

# Postgraduate Diploma

## Application of Analytical Techniques and Artificial Intelligence in Dentistry



## Postgraduate Diploma Application of Analytical Techniques and Artificial Intelligence in Dentistry

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

Website: [www.techtute.com/pk/artificial-intelligence/postgraduate-diploma/postgraduate-diploma-application-analytical-techniques-artificial-intelligence-dentistry](http://www.techtute.com/pk/artificial-intelligence/postgraduate-diploma/postgraduate-diploma-application-analytical-techniques-artificial-intelligence-dentistry)

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# 01

# Introduction

Dental treatments can carry dangers for patients. For example, during some procedures, such as wisdom tooth extraction, there is a risk of damaging adjacent structures ranging from nerves to blood vessels. In this regard, Artificial Intelligence (AI) plays a key role during preoperative planning. Intelligent Automation analyzes detailed radiographic images to evaluate the oral anatomy of individuals, which helps to identify both the location and orientation of teeth. In turn, these systems provide recommendations on the most appropriate surgical approach to minimize possible contingencies. For this reason, TECH has developed a 100% online program, aimed at specialists who will perfect their orthodontic therapy with the most sophisticated technology.



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*You will delve into 3D Printing applied to the dental field, through a convenient and flexible 100% online format. Bet on TECH!”*

In the field of dentistry, specialists rely on machine learning to enrich the clinical experience of patients. However, healthcare professionals face multiple ethical challenges in their practice. One example of this is transparency in obtaining informed consent.

Faced with this, physicians need tools that enable them to understand and address the challenges, promoting responsible practices. In this way, clinicians will avoid situations that lead to reputational damage, suspensions of their medical licenses or legal action for medical malpractice.

To provide experts with a thorough understanding of the impact of Artificial Intelligence, TECH has implemented a Postgraduate Diploma that will delve into the ethical conditions in the use of dental data. Under the guidance of a well-versed teaching team, the syllabus will analyze the legal regulations governing Intelligent Automation to ensure lawful practices.

The syllabus will also delve into the social impact of Artificial Intelligence in dental care, based on concepts such as sustainability and equity. The program will also provide graduates with formulas oriented to risk prediction during surgical procedures. Moreover, the teaching materials will encourage students to develop innovative procedures to improve their medical care through robotics, virtual consultations and automation of administrative tasks.

The program is based on the revolutionary *Relearning* methodology, a learning system pioneered by TECH, which consists of reiterating key aspects so that they linger in the mind. In this way, training can be planned individually, since there are no preset schedules or evaluation chronograms. In addition, the Virtual Campus will be available 24 hours a day and will allow users to download the materials and consult them whenever they wish.

This **Postgraduate Diploma in Application of Analytical Techniques and Artificial Intelligence in Dentistry** contains the most complete and up-to-date program on the market. Its most notable features are:

- ♦ The development of case studies presented by experts in Application of Analytical Techniques and Artificial Intelligence in Dentistry
- ♦ 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



*Do you want to offer virtual consultations to your most vulnerable patients? Specialize in Teleodontology thanks to this innovative program"*



*You will address the main ethical challenges in the use of Artificial Intelligence, so that your procedures stand out for their empathy and human quality"*

