





## Hybrid Professional Master's Degree

Updated Pediatric Dentistry

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

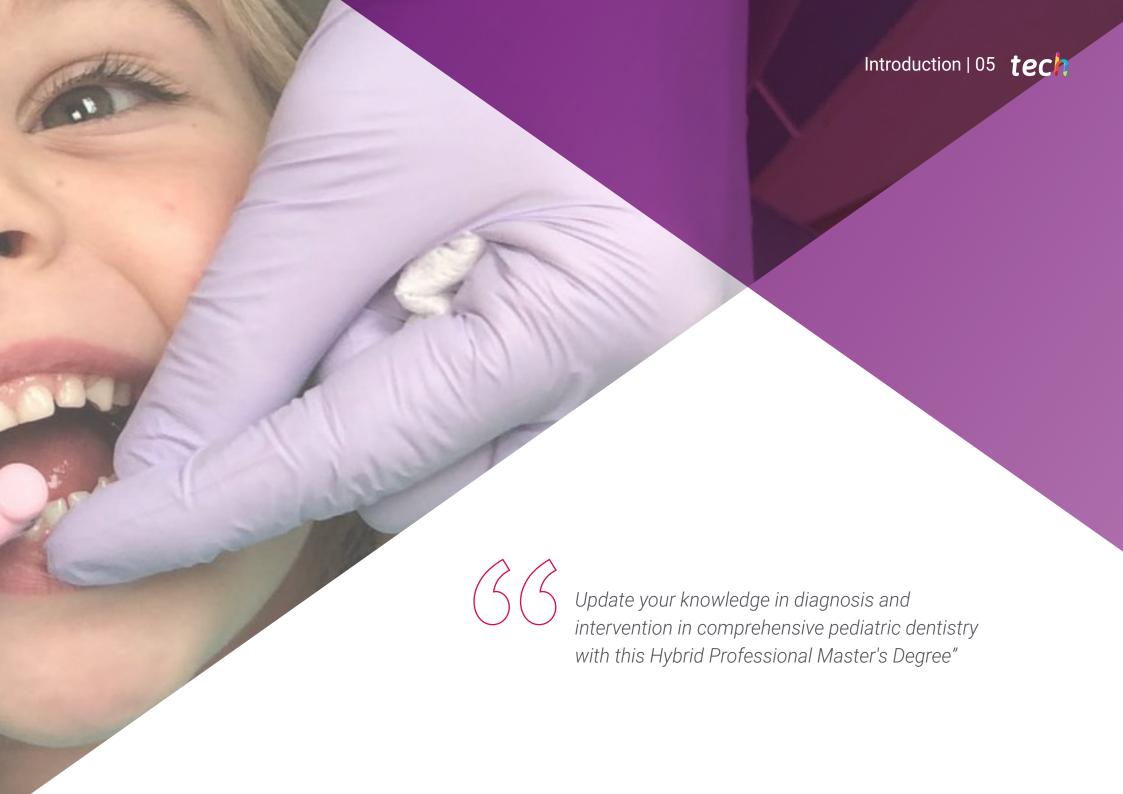
Teaching Hours: 1,620 h.

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

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## tech 06 | Introduction

The child population has a greater number of unmet health needs, with dental treatment needs standing out above all others. It is evident from these data that this population group requires greater dental care and specialized professionals in this area.

This Hybrid Professional Master's Degree allows students to deepen and broaden their knowledge, who are increasingly demanded by families to know the latest techniques, treatments and diagnostics in children. This program addresses most of the aspects that make up pediatric dentistry oral care such as knowledge of the child, with special emphasis on the psycho-emotional environment of the child from birth to 14 years of age.

In addition, it will develop the functioning and structure of the mouth, the care and maintenance of a healthy mouth, the importance of accompanying the child and his family or the informed choice of the best treatment taking into account the characteristics of the person, the family and the socioeconomic and cultural environment of the same.

An excellent opportunity for the professional who wishes to keep up to date with the latest scientific advances and diagnostic devices. To achieve this, TECH provides a program within everyone's reach, with a 100% online and flexible theoretical syllabus, without timetables and with downloadable content that can be viewed at any time. It completes this program with a practical training that allows to consolidate all the knowledge in a center, where all the acquired learning can be applied.

This program allows you to complement theoretical advances with a practical period in a leading dental clinic"

This **Hybrid Professional Master's Degree in Updated Pediatric Dentistry** contains the most complete and up-to-date scientific program on the market. The most important features include:

- Development of clinical cases presented by Nursing professionals with expertise in Pediatric Dentistry and university professors with extensive experience in the critically ill patient
- 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-therapeutic developments on assessment, diagnosis, and treatment in comprehensive pediatric dentistry
- It contains practical exercises where the self-assessment process can be carried out to improve learning
- Iconography of clinical and diagnostic imaging tests
- An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course
- With special emphasis on evidence-based medicine and research methodologies in comprehensive pediatric dentistry
- 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
- In addition, you will be able to carry out a clinical internship in one of the best hospitals in the world



Learn more about the CAMBRA method and dietary measures in the pediatric patient during the 3 weeks of practical training in a dental center"

In this Professional Master's Degree program, of a professional nature and blended learning modality, the program is aimed at updating pediatric dentistry professionals and university professors who work in specialized centers. The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate the theoretical knowledge of comprehensive pediatric dentistry and other related areas, as well as the theoretical and practical elements that will help to deepen the knowledge and allow a correct diagnosis and treatment of the patient.

Thanks to its multimedia content developed with the latest educational technology, they will allow the dental professional a situated and contextual learning, that is to say, a simulated environment that will provide an immersive learning programmed to train in real situations. This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

Incorporate new techniques into your daily practice with teaching provided by pediatric dentistry professionals.

This Hybrid Professional Master's Degree provides you with real simulations to make the update more authentic and useful.







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

#### 1. Updating from the latest technology available

The latest technological advances in pediatric dentistry require the specialist to be updated immediately. Thus, equipment such as 3D scanners, diode lasers and conscious sedation methods have transformed the discipline. For this reason, TECH offers professionals an innovative environment in which to carry out their internships, providing them with the most advanced technology available in the discipline.

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

In its commitment to offer an effective and enriching update experience, TECH has made sure to allow the professional to develop their practices accompanied by the best specialists in Pediatric Dentistry. In this way, you will be able to catch up with prestigious experts, who will accompany you throughout the internship period, bringing you up to date with the latest procedures in diagnosis and treatment of dental conditions and pathologies in pediatric patients.

#### 3. Entering First-Class Clinical Environments

TECH carefully selects all available centers for practical training. Thanks to this, the specialist will have guaranteed access to a prestigious clinical environment in the area of Pediatric Dentistry. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology.





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

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

TECH's innovative learning approach to the design of this program will allow students to combine the latest theory with the most advanced and participatory practices. In this way, the professional will be able to apply in his own work all the techniques and procedures acquired during the intensive stay, which will take place over 3 weeks and in a completely real environment.

#### 5. Expanding the Boundaries of Knowledge

TECH offers the possibility of carrying out this Internship Program not only in national but also in international centers. This way, the specialist will be able to expand their frontiers and catch up with the best professionals, who practice in first class centers and in different continents. A unique opportunity that only TECH, the largest online university in the world, could offer.







## tech 14 | Objectives

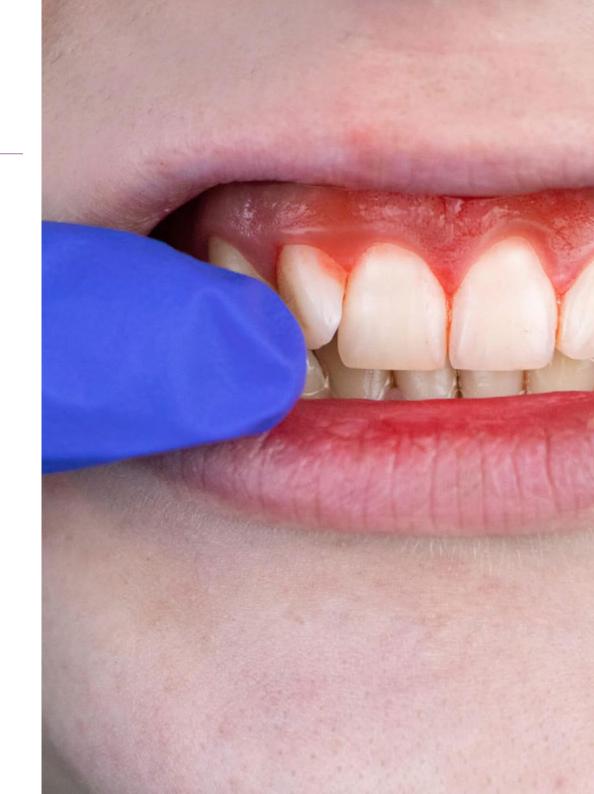


### **General Objective**

• The general objective of the Hybrid Professional Master's Degree in Updated Pediatric Dentistry is to renew the professional's knowledge in the different areas covered by comprehensive dental care, especially from birth to 14 years of age. Likewise, at the end of this program, students will obtain the essential strategies to provide individualized attention to each child according to their age and their medical, dental and emotional needs. In addition, the professional will be able to achieve their goals through a powerful audiovisual system, while learning about the latest developments in the role of the dentist as a health educator for children and their families



This update will be key to getting you up to speed on Updated Pediatric Dentistry, both theoretically and practically"





#### **Specific Objectives**

#### Module 1. Pediatric Dentistry: Basics

- Identify and describe the stages of cognitive, emotional and social development of children and adolescents
- Recognize the psychological profile of the child and adolescent
- Assess possible patient behavior in the dental clinic
- Analyze the factors that impact the child's behavior
- Establish the different classifications of patients according to their behavior
- Describe non-pharmacological behavior management techniques
- Explain pharmacological management alternatives for uncooperative children
- Distinguish the different levels of sedation from each other and from general anesthesia
- Explain the action protocols in each case
- List the most commonly used drugs for sedation and their antagonists
- Describe the inherent advantages and risks in the pharmacological sedation procedure
- Perform adequate basic behavioral guidance in patients according to their ages and cognitive and emotional capacities
- Explain the different stages of tooth formation and their chronology
- Define the evolution of the different teeth during childhood and adolescence and their characteristics
- Identify and name temporary and permanent teeth
- List the differences between primary and permanent teeth and their clinical implications

## Module 2. Growth and Development: Changes in Orofacial Structures and Associated Pathologies

- Recognize and differentiate primary, mixed first and second stage and permanent teeth, clinically and radiographically
- Describe the process a drug undergoes in a child's body from the time it is administered until it is excreted
- Identify differences in drug pharmacokinetics between children and adults and in childhood between different ages
- Review the main drugs used in pediatric dentistry
- Explain the importance of the general clinical and stomatological examination in the pediatric patient
- Recognize the need for systematic and careful collection of clinical data for an appropriate diagnosis

#### Module 3. Psychology, Behavior and Behavioral Guidance

- Provide the student with a work scheme that, once internalized, will make his/her clinical examination system effective and agile
- Explain the appropriate diagnostic method in pediatric dentistry
- Describe the different types of X-rays used in pediatric dentistry
- Explain the advantages of the different complementary tests in each specific case
- Choose the necessary complementary tests to diagnose the most common oral diseases or the risk of suffering them
- Establish an appropriate treatment plan for child patients

## tech 16 | Objectives

#### Module 4. Preventive Pediatric Dentistry

- Recognize the structures that make up the healthy mouth of an edentulous infant and its physiology
- Reflect on the rationale and basics of baby dentistry
- Value an early establishment of the dental home
- Explain the multifactorial nature of caries and the multifaceted approach to caries prevention
- Explain the various methods of preventing dental caries and their application at different ages
- Develop appropriate prevention and maintenance plans for each patient
- Identify the most frequent deviations from normality in relation to tooth number and size, enamel, alterations and dentin structure alterations
- Identify the origin and consequences of alterations in tooth number and size, enamel structure and dentin structure alterations
- Define the criteria for the selection of complementary tests to correctly diagnose these disorders
- Explain the criteria for selecting the appropriate therapeutic option in each case
- Reflect on the rationale and basics of baby dentistry
- Value an early establishment of the dental home

#### Module 5. Dental Caries Pathology and Treatment

- Explain the criteria for selecting the appropriate therapeutic option in each case
- Describe dental erosion
- Understand the role of each etiological factor in the development of erosive lesions
- Reflect on the current epidemiology of dental erosion and its multifactorial nature
- Apply available tools to diagnose erosive lesions and establish their severity
- Understand the role of each etiological factor in the development of caries lesions
- Reflect on the current epidemiology of dental caries and its multifactorial nature
- Apply the available tools to diagnose caries lesions
- Differentiate the different evolutionary stages of caries lesions
- Describe the concept of early onset or early childhood caries and their characteristics
- Explain the procedure and the steps to be taken for the correct obturation of cavities prepared for composite
- Define some systemic diseases that impact the oral cavity
- Learn to decide when it is necessary to use a preformed steel crown for the restoration of primary molars
- Learn to determine when it would be possible to use a preformed posterior or anterior aesthetic crown for the restoration of temporary teeth
- Be able to determine when it would be necessary to restore an anterior tooth using composite and an acetate crown
- Describe the necessary steps (procedure, material and criteria) for the preparation of an anterior temporary tooth to be restored with composite and an acetate crown



#### Module 6. Dental Pulp Pathology and Treatment

- Learn the clinical and radiological characteristics of the different pulp conditions in primary teeth
- Apply the most appropriate protocol to determine the degree of damage to the temporal pulp
- Describe the different techniques used in pulp therapy, as well as the possible obturation materials
- Explain how and when pulp protection is performed on primary teeth
- Explain how and when indirect pulp treatment is performed on temporary teeth
- Explain how and when a pulpotomy is performed on primary teeth
- Explain how and when pulpectomy is performed on primary teeth
- Acquire criteria to choose which treatment will be performed in young permanent teeth with pulp alterations
- Define how and when to perform direct pulp capping and indirect pulp capping in young permanent teeth
- Describe how and when an apicogenesis is performed in young permanent teeth
- Explain how and when apicoforming is performed on young permanent teeth

