

# Postgraduate Certificate

## Salivary Gland and TMJ Pathology





## Postgraduate Certificate

### Salivary Gland and TMJ Pathology

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

Website: [www.techtute.com/us/dentistry/postgraduate-certificate/salivary-gland-tmj-pathology](http://www.techtute.com/us/dentistry/postgraduate-certificate/salivary-gland-tmj-pathology)

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01

# Introduction

Knowledge of diseases related to the salivary glands and the temporomandibular joint will allow dentists to work with greater confidence to achieve more effective recovery for their patients. Therefore, superior education such as the one we present on this occasion is the perfect complement to your career to obtain an in-depth and up-to-date knowledge of these pathologies.





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*Specialize in Salivary Gland and TMJ Pathology and be able to quickly and easily identify the pathologies that may affect your patients"*

Dentists who wish to broaden their knowledge in Salivary Gland and TMJ Pathology will find the most complete information on the market in this Postgraduate Certificate, in which an anatomical reinforcement of the salivary glands and the temporomandibular joint, as well as malformations, associated syndromes and possible pathologies are addressed.

In this way, the information ranges from the functions of the saliva and the system of structures that make up the TMJ to an extensive classification of all known related pathologies, being able to study in depth the tumor pathology and those conditions that are not so frequent, but are necessary to know.

In turn, an examination protocol will be established and all possible diagnostic techniques, complementary tests, treatment, etiologies, as well as the prognosis and evolution of patients will be discussed, based on agreed statistical results.

The dentist will expand their capacity by knowing the theoretical keys to perform an action protocol, within a safe range, on the salivary glands, promoting their professional competences for a qualitative practice, acquiring the methodology to interpret relevant signs and symptoms about glandular and articular pathology, as well as a differential diagnosis.

This academic program is characterized by its dynamic methodology that intersperses clinical cases for the student to identify and associate the subject matter explained with its corresponding image, as well as questionnaires to evaluate their knowledge and put it to the test, bringing the dentist as close as possible to those situations that will be presented daily in the office to be able to focus and manage them in a coordinated, efficient and planned manner, all mediated by working professionals who will help during the learning process to achieve a complete specialization in all aspects.

This **Postgraduate Certificate in Salivary Gland and TMJ Pathology** contains the most complete and up to date scientific program on the market. The most important features include:

- Clinical cases presented by experts in oral medicine
- The graphic, schematic and practical contents of the course are designed to provide all the essential information required for professional practice
- Exercises where the self-assessment process can be carried out to improve learning
- Algorithm-based interactive learning system for decision making for the orally impaired patient
- 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



*Only with proper specialization will you know the best way to advise your patients in cases of oral medicine."*

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*This Postgraduate Certificate is the best investment you can make in the selection of a refresher program for two reasons: in addition to updating your knowledge in Salivary Gland and TMJ Pathology, you will obtain a qualification from TECH Global University"*

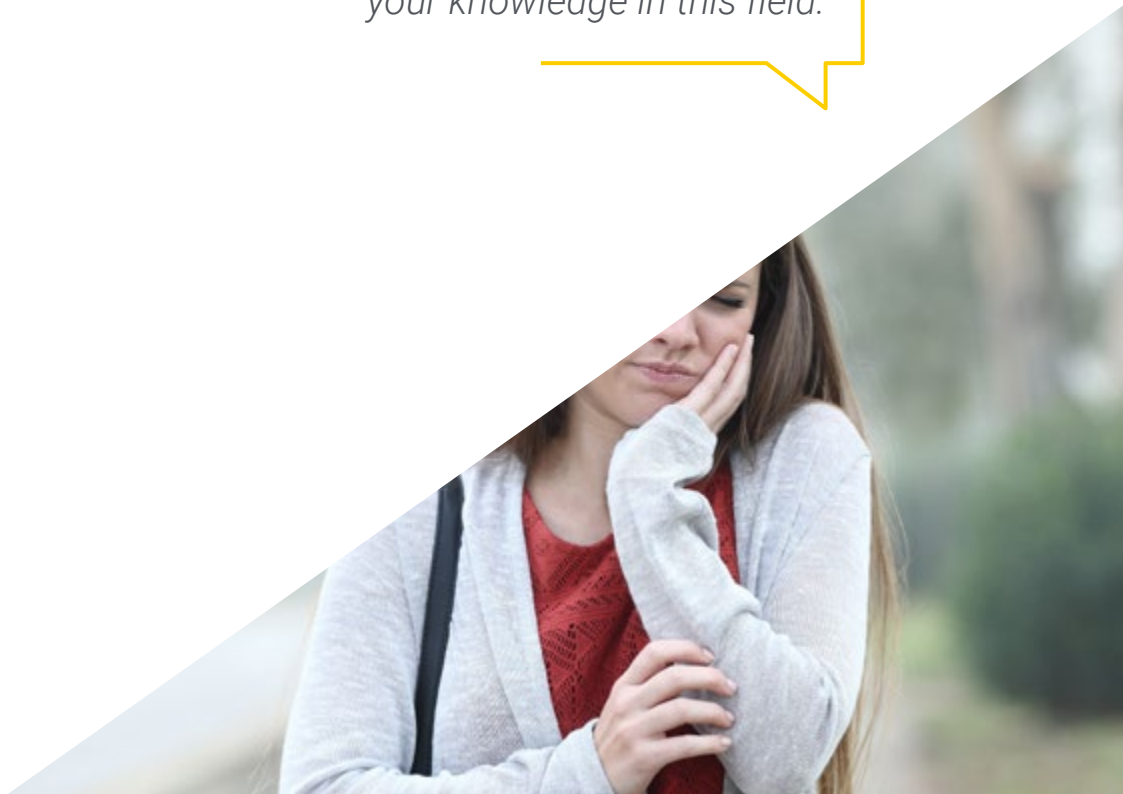
Its teaching staff includes professionals from the field of oral medicine, who contribute their work experience to this education, as well as renowned specialists from prestigious reference societies and universities.

