe Ripoll, Marta**

- ♦ Master's Degree in Advanced Orthodontics (UEM)
- ♦ Master Invisalign (Drs. Peydro and Malagón)
- ♦ Damon Master (Drs. Perera and García-Espejo)
- ♦ Insignia Lingual Orthodontics System Certification
- ♦ Degree in Dentistry from the University of Valencia
- ♦ Business Manager at Dental Clinic (ESADE)
- ♦ Higher Program Business Administration and Management (EAE)
- ♦ Member of the Spanish Society of Orthodontics and Dentofacial Orthopedics (SEDO)
- ♦ Member Spanish Society of Alignment (SEDA)
- ♦ Members Spanish Society Periodontics and Osseointegration (SEPA)

#### **Dr. Laparra Hernández, Raquel**

- ♦ PhD in Dentistry from the University of Valencia
- ♦ Associate Professor of Orthodontics at CEU Cardenal Herrera University
- ♦ Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- ♦ Master's Degree in Orthodontics and Dentofacial Orthopedics, UCH-CEU
- ♦ Professional Master's Degree in Dentistry, UCH-CEU
- ♦ Master's Degree in Dental Sciences from the University of Valencia
- ♦ Degree in Singing and Instrument Pedagogy, specializing in clarinet from the Conservatorio Superior de Música Joaquín Rodrigo
- ♦ Invisalign Certification
- ♦ Expert Master's Degree in Invisalign by Dr. Román
- ♦ Course in Neurooclusal Rehabilitation
- ♦ Myobrace Course
- ♦ Incognito Certification

**Dr. Molina Villar, Sara**

- ◆ PhD in Dentistry from CEU Cardenal Herrera University
- ◆ Official Master's Degree in Orthodontics and Dentofacial Orthopedics, CEU Cardenal Herrera University
- ◆ Expert Diploma in Orthodontics and Dentomaxillary Orthopedics at CEU Cardenal Herrera University
- ◆ Degree in Dentistry from the University of Valencia, Award for Extraordinary Performance
- ◆ Collaborating Professor for the Master's Degree in Orthodontics Catholic University of Valencia
- ◆ Theoretical and Practical Modular Course in Orthodontics and Orthognathic Surgery
- ◆ Certification in the Invisalign System

**Mr. Orozco Aparicio, Iñaki**

- ◆ Degree in Dentistry from the University of Valencia
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics from the University of Valencia
- ◆ Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics and Specialization Degree in Orthodontics, CEU Cardenal Herrera University
- ◆ Professor for the Degree in Dentistry Courses Orthodontics III and Orthodontics IV
- ◆ Collaborating Professor for the Master's Degree in Clinical Orthodontics at UAH
- ◆ Advanced Program in Management and Strategic Management IE-Madrid
- ◆ Teaching collaborator in various continuing education projects in dental schools in Las Palmas and Tenerife in lingual orthodontics
- ◆ Clinical practice in private practice as a specialist in Orthodontics in Spain and the United Kingdom
- ◆ Member of the Spanish Society of Prosthetics, Stomatology and Aesthetics (AESOR) and the Spanish Society of Oral Surgery (SEDO)
- ◆ Member of the GDC (General Dental Council of the United Kingdom)

**Dr. Sánchez García, María José**

- ◆ PhD in Dentistry at the University of Murcia..
- ◆ Degree in Dentistry from the University of Murcia
- ◆ Postgraduate Diploma in Periodontics from the University of Murcia
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics from the University of Valencia
- ◆ Former Associate Professor, CEU Cardenal Herrera University, Valencia
- ◆ Former Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics, CEU Cardenal Herrera, Valencia
- ◆ Invisalign and Incognito Certification
- ◆ Member of the Spanish Society of Orthodontics
- ◆ Member of AESOR (Association of Specialists in Orthodontics and Dentofacial Orthopedics)
- ◆ Member of the World Federation Orthodontists (WFO)
- ◆ Exclusive Practice Orthodontist at Valencia and Murcia

**Dr. Sánchez Albero, Ana**

- ◆ PhD in Dentistry from CEU Cardenal Herrera University
- ◆ Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- ◆ Professor for the Specialization Degree in Orthodontics (CEU Cardenal Herrera University)
- ◆ Professor of Comprehensive Orthodontics (Catholic University)
- ◆ Master's Degree in Transparent Orthodontics
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics from the CEU Cardenal Herrera University

- ◆ Postgraduate Diploma in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- ◆ Degree in Dentistry from CEU Cardenal Herrera University
- ◆ Member of the Spanish Society of Orthodontics (SEDO)
- ◆ Invisalign Certification