#### Module 7. Dental Trauma. Diagnosis and Therapeutics

- Recognize the main causes of dental trauma in childhood
- Understand the critical importance of a correct diagnosis in determining the most appropriate treatment
- Identify the necessary modifications in the diagnostic procedures for trauma in temporary teeth
- Explain the diagnosis of the most frequent traumas in young permanent teeth

- Recognize the differences between trauma to primary teeth and young permanent teeth
- Acquire criteria to choose the treatment to be performed on a temporary tooth that has suffered dental trauma
- Reflect on the therapeutic objectives to be established in the different situations of dental trauma that can occur in primary teeth
- Apply the protocol of periodic controls established according to the type of trauma that the primary tooth has suffered
- Describe the different after-effects that dental trauma to a permanent tooth can have on the permanent tooth itself or on the permanent successor

#### Module 8. Oral Pathology in Pediatric Dentistry

- Define the oral pathology most frequently observed in pediatric patients and its clinical and/or pharmacological management
- Identify some systemic diseases that condition dental treatment
- Learn what precautions to take in children with cardiac pathology, asthma or diabetes
- Recognize the importance of the systemic phase in the clinical history
- Recognize the importance of previous consultations in the case of underlying systemic disease
- Know what precautions to take in children with hematological, renal or oncological pathologies
- Recognize the importance of previous consultations in the case of underlying systemic disease

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#### Module 9. Pain Control Surgical Treatments

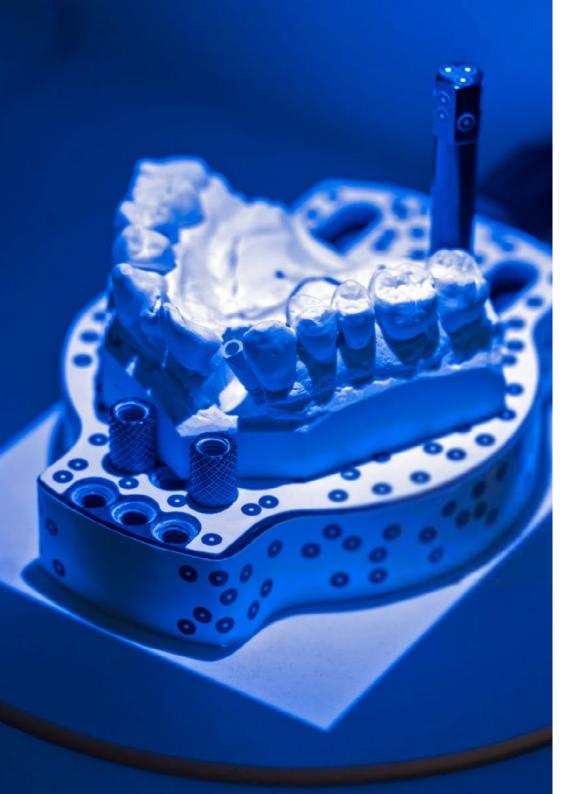
- Recognize the phases of the painful process and the action that anesthetic drugs have on it
- Know the principles necessary to guide the behavior of pediatric patients during local anesthesia
- Explain dosage in the administration of local anesthesia
- Describe the proper way to perform local anesthesia techniques in children to obtain effective anesthesia prior to pain-producing dental procedures
- Explain the basic principles of preoperative surgery in pediatric dentistry

#### Module 10. Pediatric Orthodontics

- Apply the extraction protocol in pediatric patients, especially in primary teeth
- Describe the surgical treatment of the most common soft tissue disorders in children
- Explain the indications for postoperative surgery in pediatric dentistry
- Define the concept of therapeutic remineralization in incipient caries lesions
- Recognize the main remineralizing agents currently used and reflect on their mechanisms of action
- Explain the indications, contraindications and techniques for the use of different restorative materials
- Acquire the necessary criteria to select the most appropriate material in each case
- Identify the advantages of using absolute isolation when treating a cavitated caries lesion
- Define the most frequent location of caries development in primary and permanent molars
- List the necessary steps (procedure, material and criteria) for the preparation of a temporary molar to be restored with a preformed steel crown
- List the necessary steps (procedure, material and criteria) for the preparation of a temporary tooth to be restored with a preformed esthetic crown
- List the necessary steps (procedure, material and criteria) for the preparation of an preformed steel crown for the restoration of a permanent molar

## Module 11. Pediatric Patients with Special Care Needs. Medically Compromised Patients

- Describe the most important causes and consequences of the premature loss of primary teeth
- Explain the reasons behind the importance of space maintenance
- Define what a space maintainer is and what types exist
- Acquire criteria to justify the choice of a certain type of space maintainer on an individual basis
- Explain the reasons behind the importance of the early treatment of harmful habits
- Define the main types of harmful oral habits
- Describe the main causes of oral habits and their most important consequences
- · Apply the different therapy protocols against oral habits and their justification
- Describe some systemic diseases that impact the oral cavity
- Recognize the importance of the systemic phase in the clinical history
- Recognize the importance of previous consultations in the case of underlying systemic disease
- Define the oral and dental disorders associated with the conditions discussed on this topic
- Know what modifications need to be added to the treatment plan of a patient with a mental or sensory disability
- Recognize the importance of the systemic phase in the clinical history



### Objectives | 19 tech

#### Module 12. Relevant Topics in Current Pediatric

- Encourage dentists to take an interest and join the network of professionals involved in the detection and reporting of child abuse and neglect
- Identify the injuries generated by physical abuse in order to collaborate in the correct diagnosis and detection of child abuse cases
- Describe the physical and behavioral indicators associated with physical abuse and physical neglect
- Explain the role and obligation of the dentist in this social problem, as well as the means of complaint available to him/her
- Recognize the importance of informed consent
- Describe the most frequent medical emergencies that may occur in pediatric patients in the dental clinic and their clinical and/or pharmacological management
- List some systemic diseases that condition dental treatment
- Reflect on the changes that have taken place in the family structure and on its features in the last few decades
- Explain the features of new families





## tech 22 | Skills



#### **General Skills**

- Integrate the essential elements of the profession, including ethical principles and legal responsibilities
- Establish the importance of these principles for the benefit of the patient, society and the profession, with special attention to professional secrecy
- Know how to identify patient concerns and expectations, and communicate effectively and clearly, both orally and in writing, with patients, family members, the media and other professionals
- Understand and recognize the social and psychological aspects relevant to the treatment of patients
- Know how to apply the principles of anxiety and stress management to oneself, patients and other members of the dental team
- Explain the importance of developing a professional practice with respect for patient autonomy, beliefs and culture
- Promote the autonomous learning of new knowledge and techniques, as well as motivation for quality
- Know how to share information with other healthcare professionals and to work in teams
- Explain the importance of maintaining and using patient information records for further analysis, preserving the confidentiality of the data
- Understand the basic biomedical sciences on which dentistry is based in order to ensure proper oral and dental care

- Describe the normal structure and function of the stomatognathic apparatus, at the molecular, cellular, tissue and organic levels, in the different stages of life
- Describe the general processes of the disease, including infection, inflammation, immune system alterations, degeneration, neoplasia, metabolic alterations and genetic disorders
- Understand and recognize the principles of ergonomics and occupational safety (including cross-infection control, radiation protection and occupational and biological diseases)
- Know, critically evaluate and know how to use clinical and biomedical information sources to obtain, organize, interpret and communicate scientific and health information
- Define and apply the scientific method and have the critical capacity to evaluate established knowledge and new information Be able to formulate hypotheses, collect and critically evaluate information for problem solving, following the scientific method
- Apply the basic treatment of the most common oral and dental pathology in patients
  of all ages Therapeutic procedures should be based on the minimally invasive concept
  and on a comprehensive and integrated approach to oral treatment
- Know how to plan and perform multidisciplinary, sequential and integrated dental treatments of limited complexity in patients of all ages and conditions and patients requiring special care



- Describe the implications of behavioral guidance in all preventive or therapeutic clinical procedures and incorporate the expectations of patients' parents about clinical safety
- Perform a preoperative assessment of patient behavior and patient classification to establish an approach strategy
- Identify the implications of psychology as preparatory work for any procedure in pediatric patients and their parents
- Appropriate handle the different materials available for the treatment of the different oral pathologies, as well as the main drugs used in pediatric dentistry
- Value research as the only way to progress in dentistry and pediatric dentistry
- Point out the specific implications of advances in the knowledge of MIH and dental erosion lesions
- Point out the implications of specific advances in the preventive approach and management for the maintenance of oral health in children regardless of their age and health status or level of disability
- Associate new developments in baby dentistry with the specific care of this age group in the dental clinic
- Describe the most important considerations in the approach to a patient who is suspected in a substantiated manner to be a victim of child maltreatment
- Point out the main characteristics of the pathologies affecting infants, children and adolescents

- Identify the main characteristics of advances in the management of incipient caries lesions
- Describe the main diagnostic and therapeutic procedures in pediatric dentistry and incorporate the advances that have been established in recent years
- Incorporate the latest advances in anesthesia in the preparation for therapeutic procedures that require it
- Incorporate the latest advances in bioactive materials to dental therapeutics in children
- Identify the main characteristics of advances in pulp therapy in young primary and permanent teeth
- Describe the main characteristics of space management and interception of detrimental habits and their implications in achieving correct dental alignment and occlusion
- Incorporate the techniques for approaching patients with ASD in the dental clinic to make it a friendly and non-threatening space
- Describe advances in the most commonly used advanced behavioral guidance techniques in precooperative or noncooperative patients
- Incorporate the latest advances in motivational interviewing and the CAMBRA method into daily clinical practice





#### **International Guest Director**

Professor Raman Bedi is the Chairman of the Global Child Dental Fund and was previously Chief Dental Officer in England, i.e. the most senior advisor on Dentistry in each of the four UK governments and Head of the dental profession.

Since 2012 Raman has been the Founding Chair of the Oral Health working group of the World Federation of Public Health Associations, which raises the importance of oral health issues affecting global public health. He is a practicing specialist who focuses exclusively on the complete oral rehabilitation of young children. He was a consultant to the NHS in pediatric dentistry from 1991 to 2005 and is on the General Dental Council's list of Specialists in Pediatric Dentistry and Dental Public Health. He is a consultant to WHO on curriculum development in the field of patient safety and dentistry, and was Co-Chair of the World Expert Committee on the Management and Prevention of Dental Caries. Recently, WHO asked him to review dental services in Oman.

Raman was Head of Sental Public Health at the Eastman Dental Institute of University College London and Director of the National Centre for Transcultural Oral Health. He was also Co-Director of the World Health Organization Collaborating Center at the Eastman Dental Institute. He is currently Professor Emeritus at King's College London.

He is one of the few researchers to have been awarded the program of Doctor of Science by the University of Bristol for his contribution to dental research and Doctor of Humane Letters by AT Still University for his academic contribution to the social sciences.



## Dr. Bedi, Raman

- Chair Global Child Dental Fund and Professor of Transcultural Oral Health - King's College, London
- Professor Emeritus, King's College London
- Formerly Director of Dentistry England
- Professor Extraordinary Professor of Pediatric Dentistry at the University of the Western Cape. Africa South Africa
- Adjunct Professor at the University of Pennsylvania
- Doctor of Dental Surgery, University of Bristol
- Doctor of Humane Letters from AT Still University
- Doctor of Science, University of Bristol
- Honorary Fellow of Dental Surgery at the Royal College of Physicians and Surgeons of Glasgow
- Honorary Member of the Faculty of Public Health, United Kingdom



Thanks to TECH you will be able to learn with the best professionals in the world"

### tech 28 | Course Management

#### **Professors**

#### Dr. Del Campo Rodríguez, Ángel

- Pediatric Dentist at DentalFisio
- Professor and Coordinator of the Dental Pediatrics Area at the Universidad Europea
- Coordinator of the Dental Units at the Children's Hospital Rodolfo Nieto Padrón
- Associate Professor Postgraduate degree of Pediatric Dentistry, Juarez Autonomous University of Tabasco
- PhD in Dentistry from the University of Valencia
- Master's Degree in Anthropology, New York University

#### Dr. Enciso Ripoll, Manuel Jesús

- Dentist in the Department of Universal Health and Public Health
- Dentist at Doctor Puchol Clinic
- Assistant Dentist at the Hospital de Manises
- Primary Care Dentist at the Denia Marina Salud Hospital
- Associate Professor of Oral Medicine at the CEU Cardenal Herrera University
- PhD in Dentistry from the University of Valencia
- Degree in Dentistry from the University of Valencia
- Master's Degree in Individual and Community Clinical Dentistry
- University in Periodontics from the Complutense University of Madrid
- Expert in Immunonutrition, Catholic University of Valencia

#### Dr. Figueroa García, Angela

- Specialist in Dentistry and Stomatology in a Private Clinic
- Undergraduate and Postgraduate Assistant Professor in the Department of Periodontics,
   Faculty of Medicine and Dentistry, University of Valencia, Spain
- Associate Professor of Advanced Periodontics, European University of Valencia
- Associate Professor of Advanced Periodontics at the European University of Valencia
- PhD in Dentistry from the University of Valencia
- Master's Degree in Periodontics by the University of Valencia
- Author of several publications, communications and conferences on periodontics
- SEPA Specialist Member

#### Dr. González Aranda, Cristina

- Specialist in Pediatric Dentistry
- Collaborating Professor on the Master's Degree in Pediatric Dentistry, Faculty of Dentistry, Complutense University of Madrid
- Associate Professor of Pediatric Dentistry, Faculty of Dentistry, Complutense University of Madrid
- Dr. in Current Pediatric from the Complutense University of Madrid
- Master's Degree in Pediatric Dentistry, Complutense University of Madrid
- Official Master's Degree in Dental Sciences, Universidad Complutense de Madrid

#### Dr. García Márquez, Juan Eliseo

- Dentist with exclusive dedication in Oral Surgery, Periodontics, Implants to Special Patients
- Professor in the subject of of special patients Degree at CEU Cardenal Herrera University
- Associate Professor of Periodontics the Faculty of Health Sciences at CEU Cardenal Herrera University
- Collaborating Professor for the Masters Degree s Degree in Oral Surgery and Implantology at CEU Cardenal Herrera University
- Master's Degree in Dentistry in Special Patients, University of Valencia
- Master's Degree in Hospital Surgery from the University of Valencia in the Hospital General University
- Postgraduate Certificate in Periodontics from the University of Valencia
- Member of the Spanish Society of Odontostomatology for Patients with Special Needs (SEOENE), Member of the Spanish Society of Periodontics and Osseointegration (SEPA)

