

# Postgraduate Certificate

## Virtual Articulator and Occlusion



## Postgraduate Certificate

### Virtual Articulator and Occlusion

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/dentistry/postgraduate-certificate/virtual-articulator-occlusion](http://www.techtute.com/us/dentistry/postgraduate-certificate/virtual-articulator-occlusion)

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# 01

# Introduction

The use of intraoral scanners and specialized software for cephalometric analysis and digital photographs have helped to create virtual models of the mouth and teeth, which is undoubtedly facilitating the design of accurate dental prostheses and restorations. For this reason, these are tools that are now essential for the dentists to be proficient in handling, which is why they have a perfect opportunity to update their knowledge with TECH. Through it, the digital planning of occlusion and the use of the virtual articulator in aesthetics and digital dentistry will be addressed. Undoubtedly, an elementary program to improve the accuracy of clinical procedures in a 100% online way and with the support of experts in this field.





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*Enroll in a Postgraduate Certificate that will allow you to incorporate the most innovative dental occlusion treatments into your clinical practice"*

Digital Dentistry has positioned itself as a constantly evolving field that utilizes state-of-the-art technology for the planning, design and fabrication of dental prostheses and restorations. Virtual articulators play a major role in this, allowing for more precise and personalized treatment planning. This undoubtedly translates into better results for patients, so they have positioned themselves as tools that the dentist must handle today with solvency.

For this reason, the Postgraduate Certificate was created, which offers these healthcare professionals a complete overview of the use of virtual articulators and their importance in Digital Dentistry. With it, students will examine the different types of virtual articulators, delve into the use of Tekscan and Teethan technology and explore the application of MODJAW in the diagnosis and treatment of temporomandibular disorders. Likewise, the fundamentals of dental prosthesis planning and the registration of movements and localization of the mandibular axis will be covered.

All this and more in just 150 hours of a highly dynamic educational journey. In fact, the enrollee will not have to attend on-site teaching centers or be subject to predetermined schedules. Instead, TECH gives you the baton of managing your own educational deadlines, so you can organize your study sessions at your convenience while drawing on the expertise of a reputable team of teachers who specialize in Digital Dentistry.

This **Postgraduate Certificate in Virtual Articulator and Occlusion** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Virtual Articulator and Occlusion
- ♦ 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
- ♦ Practical exercises where self-assessment can be used to improve learning
- ♦ Its special emphasis on innovative methodologies
- ♦ Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- ♦ Content that is accessible from any fixed or portable device with an Internet connection



*Become an expert in the advanced use of virtual articulators. And 100% online!"*

“

*You will be able to apply virtual articulators in the planning of dental prostheses by examining their fundamentals in explanatory videos and interactive diagrams”*

The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the educational year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Take a comprehensive tour with TECH through the new digital techniques and technologies on which virtual articulators are based.*

*Enhance your skills in the design of restorations and dental prostheses with virtual articulator by accessing the online resource catalog 24 hours a day.*



# 02

# Objectives

TECH has designed this program with the objective of providing the dental professional with the most advanced, global and multidisciplinary preparation in virtual articulators and occlusion that can be found in the educational market. In this sense, after 150 hours the student will be able to obtain a deep insight into the digital tools for data capture related to Dental Occlusion, as well as the use of virtual articulators in the planning and design of occlusion treatments.







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*If you want to master the basic principles of dental occlusion, this is the program for you”*



## General Objectives

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- ◆ Increase the professional's knowledge of the application of digital technologies in the diagnosis, treatment and planning of clinical cases
- ◆ Know the techniques of digital orthodontics and computer-guided implant planning
- ◆ Develop skills in interdisciplinary communication and collaboration in teamwork, using digital technology as a tool
- ◆ Examine the application of acquired knowledge in clinical practice, in this way improving the quality of patient care





## Specific Objectives

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- ◆ Understand the basic principles of dental occlusion and the importance of centric relation in the diagnosis and treatment of occlusion
- ◆ Employ digital tools for the capture of data related to dental occlusion, including the capture of images and the use of specific software
- ◆ Detect the different types of virtual articulators and their use in the planning and design of dental occlusion treatments
- ◆ Use virtual articulators for the planning and design of dental occlusion treatments

