Postgraduate Diploma

Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine

tech global university

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Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/medicine/postgraduate-diploma/postgraduate-diploma-application-artificial-intelligence-clinical-data-processing-modeling-diagnostics-aesthetic-medicine

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Introduction

The integration of Artificial Intelligence in the field of Aesthetic Medicine represents a paradigmatic evolution in clinical data management and diagnostic decision making. This is because sophisticated tools such as Predictive Modeling offer specialists techniques aimed at improving diagnostic accuracy, personalizing therapeutic plans and even predicting aesthetic results with greater accuracy. In this framework, professionals must acquire advanced skills to handle these technological instruments in order to increase the quality of their interventions and patient satisfaction. With this idea in mind, TECH has created a pioneering 100% online university program focused on the use of intelligent systems in this healthcare area.

With this Postgraduate Diploma, entirely online, you will master the most modern Artificial Intelligence techniques to personalize aesthetic therapies and anticipate the results of interventions"

According to a recent report prepared by the World Health Organization, more than 2.5 million aesthetic medicine procedures were performed on a global scale last year. In this scenario, professionals face the challenge of personalizing therapeutic plans according to the needs and expectations of each person. Faced with this, Artificial Intelligence has emerged as a valuable tool that offers innovative solutions both for Clinical Data Processing and for performing exhaustive simulations of aesthetic results. In this way, practitioners use methods such as machine learning algorithms or neural networks to obtain more accurate diagnoses. They design highly individualized treatments to ensure a substantial improvement in the overall well-being of individuals.

Given this context, TECH presents an innovative Postgraduate Diploma in the Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnosis in Aesthetic Medicine. Conceived by references in this field, the academic itinerary will delve into subjects ranging from the integration of algorithms that process large volumes of data or training of predictive models to the structuring of the information obtained in imaging tests. In line with this, the syllabus will address multiple strategies to simulate procedures such as facial changes, skin regenerations or results of aesthetic surgeries by means of state-of-the-art three-dimensional software. In addition, the didactic materials will provide practitioners with a wide range of methods for early identification of conditions such as precancerous skin lesions.

As for the methodology of the university program, it is based on a flexible 100% online modality. In turn, TECH employs its innovative Relearning system, which consists of the reiteration of essential concepts to ensure their mastery. On the other hand, practitioners will find in the Virtual Campus several multimedia pills that will liven up their academic experience. These include specialized readings based on the latest scientific postulates, explanatory videos, infographics and interactive summaries.

This **Postgraduate Diploma in Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine** 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 Artificial Intelligence applied to Aesthetic Medicine
- The graphic, schematic and eminently practical content of the book provides scientific and practical information on those disciplines that are essential for professional practice
- Practical exercises where the process of 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

You will be prepared to collect, analyze and visualize clinical data from various sources; ensuring its quality for the planning of aesthetic treatments"

The characteristic Relearning system created by TECH will allow you to update your knowledge at your own pace, without depending on external conditioning factors such as unnecessary travel"

You will delve into the use of SkinVision, which will help you to identify complex melanomas at an early stage.

You will have a solid understanding of the ethical and legal implications of the use of Artificial Intelligence in Aesthetic Medicine.

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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.

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Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it relies on an enormous faculty of more than 6,000 professors of the highest international renown.

Study at the world's largest online university and guarantee your professional success. The future starts at TECH"

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.

The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.

Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.

The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.

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Syllabus

This Postgraduate Diploma will provide physicians with a holistic understanding of the adoption of the main Artificial Intelligence techniques in Aesthetic Medicine. The academic itinerary will delve into the implementation of algorithms to collect, analyze and process large volumes of clinical data. The syllabus will also provide experts with the keys to securely store users' confidential information. In addition, the training materials will provide an in-depth study of the use of advanced simulation tools (such as Crisalix, FaceGen or ZBrush) to create three-dimensional models of patients and to preview the results of treatments before they are performed.

You will have at your disposal advanced multimedia resources, such as explanatory videos and interactive summaries, for your comprehensive training with this TECH program"

Module 1. Clinical Data Processing for Predictive Modeling in Aesthetic Medicine

1.1. Patient Data Collection and Storage
- 1.1.1. Database Implementation for Secure, Scalable Storage (MongoDB Atlas)
- 1.1.2. Facial and Body Image Data Collection (Google Cloud Vision AI)
- 1.1.3. Collection of Clinical History and Risk Factors (Epic Systems AI)
- 1.1.4. Integration of Data from Medical Devices and Wearables (Fitbit Health Solutions)

1.2. Data Cleaning and Normalization for Predictive Modeling
- 1.2.1. Detection and Correction of Missing or Inconsistent Data (OpenRefine)
- 1.2.2. Normalization of Image and Clinical Text Data Formats (Pandas AI Library)
- 1.2.3. Elimination of Bias in Clinical and Aesthetic Data (IBM AI Fairness 360)
- 1.2.4. Pre-Processing and Organization of Data to Train Predictive Models (TensorFlow)