#### Dr. López Zamora, María Isabel

- Dentist Specialist in Pediatrics
- Graduate in Dentistry from CEU Cardenal Herrera University
- Master's Degree in in Comprehensive Pediatric Dentistry from the CEU Cardenal Herrera University
- Program in Conscious Sedation and Advanced Life Support for Dentistry by the InsvaCare training center
- Course on esthetic pediatric crowns taught by NuSmile
- Oral communications at congresses of the Spanish Society of Pediatric Pediatric Dentistry (SEOP)

#### Dr. Gatón Hernández, Patricia

- Dentist specialized in Minimally Invasive Intervention and Pediatric Dentistry
- Director of Advanced Training in Multidisciplinary Minor Interventional Dentistry
- Director of Academic Course by modules in Pediatric Dentistry
- Associate Professor at University of Barcelona
- Guest Professor University of Sao Paulo. Brazil
- PhD in Dentistry at the University International of Catalunya
- Postgraduate course in Pediatric Dentistry at HM Nens Hospital
- Postgraduate Course in Dentistry Esthetic University of Barcelona
- Member of from European Board of Minimun Intervention Dentistry

#### Dr. Haya Fernández, María Celia

- Specialist in General: Dentistry
- Professor of Gerodontology and Oral Medicine, Faculty of Experimental and Health Sciences, at CEU Cardenal Herrera University
- PhD in Dentistry from the University of Valencia
- Master's Degree in Oral Medicine, General University Hospital, University of Valencia
- Master's Degree in Health Education for Patients and Dependents by the University of Valencia
- Pedagogical Adaptation Program by the University of Valencia
- Member of Spanish Society of Oral Medicine, the Spanish Society of Gerodontology, Center for Dental Studies of Valencia

## tech 30 | Course Management

#### Dr. Gianní. Manfredi

- Specialist in Pediatric Dentistry Studio Orthodontics
- Associate Professor of Orthodontics at undergraduate and postgraduate from the European University of Valencia
- Head professor of Forensic and Legal Dentistry contract at the San Vicente Mártir Catholic University of Valencia
- Doctorate in Health biomedicine and Sciences, University Europe
- Master's s Degree in Pediatric Dentistry from the San Vicente Mártir Catholic University of Valencia
- Master's Degree Official in Advanced Dentistry from the European University of Valencia
- Certificate in Conscious Sedation and Basic Instrumental Cardiopulmonary Resuscitation, San Vicente Mártir Catholic University of Valencia
- Refresher course on Guidelines for Dental Care of Patients with Special Needs, Sant Joan de Déu hospita
- Oral communication at the 36th, 38th, 39th Annual Meeting of the Spanish Society of Pediatric Dentistry (SEOP)

#### Dr. Barreda Ramos, Isai

- Specialist in General: Dentistry
- Expert in pediatric dentistry in several private clinics
- Dental Surgeon, Universidad Popular Autónoma del Estado de Puebla (UAEP)
- Specialist in Orthodontics by the UNITEC
- Research Award 2003, Mexican La Association of Orthodontics (AMO)



#### Dr. Leyda Menéndez, Ana

- Pediatric dentist with exclusive practice
- Head of the Psychiatry Service of the Contract pediatric dentist, Clinic of Dentistry,
   Faculty of Dentistry of the CEU Cardenal Herrera University
- Associate Professor of the program of Specialist in Comprehensive Pediatric Dentistry at the Faculty of Dentistry, CEU Cardenal Herrera University
- PhD in Dentistry from the University of Valencia
- Degree in Dentistry from the University of Valencia
- Postgraduate Course in Dentistry for special patients: Physically and mentally disabled patients and medically compromised patients"
- Postgraduate Degree in Baby Dentistry from the Scientific University of the South
- Postgraduate in Pediatric Dentistry from the Cayetano Heredia Peruvian University

#### Dr. Lozano Pajares, Melanie

- Medical Director and Pediatric Dentist at Clínica Dental Cuesta y Lozano SL
- Collaborator in the Master's Degree in Advanced Pediatric Dentistry at the European University of Valencia
- Degree in Dentistry from the European University of Valence
- Diploma in Pediatric Dentistry, Advanced Training in Multidisciplinary Minimal Intervention Dentistry
- Program on Conscious Sedation in Dentistry by Ins yaCare
- Certification in Invisalign by Essentials Madrid
- Member of the Spanish Society of Pediatric Dentistry, Communications and presentations in different programs and congresses at national level

#### Dr. Manzano, Alberto

- Dentist and Director of the consulting firm Plan Synergia
- Professor responsible for the subject of Endodontics for the international group at the European University
- Lecturer of courses on Management and Marketing for dental clinics nationwide
- Doctor of Dentistry, Faculty of Medicine and Dentistry, University of Valencia, Spain
- Degree in Dentistry from the Faculty of Medicine and Dentistry of the University of Valencia
- University Master's Degree in Pathology and Dependents, Faculty of Medicine and Dentistry from the University of Valencia
- Postgraduate Certificate in Implantology and Oral Rehabilitation from the University of Paris XII
- Executive Program in Management and Marketing for Dental Clinics, E-Universitas

#### Dr. Palma Carrió, Cristina

- Dentist Specialist in Periodontal Treatment at Clínica Dental Cristina Palma Carrió
- Lecturer at the University of Valencia in the Department of Stomatology
- PhD in Dentistry at the University of Valladolid
- Bachelor in Dentistry from the University of Valencia
- Master's Degree in Oral Surgery and Implantology University of Valencia
- Diploma in in Herpetology, Foundations SEPA
- Diploma in Rotational and Microscopic Endodontics University of Valencia

## tech 32 | Course Management

#### Dr. Melo Almiñana, Maria Pilar

- Specialist in Current Pediatric and General Stomatology
- Professor of Biomaterials in the undergraduate program in Spanish and English at the Valencia European University
- Professor for the Master's Degree in Temporomandibular Joint Pathology at the Faculty of Medicine and Dentistry, University of Valencia
- PhD in Current Pediatric from the Faculty of Medicine Dentistry and from the University of Valence
- Degree in Dentistry from the Faculty of Medicine and Dentistry of the University of Valencia
- Master's Degree in Aesthetic Dentistry from the Faculty of Medicine and Dentistry
  of the University of Valencia and the University-Business Foundation (ADEIT)
- Master's Degree in Forensic Sciences from the Faculty of Medicine and Dentistry of the University of Valencia and the University-Business Foundation (ADEIT)
- Publication of several scientific articles in JCR journals

#### Dr. Segarra Ortells, Cristina

- Specialist in Pediatric Current Pediatric
- Teacher and researcher from CEU Cardenal Herrera University
- Degree in Dentistry and Oral Surgery
- Specialist in Pediatric Dentistry
- Author of several scientific articles

#### Dr. Mut Ronda, Salvador

- Salvador Mut Pharmacy Officer
- Director of the Professional Master's Degree in Bioethics at the International University of Valencia (VIU)
- Associate Professor of General Pharmacology, Anesthesia, Resuscitation; Human Nutrition and General Pathology I and II (Spanish and English degree) at the Faculty of Health Sciences, Department of Dentistry of the European University of Valencia
- Director of Thesis Projects
- Participation in various specialized training programs in pharmacology
- PhD in Pharmacy from the University of Valencia
- Degree in Pharmacy from the University of Valencia
- Expert course in Biomedical English at the European University of Valencia

#### Dr. Cargill Foster, Nelly Ruth

- Medical specialist in the dental area
- Coordinator of the Secretary of Research, Graduate Studies and Liaison of the UJAT
- UJAT Postgraduate Director
- Head of the Graduate Department of the Academic Division of Health Sciences of the UJAT
- Degree in Medicine and Surgery
- Specialist in Dentistry

#### Dr. Muwaquet Rodríguez, Susana

- Specialist in Aesthetic Dentistry and Esthetic Stomatology
- Dentist at Dental Carlet
- Associate Professor at the European University of Valencia in the Line
- PhD in Dentistry at the University of Granada
- Degree in Dentistry from the University of Granada
- Master's Degree in Clinical and Microscopic Endodontics, Catholic University of Murcia
- Former Professor for the Master's Degree in Orthodontics at the Faculty of Medicine and Dentistry, University of Valencia
- Expert Program in Surgery and Prosthesis on Implants at the European Center of Orthodontics (CEOSA)
- Member of the Spanish Association of Endodontics (AEDE), Spanish Society of Conservative and Aesthetic Dentistry (SEOC), Spanish Society of Periodontics and Osseointegration (SEPA)
- Author of several article papers, posters and communications

#### Dr. Limonchi Palacio, Landy Vianey

- Specialist in Pediatric Current Pediatric
- Juchimán Clinic Coordinator
- Professor of the course "Habit Correction with Appliances" for the Bachelor's Degree in Dental Surgery of the Academic Direction of Health Sciences of Mexico
- Teacher of the course "Patient Care for Patients with Systemic Diseases of the Bachelor's Degree in Dental Surgeon of the Academic Direction of Health Sciences of Mexico
- Lecturer at the 2nd National Forum on Dental Research

#### Dr. Negre Barber, Adela

- Dentist Specialist in Oral Health and Prevention
- Associate Professor at the University of Valencia in the subject of Preventive and Community Dentistry I and II
- Graduate in Current Pediatric, Faculty of Medicine, Valencia
- PhD in Current Pediatric from the Faculty of Medicine Dentistry and from the University of Valence
- Official University Master's Degree in Dentistry Science at the Faculty of Medicine and Dentistry, University of Valencia
- Master's Degree in Individual and Community Clinical Dentistry, Faculty of Medicine and Dentistry from the University Valencia, University-Business Foundation (ADEIT), Valencia, SEOP)
- Best Novel Communication Award SEOP 2015

#### Dr. Serrano Martínez, Concepción

- Specialist in General and Digestive Current Pediatric
- PhD in Medicine and Surgery in General the Faculty of Medicine Dentistry and the University of Valencia
- Degree in Medicine and Surgery General: from the University of Murcia
- Speciality in Stomatology from the University of Murcia
- Postgraduate degree in Dentistry for the special and medically compromised patient, Faculty of Medicine and Dentistry from the University University of Valencia
- Member of Association DEBRA from Spain

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#### Dr. Pérez Chicote, Víctor

- Specialist in Dental Implants in Complex Cases at the Víctor Pérez Chicote Dental Surgery Center
- Teacher of training programs in Oral Surgery and Implantology in the private clinic
- PhD in Dentistry from the University of Valencia
- Degree in Dentistry 95 -00 at the University of Valencia
- Master's Degree in Dentistry in Special Patients, University of Valencia
- Masters Degree in and Oral Rehabilitation Surgery from ESORIB
- Master's Degree in Dental Sciences from the University of Valencia
- Postgraduate Certificate's Degree in Maxillofacial Implantology and Surgery from the UPEC
- Postgraduate course in Oral Surgery and Implantology at the University of of Santa Clara
- Postgraduate course in Advanced Surgery and Zygomatic Implants in Maringá
- Member of SEI

#### Dr. Cruz Pamplona, Marta

- Specialist in General Dentistry in Private Clinic
- Associate Professor of Oral Medicine at the CEU Cardenal Herrera University
- Professor of the degree in Dentistry (regular degree and international degree) at the European University of Valencia
- Professor of Adult and Child Clinical Practice at the European University of Valencia
- Author of several research papers, publications and oral communications
- Degree in Current Pediatric from CEU Cardenal Herrera University
- Masters Degree from Medicine and Surgery from the University of Valencia
- Diploma in Oral Medicine, General University Hospital Consortium in Valencia

#### Dr. Saavedra Marbán, Gloria

- Specialist in Dental Care for children at high biological risk
- Professor for the Master's Degree in Pediatric Dentistry, Complutense University of Madrid
- Associate Professor of Pediatric Dentistry at the Complutense University of Madrid
- Associate Professor of the Department of Stomatology IV of the Faculty of Dentistry, Complutense University of Madrid
- Dr. in Dentistry from the Complutense University of Madrid
- Degree in Dentistry from the Complutense University of Madrid
- Master's Degree in drug Pediatric Dentistry from the Complutense University of Madrid
- Specialist in Dental Care for Children at High Biological Risk, Complutense University of Madrid
- Member of the Pediatric Dentistry Scientific Commission of the Illustrious College of Dentists and Stomatologists of the First Region

#### Dr. Sastriques Mateu, Cristina

- Dentist Specialized in Endodontics and Pediatric Dentistry
- Professor of Pediatric from the University European University of Valencia
- Degree in of the Faculty of Medicine and Current Pediatric from the University of Valencia
- Master's Degree in Endodontics, Faculty of Experimental and Health Sciences, at CEU Cardenal Herrera University
- Postgraduate course in Implantology and Basic Oral Surgery at the Rubber Clinic. Madrid
- Expert Degree in Endodontics and Restorative Dentistry by Ilzarbe Dental Clinic
- Conscious Sedation Course, Barcelona Dental Council, Spain
- Member of Spanish Association of Endodontics (AEDE)

#### Dr. Savall Orts, María

- Dentist Specialist in Oral Medicine and Esthetic Dentistry
- Ad Honorem collaborating professor in the Master of Aesthetic, Adhesive and Minimally Invasive Dentistry at the Lluis Alcanyis Foundation Dental Clinic, University of Valencia
- Degree in Dentistry, Faculty of Medicine and Dentistry from the University University of Valencia
- Master's Degree in Medicine and Surgery from the Faculty of Medicine Dentistry and the University of Valencia
- Master's Degree in Adhesive and Minimally Invasive Aesthetic Dentistry,
   Faculty of Medicine and Dentistry, University of Valencia
- Postgraduate course in Occlusion, Temporomandibular Dysfunction and Orofacial Pain by the Catalan Society of Odontology and Stomatology (SCOE)