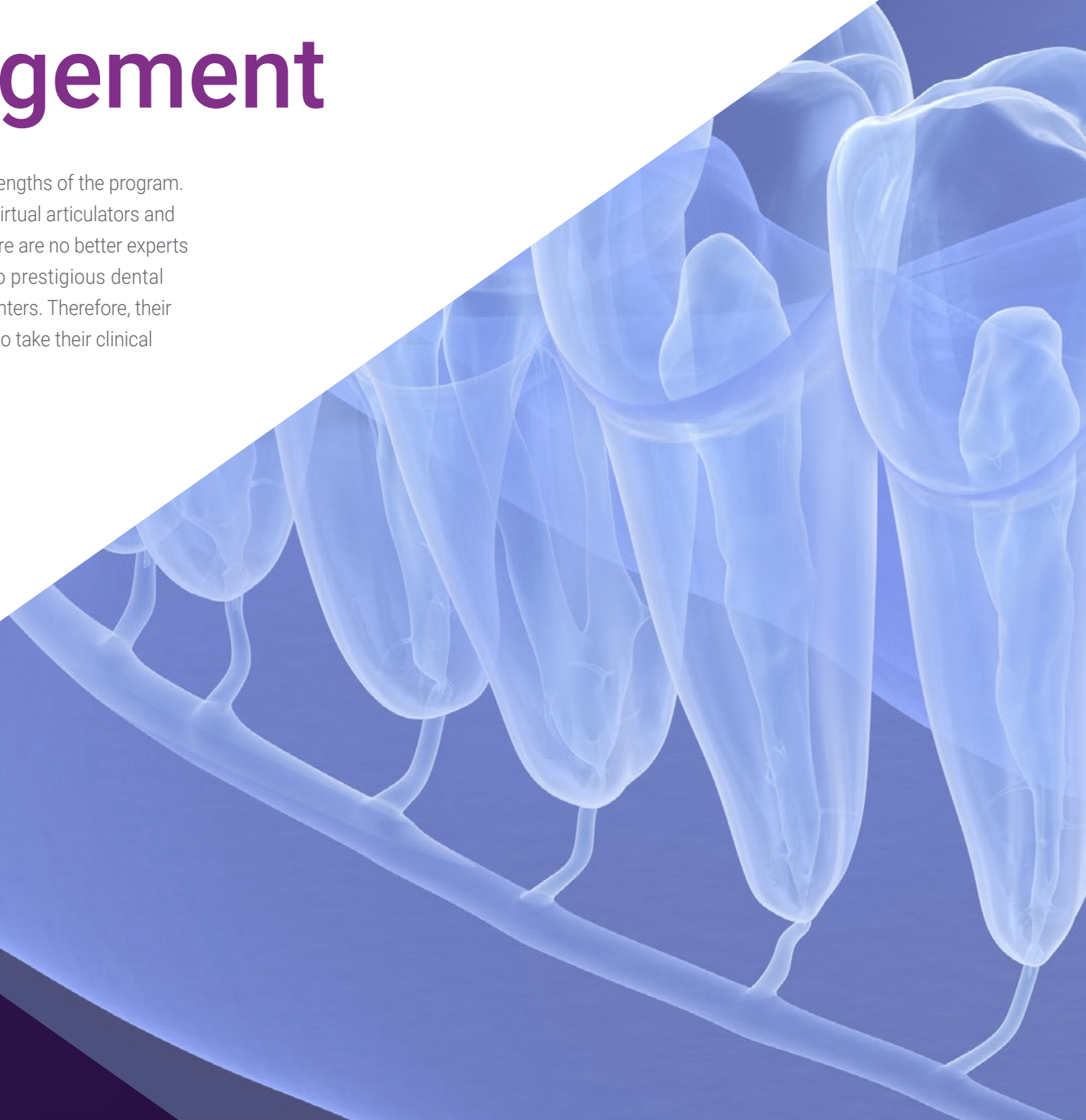


*Take advantage of the opportunity to become a reference in digital tools that allow you to capture dental images and use specialized software"*

# 03

# Course Management

The teacher team of the Postgraduate Certificate is one of the main strengths of the program. These professors have excelled in the design of dental strategies with virtual articulators and have extensive experience in the field of Digital Dentistry. Therefore, there are no better experts in the educational market for this program. In this line, they belong to prestigious dental associations of international caliber and have worked in large dental centers. Therefore, their valuable know-how will clearly play to the student's advantage in order to take their clinical practice to the next level.



