



## Postgraduate Diploma

## Clinical Orthodontics

» Modality: online

» Duration: 6 months

» Certificate: TECH Global University

» Credits: 22 ECTS

» Schedule: at your own pace

» Exams: online

 $We b site: {\color{blue}www.techtitute.com/us/dentistry/postgraduate-diploma/postgraduate-diploma-clinical-orthodontics}$ 

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 $\begin{array}{c|c} 01 & 02 \\ \hline & & \text{Objectives} \\ \hline & & & \\ \hline & & \\ \hline & & & \\ \hline & &$ 

06 Certificate





### tech 06 | 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 training. Its peculiarities in diagnosis, type of treatment, objectives and scientific bases, demand an exclusive professional practice.

The knowledge acquired in this program will allow the student 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 periodontics.

The fundamental justification of the program is, therefore, to train professionals with adequate knowledge, skills, attitudes, values and competencies, who is able to serve society by satisfying its health demands, in terms of prevention, diagnosis and treatment, in an ethical, efficient and safe manner.

This professional must appreciate the need for lifelong professional development and continuing education, be able to efficiently utilize advances in knowledge and technology, and understand the central role of the patient in therapeutic decision making.

This **Postgraduate Diploma in Clinical Orthodontics** includes the most complete and up to date scientific program on the market. The most important features include:

- Clinical cases presented by experts in the different dental specialties
- 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
- Latest information on Clinical Orthodontics
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- With a special emphasis on evidence-based medicine and research methodologies in Clinical Orthodontics
- Content that is accessible from any fixed or portable device with an Internet connection



Expand your knowledge through the
Postgraduate Diploma in Clinical Orthodontics,
in a practical way and adapted to your needs"



This Postgraduate Diploma is the best investment you can make when selecting an up to date program for two reasons: in addition to updating your knowledge in Clinical Orthodontics, you will obtain a Postgraduate Diploma from TECH Global University"

Forming part of the teaching staff is a group of professionals in the world of Dentistry, who bring to this course their work experience, as well as a group of renowned specialists, recognised by esteemed scientific communities.

The multimedia content developed with the latest educational technology will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive training program to train in real situations.

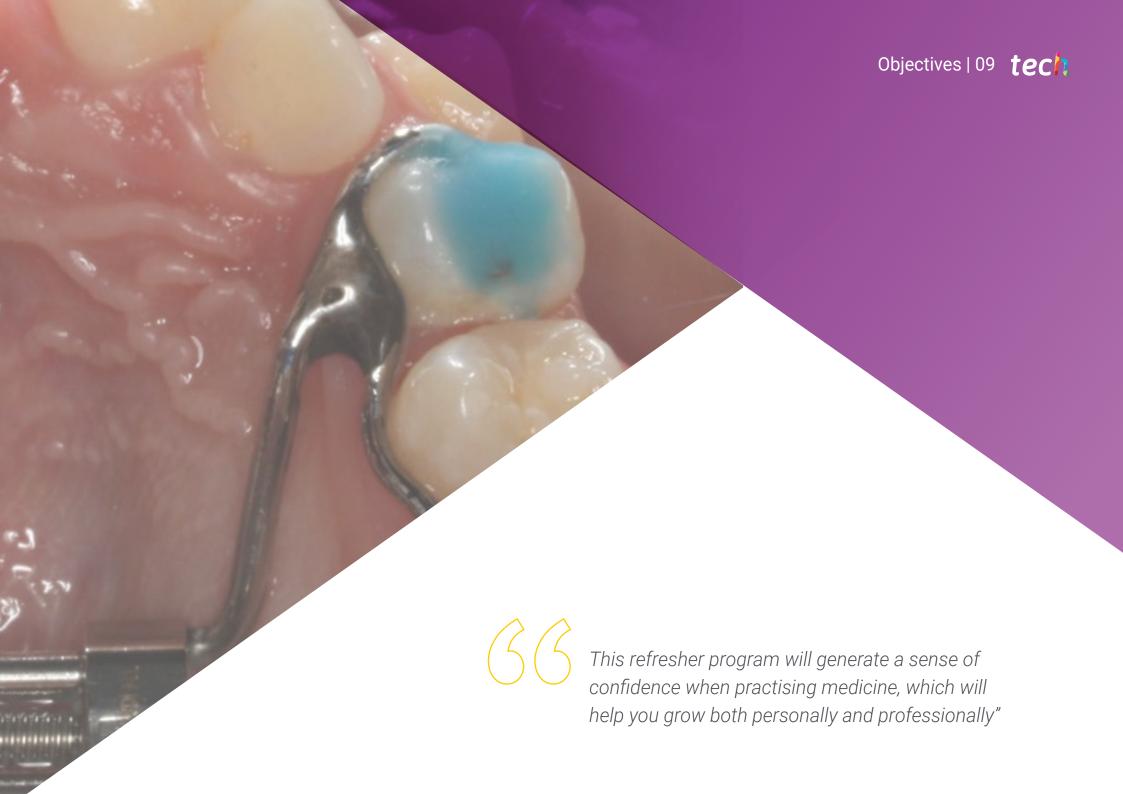
This program is designed around Problem Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this reason, you will be assisted by an innovative, interactive video system created by renowned and experienced experts in the field of radiology with extensive teaching experience.