#### Dr. Ureña Cirett, José Luis

- Specialist in Pediatric Current Pediatric
- Postgraduate Professor of Pediatric Dentistry, Technological University of México (UNITEC), Mexico City, Mexico
- Undergraduate Professor of Pediatric Dentistry, School of Dentistry, Universidad Intercontinental. Mexico City
- Visiting Professor at the Faculty of Current Pediatric at the Complutense University of Madrid
- Professor at UIC and Director of the School of Dentistry at Universidad Intercontinental
- Surgeon, National Autonomous University of Mexico
- Master of Science in Pediatric Dentistry at the University of Michigan
- Mini-Residency in Adhesive Materials at the University of Minnesota

#### Dr. Ramírez Mendoza, Jeannette

- Pediatric dentist with exclusive dedication to infants, children and adolescents
- Research Professor of the Postgraduate Program in Orthodontics and Pediatric Dentistry at the Juárez Autonomous University of Tabasco
- Director of the Academic Body in Pediatric Dentistry of the Academic Division of Health Sciences of the Juárez Autonomous University of Tabasco
- Doctorate in Education, Iberoamerican University Foundation
- Dental Surgeon by the Juárez Autonomous University of Tabasco
- Specialist in Pediatric Dentistry from the Juarez Autonomous University of Tabasco
- Specialist in Orthodontics, Mexican Teaching and Research Dentistry Association
- Master's Degree in Medical Education, Higher Institute of Medical Sciences of Havana
- Diploma in Dentofacial Orthopedics, AOMEI
- Diploma in Emotional Intelligence, Centro de Superación Humana
- National Council of Children's Dentistry and National Council of Orthodontics of Mexico



Boost your career path with holistic teaching, allowing you to advance both theoretically and practically"





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## Module 1. Pediatric Dentistry: Basics

- 1.1. Introduction to Pediatric Dentistry
  - 1.1.1. What Is Pediatric Dentistry and What Is the Role of the Pediatric Dentist in Current Dentistry??
  - 1.1.2. Vision and Objecties of the Pediatric Dentist
  - 1.1.3. Historical Evolution of Pediatric Dentistry
  - 1.1.4. Comprehensive or Full Care of the Pediatric Patient
  - 1.1.5. Differences Between Pediatric Dentistry and Other Dental Specialities. Differences between Pediatric and Adult Patients
  - 1.1.6. Characteristics of an "Ideal" Pediatric Dentist and the Challenges of the Future in Pediatric Dental Care
- 1.2. Clinical Examination in Pediatric Dentistry
  - 1.2.1. First Visit in Pediatric Dentistry: Objectives, Requirements and Tools
  - 1.2.2. Medical history: Objective, Fundamentals and Sructure
  - 1.2.3. Clinical Examination: Objective, Characteristics and Structure
  - 1.2.4. Extraoral Clinical Examination
  - 1.2.5. Intraoral Clinical Examination
  - 1.2.6. Oral Hygiene Evaluation
  - 1.2.7. Diet Evaluation
- 1.3. Radiological Examination and Complementary Tests
  - 1.3.1. Radiological Tests
    - 1.3.1.1. Advantages Types
    - 1.3.1.2. Extraoral X-Rays: Lateral Skull Orthopantomography, Wrist X-ray: Objectives
    - 1.3.1.3. Advantages Indicated Time of Execution and Disadvantages
    - 1.3.1.4. Intraoral X-rays. Bitewing, periapical and occlusal radiographs: objectives, indications, advantages, disadvantages and materials Criteria: age and caries risk
  - 1.3.2. Complementary Tests
    - 1.3.2.1. Laboratory Tests: Usefulness
    - 1.3.2.2. Study Models: Indications
    - 1.3.2.3. Clinical Images: Advantages

- 1.4. Diagnosis and Treatment Plan
  - 1.4.1. The Diagnostic Process. Concept
  - 1.4.2. Information: Need and Requirement
  - 1.4.3. Provisional Diagnosis, Differential Diagnosis and Definitive Diagnosis
  - 1.4.4. Therapeutic Process: Objectives
  - 1.4.5. Adequate Treatment: Rationale, Requirements, Objectives and Phases
    - 1.4.5.1. Immediate Phase (Urgent Measures)
    - 1.4.5.2. Systemic Phase (Medical Alerts)
    - 1.4.5.3. Preparatory Phase (Preventive Measures)
    - 1.4.5.4. Corrective Phase (Operative Dentistry)
    - 1.4.5.5. Maintenance Phase
    - 1.4.5.6. Schedule or Appointment-Based Planning: Importance
- 1.5. Chronology and Morphology of Primary and Permanent Dentition, Eruption and Dental Occlusion
  - 1.5.1. Chronology of Human Dentition. Importance
  - 1.5.2. Nolla's Phases of Dental Development
  - 1.5.3. Morphology of Temporary Dentition. Importance Features
  - 1.5.4. Differences Between Temporary (TT) and Permanent (PT) Teeth
  - 1.5.5. General Characteristics of the Temporal Incisor Group
  - 1.5.6. Clinical Repercussions of the Differences Between TT and PT
  - 1.5.7. General Characteristics of the Temporal Canine Group
  - 1.5.8. General Characteristics of the Temporal Molar Group
- 1.6. Nomenclature and Dental Identification Systems
  - 1.6.1. Introduction
  - Guide for the Identification of Teeth. Shape and Color, Presence of Mamelons, Eruption Status, Chronological Age and History of Premature Extractions
  - 1.6.3. Primary and Permanent Dentition Nomenclature
  - 1.6.4. Dental Identification Systems
    - 1.6.4.1. International System or FDI
    - 1.6.4.2. Universal or American System
    - 1.6.4.3. Zsigmondy or Palmer System
    - 1.6.4.4. Haderup or German System

# **Module 2.** Growth and Development: Changes in Orofacial Structures and Associated Pathologies

- 2.1. Growth and Development
  - 2.1.1. Introduction
  - 2.1.2. Definitions and Fundamentals of Growth and Development
    - 2.1.2.1. Prenatal Growth
    - 2.1.2.2. Postnatal Growth
    - 2.1.2.3. Factors That Impact Growth and Development
    - 2.1.2.4. Theories of Growth and Development
    - 2.1.2.5. Basic Concepts of General and Craniofacial Growth
    - 2.1.2.6. Development of the Maxilla
    - 2.1.2.7. Jaw Development
    - 2.1.2.8. Growth and Development of the Dental Arches. Primary Dentition Stages, Mixed Dentition Stages, Anterior Replacement, Lateral Replacement: Dimensional Changes of the Arches
    - 2.1.2.9. Differential Human Growth. Krogman's Childhood Ages, Growth Markers, Growth Acceleration (Spikes) and Growth Assessment Methods and Their Importance in Pediatric Dentistry
- 2.2. Dentition Development, Eruption, Exfoliation and Occlusion of Teeth
  - 2.2.1. Introduction. Dental Development. Odontogenesis
  - 2.2.2. Stages of Dental Development
    - 2.2.2.1. Stages of Morphological Development
    - 2.2.2. Stages of Histophysiological Development
  - 2.2.3. Dental Eruption and Exfoliation
    - 2.2.3.1. Concepts and Theories of Eruption
    - 2.2.3.2. Eruption phases: preeruptive/prefunctional and posteruptive/functional eruption
    - 2 2 3 3 Dental Exfoliation
  - 2.2.4. Clinical Problems During Dental Eruption
    - 2.2.4.1. Eruption of the First Teeth, "Teething", and Their Management
    - 2.2.4.2. Natal and Neonatal Teeth
    - 2.2.4.3. Other Oral Lesions Connected to Eruption
      - 2.2.4.3.1. Factors Affecting Dentition Development. Local and Systemic Factors

- 2.2.5. Occlusion Development
  - 2.2.5.1. Characteristics and Different Stages
  - 2.2.5.2. Gingival Flange
  - 2.2.5.3. Occlusion in Primary Dentition
  - 2.2.5.4. Occlusion in Mixed Dentition
  - 2.2.5.5. Occlusion in Permanent Dentition
- 2.3. Anomalies in Tooth Development
  - 2.3.1. Anomalies in Shape and Number
    - 2.3.1.1. Introduction
    - 2.3.1.2. Alterations in Tooth Number: Concept
    - 2.3.1.3. Dental Agenesis: Etiology and Manifestations
    - 2.3.1.4. Clinics, Diagnosis and Therapeutic Options
    - 2.3.1.5. Supernumerary Teeth: Etiology and Manifestations
    - 2.3.1.6. Clinics, Diagnosis and Therapeutic Options
    - 2.3.1.7. Local Morphological Alterations: Regional Odontodysplasia, Macrodontia and Microdontia, Gemmation, Fusion, Cusps and Accessory Tubercles, *Dens in Dente* and Taurodontism
  - 2.3.2. Abnormalities of Enamel Structure
    - 2321 Fnamel Nature
    - 2.3.2.2. Histology of Healthy Enamel
    - 2.3.2.3. Amelogenesis
  - 2.3.3. Alterations of the Enamel as a Syndromic Feature
  - 2.3.4. Genetic Dysplasias: Amelogenesis Imperfecta. Generalities and Types
    - 2.3.4.1. Al Type I Hypoplastic
    - 2.3.4.2. Al Type II Hypomaturative
    - 2.3.4.3. Al Type III Hypocalcified
    - 2.3.4.4. Al Type IV Hypomaturative-Hypoplastic With Taurodontism
  - 2.3.5. Environmental Dysplasias
    - 2.3.5.1. Hypoplasia Due to Fluoride Ingestion
    - 2.3.5.2. Hypoplasia Due to Nutritional Deficits
    - 2.3.5.3. Hypoplasias Due to Exanthematous Diseases
    - 2.3.5.4. Hypoplasias Due to Prenatal Infections
    - 2.3.5.5. Hypoplasias Due to Neuropathies
    - 2.3.5.6. Hypoplasias Due to Inborn Errors of Metabolism

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	2.3.6.	Hypoplasias Due to Local Factors: Apical Infection, Trauma, Surgery, Irradiation		
	2.3.7.	Treating Hypoplastic Teeth		
2.4.	Incisor-	Molar Hypomineralization (IMH). Etiology and Diagnosis		
	2.4.1.	The Concept of Incisor-Molar Hypomineralization		
	2.4.2.	Histological Features of Hipomineralized Enamel		
	2.4.3.	The Tissues Under Hypomineralized Enamel: Dentin-Pulp Complex		
	2.4.4.	Etiological Factors		
		2.4.4.1. Genetic and Ethnic Factors		
	2.4.5.	Environmental Factors		
		2.4.5.1. Hypoxia		
		2.4.5.2. Hypocalcemia		
		2.4.5.3. Hypokalemia		
		2.4.5.4. High Fever		
		2.4.5.5. Drugs:		
		2.4.5.6. Environmental Toxicity		
		2.4.5.7. Breastfeeding		
		2.4.5.8. Fluoride		
		2.4.5.9. Others		
	2.4.6.	Influence of the Period of Action of the Causative Agent on the Development of Incisor-Molar Hypomineralization		
	2.4.7.	Clinical Manifestations		
		2.4.7.1. Pattern of Affectation		
		2.4.7.2. Diagnostic Criteria		
		2.4.7.3. Associated Clinical Problems		
	2.4.8.	Differential Diagnosis		
	2.4.9.	Severity Criteria		
	2.4.10.	Epidemiological Analysis		
2.5.	Incisor-	Incisor-Molar Hypomineralization (IMH). Prevention and Treatment		
	2.5.1.	Prevention		
		2.5.1.1. Dietary and Oral Hygiene Recommendations		
		2.5.1.2. Early Diagnosis		
		2.5.1.3. Remineralization and Desensitization		
		2.5.1.4. Dit and Ficeura Spalante		

2.5.2.	Restorative Treatment
	2.5.2.1. Treatment of Enamel Opacities in Incisors
	2.5.2.2. Restorative and Prosthetic Treatment of Molar Teeth
	2.5.2.3. General Aspects of Cavity Preparation
	2.5.2.4. Molar Restoration
	2.5.2.5. Difficulties Treating Teeth With IMH
	2.5.2.6. Causes and Consequences of Bonding Difficulties in Enamel and Dentin
2.5.3.	Exodontics
2.5.4.	Affected Behavior in Patients With Previous Experience of Pain
Abnorn	nalities of Dentin Structure
2.6.1.	Introduction
2.6.2.	Dentin Alterations as a Syndromic Element: Familial Hypophosphatemic Rickets, Pseudohypoparathyroidism, Other Syndromes
2.6.3.	Genetic Dysplasias
	2.6.3.1. Dentinogenesis Imperfecta: Classification: Shields Type I, II and II
	2.6.3.2. Dentin Dysplasia: Classification: Shields Type I, II and III
2.6.4.	Treating Hypoplastic Teeth
Eruptio	n Abnormalities
2.7.1.	Introduction
2.7.2.	Natal and Neonatal Teeth
2.7.3.	Development Cysts
2.7.4.	Early Eruption. Late Eruption
2.7.5.	Premature Loss of Primary Teeth
2.7.6.	Ectopic Eruption
2.7.7.	Dental Ankylosis
2.7.8.	Failure of Permanent Teeth to Erupt
Dental	Erosion in Children
2.8.1.	Concept
2.8.2.	Epidemiology of Dental Erosion
2.8.3.	Pathogenesis of Dental Erosion

2.6.

2.7.

2.8.