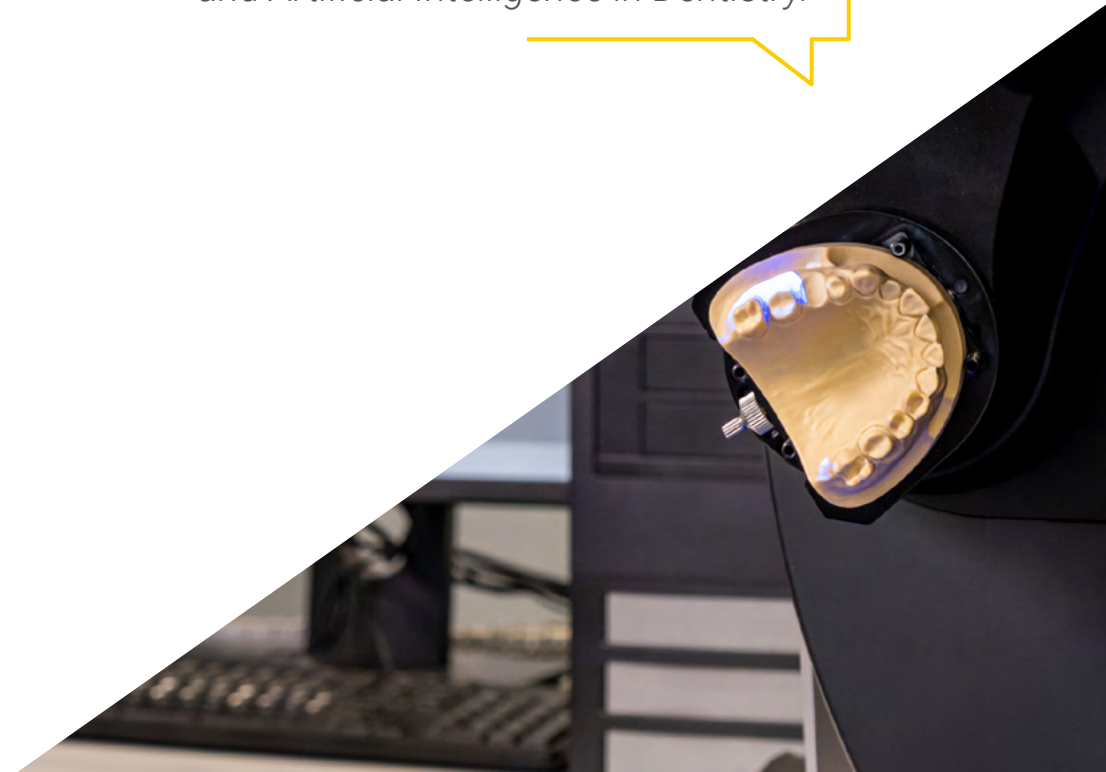
The program's teaching staff includes professionals from the field who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will drive the most effective strategies to preserve the safety and maintenance of dental equipment.*

*The Relearning system will lead you to advance in a much more agile way in the Application of Analytical Techniques and Artificial Intelligence in Dentistry.*