This Postgraduate Diploma offers training in simulated environments, which provides an immersive learning experience designed to train for real life situations.

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







## tech 10 | Objectives

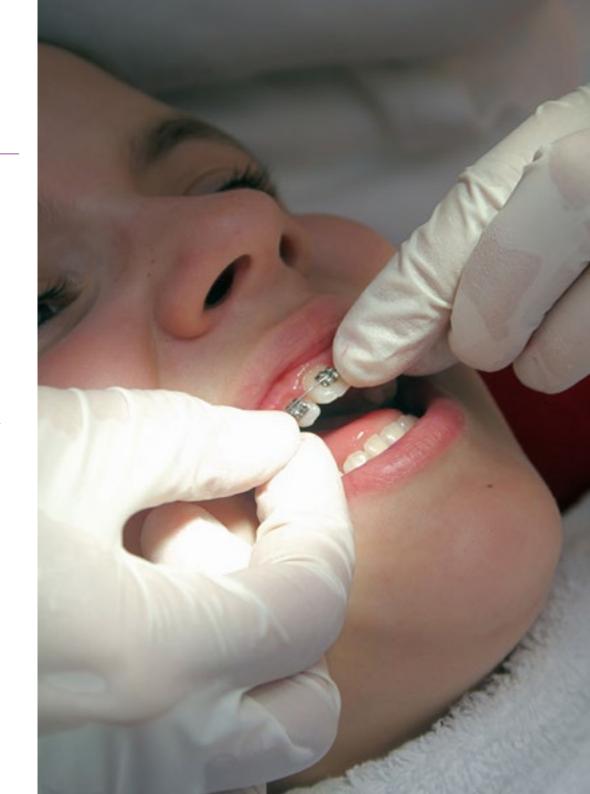


### **General Objectives**

- 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 to new or unfamiliar environments with a multidisciplinary approach within the health sciences context
- Transmit learning skills to students that will allow them to continue their specialization in an autonomous and self-directed manner, developing habits of excellence and quality in professional practice
- 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
- Foster the acquisition of technical skills and abilities, through a powerful audiovisual system, and the possibility of development through online simulation workshops and/or specific education
- Encourage professional stimulation through continuous education and research



Make the most of this opportunity and take the next step to stay up to date with the latest advances in Clinical Orthodontics"





### **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
- Know oral radiology, both intraoral and extraoral, with a special focus on lateral and frontal skull teleradiography. Students will also receive training in other techniques such as conventional radiology, ultrasound, CT, CBCT, and MRI, particularly of the cervicofacial 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 training 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. 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 6. Multidisciplinary Treatments

• Develop competences in the search and organization of documentation, and in presenting and communicating their work adequately to the scientific community





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#### **Professors**

#### 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)

### 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

#### 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. 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 a the Spanish Society of Orthodontics (SEDO)
- Invisalign Certification

### 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

#### 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. 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, Exlusive Private Practice

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#### 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

#### 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. 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

#### 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

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#### 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. 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. 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

#### 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 Neuroclusal Rehabilitation
- Myobrace Course
- Incognito Certification

### 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

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- 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







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





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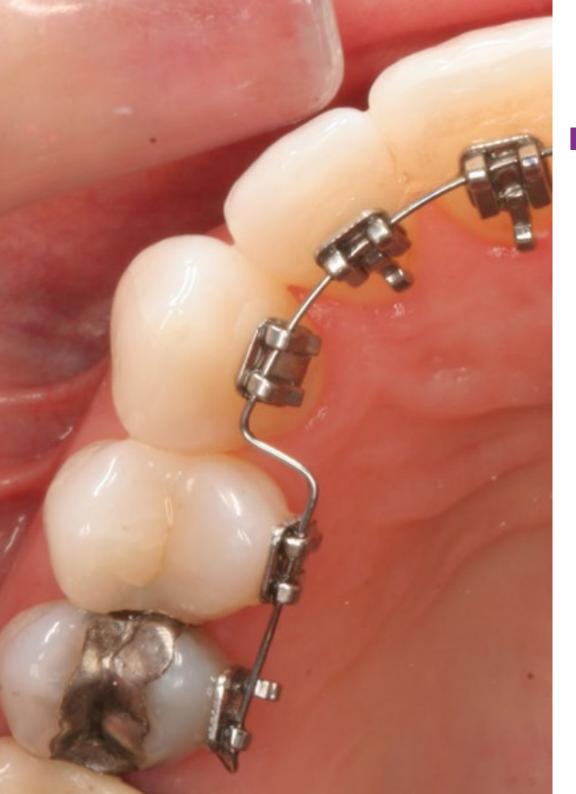
#### Module 1. Initial Diagnosis