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 training 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. To do so, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts in Salivary Gland and TMJ Pathology.

*The Postgraduate Certificate allows you to exercise in simulated environments that provide an immersive learning program in order to train in real situations.*

*This 100% online Postgraduate Certificate will allow you to combine your studies with your professional work while increasing your knowledge in this field.*



# 02

# Objectives

The Postgraduate Certificate in Salivary Gland and TMJ Pathology is designed to enhance the dentist's actions when dealing with patients with oral health problems, generating a sense of security that will allow them to be more effective in their daily practice.





A microscopic image of tissue, likely stained with hematoxylin and eosin (H&E), showing various cellular structures and a dense population of cells. The image is overlaid with a large, diagonal purple graphic that covers the right side and bottom of the slide.

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*This refresher program will provide you with a sense of confidence in your daily work, which will help you grow both personally and professionally”*



## General Objectives

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- ♦ Get an extensive theoretical update in a comprehensive framework covering injuries, diagnosis, prevention, treatment and rehabilitation
- ♦ Encourage problem solving and critical thinking through practical cases applicable to working life, strengthening the professional's confidence when expressing themselves and their autonomy as a healthcare professional
- ♦ Support empathy and multidisciplinary treatment, emphasizing that as a professional one must have a global vision of the patient's state of health in order to avoid possible repercussions secondary to misinformation
- ♦ Promote evidence-based knowledge and to learn to see beyond dental pathology by expanding its diagnostic protocol for the early detection of serious pathologies such as oral cancer
- ♦ Integrate a technical and theoretical practice in the daily treatment knowing how to approach complex cases related to systemic diseases or adjacent pathologies of the patient through sessions and clinical cases mediated by quality audiovisual means
- ♦ Obtain advanced medical knowledge that will enable you to excel in the healthcare field by correctly interpreting data and tests through the understanding and application of knowledge that encompasses the patient's health holistically
- ♦ Improve public speaking and communication skills so that the receiver of the message, regardless of whether or not they know the subject matter, is able to fully understand the professional's explanation, as well as prioritize ethics and a sense of morality when dealing with a case





## Specific Objectives

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- Gain an understanding of salivary functions, as well as the temporomandibular joint, its possible organic involvement and the syndromes associated to it
- Perform anatomical reinforcements on salivary glands and the TMJ, emphasizing the importance of adequate exploration methods
- Distinguish the different glandular and TMJ malformations, as well as infectious, tumoral and obstructive pathologies, with their relevant tests
- Obtain a concrete classification of the various specific radiological tests for these areas, as well as their indications, contraindications and adverse effects
- Know what further complementary tests can be used in order to make a firm and comprehensive diagnosis



*Take the step to get up to speed on the latest developments in oral medicine"*

03

# Course Management

The teaching team, experts in Oral Medicine, has ample recognition in the profession and are professionals with years of teaching experience who have come together to help the student give a boost to their profession. To this end, they have developed this Postgraduate Certificate with recent updates on the subject that will allow you to train and enhance your skills in this sector.