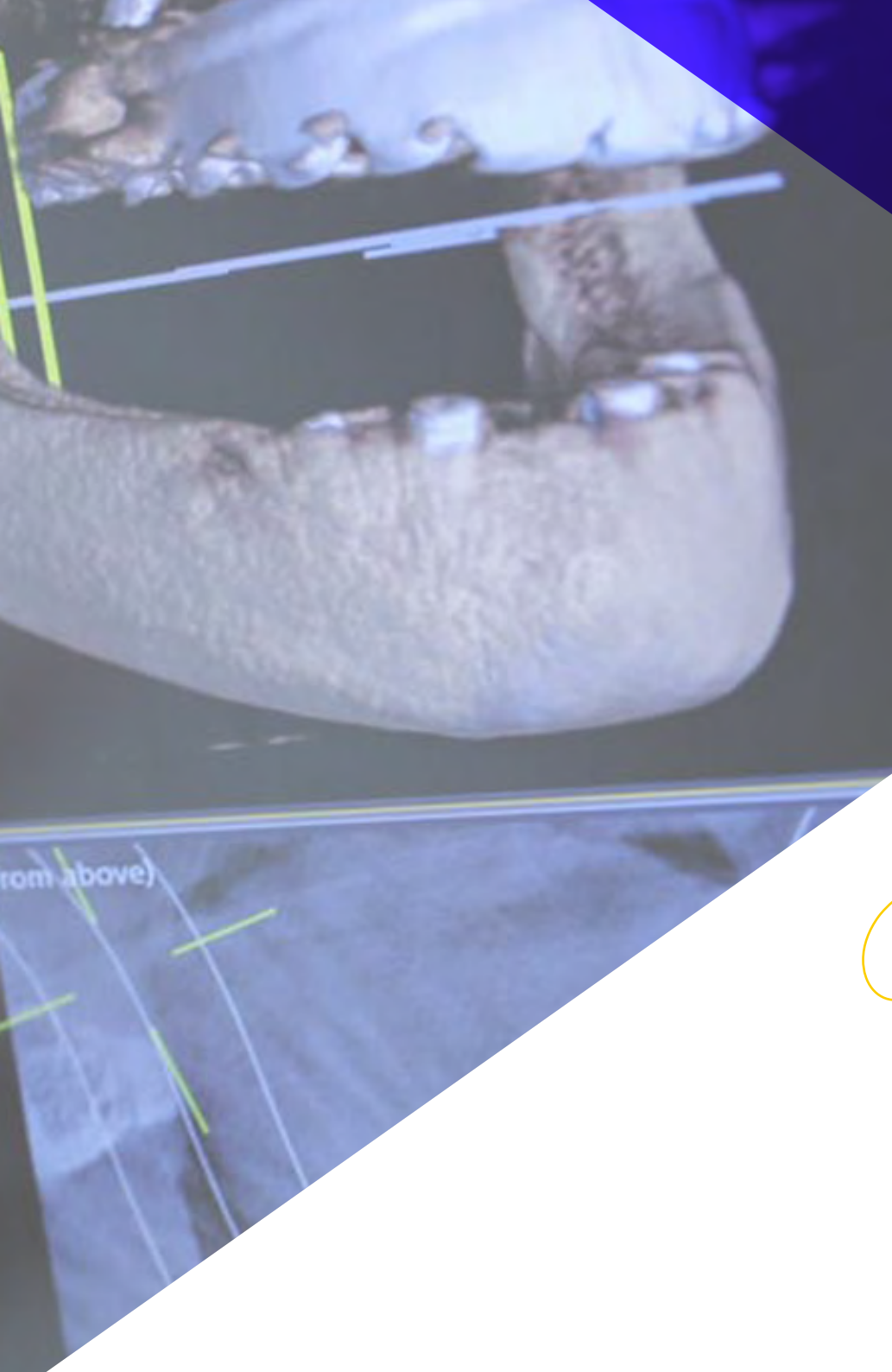


# 02 Objectives

Thanks to this university program, students will develop advanced skills in the application of Artificial Intelligence for the accurate diagnosis of oral pathologies. In this way, they will include in their clinical practice the most innovative treatments, including 3D modeling. In addition, graduates will optimize the patient experience by optimizing medical and administrative management in dental clinics. They will also provide modern solutions to the most complex patients, among which Teleodontology stands out. Moreover, professionals will develop an ethical and responsible conscience to overcome the moral challenges related to the use of Artificial Intelligence.







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*You will apply advanced techniques in oral health monitoring and prevent oral diseases such as Candidiasis, Leukoplakia or Bruxism"*



## General Objectives

- ♦ Gain a solid understanding of Machine Learning principles and their specific application in dental contexts
- ♦ Master methods and tools for analyzing dental data, including visualization techniques to improve diagnostics
- ♦ Develop a thorough understanding of the ethical and privacy considerations associated with the application of AI in dentistry
- ♦ Acquire advanced skills in the application of AI for the accurate diagnosis of oral diseases and interpretation of dental images
- ♦ Understand the specialized use of AI in 3D treatment planning and modeling, optimizing orthodontic treatments and customizing treatment plans
- ♦ Develop competencies to use AI tools in oral health monitoring, oral disease prevention and effective integration of these technologies
- ♦ Know the latest AI technologies applied in 3D printing, robotics, clinical management, teleodontology, and automation of administrative tasks
- ♦ Use AI to analyze patient feedback, improve marketing strategies and dental CRM, optimizing clinical and administrative management in dental clinics
- ♦ Handle large datasets, using Big Data concepts, data mining, predictive analytics and machine learning algorithms
- ♦ Explore ethical challenges, regulations, professional liability, social impact, access to dental care, sustainability, policy development, innovation, and future prospects in the application of AI in dentistry





## Specific Objectives

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### Module 1. AI-assisted Dental Diagnostics and Treatment Planning

- ♦ Acquire expertise in the use of AI for treatment planning, including 3D modeling, orthodontic treatment optimization and treatment plan customization
- ♦ Develop advanced skills in the application of AI for the accurate diagnosis of oral diseases, including interpretation of dental images and pathology detection
- ♦ Obtain competencies to use AI tools in oral health monitoring and oral disease prevention, effectively integrating these technologies into dental practice
- ♦ Collect, manage and use both clinical and radiographic data in AI treatment planning
- ♦ Enable students to evaluate and select AI technologies suitable for their dental practice, considering aspects such as accuracy, reliability and scalability

### Module 2. Innovation with AI in Dentistry

- ♦ Develop specialized skills in the application of AI in 3D printing, robotics, dental materials development, clinical management, teleodontology, and automation of administrative tasks, addressing diverse areas of dental practice
- ♦ Acquire the ability to strategically implement AI in dental education and training, ensuring that practitioners are equipped to adapt to constantly evolving technological innovations in the dental field
- ♦ Develop specialized skills in the application of AI in 3D printing, robotics, dental materials development, and automation of administrative tasks
- ♦ Employ AI to analyze patient feedback, optimizing clinical management in dental clinics to improve patient experience
- ♦ Strategically implement AI in dental education, ensuring that professionals are equipped to adapt to the ever-evolving technological innovations in the dental field