**Ms. Sanz-Orrio Soler, Icíar**

- ◆ Associate Professor in the English program for the Degree of Dentistry of the Catholic University of Valencia
- ◆ Professor for the Specialization Degree in (CEU Cardenal Herrera University)
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics from the CEU Cardenal Herrera University
- ◆ Postgraduate Diploma in Orthodontics and Dentofacial Orthopedics at CEU Cardenal Herrera University
- ◆ Degree in Dentistry from CEU Cardenal Herrera University
- ◆ Master's Degree in Invisalign Clear Aligner Aystem with Dr. Manuel Román
- ◆ Tweed Study Course in Tucson, Arizona
- ◆ Incognito Certification Course
- ◆ Course on Neuro Rehabilitation and Integral Treatment of the TMJ with Dr. Javier Plaza
- ◆ Member of the Spanish Society of Orthodontics (SEDO)
- ◆ Affiliated Member of the Spanish Associations of Exclusive (AESOR)
- ◆ Member of the World Federation of Orthodontists, WFO
- ◆ Member of the Spanish Society of Alignment SEDA
- ◆ Orthodontics and Dentofacial Orthopedics Private Practice



**Dr. Torrella Girbes, Mar**

- ◆ Degree in Dentistry from the University of Valencia
- ◆ Award for an extraordinary academic record from the University of Valencia
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics from the University of Valencia
- ◆ Doctor of Medicine "Cum Laude" from the UCH-CEU in Valencia.
- ◆ Professor in charge of Orthodontics II at UCH-CEU
- ◆ Collaborating professor in the Dentistry Department in the Orthodontics I subject in UHU-CEU
- ◆ Professor for the Specialization Master's Degree in Orthodontics, UHU-CEU
- ◆ Professor of the Master's Degree in Orthodontics and Dentofacial Orthopedics CEU Cardenal Herrera University
- ◆ Certificate of Lingual Orthodontics Incognito System
- ◆ Invisalign Certification Invisalign provider
- ◆ Advanced Training Course on Occlusion, Craniomandibular Dysfunction, Orofacial Pain and Oral Sleep Medicine
- ◆ Member of the Spanish Society of Orthodontics (SEDO).
- ◆ Member of the Spanish Association of Exclusive Orthodontists (AESOR)
- ◆ Member of the Tweed Foundations (Tucson-Arizona)
- ◆ Exclusive dedication to the practice of the specialty of Orthodontics and Dentofacial Orthopedics

**Ms. Valero Remohi, Paloma**

- ◆ Professor for the Master's Degree in Orthodontics and Dentofacial Orthopedics (CEU Cardenal Herrera University)
- ◆ Professor for the Specialization Degree in (CEU Cardenal Herrera University)
- ◆ Associate Professor in charge of Orthodontics I and Orthodontis II in the Department of Dentistry, CEU Cardenal Herrera University
- ◆ Master's Degree in Orthodontics and Dentofacial Orthopedics, International University of Catalonia
- ◆ Doctoral Candidate and Diploma of Advanced Studies, International University of Catalonia
- ◆ Diploma in Clinical Management and Dental Management Dental Doctors Institute of Management
- ◆ Degree in Dentistry. University of Valencia
- ◆ Invisalign and Incognito Certification
- ◆ Affiliated member of the Spanish Society of Orthodontics (SEDO) and the Spanish Association of Orthodontists (AESOR)
- ◆ Exclusive Orthodontist Orthodontics and Orthopedics Private Practice



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

05

# Structure and Content

The structure of the contents has been designed by a team of professionals from leading dental centers and universities, who are aware of the relevance of up-to-date training to be able to intervene in the need for Orthodontics and Dentofacial Orthopedics, and who are committed to quality teaching through new educational technologies.





“

*This Professional Master's Degree in Orthodontics and Dentofacial Orthopedics contains the most complete and up-to-date scientific program on the market”*

## Module 1. Initial Diagnosis

- 1.1. Systematic Diagnosis in Dentistry
  - 1.1.1. First Visit and Clinical History
  - 1.1.2. Patient Exploration
  - 1.1.3. Ordinary Records
  - 1.1.4. Complementary Records
  - 1.1.5. Myofunctional Records
- 1.2. Staged Orthodontic Diagnosis
  - 1.2.1. Establishing Problem Listing
  - 1.2.2. Establishing Therapeutic Objectives
  - 1.2.3. Mechanotherapy Planning and Equipment