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*Learn from the best professionals  
and become a successful  
professional yourself”*

## International Guest Director

Dr. Pierre Bouletreau is an expert in **Maxillofacial, Oral and Facial Plastic Surgery** referenced internationally for his high level of **research and surgical excellence**. His professional career, moreover, has been framed by multiple awards in Europe and in his own country. In particular, this specialist has won the **Antonin Poncet and Leibinger awards**, as well as the Les Gueules cassées scholarship and national recognition from the **Hospital Clinic Program**.

Throughout his career, this physician has been linked to **leading medical institutions** and has been a disciple of true scientific eminences in the field of Oral Surgery. Specifically, he has collaborated with several institutions in Lyon, becoming a member and later **Head of Service** of the **Department of Maxillofacial, Oral and Facial Plastic Surgery** of the **Lyon Sud Hospital**. At the same time, he has carried out clinical training internships at the **New York University Medical Center**, the **Division of Plastic and Reconstructive Surgery** at **Stanford University** and **Orthognathic Surgery** internships with **Dr. G. W. Arnett** in **Santa Barbara, California**.

On the other hand, from the academic point of view, he has maintained a continuous updating of his skills and has developed studies in areas such as **Clinical and Economic Analysis of Medical Decisions, Experimental Microsurgical Techniques, Biological and Medical Engineering**, among others. From this scientific work, he has collaborated with research projects and is the author of **more than 80 articles** published in national and international journals. At the same time, he stands out for his assiduous participation in specialized **congresses**.

Dr. Bouletreau is also a reviewer for publications such as the **Journal of Dental Science and Research**. He is also a member of the **French Society of Maxillofacial, Stomatological and Oral Surgery**.



## Dr. Pierre, Bouletreau

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- ♦ Head of Maxillofacial, Oral and Facial Plastic Surgery, Lyon Sud Hospital, Lyon, France
- ♦ Assistant Practitioner at the UFR Laënnec
- ♦ Doctorate in Medicine from the University Claude Bernard - Lyon I
- ♦ Research internship at the New York University Medical Center
- ♦ Internship at the Institute of Plastic and Reconstructive Surgery at the New York University Medical Center
- ♦ Training in the Division of Plastic and Reconstructive Surgery at Stanford University School of Medicine
- ♦ Postgraduate Diploma in General Surgery
- ♦ University Diploma in Clinical and Economic Analysis of Medical Decisions
- ♦ International Reviewer for the Journal of Dental Science and Research
- ♦ Member of: French Society of Maxillofacial, Stomatologic and Oral Surgery Association of Facial Surgeons

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

## Management



### Dr Sánchez Sánchez, Almudena

- ◆ Founding Partner, Medical Director, SMILE FACTORY Clinic, Advanced Dentistry, Since 2014
- ◆ Daily clinical practice of Oral Surgery, Implantology, Oral Medicine, Periodontics and Implantoprosthodontics since 2006
- ◆ Degree in Dentistry from the European University of Madrid UEM, 2001-2006
- ◆ Professional Master's Degree in Oral Surgery and Implantology, (Hospital Universitario de Madrid) 2010-2013
- ◆ Master's Degree in Oral Medicine, UCM, 2006-2007
- ◆ Member of the Spanish Society of Oral Medicine (SEMO), 2007-Present
- ◆ Member of the Spanish Society of Oral Laser (SELO), 2019

## Professors

### Dr. Jiménez Núñez, Francisco

- ◆ General Dentistry, Implantology and Periodontics at Dental BarMar Clinic
- ◆ General Dentistry, Pediatric Dentistry and Periodontics at Virgen del Pilar Clinic
- ◆ Master's Degree in Oral Surgery and Implantology from the University Hospital of Madrid
- ◆ Master's Degree in Dental Sciences from the Complutense University of Madrid
- ◆ Degree in Dentistry from the Complutense University of Madrid





# 04

# Structure and Content

The structure of the contents has been designed by a team of professionals knowledgeable about the implications of the program in daily practice, aware of the current relevance of training in oral medicine, and committed to quality teaching through new educational technologies.