### Module 3. Ethics, Regulation and the Future of AI in Dentistry

- ♦ Understand and address ethical challenges related to the use of AI in dentistry, promoting responsible professional practices
- ♦ Inquire into the regulations and standards relevant to the application of AI in Dentistry, developing skills in policy formulation to ensure safe and ethical practices
- ♦ Address the social, educational, business and sustainable impact of AI in dentistry, to adapt to changes in dental practice in the era of advanced AI
- ♦ Manage the tools necessary to understand and address the ethical challenges related to the use of AI in Dentistry, promoting responsible professional practices
- ♦ Provide students with a thorough understanding of the social, business and sustainable impact of AI in the field of dentistry, preparing them to lead and adapt to changes that arise during their professional practice

03

# Course Management

Loyal to its philosophy of providing educational excellence, TECH has carefully selected the teaching staff of this Postgraduate Diploma. In this way, it brings together leading specialists in Artificial Intelligence applied to Dentistry. These professionals have poured into the didactic contents their years of experience in internationally recognized health institutions. In addition, they will encourage graduates to acquire an interdisciplinary vision, to effectively care for patients with various symptoms and pathologies. Students will be prepared to take advantage of the job opportunities presented by a dental industry in constant evolution due to technological advances.





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*The diversity of talents and knowledge of the teaching staff will generate a dynamic learning environment. Learn with the best!”*

## Management



### Dr. Peralta Martín-Palomino, Arturo

- ♦ CEO and CTO at Prometheus Global Solutions
- ♦ CTO at Korporate Technologies
- ♦ CTO at AI Shephers GmbH
- ♦ Consultant and Strategic Business Advisor at Alliance Medical
- ♦ Director of Design and Development at DocPath
- ♦ Ph.D. in Psychology from the University of Castilla - La Mancha
- ♦ Ph.D. in Economics, Business and Finance from the Camilo José Cela University
- ♦ Ph.D. in Psychology from University of Castilla – La Mancha
- ♦ Professional Master's Degree in Executive MBA by the Isabel I University
- ♦ Professional Master's Degree in Sales and Marketing Management, Isabel I University
- ♦ Expert Master's Degree in Big Data by Hadoop Training
- ♦ Professional Master's Degree in Advanced Information Technologies from the University of Castilla - La Mancha
- ♦ Member of: SMILE Research Group



### Dr. Martín-Palomino Sahagún, Patricia

- ♦ Specialist in Dentistry and Orthodontics
- ♦ Private Orthodontist
- ♦ Researcher
- ♦ Ph.D. in Dentistry from the University Alfonso X El Sabio
- ♦ Postgraduate in Orthodontics from the University Alfonso X El Sabio
- ♦ Degree in Dentistry at the University of Alfonso X El Sabio

## Professors

### Dr. Carrasco González, Ramón Alberto

- ♦ Specialist in Computer Science and Artificial Intelligence
- ♦ Researcher
- ♦ Head of *Business Intelligence* (Marketing) at Caja General de Ahorros de Granada and Banco Mare Nostrum.
- ♦ Head of Information Systems (*Data Warehousing and Business Intelligence*) at Caja General de Ahorros de Granada and Banco Mare Nostrum
- ♦ Ph.D. in Artificial Intelligence from the University of Granada.
- ♦ Computer Engineer from the University of Granada

### Mr. Popescu Radu, Daniel Vasile

- ♦ Pharmacology, Nutrition and Diet Specialist
- ♦ Freelance Producer of Didactic and Scientific Contents
- ♦ Nutritionist and Community Dietitian
- ♦ Community Pharmacist
- ♦ Researcher
- ♦ Professional Master's Degree in Nutrition and Health at the Oberta University of Catalonia (UOC)
- ♦ Professional Master's Degree in Psychopharmacology from the University of Valencia
- ♦ Pharmacist by the Complutense University of Madrid
- ♦ Nutritionist-Dietician at the European University Miguel de Cervantes

# 04

## Structure and Content

This program will address the integral application of Artificial Intelligence in Dentistry, emphasizing its usefulness for diagnosis and treatment planning. To this end, the syllabus will include the creation of 3D Models for graduates to improve the efficiency and accuracy of therapies. It will also delve into intelligent tools for monitoring oral health. In addition, the didactic contents will encourage students to make innovations, applying assisted robotics to optimize assistance. Finally, they will delve into the ethical challenges inherent in the use of technology, addressing aspects such as sustainability and its social impact.