## Module 2. Advanced Diagnosis

- 2.1. Cephalometric Analysis 3D Diagnosis CBCT and CT
  - 2.1.1. Cephalometric Analysis
    - 2.1.1.1. Introduction
    - 2.1.1.2. Craniometric Points Description
    - 2.1.1.3. Steiner Cephalometric Analysis
    - 2.1.1.4. Ricketts' Cephalometric Analysis
  - 2.1.2. 3D Diagnosis
    - 2.1.2.1. Introduction
    - 2.1.2.2. System Fundamentals
    - 2.1.2.3. CBCT vs. Computerized Tomography
    - 2.1.2.4. Advantages
    - 2.1.2.5. Disadvantages
    - 2.1.2.6. The Voxel
    - 2.1.2.7. Image Interpretation
    - 2.1.2.8. Radiation
    - 2.1.2.9. Clinical Application of CBCT





- 2.2. Diagnosis and Treatment of Habits
  - 2.2.1. Introduction
  - 2.2.2. Atypical Swallowing in Children
  - 2.2.3. Nutritional Sucking Habits
    - 2.2.3.1. Breastfeeding
    - 2.2.3.2. Feeding Bottles
  - 2.2.4. Non-Nutritional Sucking Habits
    - 2.2.4.1. Digital Sucking
    - 2.2.4.2. Pacifier Habits
  - 2.2.5. Mouth Breathing
  - 2.2.6. Dyslalia
  - 2.2.7. Other Habits
- 2.3. Early Diagnosis of At-Risk Patients
  - 2.3.1. Caries and White Spots: Current Techniques Preventive Treatment for Enamel Demineralization
  - 2.3.2. Root Resorptions: Current Techniques. Preventive Treatment for Root Resorption
  - 2.3.3. Differential Diagnosis of the Most Frequent Temporomandibular Disorders in Orthodontic Patients
  - 2.3.4. Idiopathic Condylar Resorption: Current Diagnostic Techniques. Preventive Treatment for Severe Progressive Open Bite

### Module 3. Etiology of Malocclusions and Dentofacial Deformities

- 3.1. Craniofacial Growth and Development
  - 3.1.1. Types of Postnatal Growth
  - 3.1.2. Integrating Facial Development
  - 3.1.3. Upper Jaw Growth
  - 3.1.4. Jaw Growth
- 3.2. Tooth Eruption Pathophysiology
  - 3.2.1. Eruption Phases
  - 3.2.2. Tooth Eruption in Adults
  - 3.2.3. Eruption Mechanisms
  - 3.2.4. General Development of Dentition
- 3.3. Dentoalveolar Growth and Adaptation in Different Malocclusions and Dentofacial Deformities

- 3.3.1. Dentoalveolar Growth and Adaptation in Transverse Malocclusions
- 3.3.2. Dentoalveolar Growth and Adaptation in Vertical Malocclusions
- 3.3.3. Dentoalveolar Growth and Adaptation in Sagittal Malocclusions
- 3.4. Differential Diagnosis of Etiological Factors
  - 3.4.1. Malocclusion Etiological Factors
  - 3.4.2. Specific Causes of Malocclusion
  - 3.4.3. Genetic Influences
  - 3.4.4. Environmental Influences
  - 3.4.5. Current Etiological Perspective

### Module 4. Treatment Plan

- 4.1. Concepts and Objectives
  - 4.1.1. Establishing Priority Lists for Orthodontic Problems
  - 4.1.2. Establishing Treatment Possibilities and Therapeutic Sequencing
  - 4.1.3. Assessing Potential Treatment Factors
  - 4.1.4. Types of Treatment
  - 4.1.5. Treating Orthodontic Disorders
- 4.2. Evidence-Based Orthodontics: PICO, Databases and Critical Reading
  - 4.2.1. Formulating Clinical Questions
  - 4.2.2. Literature Consultation
  - 4.2.3. Types of Clinical Studies
  - 4.2.4. Bias and Confusion Factors
  - 4.2.5. Evidence Levels and Degrees of Recommendation
  - 4.2.6. Critical Assessment of Results
- 4.3. Limits of Orthodontics and Dentofacial Orthopedics According to Malocclusion Type and Patient Age
  - 4.3.1. Growth Modification in Skeletal Problem Treatments
  - 4.3.2. Biological Limits
  - 4.3.3. Soft Tissue Limitations
- 4.4. Early or Late Treatment Indications
  - 4.4.1. Determining Skeletal Maturity
  - 4.4.2. Malocclusion Evolution during Growth
  - 4.4.3. Early Treatment for Malocclusions

- 4.5. Determining the Need for Therapeutic Extractions
  - 4.5.1. Definition of Volumetric Malocclusions
  - 4.5.2. Premolar Therapeutic Extractions
  - 4.5.3. Special Extraction Cases
  - 4.5.4. Stripping Technique as an Alternative to Tooth Extractions
- 4.6. Preparing Individualized Treatment Plans
  - 4.6.1. General Considerations in Individualized Treatment Planning
  - 4.6.2. Determining Individualized Treatment Plans
  - 4.6.3. Auxiliary Tools to Determine Individual Treatment Plans: Steiner's Analysis