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#### 2.8.4. Etiological Factors

- 2.8.4.1. Biological Factors: Saliva and the Anatomy of the Hard and Soft Tissues of the Mouth
- 2.8.4.2. Chemical Factors: Nature, Acidity, pH and Buffery Capacity, Adhesion and Mineral Content in Food
- 2.8.4.3. Behavioral Factors: Daytime and Nighttime Food and Beverage Consumption, Vomiting, Regurgitation, and Intake of Medications and Oral Hygiene
- 2.8.4.4. General Health Status of the Child
- 2.8.4.5. Habits
- 2.8.4.6. Education and Socioeconomic Level
- 2.8.4.7. Knowledge on the Etiology of the Disease
- 2.8.5. Clinical Manifestations
- 2.8.6. Diagnosis of Dental Erosion
- 2.8.7. Differential Diagnosis of Dental Erosion

## Module 3. Psychology, Behavior and Behavioral Guidance

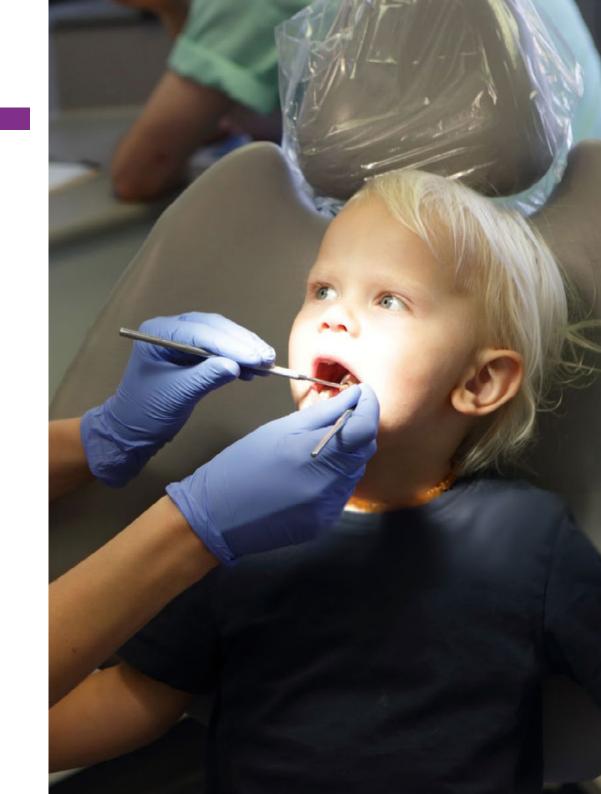
- 3.1. Pediatric Psychological Development. Applied Pediatric Psychobiology
  - 3.1.1. Applied Pediatric Psychobiology: Children's Characteristics
  - 3.1.2. Theories of Childhood Development and Factors that Govern Children's Behaviour
  - 3.1.3. Characteristics of Children Under 3 Years Old
  - 3.1.4. Characteristics of Children Between 3 and 5 Years Old
  - 3.1.5. Characteristics of Children Between 6 and 12 Years Old
  - 3.1.6. Characteristics of Preadolescents and Adolescents
  - 3.1.7. The "Dos" and "Don'ts" of Pediatric Dentistry
- 3.2. Factors that Determine Childhood Behaviour in the Dental Clinic
  - 3.2.1. Patient Age
  - 3.2.2. Degree of Maturity
  - 3.2.3. Temperament: Anxiety, Fear and Anger
  - 3.2.4. Previous Medical or Dental Life Experiences
  - 3.2.5. The Pediatric Dentistry Team
    - 3.2.5.1. Auxiliary Staff
    - 3.2.5.2. The Pediatric Dentist: Attitudes of the Professional, Training and Experience

- 3.3. Guide of Childhood Behaviour. Basic Techniques
  - 3.3.1. Patient Classification According to Their Degree of Collaboration
    - 3.3.1.1. Wright's Classification
    - 3.3.1.2. Lampshire's Classification
    - 3.3.1.3. Frankl's Classification
    - 3.3.1.4. Venham's Classification
  - 3.3.2. Principles for Behavioral Guidance
  - 3.3.3. Basic Techniques for Behavioral Guidance
    - 3.3.3.1. Techniques for Establishing Communication: Say/Show/Do
    - 3.3.2. Techniques for the prevention or modification of inappropriate or dangerous behavior. Positive and negative reinforcement; nonverbal communication/voice control; gradual exposure; parental presence/absence; modeling; distraction, hand over mouth
    - 3.3.3.3. Nitrous Oxide
- 3.4. Guide of Childhood Behaviour. Limiting Techniques and Advanced Techniques
  - 3.4.1. Advanced Techniques for Behavioral Guidance
    - 3.4.1.1. Stabilization for Physical Protection. Mechanical Stabilization of the Body. Mechanical Stabilization of the Mouth
    - 3.4.1.2. Sedation
    - 3.4.1.3. General Anesthesia
- 3.5. Pharmacological Handling of the Behavior
  - 3.5.1. Minimal and Moderate Sedation
    - 3.5.1.1. Principles
    - 3.5.1.2. Objectives
    - 3.5.1.3. Warnings on Minimal and Moderate Sedation
  - 3.5.2. Deep Sedation
    - 3.5.2.1. Warnings on Deep Sedation
  - 3.5.3. Patient Selection
  - 3.5.4. Patient's Medical Background
  - 3.5.5. Physical Evaluation

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## Module 4. Preventive Pediatric Dentistry

- 4.1. First Denal Visit
  - 4.1.1. Introduction
  - 4.1.2. Objectives of the First Dental Visit
  - 4.1.3. Preparing the Child for Their First Dental Visit
  - 4.1.4. Dental Visit by Ages. Techniques and Suggestions
- 4.2. Oral Health of the Child and Anticipatory Guide for Parents and/or Tutors
  - 4.2.1. Risk Evaluation. Definition and Tools
  - 4.2.2. CAMBRA Method
    - 4.2.2.1. Children Under the Age of 6
    - 4.2.2.2. Children Over the Age of 6
  - 4.2.3. "Dental Home". Concept
    - 4.2.3.1. Features
    - 4.2.3.2. Benefits
  - 4.2.4. Anticipatory Guide for Parents
    - 4.2.4.1. Concept
    - 4.2.4.2. Oral Health Protocols for Babies
    - 4.2.4.3. Importance of NonDental Professionals in the Oral Health of Infants
- 4.3. Measures to Control Plague in Pediatric Dentistry
  - 4.3.1. Introduction. Concept. Dental Plaque in Caries Etiology
  - 4.3.2. Mechanical Control of the Plaque
    - 4.3.2.1. Tooth Brush. Characteristics and Techniques
    - 4.3.2.2. Tooth Pastes
    - 4.3.2.3. Dental Floss. Characteristics and Techniques
  - 4.3.3. Chemical Control of the Plaque
    - 4.3.3.1. Chemical Anti-Plaque Agents. Properties
  - 4.3.4. Preventive Oral Hygiene Measures for Children by Age



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- 4.4. Dietary Measures and Nutrition in the Pediatric Patient
  - 4.4.1. Introduction. Nutrition in the Dental Development of the Child
  - 4.4.2. Diet: Feeding Mode and Frequency of Intake, Factors of Dietary Cariogenicity Protective Food
    - 4.4.2.1. Food Pyramid Guide
    - 4.4.2.2. Dietary Survey
    - 4.4.2.3. Balanced and Non-Cariogenic Diet
    - 4.4.2.4. Dietary Advice ("Counseling") in the Consultation Room
    - 4.4.2.5. Clinic
- 4.5. Use of Fluorides in Pediatric Dentistry
  - 4.5.1. Introduction, Metabolism, Mechanisms of action
    - 4.5.1.1. Systemic Fluoride. Fluoridation of Water and Other Sources. Advantages and Disadvantages
    - 4.5.1.2. Topical Fluoride: Mechanisms of Action, Types and Fluoride Products
    - 4.5.1.3. Acute Toxicity
    - 4.5.1.4. Chronic Toxicity. Dental Fluorosis
    - 4.5.1.5. Appropriate Prescription of Topical Fluoride According to Age and Risk of Caries
- 4.6. Dentistry for Babies
  - 4.6.1. Patients Under 3 Years of Age: Characteristics
  - 4.6.2. The Edentulous Baby's Mouth
    - 4.6.2.1. Constituent Elements and Functions
  - 4.6.3. Possible Findings
    - 4.6.3.1. Inclusion Cysts
    - 4.6.3.2. Microkeratocysts
    - 4.6.3.3. Geographic Tongue
    - 4.6.3.4. Natal and Neonatal Teeth
    - 4.6.3.5. Ankyloglossia
    - 4.6.3.6. Riga-Fede Syndrome
  - 4.6.4. Baby Dentistry: Concept, Rationale and Fundamentals
  - 4.6.5. The First Visit in a Child Under 3 Years of Age: Timing, Objectives and Constituent Elements

- 4.7. Maintenance of the Oral and Dental Health of Children Under 3 Years of Age
  - 4.7.1. Information: Type of Information and Methodology
  - 4.7.2. Transmission. Educational
    - 4.7.2.1. Motivational Interviewing: Characteristics and Objectives
    - 4.7.2.2. Anticipatory Guide
  - 4.7.3. Preventive Strategies for Children Under the Age of 3
    - 4.7.3.1. Caring for the Oral Health of Parents
    - 4.7.3.2. Oral Hygiene
    - 4.7.3.3. Balanced Non-Cariogenic Diet
    - 4.7.3.4. Adequate Fluoride Intake
    - 4.7.3.5. Periodic Professional Monitoring

## Module 5. Dental Caries Pathology and Treatment

- 5.1. Dental Caries. Etiology, Pathogenesis and Clinical Manifestations
  - 5.1.1. Concept of Caries Disease
  - 5.1.2. Current Relevance of Caries Disease
  - 5.1.3. Etiological Factors of Caries Disease
    - 5.1.3.1. Factors Relative to the Host: Teeth and Saliva
    - 5.1.3.2. Factors Related to Plague Microbiology
    - 5.1.3.3. Factors Related to the Diet: Factors Dependent on the Food Ingested. Dietary Factors Dependent on the Individual
    - 5.1.3.4. Factors Dependent on the Individual's Cultural and Socioeconomic Context
  - 5.1.4. Pathogenesis of the Caries Lesion
    - 5.1.4.1. Demineralization/Remineralization Process. Critical pH
    - 5.1.4.2. The Oral Regulation of pH Fluctuations and Remineralization
  - 5.1.5. Clinical Manifestations of the Caries Lesion
    - 5.1.5.1. Incipient Caries Lesions
    - 5.1.5.2. Cavitated Caries Lesions
  - 5.1.6. Epidemiology of Dental Caries
    - 5.1.6.1. Caries in Primary Dentition
    - 5 1 6 2 Caries in Mixed Dentition
    - 5.1.6.3. Caries in Young Permanent Dentition

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5.4.2.4. Alternative Products to Favour Remineralization

5.2.	Diagno	sis of Dental Caries	5.5.	Treatm	nent of Cavitated Caries Lesions. Principles
	5.2.1.	Detecting and Monitoring Caries Lesions 5.2.1.1. Methods That Do Not Require Technological Support: Visual Method and Tactile Method 5.2.1.2. Methods that Require Technological Support: Radiological Methods, Methods Based on Visible Light, Methods Based on Laser Light, Methods Based on Ultrasound and Methods Based on Electric Current 5.2.1.3. Injury Activity Assessment: ICDAS System 5.2.1.4. Establishing the Patient's Risk of Caries		5.5.2.	Objectives of Dental Surgery in Children Factors That Modify Dental Surgery in Children 5.5.2.1. Behaviour 5.5.2.2. Dentition Development 5.5.2.3. Extent and Depth of Cavitated Caries Lesions 5.5.2.4. Systemic Status of the Patient 5.5.2.5. Morphological Characteristics.of Temporary Teeth
5.3.		hildhood Caries. Early Childhood Caries. (ECC)  Feeding Up to 6 Months of Age 5.3.1.1. Exclusive Breastfeeding on Demand: Its Influence on Craniofacial Development: Benefits 5.3.1.2. Bottle Feeding: Indications and Consequences of its Use The Process of Eruption: Chronogram The Tasks of Temporal Dentition Feeding After the Eruption of the First Tooth: Ablactation Feeding After the Eruption of the Second Temporal Molar Prolonged Breastfeeding: Concept and Risks Early Childhood Caries 5.3.7.1. Concept 5.3.7.2. Types	5.6.	5.5.4. Pit and	Principles of Minimally Invasive Dentistry 5.5.3.1. Removal of the Minimum Necessary Dental Tissue 5.5.3.2. Preservation of Pulp Vitality 5.5.3.3. Using Bioactive Materials Absolute Isolation 5.5.4.1. Objectives 5.5.4.2. Materials and Their Adaptation to Children: Dike, Clamps and Young's Arc 5.5.4.3. Placement Techniques by Age: Preschoolers, Schoolchildren and Adolescents Fissure Sealants (PFS). Preventive Resin Restorations (PRR) Introduction. Historical Background of Fissure Sealants 5.6.1.1. Types of Fissures 5.6.1.2. Cariostatic Properties
5.4.		5.3.7.3. Transmissibility Habits and Infectivity Window 5.3.7.4. Characteristics: Rapid Progression: Reasons 5.3.7.5. Consequences eutic Remineralization in Incipient Caries Lesions Objectives and Requirements of Therapeutic Remineralization Remineralization Products and Systems 5.4.2.1. Fluoride: Mechanisms of action for Remineralization 5.4.2.2. Casein Phosphopeptide-Amorphous Calcium Phosphate Phosphopeptide Complexes (CPP-ACP): Nature, Mechanisms of Action, Presentations and Mode of Use 5.4.2.3. New Materials in Remineralization. Nanotechnology-derived materials: nano-hydroxyapatite and nano-carbonateapatite. Bioactive Crystals Based on Amorphous Sodium Phosphosilicate and Calcium Phosphates	5.7.	5.7.1.	5.6.1.3. Types of Sealants 5.6.1.4. Patient Selection.: Indications and Contraindications 5.6.1.5. Placement Technique 5.6.1.6. How to Prevent Fissure Sealants From Fracturing and Falling Off Preventive Resin Restorations (PRR) 5.6.2.1. Concept 5.6.2.2. Types 5.6.2.3. Placement Technique natic Restorative Treatment (ART). Temporary Therapeutic Restorations (TTR)