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*The skills you will acquire will guide you towards the formulation of successful diagnoses, thanks to the analysis of dental images with Intelligent Automation”*

## Module 1. AI-assisted Dental Diagnostics and Treatment Planning

- 1.1. AI in Oral Disease Diagnosis
  - 1.1.1. Use of Machine Learning Algorithms to Identify Oral Diseases
  - 1.1.2. Integration of AI in Diagnostic Equipment for Real-Time Analysis
  - 1.1.3. AI-assisted Diagnostic Systems to Improve Accuracy
  - 1.1.4. Analysis of Symptoms and Clinical Signals through AI for Rapid Diagnostics
- 1.2. Dental Image Analysis with AI
  - 1.2.1. Development of Software for the Automatic Interpretation of Dental Radiographs
  - 1.2.2. AI in the Detection of Abnormalities in Oral MRI Images
  - 1.2.3. Improvement in the Quality of Dental Imaging through AI Technologies
  - 1.2.4. Deep Learning Algorithms for Classifying Dental Conditions in Imaging
- 1.3. AI in Caries and Dental Pathology Detection
  - 1.3.1. Pattern Recognition Systems for Identifying Early Cavities
  - 1.3.2. AI for Risk Assessment of Dental Pathologies
  - 1.3.3. Computer Vision Technologies in the Detection of Periodontal Diseases
  - 1.3.4. AI Tools for Caries Monitoring and Progression
- 1.4. 3D Modeling and Treatment Planning with AI
  - 1.4.1. Using AI to Create Accurate 3D Models of the Oral Cavity
  - 1.4.2. AI Systems in the Planning of Complex Dental Surgeries
  - 1.4.3. Simulation Tools for Predicting Treatment Outcomes
  - 1.4.4. AI in the Customization of Prosthetics and Dental Appliances
- 1.5. Optimization of Orthodontic Treatments using AI
  - 1.5.1. AI in the Planning and Follow-up of Orthodontic Treatments
  - 1.5.2. Algorithms for the Prediction of Tooth Movements and Orthodontic Adjustments
  - 1.5.3. AI Analysis to Reduce Orthodontic Treatment Time
  - 1.5.4. Real-time Remote Monitoring and Treatment Adjustment Systems
- 1.6. Risk Prediction in Dental Treatments
  - 1.6.1. AI Tools for Risk Assessment in Dental Procedures
  - 1.6.2. Decision Support Systems for Identifying Potential Complications
  - 1.6.3. Predictive Models for Anticipating Treatment Reactions
  - 1.6.4. Analysis of Clinical Histories using AI to Personalize Treatments