### Module 5. Advanced Clinical Biomechanics

- 5.1. Biomechanics Applied to Orthodontics and Dentofacial Orthopedics
  - 5.1.1. Active Removable Plaques
  - 5.1.2. Functional Equipment
    - 5.1.2.1. Action Modes
    - 5.1.2.2. Orthopedic Action
    - 5.1.2.3. Dental Action
- 5.2. Bracket and Band Cementing Techniques
  - 5.2.1. Direct Cementing
  - 5.2.2. Indirect Cementing
  - 5.2.3. Indications and Limitations
- 5.3. Microscrews
  - 5.3.1. General Indications
  - 5.3.2. Limitations of Use
- 5.4. Surgical Aids to Tooth Movement
  - 5.4.1. Anatomy of the Periodontium
  - 5.4.2. Orthodontic Tooth Movement Physiology
  - 5.4.3. Why Teeth Move Faster
  - 5.4.4. Types of Surgical Aids

### Module 6. Early Dentofacial Orthopedics

- 6.1. Early Orthopedics: Neuro-Occlusal Rehabilitation
  - 6.1.1. Concept and Justification
  - 6.1.2. Planas' Law of Minimum Vertical Dimension and Planas' Functional Masticatory Angle
  - 6.1.3. Planas' Laws: Stomatognathic System Development
  - 6.1.4. First Year Treatment
  - 6.1.5. First Dentition Therapeutics
  - 6.1.6. Mixed and Second Dentition Therapeutics
- 6.2. Treatments in Deciduous Dentition and Mixed First Phase
  - 6.2.1. Class III and Anterior Crossbite
  - 6.2.2. Class II
  - 6.2.3. Open Anterior Bite
  - 6.2.4. Overbite
  - 6.2.5. Posterior Crossbite and Transverse Problems: Facial Asymmetry in Children. Treating Children with Alveolar Osteitis (Dry Socket)
  - 6.2.6. Eruption Disorders: Canines, Incisors, Premolars and Molars
  - 6.2.7. Space Constraints

### Module 7. Late Dentofacial Orthopedics

- 7.1. Treatments in Permanent Dentition: Late Orthopedics
  - 7.1.1. Etiology
  - 7.1.2. Treatment Indications
  - 7.1.3. Limitations
- 7.2. Class III Treatments
  - 7.2.1. Etiology
  - 7.2.2. Treatment Indications
  - 7.2.3. Limitations
- 7.3. Class II Treatments
  - 7.3.1. Etiology
  - 7.3.2. Treatment Indications
  - 7.3.3. Limitations

- 7.4. Open Anterior Bite Treatment
  - 7.4.1. Open Anterior Bite Definition
  - 7.4.2. Open Anterior Bite Treatment
  - 7.4.3. Late Therapies for Open Anterior Bite
- 7.5. Overbite Treatment
  - 7.5.1. Etiology
  - 7.5.2. Treatment Indications
  - 7.5.3. Limitations
- 7.6. Child and Adolescent Posterior Crossbite and Transverse Problems
  - 7.6.1. Concept and Classification
  - 7.6.2. Epidemiology
  - 7.6.3. Etiology
  - 7.6.4. Diagnosis
  - 7.6.5. Treatment
  - 7.6.6. New Technologies