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*Dentists who have directed Oral Surgery services in large hospitals will be your best asset in this Postgraduate Certificate"*

## Management



### Dr. Ulman, Darío

- ◆ Dentist Specializing in Implant Dentistry and Orthodontics
- ◆ Dentist in own practice
- ◆ *International Intraoral Scanner* Trainer
- ◆ Speaker Corner FONA
- ◆ Director of training courses for dentists
- ◆ Degree in Dentistry



### Dr. Roisentul, Alejandro

- ◆ Director of the Oral and Maxillofacial Surgery Unit of Ziv Medical Center
- ◆ Clinical Instructor, Bar-Ilan University School of Medicine
- ◆ Regional Delegate for Asia of the Latin American Association of Buccomaxillofacial Surgery and Traumatology
- ◆ President of the Israeli Association of Oral and Maxillofacial Surgeons
- ◆ Winner of numerous awards and honorable mentions



# 04

## Structure and Content

The syllabus of this Postgraduate Certificate program positions it in front of other educational programs by having the most global and up-to-date vision of virtual articulators and Dental Occlusion. In addition, it is designed to offer great flexibility to the student. In this line, the program is divided into subjects that can be taken independently and at different times, in this way adapting to the needs and time availability of each person. Moreover, students will internalize the concepts more quickly thanks to the Relearning methodology, which is based on the targeted reiteration of ideas through videos, interactive summaries and other resources.





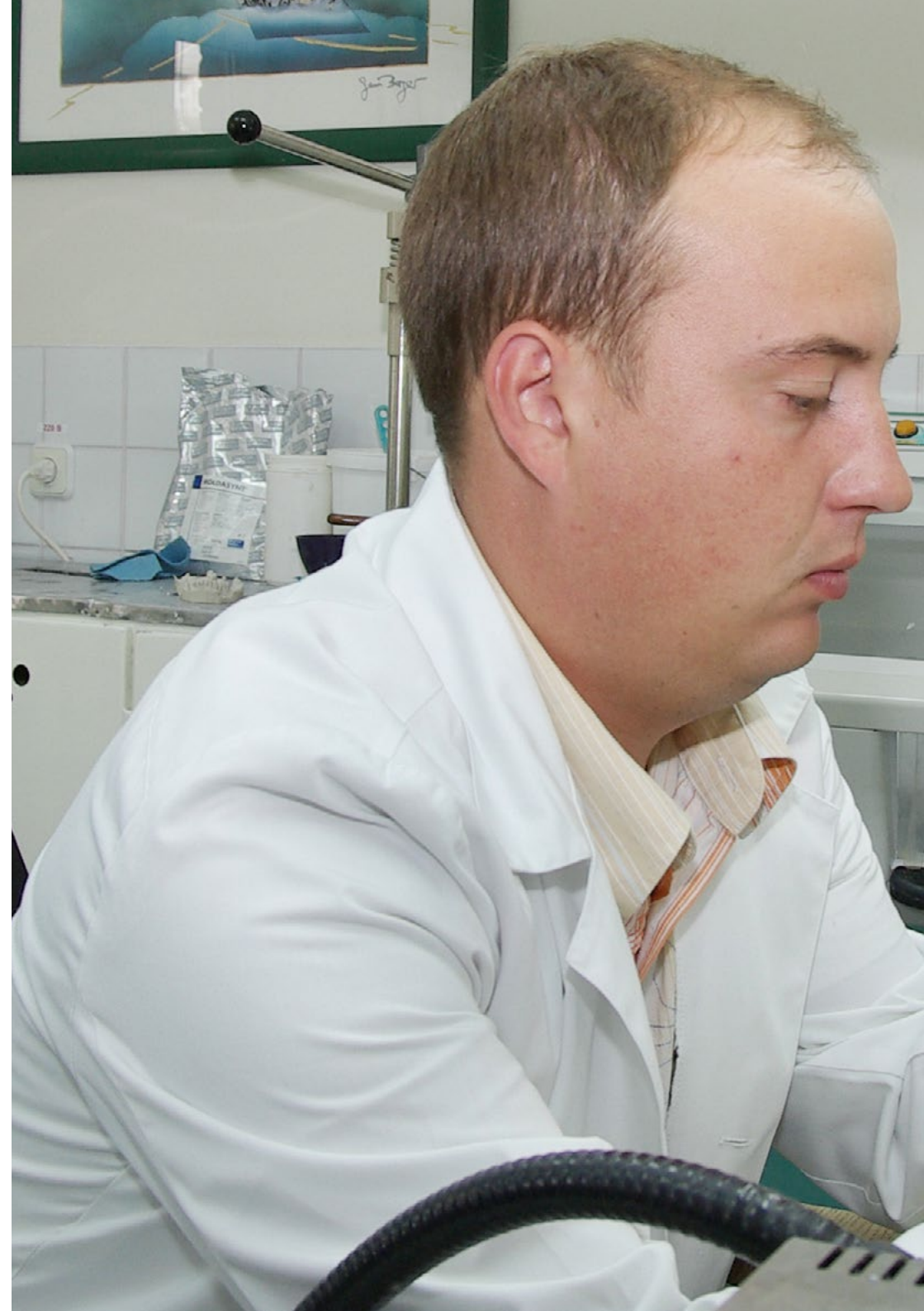


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*Enroll in an educational experience that uses Relearning to help you internalize ideas more quickly, saving you study time"*