- 1.7. Personalization of Treatment Plans with AI
    - 1.7.1. AI in the Adaptation of Dental Treatments to Individual Needs
    - 1.7.2. AI-based Treatment Recommender Systems
    - 1.7.3. Analysis of Oral Health Data for Personalized Treatment Planning
    - 1.7.4. AI Tools for Adjusting Treatments Based on Patient Response
  - 1.8. Oral Health Monitoring with Intelligent Technologies
    - 1.8.1. Smart Devices for Oral Hygiene Monitoring
    - 1.8.2. AI-enabled Mobile Applications for Dental Health Monitoring
    - 1.8.3. Wearables with Sensors to Detect Changes in Oral Health
    - 1.8.4. AI-based Early Warning Systems to Prevent Oral Diseases
  - 1.9. AI in Oral Disease Prevention
    - 1.9.1. AI Algorithms to Identify Risk Factors for Oral Diseases
    - 1.9.2. Oral Health Education and Awareness Systems with AI
    - 1.9.3. Predictive Tools for the Early Prevention of Dental Problems
    - 1.9.4. AI in the Promotion of Healthy Habits for Oral Prevention
  - 1.10. Case Studies: Diagnostic and Planning Successes with AI
    - 1.10.1. Analysis of Real Cases where AI Improved Dental Diagnosis
    - 1.10.2. Successful Case Studies on the Implementation of AI for Treatment Planning
    - 1.10.3. Treatment Comparisons with and without the Use of AI
    - 1.10.4. Documentation of Improvements in Clinical Efficiency and Effectiveness with AI
- Module 2. Innovation with AI in Dentistry**
- 2.1. 3D Printing and Digital Fabrication in Dentistry
    - 2.1.1. Use of 3D Printing for the Creation of Customized Dental Prostheses
    - 2.1.2. Fabrication of Orthodontic Splints and Aligners using 3D Technology
    - 2.1.3. Development of Dental Implants using 3D Printing
    - 2.1.4. Application of Digital Fabrication Techniques in Dental Restoration
  - 2.2. Robotics in Dental Procedures
    - 2.2.1. Implementation of Robotic Arms for Precision Dental Surgeries
    - 2.2.2. Use of Robots in Endodontic and Periodontic Procedures
    - 2.2.3. Development of Robotic Systems for Dental Operations Assistance
    - 2.2.4. Integration of Robotics in the Practical Teaching of Dentistry
  - 2.3. Development of AI-assisted Dental Materials
    - 2.3.1. Use of AI to Innovate in Dental Restorative Materials
    - 2.3.2. Predictive Analytics for Durability and Efficiency of New Dental Materials
    - 2.3.3. AI in the Optimization of Properties of Materials such as Resins and Ceramics
    - 2.3.4. AI Systems to Customize Materials according to Patient's Needs
  - 2.4. AI-enabled Dental Practice Management
    - 2.4.1. AI Systems for Efficient Appointment and Scheduling Management
    - 2.4.2. Data Analysis to Improve Quality of Dental Services
    - 2.4.3. AI Tools for Inventory Management in Dental Clinics
    - 2.4.4. Use of AI in the Evaluation and Continuous Improvement of Dental Practice
  - 2.5. Teleodontology and Virtual Consultations
    - 2.5.1. Tele-dentistry Platforms for Remote Consultations
    - 2.5.2. Use of Videoconferencing Technologies for Remote Diagnosis
    - 2.5.3. AI Systems for Online Preliminary Assessment of Dental Conditions
    - 2.5.4. Tools for Secure Communication between Patients and Dentists
  - 2.6. Automation of Administrative Tasks in Dental Clinics
    - 2.6.1. Implementation of AI Systems for Billing and Accounting Automation
    - 2.6.2. Use of AI Software in Patient Record Management
    - 2.6.3. AI Tools for Optimization of Administrative Workflows
    - 2.6.4. Automatic Scheduling and Reminder Systems for Dental Appointments
  - 2.7. Sentiment Analysis of Patient Opinions
    - 2.7.1. Use of AI to Assess Patient Satisfaction through Online Feedback
    - 2.7.2. Natural Language Processing Tools for Analyzing Patient *Feedback*
    - 2.7.3. AI Systems to Identify Areas for Improvement in Dental Services
    - 2.7.4. Analysis of Patient Trends and Perceptions using AI
  - 2.8. AI in Marketing and Patient Relationship Management
    - 2.8.1. Implementation of AI Systems to Personalize Dental Marketing Strategies
    - 2.8.2. AI Tools for Customer Behavioral Analysis
    - 2.8.3. Use of AI in the Management of Marketing Campaigns and Promotions
    - 2.8.4. AI-based Patient Recommendation and Loyalty Systems

- 2.9. Safety and Maintenance of AI Dental Equipment
  - 2.9.1. AI Systems for Monitoring and Predictive Maintenance of Dental Equipment
  - 2.9.2. Use of AI in Ensuring Compliance with Safety Regulations
  - 2.9.3. Automated Diagnostic Tools for Equipment Failure Detection
  - 2.9.4. Implementation of AI-assisted Safety Protocols in Dental Practices
- 2.10. Integration of AI in Dental Education and Training
  - 2.10.1. Use of AI in Simulators for Hands-on Training in Dentistry
  - 2.10.2. AI Tools for the Personalization of Learning in Dentistry
  - 2.10.3. Systems for Evaluation and Monitoring of Educational Progress using AI
  - 2.10.4. Integration of AI Technologies in the Development of Curricula and Didactic Materials

### Module 3. Ethics, Regulation and the Future of AI in Dentistry

- 3.1. Ethical Challenges in the Use of AI in Dentistry
  - 3.1.1. Ethics in AI-assisted Clinical Decision Making
  - 3.1.2. Patient Privacy in Intelligent Dentistry Environments
  - 3.1.3. Professional Accountability and Transparency in AI Systems
- 3.2. Ethical Considerations in the Collection and Use of Dental Data
  - 3.2.1. Informed Consent and Ethical Data Management in Dentistry
  - 3.2.2. Security and Confidentiality in the Handling of Sensitive Data
  - 3.2.3. Ethics in Research with Large Datasets in Dentistry
- 3.3. Fairness and Bias in AI Algorithms in Dentistry
  - 3.3.1. Addressing Bias in Algorithms to Ensure Fairness
  - 3.3.2. Ethics in the Implementation of Predictive Algorithms in Oral Health
  - 3.3.3. Ongoing Monitoring to Mitigate Bias and Promote Equity
- 3.4. Regulations and Standards in Dental AI
  - 3.4.1. Regulatory Compliance in the Development and Use of AI Technologies
  - 3.4.2. Adaptation to Legal Changes in the Deployment of IA Systems
  - 3.4.3. Collaboration with Regulatory Authorities to Ensure Compliance
- 3.5. AI and Professional Responsibility in Dentistry
  - 3.5.1. Development of Ethical Standards for Professionals using AI
  - 3.5.2. Professional Responsibility in the Interpretation of AI Results
  - 3.5.3. Continuing Education in Ethics for Oral Health Professionals