## Module 8. Conventional Orthodontics

- 8.1. Treatments for Stage 2 Mixed and Early Permanent Dentition
  - 8.1.1. Treatment Protocols
  - 8.1.2. Indications and Contraindications. Fixed Equipment
    - 8.1.2.1. Advantages and Disadvantages. Fixed Equipment
  - 8.1.3. Malocclusions
    - 8.1.3.1. Transversal Malocclusions
    - 8.1.3.2. Vertical Malocclusions
  - 8.1.4. Retention/Relapse
- 8.2. Bracket Cementation Specification: Malocclusion Type and/or Therapeutic Objectives
  - 8.2.1. Installing Pre-Adjusted Equipment
    - 8.2.1.1. Bracket and Tube Location
    - 8.2.1.2. Mesiodistal Location
    - 8.2.1.3. Vertical Position ("Height")
    - 8.2.1.4. Inclination
    - 8.2.1.5. Vestibular Face Fitting
  - 8.2.2. Cementing in Case of a Deep Curve of Spee
  - 8.2.3. Cementing in Case of Class II Molar
  - 8.2.4. Cementing in Fractured or Abraded Teeth
- 8.3. First Phase: Alignment and Leveling Types of Intrusion
  - 8.3.1. Diet
    - 8.3.1.1. Selection Principles for Alignment Arches
    - 8.3.1.2. Symmetric Crowding Alignment
    - 8.3.1.3. Alignment in Case of Premolar Extraction
    - 8.3.1.4. Alignment in Non-Extraction Cases
  - 8.3.2. Levels
    - 8.3.2.1. Extrusion Leveling (Relative Intrusion)
    - 8.3.2.2. Intrusion Leveling
- 8.4. Second Phase: Work, Closing Extraction Spaces
  - 8.4.1. Molar Ratio Correction
    - 8.4.1.1. Differential Growth in Class II Patients
    - 8.4.1.2. Differential Anchoring of Extraction Spaces
    - 8.4.1.3. Distalization
  - 8.4.2. Closing Extraction or Residual Spaces
    - 8.4.2.1. Continuous Arch with Locking Handles or DKL Arch
    - 8.4.2.2. Sliding
  - 8.4.3. Overjet and Overbite Correction
  - 8.4.4. Middle Line Centering
- 8.5. Third Phase: Completion Retention Design
  - 8.5.1. Retention Definition
  - 8.5.2. Types of Retainers
    - 8.5.2.1. Fixed Retainers
    - 8.5.2.2. Removable Retainers
  - 8.5.3. Retention Duration
    - 8.5.3.1. Cases Where Retention May Not Be Required
    - 8.5.3.2. Cases Requiring Permanent or Semipermanent Retention
    - 8.5.3.3. Cases Requiring a Variable Retention Period

## Module 9. Advanced Treatments in Conventional Orthodontics

- 9.1. Implants and Microscrews as Anchorage
  - 9.1.1. Microscrew Indications and Limitations
    - 9.1.1.1. Main Indications
    - 9.1.1.2. Skeletal Anchorage Limitations and Complications
  - 9.1.2. Clinical and Laboratory Techniques to Improve System Effectiveness and Efficiency: Current Evidence-Based Protocols
    - 9.1.2.1. Implanting Microscrews
    - 9.1.2.2. Activating Microscrews
- 9.2. Surgical and Non-Surgical Aids to Speed Up Movement
  - 9.2.1. Chemical Techniques
  - 9.2.2. Physical Techniques
  - 9.2.3. Surgical Techniques
  - 9.2.4. Micro-Osteoperforation Indications
- 9.3. Impacted Teeth Treatment and Other Eruption Disorders
  - 9.3.1. Non-Erupted or Impacted Teeth
  - 9.3.2. Retained Canines
  - 9.3.3. Treating Other Eruption Disorders
- 9.4. Treating Open Bites: Multi-Loop Technique
  - 9.4.1. Multi-Loop Structure and Function
  - 9.4.2. Multi-Loop Technique Diagnosis
  - 9.4.3. Treating Class III High Angle
  - 9.4.4. Treating Class III Low Angle
  - 9.4.5. Treating Class I Open Bite
  - 9.4.6. Treating Class II Open Bite





## Module 10. Multidisciplinary Treatments

- 10.1. Treating Periodontal Patients
  - 10.1.1. Specific Characteristics in Adult Patients
  - 10.1.2. Anatomy of the Periodontium
  - 10.1.3. Multidisciplinary or Interdisciplinary Treatments
  - 10.1.4. Diagnosing Adult Patients and Determining Treatment Goals
  - 10.1.5. Preparing Adult Orthodontic Patients for Orthodontic Treatment
  - 10.1.6. Stripping Tool as an Essential Element in Adult Periodontal Patients
  - 10.1.7. A Special Entity: Posterior Bite Collapse in Adult Patients
- 10.2. Treatment and Aesthetics in Anterior Fronts: Orthodontics and Prosthetics
  - 10.2.1. Fundamental Requirements for Successful Occlusal Therapy as Proposed by Dawson
  - 10.2.2. The Six Decisions Affecting the Functional Anatomy Matrix
  - 10.2.3. Previous Guidelines
  - 10.2.4. Fundamental Aesthetic Criteria
- 10.3. Orthodontics and Treating SAHS in Children
  - 10.3.1. Anatomy of the Respiratory System
  - 10.3.2. Lymphoid System
  - 10.3.3. General Concepts of Sleep: Sleep and Breathing
  - 10.3.4. Clinical Examination in Children with Suspected SAHS
- 10.4. Orthodontics and Treating SAHS in Adults
  - 10.4.1. Sleep Medicine
  - 10.4.2. Sleep Apnea-Hypopnea Syndrome (OSAHS)
  - 10.4.3. Efficacy of Mandibular Advancement Devices (MADs)
  - 10.4.4. Therapy Management and Monitoring Protocol