## Module 1. Virtual articulator and occlusion

- 1.1. Virtual Articulator
  - 1.1.1. Virtual Articulator and Its Use in the Planning of Dental Prostheses in Digital Dentistry
  - 1.1.2. New Techniques and Digital Technologies for the Use of Virtual Articulators in Digital Dentistry
  - 1.1.3. Occlusion in Digital Dentistry and Its Relation with the Use of Virtual Articulator
  - 1.1.4. Digital Occlusion Planning and the Use of the Virtual Articulator in Aesthetic Dentistry
- 1.2. TEKSCAN
  - 1.2.1. File Import
  - 1.2.2. Implant Placement
  - 1.2.3. Splint Design
  - 1.2.4. Stl Export
- 1.3. TEETHAN
  - 1.3.1. File Import
  - 1.3.2. Implant Placement
  - 1.3.3. Splint Design
  - 1.3.4. Stl Export
- 1.4. Different Virtual Articulators
  - 1.4.1. The Most Important
  - 1.4.2. Development and Application of Virtual Articulator Technologies in the Assessment and Treatment of Temporomandibular Disorders (TMD)
  - 1.4.3. Application of Virtual Articulator Technologies in the Planning of Dental Prostheses in Digital Dentistry
  - 1.4.4. Use of Virtual Articulator Technologies in the Assessment and Diagnosis of Dental Occlusion Disorders in Digital Dentistry
- 1.5. Design of Dental Restorations and Prostheses with Virtual Articulator
  - 1.5.1. Use of Virtual Articulator in the Design and Fabrication of Removable Partial Dentures in Digital Dentistry
  - 1.5.2. Design of Dental Restorations with Virtual Articulator for Patients with Dental Occlusion Disorders in Digital Dentistry
  - 1.5.3. Total Denture Design with Virtual Articulator in Digital Dentistry: Planning, Execution and Follow-Up
  - 1.5.4. Use of Virtual Articulator in Interdisciplinary Orthodontic Planning and Design in Digital Dentistry





- 1.6. MODJAW
  - 1.6.1. Use of MODJAW in Orthodontic Treatment Planning in Digital Dentistry
  - 1.6.2. Application of MODJAW in the Assessment and Diagnosis of Temporomandibular Disorders (TMD) in Digital Dentistry
  - 1.6.3. Use of MODJAW in the Planning of Dental Prostheses in Digital Dentistry
  - 1.6.4. MODJAW and Its Relationship to Dental Aesthetics in Digital Dentistry
- 1.7. Positioning
  - 1.7.1. Files
  - 1.7.2. Tiara
  - 1.7.3. Butterfly
  - 1.7.4. Models
- 1.8. Transaction Log
  - 1.8.1. Protrusion
  - 1.8.2. Opening
  - 1.8.3. Lateralities
  - 1.8.4. Chewing
- 1.9. Location of Mandibular Axis
  - 1.9.1. Centric Relation
  - 1.9.2. Maximum Opening without Displacement
  - 1.9.3. Click Log
  - 1.9.4. Bite Restructuring
- 1.10. Export to Design Programs
  - 1.10.1. Use of Export to Design Programs in Orthodontic Treatment Planning in Digital Dentistry
  - 1.10.2. Application of Export to Design Programs in Dental Prostheses Treatment Planning in Digital Dentistry
  - 1.10.3. Export to Design Programs and Their Relationship with Dental Aesthetics in Digital Dentistry
  - 1.10.4. Export to Design Programs in the Assessment and Diagnosis of Dental Occlusion Disorders in Digital Dentistry

# 05

# Methodology

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

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





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

## At TECH we use the Case Method

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

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



According to Dr. 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.

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

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

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



## Relearning Methodology

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

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

*The student will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*





At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology we have trained more than 115,000 dentists with unprecedented success, in all specialties regardless of the workload. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### Educational Techniques and Procedures on Video

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



### Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

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



#### Classes

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

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



#### Quick Action Guides

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



06

# Certificate

The Postgraduate Certificate in Virtual Articulator and Occlusion guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this program  
and receive your university qualification  
without having to travel or fill out  
laborious paperwork"*

This **Postgraduate Certificate in Virtual Articulator and Occlusion** contains the most complete and up-to-date scientific on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees

Title: **Postgraduate Certificate in Virtual Articulator and Occlusion**

Official N° of Hours: **150 h.**



\*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.



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