- 3.6. Social Impact of AI in Dental Care
  - 3.6.1. Social Impact Assessment for Responsible Introduction of AI
  - 3.6.2. Effective Communication about AI Technologies with Patients
  - 3.6.3. Community Participation in the Development of Dental Technologies
- 3.7. AI and Access to Dental Care
  - 3.7.1. Improving Access to Dental Services through AI Technologies
  - 3.7.2. Addressing Accessibility Challenges with AI Solutions
  - 3.7.3. Equity in the Distribution of AI-assisted Dental Services
- 3.8. AI and Sustainability in Dental Practices
  - 3.8.1. Energy Efficiency and Waste Reduction with AI Implementation
  - 3.8.2. Sustainable Practice Strategies Enhanced by AI Technologies
  - 3.8.3. Environmental Impact Assessment in the Integration of AI Systems
- 3.9. AI Policy Development for the Dental Sector
  - 3.9.1. Collaboration with Institutions for the Development of Ethical Policies
  - 3.9.2. Creation of Best Practice Guidelines on the Use of AI
  - 3.9.3. Active Participation in the Formulation of AI-related Government Policies
- 3.10. Ethical Risk and Benefit Assessment of AI in Dentistry
  - 3.10.1. Ethical Risk Analysis in the Implementation of AI Technologies
  - 3.10.2. Ongoing Assessment of Ethical Impact on Dental Care
  - 3.10.3. Long-term Benefits and Risk Mitigation in the Deployment of AI Systems



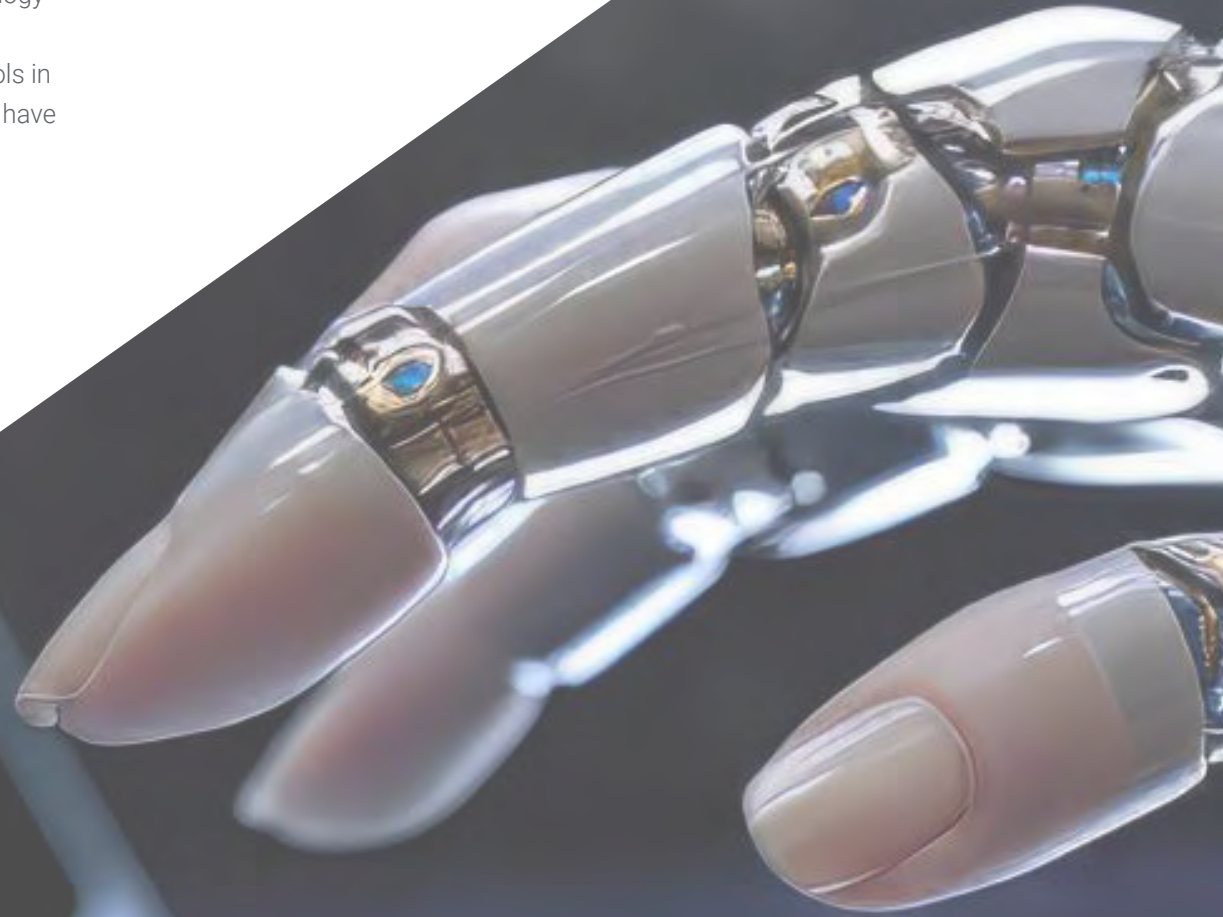
*You will have access to the multimedia resource library and the entire syllabus from day one. Forget about fixed schedules or face-to-face attendance!"*