- 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 (Cone Beam Computed Tomography) and Computed Tomography (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. 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 Patients at Risk
  - 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



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### 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. Dentition General Development
- 3.2. Dentoalveolar Growth and Adaptation in Different Malocclusions and Dentofacial Deformities
  - 3.2.1. Dentoalveolar Growth and Adaptation in Transverse Malocclusions
  - 3.2.2. Dentoalveolar Growth and Adaptation in Vertical Malocclusions
  - 3.2.3. 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

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#### 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 to Orthodontics and Dentofacial Orthopedics as a Function of 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. Conventional Orthodontics

- 5.1. Treatments for Stage 2 Mixed and Early Permanent Dentition
  - 5.1.1. Treatment Protocols
  - 5.1.2. Indications and Contraindications. Fixed Equipment
    - 5.1.2.1. Advantages and Disadvantages. Fixed Equipment
  - 5.1.3. Malocclusions
    - 5.1.3.1. Transversal Malocclusions
    - 5.1.3.2. Vertical Malocclusions
  - 5.1.4. Retention/Relapse
- 5.2. Bracket Cementation Specification: Malocclusion Type and/or Therapeutic Objectives
  - 5.2.1. Installing Pre-Adjusted Equipment
    - 5.2.1.1. Bracket and Tube Location
    - 5.2.1.2. Mesiodistal Location
    - 5.2.1.3. Vertical Position ("Height")
    - 5.2.1.4. Inclination
    - 5.2.1.5. Vestibular Face Fitting
  - 5.2.2. Cementation in Case of Deep Curve of Spee
  - 5.2.3. Cementation in Case of Class II Molar
  - 5.2.4. Cementation on Fractured or Abraded Teeth
- 5.3. First Phase: Alignment and Leveling. Types of Intrusion
  - 5.3.1. Diet
    - 5.3.1.1. Selection Principles for Alignment Arches
    - 5.3.1.2. Symmetric Crowding Alignment
    - 5.3.1.3. Alignment in Case of Premolar Extraction
    - 5.3.1.4. Alignment in Non-Extraction Cases
  - 5.3.2. Levels
    - 5.3.2.1. Extrusion Leveling (Relative Intrusion)
    - 5.3.2.2. Intrusion Leveling

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5.4.	Second	Phase.	Work	Closing	Extraction	Snaces
0.4.	Second	riidse.	VVOIK,	CIUSIIIQ	EXITACTION	Spaces

- 5.4.1. Molar Ratio Correction
  - 5.4.1.1. Differential Growth in Class II Patients
  - 5.4.1.2. Differential Anchoring of Extraction Spaces
  - 5.4.1.3. Distalization
- 5.4.2. Closing Extraction or Residual Spaces
  - 5.4.2.1. Continuous Arch with Closing Loops or DKL Arch
  - 5.4.2.2. Sliding
- 5.4.3. Overjet and Overbite Correction
- 5.4.4. Middle Line Centering
- 5.5. Third Phase: Completion. Retention Design
  - 5.5.1. Retention Definition
  - 5.5.2. Types of Retainers
    - 5.5.2.1. Fixed Retainers
    - 5.5.2.2. Removable Retainers
  - 5.5.3. Retention Duration
    - 5.5.3.1. Cases Where Retention May Not Be Required
    - 5.5.3.2. Cases Requiring Permanent or Semipermanent Retention
    - 5.5.3.3. Cases Requiring a Variable Retention Period