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*We have the most complete and up-to-date programme on the market. We seek excellence and we want to help you achieve it too"*

## Module 1. Salivary Gland and TMJ Pathology

- 1.1. Saliva and Salivary Gland Anatomy
  - 1.1.1. Composition
  - 1.1.2. Functions
  - 1.1.3. Saliva Flow Variations
  - 1.1.4. Applications and Diagnostic Use
  - 1.1.5. Salivary Gland Anatomy Recap
    - 1.1.5.1. Parotid Gland
    - 1.1.5.2. Sublingual Gland
    - 1.1.5.3. Submaxillary Gland
    - 1.1.5.4. Minor or Accessory Salivary Glands
- 1.2. Salivary Gland Malformations and Pathologies
  - 1.2.1. Exploration
  - 1.2.2. Fistulas
  - 1.2.3. Stafne Cavity
  - 1.2.4. Pathologies and Causes
  - 1.2.5. Diagnostic tests
    - 1.2.5.1. Radiological Diagnosis
    - 1.2.5.2. Sialography Uses
    - 1.2.5.3. Gammagraphy Uses
  - 1.2.6. Complementary Tests
  - 1.2.7. Serologic Test
- 1.3. Sialoadenitis
  - 1.3.1. Features
  - 1.3.2. Pathologies
    - 1.3.2.1. Bacterial Suppurative
    - 1.3.2.2. Viral
      - 1.3.2.2.1. Epidemic Mumps
      - 1.3.2.2.2. Cytomegalic Mumps
  - 1.3.3 Chronic
    - 1.3.3.1. Bacterial
      - 1.3.3.1.1. Tuberculous
      - 1.3.3.1.2. Actinomycosis
      - 1.3.3.1.3. Syphilitic
    - 1.3.3.2. Allergic/Toxic
    - 1.3.3.3. Post Radiotherapy
    - 1.3.3.4. Sclerosant
    - 1.3.3.5. Recurrent (Juvenile)
- 1.4. Sialolithiasis
  - 1.4.1. Features
  - 1.4.2. Types
    - 1.4.2.1. Pathologies
    - 1.4.2.2. Chronicle
  - 1.4.3. Mucocele
  - 1.4.4. Garel's Hernia
  - 1.4.5. Salivary Colic
  - 1.4.6. Sialodochitis
  - 1.4.7. Cannula
  - 1.4.8. Treatment
- 1.5. Sialoadenosis
  - 1.5.1. Features
  - 1.5.2. Sarcoidosis
  - 1.5.3. Cystic fibrosis
  - 1.5.4. Sjögren's Syndrome
- 1.6. Tumor Pathology and Other Involvements
  - 1.6.1. Features
  - 1.6.2. Retention Cysts
  - 1.6.3. Tumours
  - 1.6.4. Frey Syndrome
  - 1.6.5. Necrotizing Sialometaplasia
- 1.7. TMJ Anatomy
  - 1.7.1. Bone Anatomy
  - 1.7.2. Muscular Anatomy
  - 1.7.3. Ligaments



- 1.7.4. Buttresses
- 1.7.5. Disks
- 1.8. TMJ Etiopathogenesis
  - 1.8.1. Endocrine/Rheumatic Factors
  - 1.8.2. Trauma
  - 1.8.3. Psychosocial Factors
- 1.9. Pathologies. Classification
  - 1.9.1. Congenital and Developmental Disorders
  - 1.9.2. Condylar Pathology
  - 1.9.3. Masticatory Muscle Disorders
  - 1.9.4. Bone Pathology
    - 1.9.4.1. Ankylosis
    - 1.9.4.2. Arthritis
  - 1.9.5. Tumorous Pathology
- 1.10. Exploration and Treatment
  - 1.10.1. Clinical Examination
  - 1.10.2. Diagnostic tests
    - 1.10.2.1. Ultrasound
    - 1.10.2.2. Arthroscopy
    - 1.10.2.3. Resonance
    - 1.10.2.4. CAT
    - 1.10.2.5. Open Mouth/Closed Mouth X-Ray
    - 1.10.2.6. Osteoprotegerin (OPG)
  - 1.10.3. Treatment
    - 1.10.3.1. Unloading Splint
    - 1.10.3.2. Occlusal Adjustment
      - 1.10.3.2.1. Selective Grinding
      - 1.10.3.2.2. Orthodontics
    - 1.10.3.3. Pharmacological
    - 1.10.3.4. Botulinum Toxin
    - 1.10.3.5. Physiotherapy
    - 1.10.3.6. Surgical

# 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 Salivary Gland and TMJ Pathology guarantees, in addition to the most rigorous and up to date education, access to a Postgraduate Certificate issued by TECH Global University.





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

This program will allow you to obtain your **Postgraduate Certificate in Salivary Gland and TMJ Pathology** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Salivary Gland and TMJ Pathology**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development languages  
virtual classroom



## Postgraduate Certificate Salivary Gland and TMJ Pathology

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- » Schedule: at your own pace
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## Salivary Gland and TMJ Pathology