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"*

## Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

“

*At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world”*



*You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.*





*The student will learn to solve complex situations in real business environments through collaborative activities and real cases.*

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

“*Our program prepares you to face new challenges in uncertain environments and achieve success in your career”*

The case method has been the most widely used learning system among the world's leading Information Technology schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*In 2019, we obtained the best learning results of all online universities in the world.*

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



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.

This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*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.*

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.



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.



### 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.



### Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### 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.





#### Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### 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".



#### 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.



06

# Certificate

This Postgraduate Diploma in Application of Analytical Techniques and Artificial Intelligence in Dentistry guarantees, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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”*

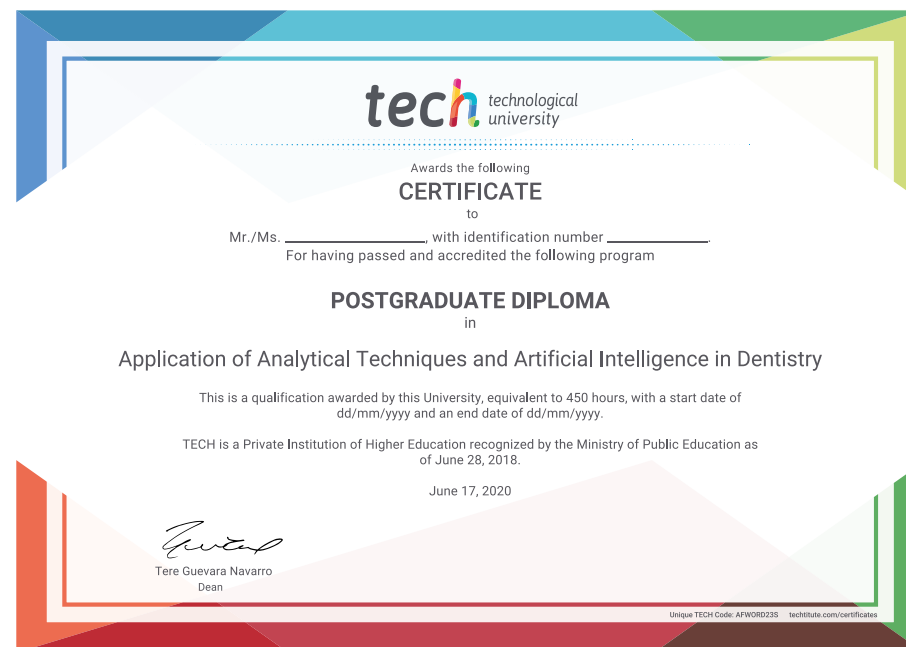
This **Postgraduate Diploma in Application of Analytical Techniques and Artificial Intelligence in Dentistry** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Diploma in Application of Analytical Techniques and Artificial Intelligence in Dentistry**

Official N° of Hours: **450 h.**



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



future

health confidence people

education information tutors

guarantee accreditation teaching

institutions technology learning

community commitment

innovation

personalized service

knowledge present

online training

development

languages

virtual classroom

**tech** technological  
university

**Postgraduate Diploma**  
Application of Analytical  
Techniques and Artificial  
Intelligence in Dentistry

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

# Postgraduate Diploma Application of Analytical Techniques and Artificial Intelligence in Dentistry