#### 5.8. Treatment of Cavitated Caries Lesions. Materials

- 5.8.1. Pulp Protection Materials
  - 5.8.1.1. Calcium Hydroxide: Mechanism of Action. Indications. Advantages and Disadvantages
- 5.8.2. Glass Ionomer: Self-Curing and Light Curing
  - 5.8.2.1. New Bioactive Materials
- 5.8.3. Materials for Dental Restoration
  - 5.8.3.1. Restorative Glass Ionomer: Characteristics, Indications, Contraindications, Advantages, Disadvantages and Mode of Use
  - 5.8.3.2. Composite Resins or Composites. Concept and Types
  - 5.8.3.3. Principles of Use
  - 5.8.3.4. Preparation of the Remaining Tooth Structure for the Use of Composites: Dentin Adhesives: Types Available Today and Selection Criteria
- 5.9. Treatment of Large Cavitated Caries Lesions in Pediatric Dentistry
  - 5.9.1. Complex Lesions in Temporary and Permanent Teeth
    - 5.9.1.1. Characteristics and Consequences
    - 5.9.1.2. Treatment Options in Temporary and Permanent Dentition
  - 5.9.2 Treatment of Molars: Preformed Crowns
    - 5.9.2.1. Indications. Advantages and Disadvantages
    - 5.9.2.2. Types: Metallic Preformed Crowns. Pediatric Esthetic Crowns
    - 5.9.2.3. Technique of Preparation, Adaptation and Cementation of Metal Crowns. Defective Crowns and Complications
    - 5.9.2.4. Preparation and Cementation Technique for Esthetic Pediatric Crowns
    - 5.9.2.5. Defective Crowns and Complications
  - 5.9.3. Treatment of Anterior Teeth
    - 5.9.3.1. Preformed Acetate Crowns. Indications and Contraindications. Procedure. Complications
    - 5.9.3.2. Esthetic Pediatric Crowns. Esthetic Pediatric Crown Preparation and Cementation Technique
    - 5.9.3.3. Defective Crowns and Complications
  - 5.9.4. Treatment of Anterior Teeth
    - 5.9.4.1. Preformed Acetate Crowns
    - 5.9.4.2. Indications and Contraindications
    - 5.9.4.3. Procedure
    - 5.9.4.4. Complications

## Module 6. Dental Pulp Pathology and Treatment

- 5.1. Pulp Pathology in Temporary Dentition (TD)
  - 6.1.1. Peculiarities of Temporary Teeth in Relation to Pulp Involvement
  - 6.1.2. Posteruptive Evolution of the Pulp of Primary Teeth
  - 6.1.3. Characteristics of the Dentin-Pulp Organ in TD
  - 6.1.4. Diagnosis
    - 6.1.4.1. General Factors: Pathologies That Contraindicate Pulp Capillary Treatment
    - 6.1.4.2. Regional Factors
    - 6.1.4.3. Local Factors
  - 6.1.5. History of Pain
    - 6.1.5.1. Stimulated, Thermal/Chemical, Intermittent Pain
    - 6.1.5.2. Spontaneous, Nocturnal, Prolonged Pain
    - 6.1.5.3. Clinical Examination: of Mucosa, Teeth. Reliability of Pulp Vitality Tests
    - 6.1.5.4. Radiological Examination: Information it Provides
    - 6.1.5.5. Classification
      - 6.1.5.5.1. Conditioning Factors in Children
      - 6.1.5.5.2. Healthy Pulp: Characteristics and Radiology
      - 6.1.5.5.3. Reversible Pulpitis: Characteristics and Radiology
      - 6.1.5.5.4. Irreversible Pulpitis: Characteristics and Radiology
      - 6.1.5.5.5. Pulp Necrosis: Characteristics and Radiology
- 6.2. Pulp Therapeutics in Temporary Teeth
  - 6.2.1. Pulp Protection
    - 6.2.1.1. Indications. Objectives
  - 6.2.2. Indirect Pulp Treatment
    - 6.2.2.1. Indications
    - 6.2.2.2. Objectives
    - 6.2.2.3. Keys
    - 6 2.2.4. Procedure

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6.3.

6.4.

6.2.3.	Pulpotomy
	6.2.3.1. Concept
	6.2.3.2. Objective
	6.2.3.3. Indications and Contraindications
	6.2.3.4. Drugs That Act on the Pulp: Types and Mode of Action
	6.2.3.5. Procedure
	6.2.3.6. Remnant Crown Reconstruction
6.2.4.	Pulpectomy
	6.2.4.1. Concept
	6.2.4.2. Objective
	6.2.4.3. Indications and Contraindications
	6.2.4.4. Canal Sealing Materials Requirements, Types and Mode of Action
6.2.5.	Procedure
6.2.6.	Remnant Crown Reconstruction
Pulp Pa	thology in Young Permanent Dentition (YPD)
6.3.1.	Assessment of Pulp Status
	6.3.1.1. Background
	6.3.1.2. Clinical Examination
	6.3.1.3. Radiographical Examination
	6.3.1.4. Vitality Tests
	6.3.1.5. Direct Pulp Evaluation
6.3.2.	Establishing the Prognosis of the Affected Tooth
Pulp Th	erapeutics in Young Permanent Teeth
6.4.1.	Indirect Pulp Coating
	6.4.1.1. Objectives
	6.4.1.2. Contraindications
	6.4.1.3. Procedure
	6.4.1.4. Criteria for Success or Failure of the Treatment in its Evolution
6.4.2.	Direct Pulp Coating
	6.4.2.1. Objectives
	6.4.2.2. Contraindications
	6.4.2.3. Procedure
	6.4.2.4. Criteria for Success or Failure of the Treatment in its Evolution

6.4.3.	Apex Formation
	6.4.3.1. Objectives
	6.4.3.2. Contraindications
	6.4.3.3. Procedure
	6.4.3.4. Periodic Controls
	6.4.3.5. Criteria for Success or Failure of the Treatment in its Evolution
6.4.4.	Apicogenesis
	6.4.4.1. Objectives
	6.4.4.2. Contraindications
	6.4.4.3. Procedure
	6.4.4.4. Periodic Controls
	6.4.4.5. Criteria for Success or Failure of the Treatment in its Evolution

## Module 7. Dental Trauma. Diagnosis and Therapeutics

- 7.1. Trauma Patient Diagnosis, Classification and Examination
- 7.2. Fracture Management in Young Dentition
- 7.3. Dislocation Management in Young Dentition
- 7.4. Avulsion Management in Young Dentition
- 7.5. Trauma Management in Temporal Dentition

## Module 8. Oral Pathology in Pediatric Dentistry

- 8.1. Periodontal Pathology in Pediatric Dentistry
  - 8.1.1. Diagnosis: Periodontal Evaluation in the Child
  - 8.1.2. Gingival Inflammation
    - 8.1.2.1. Gingivitis Associated With Plaque Not Systemically Aggravated
    - 8.1.2.2. Systematically Aggravated Gingivitis
    - 8.1.2.3. Gingivitis Induced by Drugs
      - 8.1.2.3.1. Chronic Periodontitis
      - 8.1.2.3.2. Aggressive Periodontitis in Temporary and Mixed Dentition
  - 8.1.3. Aggressive Localized Periodontitis
    - 8.1.3.1. Aggressive General Periodontitis
  - 8.1.4. Necrotizing Periodontal Disease
    - 8.1.4.1. Acute Ulceronecrotizing Gingivitis (AUNG)
    - 8.1.4.2. Ulceronecrotizing Periodontitis (UNP)

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8.2.	Urai ivii	ucosai Patnology of Viral and Fungal Origin. Diagnosis and Treatment
	8.2.1.	Viral Diseases of the Oral Mucosa. Herpes Simplex Virus
		8.2.1.1. Etiology
		8.2.1.2. Pathogenesis
		8.2.1.3. Herpetic primoinfection
		8.2.1.4. Recurrent Herpes Simplex
		8.2.1.5. Diagnosis/Differential Diagnosis
		8.2.1.6. Treatment
	8.2.2.	Viral Diseases of the Oral Mucosa. Coxsackievirus
		8.2.2.1. Hand-Mouth-Foot Disease
		8.2.2.2. Herpangina
	8.2.3.	Mycotic Diseases of the Oral Mucosa. Acute or Muguet Pseudomembranous Candidiasis
		8.2.3.1. Etiology
		8.2.3.2. Diagnosis
		8.2.3.3. Differential Diagnosis
		8.2.3.4. Treatment
	8.2.4.	Mycotic Diseases of the Oral Mucosa. Angular Cheilitis
		8.2.4.1. Etiology
		8.2.4.2. Diagnosis
		8.2.4.3. Differential Diagnosis
		8.2.4.4. Treatment
	8.2.5.	Recurrent Aphthous Stomatitis
		8.2.5.1. Etiopathogenesis: Immunological Factors, Heredity and Predisposing Factors
		8.2.5.2. Minor Aphthous Ulcers and Major Aphthous Ulcers
		8.2.5.3. Diagnosis
		8.2.5.4. Treatment
8.3.	Oral Mu	ucosal Pathology of Traumatic or Allergic Origin. Diagnosis and Treatmen
	8.3.1.	Trauma Lesions of the Oral Mucosa
		8.3.1.1. Nibbled Mucosa

8.3.1.2. Traumatic Ulcerations

	8.3.2.	Irritative Lesions Caused by Chemical Agents
		8.3.2.1. By Direct Contact With the Oral Mucosa
		8.3.2.2. Palatal Necrosis After Anesthesia
		8.3.2.3. Ulcers Generated by Chemotherapeutic Treatment
		8.3.2.4. Allergic Stomatitis: Drug-Induced Stomatitis
		8.3.2.5. Contact Stomatitis
	8.3.3.	Irritative Lesions Caused by Physical Agents
		8.3.3.1. Lesions Secondary to Radiotherapeutic Treatment
		8.3.3.2. Electrical Burn
		8.3.3.3. Lesions Caused by Excessive Heat or Cold
8.4.		ogies of the Oral Mucosa. Most frequent benign lesions in pediatrics. sis and Treatment
	8.4.1.	White Leions
		8.4.1.1. Focal Hyperkeratosis
		8.4.1.2. Leukoedema
		8.4.1.3. White Spongy Nevus
	8.4.2.	Pigmented Lesions
		8.4.2.1. Physiological Pigmentation
		8.4.2.2. Oral Melanotic Macule
		8.4.2.3. Nevo
		8.4.2.4. Petechiae and Ecchymosis
	8.4.3.	Red Lesions
		8.4.3.1. Erythema Multiform
	8.4.4.	Exophytic Lesions

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8.5.

8.4.5.	Fibrous Hyperplasia or Fibroma Due to Irritation 8.4.5.1. Giant cell Fibroma
	8.4.5.2. Peripheral Ossifying Fibroma
	8.4.5.3. Hereditary Gingival Fibromatosis
	8.4.5.4. Papillary Hyperplasia
	8.4.5.5. Pyogenic Granuloma
	8.4.5.6. Giant Cell Peripheral Granuloma
	8.4.5.7. Vulgaris or Virus Verruca
	8.4.5.8. Condyloma Acuminatum
	8.4.5.9. Hemangioma
	8.4.5.10. Lymphangioma
	8.4.5.11. Neurofibroma
	8.4.5.12. Congenital Granular Cell Gingival Tumor
	8.4.5.13. Mixed Tumor or Pleomorphic Adenoma
	thology. Most frequent cystic lesions, benign tumors oplasms in pediatrics. Diagnosis and Treatment
8.5.1.	Cysts and Pseudocysts of Soft Tissues
	8.5.1.1. Lymphoepithelial Cysts
	8.5.1.2. Hematoma and Rash Cyst
	8.5.1.3. Mucocele
	8.5.1.4. Cannula
	8.5.1.5. Dentigenic Cyst
	8.5.1.6. Odontogenic Cyst
	8.5.1.7. Traumatic Bone Cyst
	8.5.1.8. Static Bone Cyst
8.5.2.	Benign Tumors
	8.5.2.1. Adenomatoid Odontogenic Tumor
	8.5.2.2. Composite and Complex Odontoma
	8.5.2.3. Ameloblastic Fibroma and Fibroodontoma
	8.5.2.4. Central Ossifying Fibroma
	8.5.2.5. Fibrous Dysplasia
	8.5.2.6. Benign Cementoblastoma
	8.5.2.7. Benign Osteoblastoma
	8.5.2.8. Cherubism

	8.5.3.	Neoplasms
		8.5.3.1. Ameloblastoma
		8.5.3.2. Childhood Neuroectodermal Tumor
		8.5.3.3. Giant Cell Central Granuloma
		8.5.3.4. Osteoma
		8.5.3.5. Ameloblastic Odontoma
		8.5.3.6. Ewing Sarcoma
		8.5.3.7. Osteogenic and Chondrogenic Sarcoma
		8.5.3.8. Primary Bone Lymphoma
		8.5.3.9. Burkitt Lymphoma
		8.5.3.10. Histiocytosis X
Mod	lule 9. F	Pain Control Surgical Treatments
9.1.	The Pro	ocess of Pain
	9.1.1.	Pain
	9.1.2.	Nociceptive System
	9.1.3.	Local Anesthetic. Mechanism of Action
9.2.	Local A	anesthesia in Pediatric Dentistry
	9.2.1.	Concepts
		9.2.1.1. Analgesia
		9.2.1.2. Local Anesthesia
		9.2.1.3. General Anesthesia
	9.2.2.	Local Anesthesia: Advantages and Objectives
	9.2.3.	Local anesthetics
		9.2.3.1. Composition

9.2.3.2. Action and Structure

9.2.3.4. Antioxidants 9.2.3.5. Preservatives 9.2.3.6. Fungicides

9.2.3.3. Vasoconstrictor: Actions, Importance in Pediatric Dentistry and Undesired Effects

9.2.4. Calculating Individualized Anesthetic Dosage

9.2.5. Techniques for Local Anesthesia
9.2.5.1. Topical Anesthesia: Efficacy. Acceptance by The Child. Topical Anesthetics Most Commonly Used Today Application and Possible Complications
9.2.5.2. Maxillary Anesthesia: Supraperiosteal and Intrapapillary Infiltration
9.2.5.3. Mandibular Anesthesia: Supraperiosteal Infiltration, Inferior Dental Nerve Block (Truncal), Intraligamentous (LPD)
9.2.6. Variations on the Technique in Adults

9.2.7. Guide of Behaviour. Preparing the Pediatric Patient for Local Anesthesia9.2.8. Causes of Anesthesia Failure

9.2.9. Complications: General and Local 9.2.9.1. Overdose of Local Anesthetics

9.3. Analgesia for Children

9.3.1. Graphic Pain Assessment for Children in Preverbal Period

9.3.2. Most Common Analgesics Prescribed in Children

9.3.2.1. Generic Name. Function

9.3.2.2. Recommended Oral Dose

9.3.2.3. Advantages and Disadvantages

9.3.2.4. Introduction

9.4. Surgery of Soft Tissues

9.4.1. Low Insertion Upper Frenulum

9.4.1.1. Diagnosis

9.4.1.2. Frenectomy: Indications and Procedure

9.4.2. Ankyloglossia

9.4.2.1. Consequences

9.4.2.2. Frenectomy: Procedure

9.4.2.3. Mucocele: Surgical Excision

9.4.2.4. Pyogenic Granuloma: Surgical Excision

9.4.2.5. Eruption Cyst: Drainage and Operculectomy

9.5. Hard Tissues Surgery Extraction

## Module 10. Pediatric Orthodontics

10.1. Preventive and Interceptive Orthodontics

10.1.1. Introduction. Concepts

10.1.2. Diagnosis and Treatment Plan

10.1.3. Classification of Malocclusions

10.1.4. Crowding Management

10.1.4.1. Serial Extractions

10.1.4.2. Crossbites: Anterior and Posterior

10.1.4.3. Diastemas

10.1.4.4. Deep Bite

10.1.4.5. Open Bites: Anterior and Posterior

10.1.4.6. Pre-orthodontic trainers

10.1.4.7. Ectopic Eruptions

10.1.4.8. Treatment to Modify Growth

10.2. Space Management and Maintenance

10.2.1. Factors Causing Loss of Space

10.2.2. Premature Loss of Temporary Teeth

10.2.2.1. Associated Problems

10.2.2.2. Damping Factors

10.2.2.3. Clinical Situations

10.2.3. Space Maintenance

10.2.3.1. Objective

10.2.3.2. Requirements

10.2.3.3. Procedures

10.2.3.4. Factors to Consider

10.2.4. Space Maintenance

10.2.4.1. Concept

10.2.4.2. Indications

10.2.4.3. Contraindications

10.2.4.4. Requirements

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10.3.