## Module 11. Lingual Orthodontics

- 11.1. History and Introduction to Lingual Equipment
- 11.2. Why Lingual Orthodontics?
  - 11.2.1. Review of the Different Global Systems Available
- 11.3. Basic Necessary Materials for Predetermined Systems
  - 11.3.1. Expendable Materials
  - 11.3.2. Non-Expendable Materials
- 11.4. Patient Selection and Records
  - 11.4.1. Characteristics of Lingual Patients
  - 11.4.2. Silicone Impressions: Procedure
  - 11.4.3. Digital Leap: Scanner
  - 11.4.4. Preparing Lab Sheets and Selecting Prescriptions
- 11.5. Keys to Consider in Lingual Orthodontic Treatments
- 11.6. Vestibular vs. Lingual Biomechanical Differences: Apparatus Update for 3 Planes of Space
- 11.7. Laboratory Procedures
  - 11.7.1. Apparatus Manufacturing Using the Hiro System
    - 11.7.1.1. Introduction
    - 11.7.1.2. Step-by-Step Procedure
    - 11.7.1.3. Maxillary Arch
    - 11.7.1.4. Mandibular Arch
    - 11.7.1.5. Using a Full-Arch Arch-Wire
    - 11.7.1.6. Bracket Placement
    - 11.7.1.7. Individual Tray Manufacture
    - 11.7.1.8. Perfecting Bracket Base





- 11.7.2. Apparatus Manufacturing Using the Incognito™ System
  - 11.7.2.1. Manufacture Process
  - 11.7.2.2. Set-Up
  - 11.7.2.3. Computer-Assisted Bracket Design
  - 11.7.2.4. Prototyping
  - 11.7.2.5. Casting and Quality Control
  - 11.7.2.6. Arch Bending
  - 11.7.2.7. Individual Tray Cementing
- 11.8. Set-Up Receipt and Approval
  - 11.8.1. Manual Set-Up
  - 11.8.2. Digital Set-Up
- 11.9. Case Reception and Cabinet Preparation
  - 11.9.1. Case Reception
  - 11.9.2. Scheduling Appointments
  - 11.9.3. Table Preparation
- 11.10. Indirect Cementing According to Individual Tray Selection
  - 11.10.1. Indirect Cementing with Transparent Silicone Tray
  - 11.10.2. Indirect Cementing with Opaque Silicone Tray
- 11.11. Type and Use of Basic Ligatures
  - 11.11.1. Self-Retaining Slot
  - 11.11.2. Conventional Elastic Ligatures
  - 11.11.3. Metallic Ligatures
  - 11.11.4. Overtie
  - 11.11.5. Steel Overtie
  - 11.11.6. Power Tie

- 11.11.7. Elastic Lasso
  - 11.11.7.1. Conventional Lasso
  - 11.11.7.2. O-Lasso
- 11.11.8. Chicane
- 11.12. Arch Selection and Placement
  - 11.12.1. Lingual Bracket Slot Characteristics
  - 11.12.2. Arch Sequencing
  - 11.12.3. Overextended Arches
  - 11.12.4. Initial Arch Placement and Manipulating the Arch in the Mouth
- 11.13. Prevention, Emergency Solutions and Common Complications
  - 11.13.1. Prevention and Emergency Solutions
  - 11.13.2. Bracket Recementing
  - 11.13.3. Bracket Decementing
- 11.14. Lingual Orthodontics and Periodontics
- 11.15. Lingual Orthodontics and Microscrews
- 11.16. Lingual Orthodontics Retention

## Module 12. Orthodontics and Orthognathic Surgery

- 12.1. Introduction and Diagnosis
  - 12.1.1. Aesthetic and Functional Treatment Objectives
  - 12.1.2. Age and Opportunity for Treatment
  - 12.1.3. Patient Motives, Demands and Psychology
  - 12.1.4. Clinical Examination
  - 12.1.5. Records Required for Orthognathic Surgery, Sagittal and Frontal Analysis
- 12.2. Temporomandibular Joint
  - 12.2.1. TMJ and Orthodontic Surgery
  - 12.2.2. Centric Relation and Orthognathic Surgery
  - 12.2.3. TMJ Radiographic Study
  - 12.2.4. Progressive Condylar Resorption: Concept, Diagnosis and Management
  - 12.2.5. Condylar Hyperplasia as a Cause of Facial Asymmetries: Concept, Diagnosis and Management
- 12.3. Splints and Orthognathic Surgery
  - 12.3.1. Prediagnostic Splint for Joint Pathologies