### Module 6. Multidisciplinary Treatments

- 6.1. Treating Periodontal Patients
  - 6.1.1. Specific Characteristics in Adult Patients
  - 6.1.2. Anatomy of the Periodontium
  - 6.1.3. Multidisciplinary or Interdisciplinary Treatments
  - 6.1.4. Diagnosing Adult Patients and Determining Treatment Goals
  - 6.1.5. Preparing Adult Orthodontic Patients for Orthodontic Treatment
  - 6.1.6. Stripping Tool as an Essential Element in Adult Periodontal Patients
  - 6.1.7. A Special Entity: Posterior Bite Collapse in Adult Patients
- 6.2. Treatment and Aesthetics in Anterior Fronts. Orthodontics and Prosthetics
  - 6.2.1. Fundamental Requirements for Successful Occlusal Therapy as Proposed by Dawson
  - 5.2.2. The Six Decisions Affecting the Functional Anatomy Matrix
  - 6.2.3. Previous Guidelines
  - 6.2.4. Fundamental Aesthetic Criteria
- 5.3. Orthodontics and Treating OSAHS in Children
  - 6.3.1. Anatomy of the Respiratory System
  - 6.3.2. Lymphoid System
  - 6.3.3. General Sleep Concepts: Sleep and Breathing
  - 5.3.4. Clinical Examination in Children with Suspected OSAHS
- 6.4. Orthodontics and Treating OSAHS in Adults
  - 6.4.1. Sleep Medicine
  - 6.4.2. Obstructive Sleep Apnea-Hypopnea Syndrome (OSAHS)
  - 5.4.3. Efficacy of Mandibular Advancement Devices (MADs)
  - 6.4.4. Therapy Management and Monitoring Protocol





## tech 30 | Methodology

#### At TECH we use the Case Method

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

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



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



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

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

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





### **Relearning Methodology**

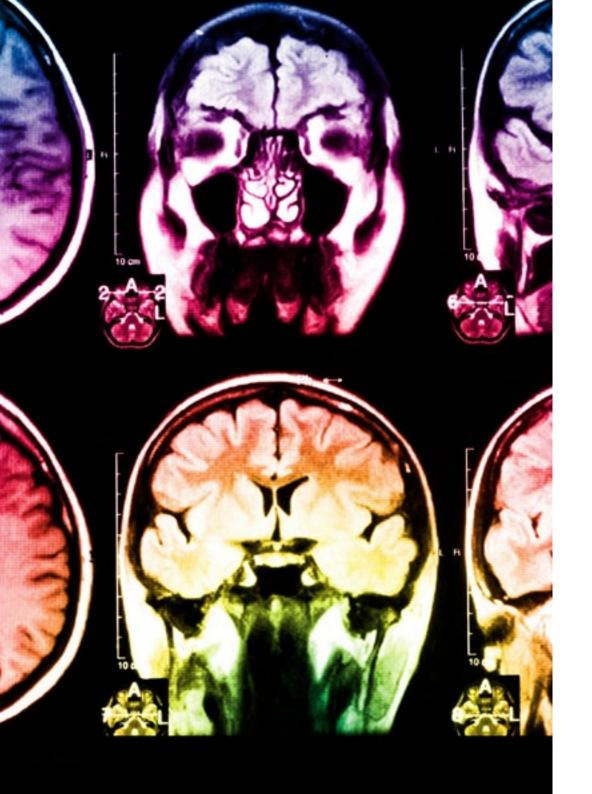
At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

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

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

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





### Methodology | 33 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 34 | 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.

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**

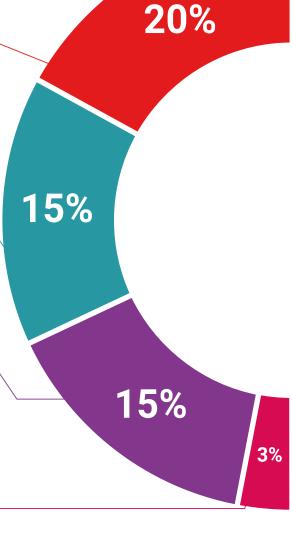
TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times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



### **Testing & Retesting**



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

#### Classes



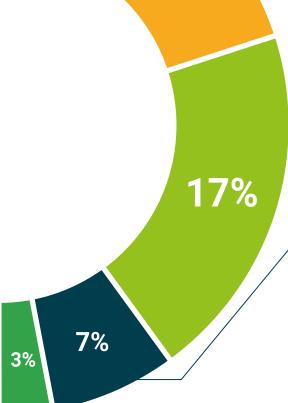
There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

#### **Quick Action Guides**



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







## tech 38 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Clinical Orthodontics** 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: Postgraduate Diploma in Clinical Orthodontics

Modality: online

Duration: 6 months

Accreditation: 22 ECTS



Mr./Ms. \_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Postgraduate Diploma in Clinical Orthodontics

This is a program of 550 hours of duration equivalent to 22 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



<sup>\*</sup>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.

tech global university

## Postgraduate Diploma

**Clinical Orthodontics** 

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 22 ECTS
- » Schedule: at your own pace
- » Exams: online