10.2.5.	Classification of Space Maintainers
	10.2.5.1. Fixed Maintainers: Concept, Indications, Advantages, Disadvantages and Types
	10.2.5.2. Removable Retainers: Concept, Indications, Advantages, Disadvantages and Types
10.2.6.	Clinical Situations
	10.2.6.1. Premature Loss of Incisors
	10.2.6.2. Premature Loss of Canines
	10.2.6.3. Premature Loss of Temporary Molars
	10.2.6.4. Multiple Losses
Oral Ha	oits and Their Interceptive Treatment
10.3.1.	Habits
	10.3.1.1. Concept
	10.3.1.2. Types
	10.3.1.3. Classification
10.3.2.	Oral Habits
	10.3.2.1. Importance
	10.3.2.2. Consequences
	10.3.2.3. Prevention

10.3.2.6. Diagnosis: Anamnesis, Clinical and Functional Examination

10.3.2.10. Atypical Swallowing: Etiology, Classification, and Treatment

10.3.2.7. Criteria for Treatment and Therapeutic Objectives

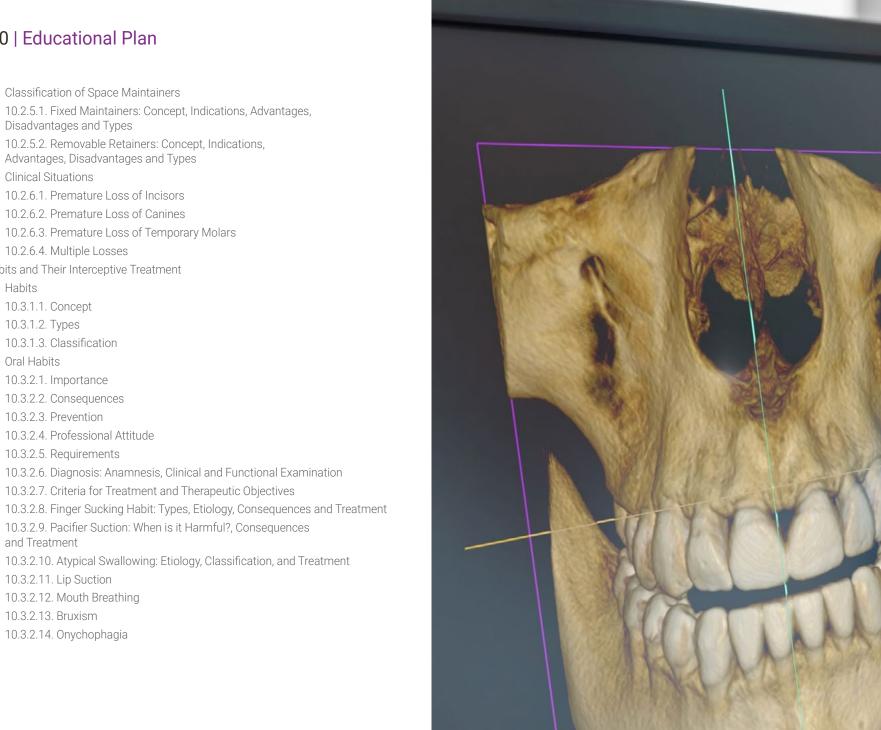
10.3.2.9. Pacifier Suction: When is it Harmful?, Consequences

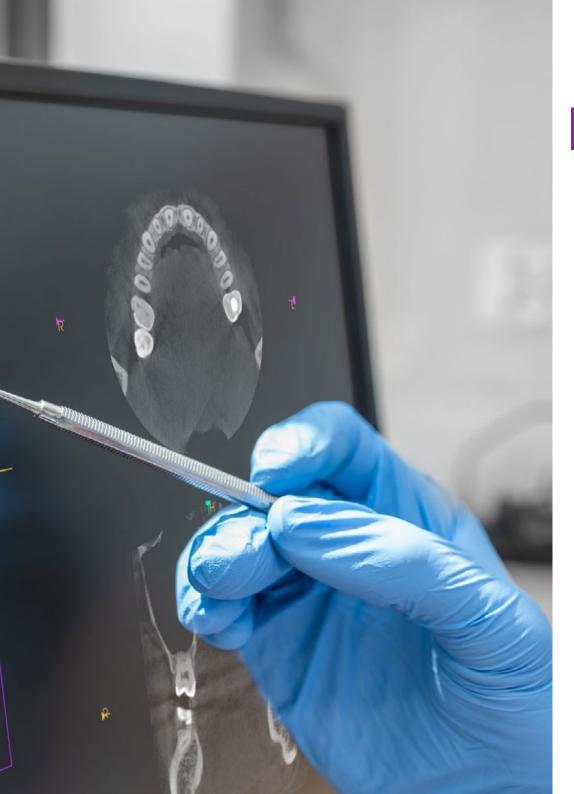
10.3.2.4. Professional Attitude 10.3.2.5. Requirements

and Treatment

10.3.2.11. Lip Suction 10.3.2.12. Mouth Breathing

10.3.2.13. Bruxism 10.3.2.14. Onychophagia





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# **Module 11.** Pediatric Patients with Special Care Needs. Medically Compromised Patients

11.1.	Cardiovascular	Pathology
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- 11.1.1. Congenital Heart Disease
- 11.1.2. Rheumatic Fever
- 11.1.3. Heart Murmur and Cardiac Arrhythmias
- 11.1.4. Arterial Hypertension
- 11.1.5. Congestive Heart Failure
- 11.1.6. Bacterial Endocarditis
  - 11.1.6.1. Pathogenesis
  - 11.1.6.2. Complications
  - 11.1.6.3. Dental Procedures Requiring Prophylactic Antibiotic Therapy to Prevent Bacterial Endocarditis

### 11.2. Allergic and Immunologic Pathology

- 11.2.1. Anaphylaxis
  - 11.2.1.1. Concept
  - 11.2.1.2. Diagnosis
  - 11.2.1.3. Causes
  - 11.2.1.4. Evolution
  - 11.2.1.5. Diagnosis
  - 11.2.1.6. Treatment

### 11.2.2. Allergic rhinitis

- 11.2.2.1. Etiology
- 11.2.2.2. Clinical Picture
- 11.2.2.3. Diagnosis and Management
- 11.2.2.4. Complications
- 11.2.2.5. Dental Considerations

### 11.2.3. Atopic Dermatitis

- 11.2.3.1. Clinical Picture
- 11.2.3.2. Etiology
- 11.2.3.3. Diagnosis and Management
- 11.2.3.4. Complications
- 11.2.3.5. Dental Considerations

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11.3.

11.3.4. Pituitary Gland

11.2.4.	Urticaria and Angioedema
	11.2.4.1. Concept
	11.2.4.2. Clinical Picture
	11.2.4.3. Etiology
	11.2.4.4. Diagnosis and Management
	11.2.4.5. Dental Considerations
11.2.5.	Food Allergy and Latex Allergy
	11.2.5.1. Clinical Picture
	11.2.5.2. Etiology
	11.2.5.3. Diagnosis and Management
	11.2.5.4. Dental Considerations
	11.2.5.5. Preventive Measures
	11.2.5.6. Treatment for Acute Allergic Reaction to Latex
11.2.6.	Asthma
	11.2.6.1. Concept
	11.2.6.2. Epidemiology
	11.2.6.3. Causes
	11.2.6.4. Progression of the Disease and Prognosis
	11.2.6.5. Complications
	11.2.6.6. Dental Considerations
	11.2.6.7. Psychological Profile of the Asthmatic Child and Recommendations
Endocri	ne Pathologiy
11.3.1.	Pancreatic Disorders
	11.3.1.1. Diabetes Mellitus: Concept, Epidemiology, Diagnosis. Causes
	11.3.1.2. Type I Diabetes: Clinical Features, Symptomatology, Treatment Goals, Oral Findings
	11.3.1.3. Type II Diabetes: Clinical Features
	11.3.1.4. Type III Diabetes: Clinical Features
	11.3.1.5. Type IV Diabetes: Clinical Features
	11.3.1.6. Type III Diabetes: Clinical Features
	11.3.1.7. Dental Considerations for the Pediatric Diabetic Patient
11.3.2.	Thyroid and Parathyroid Gland
11.3.3.	Adrenal Gland

- 11.4. Hematological Disorders
  - 11.4.1. Anaemia
    - 11.4.1.1. Types
    - 11.4.1.2. Dental Considerations
  - 11.4.2. Hemostasis Disorders
    - 11.4.2.1. Alterations in Platelet Number or Function
    - 11.4.2.2. Plasma Phase Alterations Recommendations
    - 11.4.2.3. Anticoagulated Patients. Recommendations
- 11.5. Infectious Diseases
- 11.6. Nephropathies
- 11.7. Pediatric Oncology Processes
- 11.8. Neurological Pathology
- 11.9. Hereditary pathologies: hereditary epidermolysis bullosa (EB)
- 11.10. Oral Care for Patients With Sensory Impairment
- 11.11. Oral care for patients with intellectual disabilities
- 11.12. Oral Care for Patients with Autism Spectrum Disorder

## Module 12. Relevant Topics in Current Pediatric

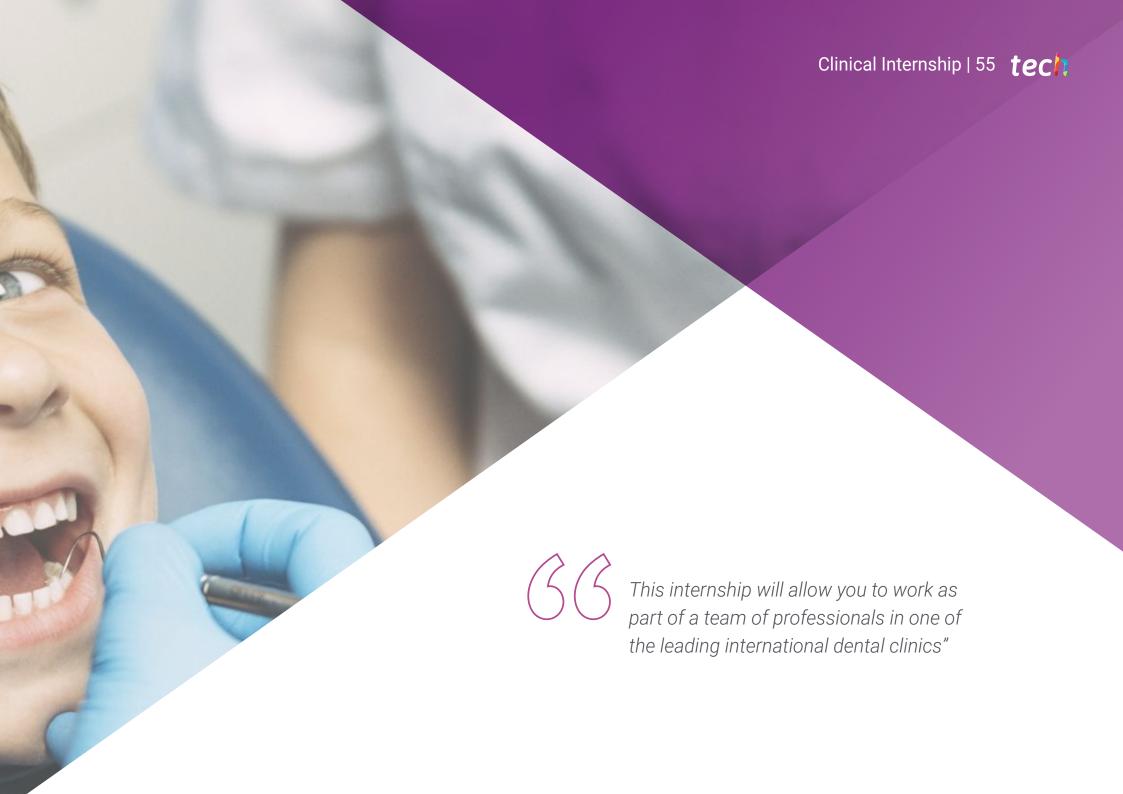
- 12.1. Emergencies in Pediatric Dentistry: Diagnosis and Management
- 12.2. Clinical Repercussions of New Parenting Patterns. Informed Consent
- 12.3. Child Abuse and Neglect
- 12.4. Dental Materials in Pediatric Dentistry
- 12.5. Rational Management of a Pediatric Dentistry Clinic
- 12.6. Most common drugs in Pediatric Dentistry or Drugs in Pediatric Dentistry





You will be supported by a wealth of multimedia material, including video summaries, self-awareness exercises and real clinical cases"





## tech 56 | Clinical Internship

The Internship Program of this Updated Pediatric Dentistry program consists of a 3-week practical stay in a referral clinic. The students will be present from Monday to Friday, with 8-hour consecutive days and accompanied by specialized professionals from the center itself who will guide them and teach them the techniques and treatments applied in the dental clinic.