- 12.3.2. Presurgical Splint to Locate True Hinge Axis
- 12.3.3. Presurgical Splint to Stabilize Condyles and Ligaments
- 12.3.4. Presurgical Splint to Diagnose the Mandibular Midline
- 12.4. Pre-Surgery Orthodontics
  - 12.4.1. Diagnosis and Keys
  - 12.4.2. Sagittal Problems
  - 12.4.3. Vertical Problems
  - 12.4.4. Asymmetric Patients
- 12.5. Pre-Surgery Planning
  - 12.5.1. Introduction to Cephalometric Predictions
  - 12.5.2. Predicting Treatments: VTO and STO
  - 12.5.3. Dentoalveolar and Gingival Biotype: Need for Grafting?
  - 12.5.4. Bone Movement: Repercussions on Soft Tissues
  - 12.5.5. SARPE: Indications and Limitations
- 12.6. Modeling Surgery
  - 12.6.1. Pre-Surgical Working Models
  - 12.6.2. Model Surgery for Monomaxillary Surgery
  - 12.6.3. Model Sugery for Bi-Maxillary Surgery
  - 12.6.4. Articulator and Axiography
- 12.7. Post-Surgical Treatment and Completion
  - 12.7.1. Immediate Postoperative Surgery
  - 12.7.2. Immediate Postoperative Orthodontics
  - 12.7.3. Post-Surgical Orthodontic Objectives and Case Completion



**Module 13. Thermoplastic Orthodontics**

- 13.1. Introduction Clear Splints or Dental Aligners
  - 13.1.1. History of Aligners
  - 13.1.2. Current Use of Transparent Retainers
- 13.2. Record Keeping
  - 13.2.1. Prior to Aligner Registrations
  - 13.2.2. Extraoral and Intraoral Photography
  - 13.2.3. Orthopantomography X-Ray and Lateral Skull Teleradiography
  - 13.2.4. Taking Imprints
  - 13.2.5. Intraoral Scanner
- 13.3. Attachments and Pressure Points
  - 13.3.1. Pressure Points
  - 13.3.2. Introduction to Attachments
    - 13.3.2.1. Optimized Attachments
    - 13.3.2.2. Conventional Attachments
    - 13.3.2.3. Hierarchy of Attachment Placement According to the Movement to be Performed by the Tooth
    - 13.3.2.4. Usual Movements, which Prevent the Placement of Attachments
    - 13.3.2.5. Attachment Placement
- 13.4. Aligner Movements
  - 13.4.1. Introduction to Aligner Movements
  - 13.4.2. Predictable and Unpredictable Aligner Movements
  - 13.4.3. Comparing Different Movement Predictability
  - 13.4.4. Predictable Malocclusions Using Aligners
- 13.5. Reviewing and Correcting the Virtual Video
  - 13.5.1. What Can Be Seen through Virtual Video?
  - 13.5.2. How to Proceed upon Receiving the Virtual Video
  - 13.5.3. Modifying the Virtual Video
  - 13.5.4. Indirectly Modifying the Virtual Video

**Module 14. Dental Aligner Correction in 3 Planes of Space**

- 14.1. Correcting Sagittal Plane Malocclusions
  - 14.1.1. Correcting Sagittal Plane Malocclusions: Class II
  - 14.1.2. Correcting Sagittal Plane Malocclusions: Class III
- 14.2. Correcting Vertical Plane Malocclusions
  - 14.2.1. Overbite
  - 14.2.2. Open Bite
- 14.3. Correcting Transversal Plane Malocclusions
  - 14.3.1. Single-Tooth Crossbite
  - 14.3.2. Unilateral Posterior Crossbite
  - 14.3.3. Bilateral Posterior Crossbite
  - 14.3.4. Scissor Bite
  - 14.3.5. Midline Discrepancy

**Module 15. Transparent Splints in Orthognathic and Oral Surgery**

- 15.1. Introduction to Preparing Surgical Patients for Transparent Splints
- 15.2. Added Canines
- 15.3. Added Teeth

**Module 16. Multidisciplinary Thermoplastic Orthodontics and Case Completion**

- 16.1. Aligners Together with Other Dental Specialties
- 16.2. Managing Extractions with Thermoplastic Orthodontics
- 16.3. Case Completion
- 16.4. Auxiliary Equipment

06

# Methodology

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

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





“

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

## At TECH we use the Case Method

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

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



According to Dr. 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".

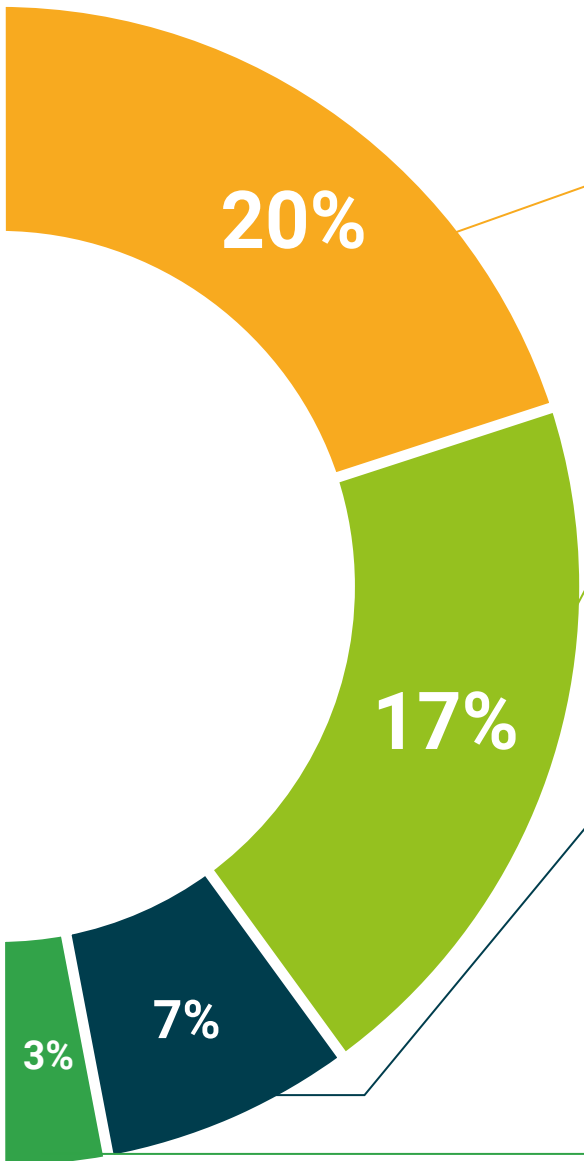


### Additional Reading

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 Orthodontics and Dentofacial Orthopedics guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.





“

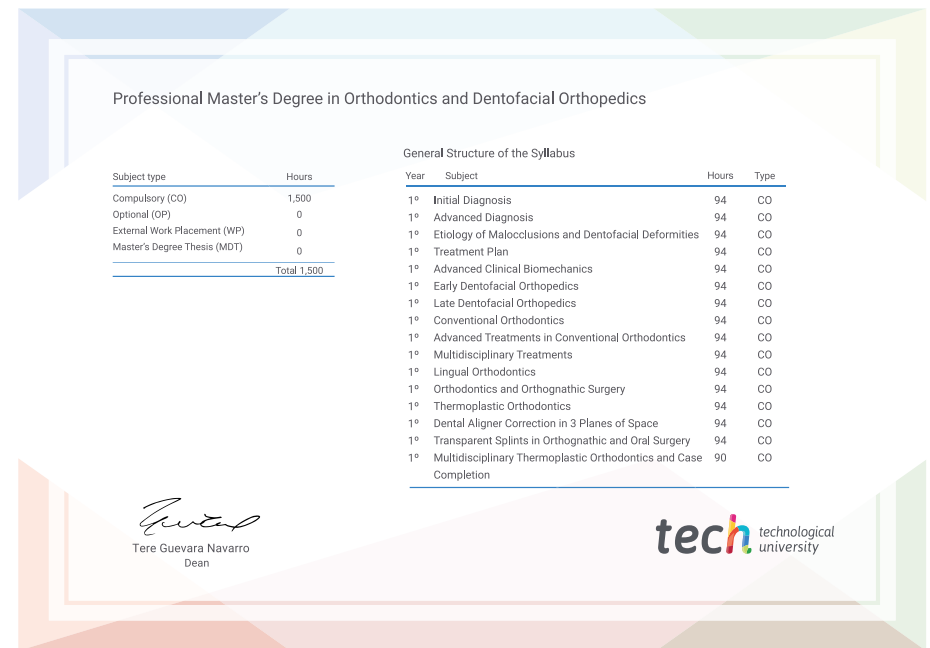
*Successfully complete this program  
and receive your university degree  
without travel or laborious paperwork”*

This **Professional Master's Degree in Orthodontics and Dentofacial Orthopedics** contains the most complete and updated scientific program on the market.

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

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Orthodontics and Dentofacial Orthopedics**  
 Official N° of hours: **1,500 h.**



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



## Professional Master's Degree

Orthodontics and  
Dentofacial Orthopedics

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree

## Orthodontics and Dentofacial Orthopedics