Likewise, the dentist has a TECH tutor at his disposal during this practical phase, who will accompany him throughout this stage, to ensure that he acquires useful, essential and updated knowledge so that the specialist is able to practice his profession incorporating the latest trends in oral treatments.

In this training proposal, the activities are aimed at developing and perfecting the competencies, skills and techniques necessary for the health care of minors. For this reason, we will address the diagnosis and management of emergencies in pediatric dentistry, the detection of pathologies associated with orofacial structures and the application of dental materials to children.

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

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





# Clinical Internship | 57 **tech**

Module	Practical Activity
Preventive pediatric dentistry techniques and intervention in oral pathologies	Perform initial and anticipatory assessment of the oral status of the pediatric patient
	Perform clinical and radiological examination of the pediatric patient
	Explore the morphology and chronology of the primary and permanent dentition, eruption and dental occlusion
	Apply the techniques of plaque control in pediatric dentistry
	Assess, diagnose and treat oral mucosa pathologies of viral, mycotic, traumatic or allergic origin
	Perform the specific approach to cystic lesions, benign tumors and neoplasms in the pediatric patient
Therapeutic techniques in caries, dental trauma and pulp pathologies	Diagnose and treat dental caries using state-of-the-art methods and technology
	Perform therapeutic remineralization of incipient caries lesions
	Apply pit and fissure sealants (PFS) and perform preventive resin restorations (PRR)
	Indicate and apply atraumatic restorative treatment (ART) and temporary therapeutic restorations (TTR)
	Diagnose and examine by radiological techniques the traumatology in young primary and permanent dentition
	Apply pulp treatment in young primary and permanent teeth
Pediatric orthodontics and approach to pathologies associated with changes in orofacial structures	Evaluate the development of dentition, eruption, exfoliation and dental occlusion in the pediatric patient
	Diagnose and treat anomalies of tooth development, as well as incisor-molar hypomineralization (HIM) and anomalies of dentin structure and eruption
	To address, by means of specific techniques, dental erosion in children
	Apply preventive and interceptive orthodontics, managing space maintenance with fixed and removable retainers
Specific approach procedures in pediatric patients in Dentistry	Establish proper positioning for adequate protection of the pediatric patient, performing mechanical stabilization of the body and mechanical stabilization of the mouth
	Indicate and apply specific pharmacological treatments in pediatric patients, administering sedation in those interventions that require it
	Applying local anesthesia in children
	To attend, with a specific orientation to their condition, the pediatric patient with sensory or intellectual disability or the patient with Autism Spectrum Disorder (ASD)

## **Civil Liability Insurance**

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

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

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



## **General Conditions for Practical Training**

The general terms and conditions of the internship program agreement shall be as follows:

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

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

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





## tech 62 | Where Can I Do the Clinical Internship?

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



### Kiru Odontología Integral

Country City
Spain Madrid

Management:

C. de López de Hoyos, 474, 28043 Madrid

Dental Clinic specialized in multiple therapeutic and aesthetic integral services.

#### Related internship programs:

- Updated Pediatric Dentistry
- Periodontics and Mucogingival Surgery



#### Clínica Carel Dental

Country City
Spain Madrid

Management:

Camino de Montoro, 43, 28055, Madrid

Clinical center for oral health assistance

#### Related internship programs:

- Updated Pediatric Dentistry



### Centro Odontológico Santos Pilarica

Country City
Spain Valladolid

Management: P.º de Juan Carlos I, 140, 47011 Valladolid

Dental care and esthetic dentistry clinic

#### Related internship programs:

- Dental Clinic Management and Direction
- Adhesive Aesthetic Dentistry



### Clínica Dr Dopico

Country City
Spain Asturias

Management: C. de la Libertad, 1, 1°B, 33180 Noreña, Asturias

Center for dental care and dental esthetics

#### Related internship programs:

- Adhesive Aesthetic Dentistry
- Dental Clinic Management and Direction



## **Hospital HM Modelo**

Country City
Spain La Coruña

Management: Rúa Virrey Osorio, 30, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation - Palliative Care



## Hospital Maternidad HM Belén

Country City
Spain La Coruña

Management: R. Filantropía, 3, 15011, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Update in Assisted Reproduction - Hospitals and Health Services Management



## Hospital HM Rosaleda

Country City
Spain La Coruña

Management: Rúa de Santiago León de Caracas, 1, 15701, Santiago de Compostela, A Coruña

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Hair Transplantation
- Orthodontics and Dentofacial Orthopedics



## Hospital HM San Francisco

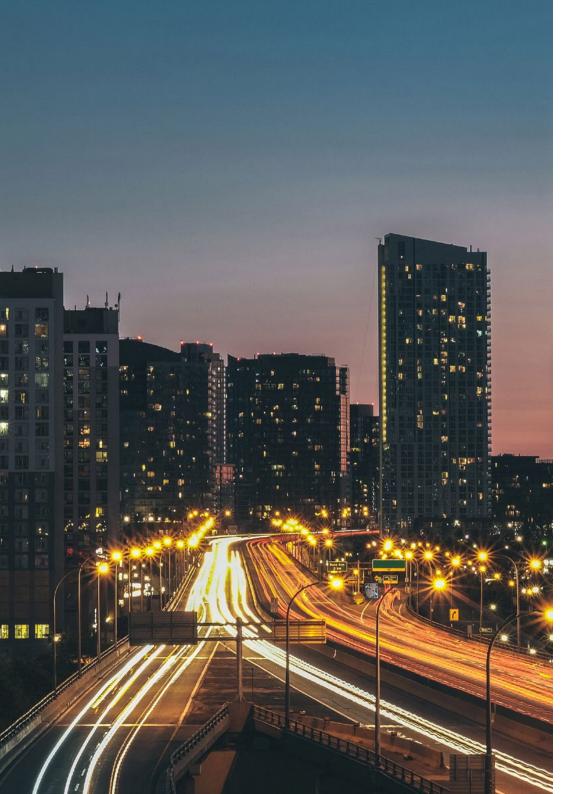
Country City
Spain León

Management: C. Marqueses de San Isidro, 11, 24004, León

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

Update in Anesthesiology and Resuscitation Trauma Nursing



## Where Can I Do the Clinical Internship? | 63 tech



## **Hospital HM Nou Delfos**

Country City
Spain Barcelona

Management: Avinguda de Vallcarca, 151, 08023 Barcelona

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Aesthetic Medicine
- Clinical Nutrition in Medicine



### **Hospital HM Madrid**

Country City
Spain Madrid

Management: Pl. del Conde del Valle de Súchil, 16, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care
- Anaesthesiology and Resuscitation



## **Hospital HM Sanchinarro**

Country City
Spain Madrid

Management: Calle de Oña, 10, 28050, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation - Palliative Care



### Hospital HM Puerta del Sur

Country City
Spain Madrid

Management: Av. Carlos V, 70, 28938, Móstoles, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care
- Clinical Ophthalmology

## tech 64 | Where Can I Do the Clinical Internship?



### Hospital HM Montepríncipe

Country City
Spain Madrid

Management: Av. de Montepríncipe, 25, 28660, Boadilla del Monte, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Palliative Care - Aesthetic Medicine



## **Hospital HM Torrelodones**

Country City
Spain Madrid

Management: Av. Castillo Olivares, s/n, 28250, Torrelodones, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation - Palliative Care



## Policlínico HM Arapiles

Country City Spain Madrid

Management: C. de Arapiles, 8, 28015, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Anaesthesiology and Resuscitation Pediatric Dentistry



### Policlínico HM Cruz Verde

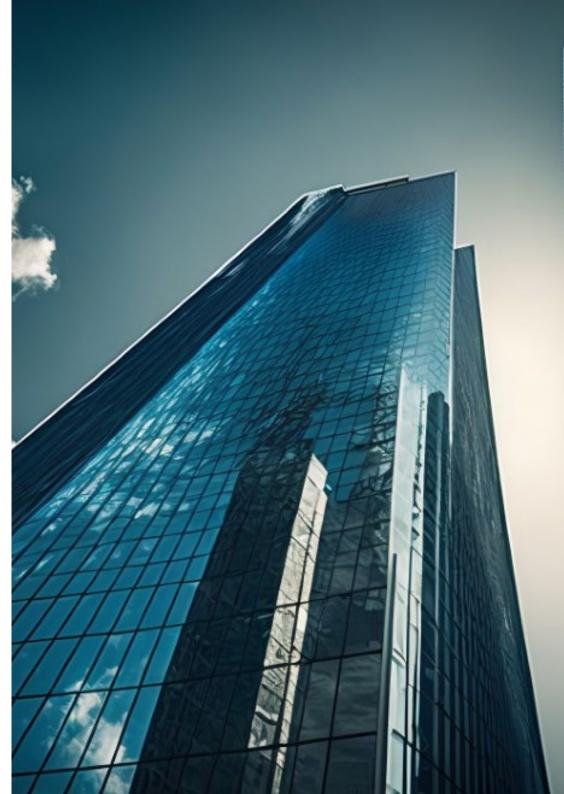
Country City
Spain Madrid

Management: Plaza de la Cruz Verde, 1-3, 28807, Alcalá de Henares, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Advanced Clinical Podiatry
- Optical Technologies and Clinical Optometry





#### Policlínico HM La Paloma

Country City
Spain Madrid

Management: Calle Hilados, 9, 28850, Torrejón de Ardoz, Madrid

Network of private clinics, hospitals and specialized centers distributed throughout Spain.

#### Related internship programs:

- Advanced Operating Room Nursing - Orthodontics and Dentofacial Orthopedics



#### Clínica Modo Dental

Country City
Spain Madrid

Management: C. del Marqués de la Valdavia, 72, 28100 Alcobendas, Madrid

Modo Dental, characterized by using the latest technology in oral health.

#### Related internship programs:

- Adhesive Aesthetic Dentistry
- Updated Pediatric Dentistry



## Clínica dental Origen (Torrelodones)

Country City
Spain Madrid

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

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

#### Related internship programs:

- Endodontics and Apical Microsurgery - Implantology and Oral Surgery



### Clínica dental Origen (Villaviciosa de Odón)

Country

Spain Madrid

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

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

#### Related internship programs:

- Endodontics and Apical Microsurgery - Implantology and Oral Surgery



### Clínica dental Irene González Aroca

Country City
Spain Badajoz

Management: C. Marquesa de Pinares, 15, 06800 Mérida, Badajoz

At the Irene González Aroca Dental Clinic they provide dental medical care in the earliest stages of life.

#### Related internship programs:

- Updated Pediatric Dentistry



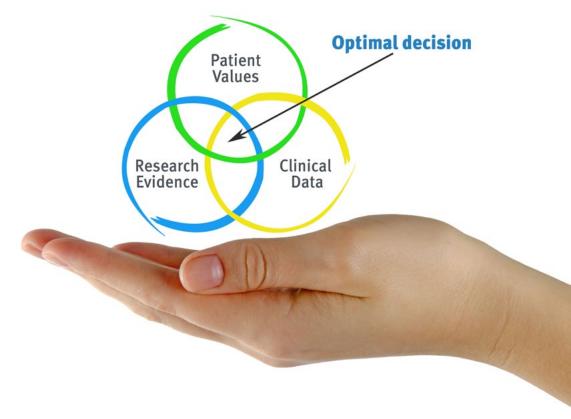


## tech 68 | Methodology

## 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 | 71 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 72 | 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**

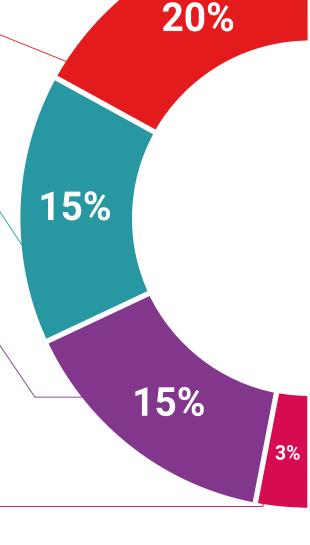
TECH introduces students to the latest techniques, the latest educational advances, and to the forefront of medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times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

## **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.

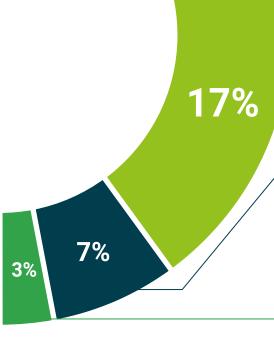
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



### **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.





20%





## tech 76 | Certificate

This **Hybrid Professional Master's Degree in Updated Pediatric Dentistry** contains the most complete and up-to-date program in the professional and academic landscape.

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

In addition to the Hybrid Professional Master's Degree, you will be able to obtain a certificate, as well as the certificate of the content of the program. To do so, you should contact your academic advisor, who will provide you with all the necessary information.

Title: Hybrid Professional Master's Degree in Updated Pediatric Dentistry

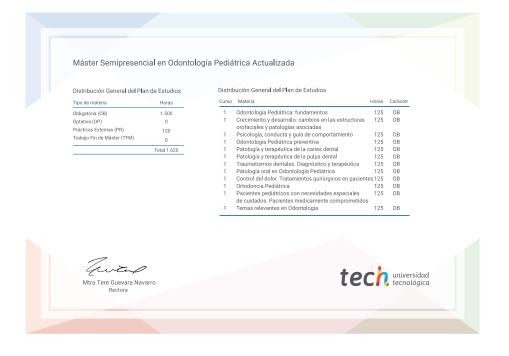
Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: **TECH Technological University** 

Teaching Hours: 1,620 h.





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

health confidence people information futors guarantee accreditation teaching technology learning community commitment



# Hybrid Professional Master's Degree

Updated Pediatric Dentistry

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Technological University

Teaching Hours: 1,620 h.