1.3. Medical Image Data Structuring
- 1.3.1. Facial Image Segmentation for Feature Analysis (NVIDIA Clara)
- 1.3.2. Identification and Classification of Skin Areas of Interest (SkinIO)
- 1.3.3. Organization of Image Data in Different Resolutions and Layers (Clarifai)
- 1.3.4. Labeling of Medical Images to Train Neural Networks (Labelbox)

1.4. Predictive Modeling Based on Personal Data
- 1.4.1. Prediction of Aesthetic Results from Historical Data (H2O.ai AutoML)
- 1.4.2. Machine Learning Models for Personalized Treatment (Amazon SageMaker)
- 1.4.3. Deep Neural Networks for Predicting Response to Treatments (DeepMind AlphaFold)
- 1.4.4. Personalization of Models according to Facial and Body Features (Google AutoML Vision)

1.5. Analysis of External and Environmental Factors in Aesthetic Results
- 1.5.1. Incorporation of Meteorological Data in Skin Analysis (Weather Company Data on IBM Cloud)
- 1.5.2. Modeling UV Exposure and Its Impact on the Skin (NOAA AI UV Index)
- 1.5.3. Integration of Lifestyle Factors in Predictive Models (WellnessFX AI)
- 1.5.4. Analysis of Interactions between Environmental Factors and Treatments (Proven Skincare AI)

1.6. Generation of Synthetic Data for Training
- 1.6.1. Synthetic Data Creation to Improve Model Training (Synthea)
- 1.6.2. Synthetic Imaging of Rare Skin Conditions (NVIDIA GANs)
- 1.6.3. Simulation of Variations in Skin Textures and Skin Tones (DataGen)
- 1.6.4. Use of Synthetic Data to Avoid Privacy Concerns (Synthetic Data Vault)

1.7. Anonymization and Security of Patient Data
- 1.7.1. Implementation of Clinical Data Anonymization Techniques (OneTrust)
- 1.7.2. Encryption of Sensitive Data in Patient Databases (AWS Key Management Service)
- 1.7.3. Pseudonymization to Protect Personal Data in AI Models (Microsoft Azure AI Privacy)
- 1.7.4. Auditing and Monitoring Access to Patient Data (Datadog AI Security)

1.8. Optimization of Predictive Models for Personalization of Treatment
- 1.8.1. Selection of Predictive Algorithms Based on Structured Data (DataRobot)
- 1.8.2. Optimization of Hyperparameters in Predictive Models (Keras Tuner)
- 1.8.3. Cross-Validation and Testing of Customized Models (Scikit-learn)
- 1.8.4. Model Fitting based on Outcome Feedback (MLflow)

1.9. Data Visualization and Predictive Results
- 1.9.1. Creating Visualization Dashboards for Predictive Results (Tableau)
- 1.9.2. Treatment Progression Charts and Long-Term Predictions (Power BI)
- 1.9.3. Visualization of Multivariate Analysis on Patient Data (Plotly)
- 1.9.4. Comparison of Results between Different Predictive Models (Looker)

1.10. Updating and Maintaining Predictive Models with New Data
- 1.10.1. Continuous Integration of New Data into Trained Models (Google Vertex AI Pipelines)
- 1.10.2. Performance Monitoring and Automatic Adjustments in Models (IBM Watson Machine Learning)
- 1.10.3. Updating Predictive Models Based on Recent Data Patterns (Amazon SageMaker Model Monitor)
- 1.10.4. Real-Time Feedback for Continuous Model Improvement (Dataiku)

Module 2. Modeling and Simulation in Aesthetic Medicine

2.1. Simulation of AI Procedures
- 2.1.1. 3D Simulation of Facial Changes in Rejuvenation Procedures (Crisalix)
- 2.1.2. Modeling Dermal Fillers Results and Lip Adjustments (Modiface)
- 2.1.3. Visualization of Body Aesthetic Surgery Results (MirrorMe3D)
- 2.1.4. Real-Time Projection of Botox and Fillers Results (TouchMD)

2.2. Creating 3D Patient Models
- 2.2.1. Generating 3D Facial Models from Photographs (FaceGen)
- 2.2.2. 3D Body Scanning and Reconstruction for Aesthetic Simulation (Artec Eva)
- 2.2.3. Integration of Anatomical Data into 3D Models (Materialise Mimics)
- 2.2.4. Realistic Skin Modeling and Texturing in Facial Reconstructions (ZBrush)

2.3. Simulation of Plastic Surgery Outcomes
- 2.3.1. Simulation of Rhinoplasties with Modeling of Bone Structures (Rhinomodel)
- 2.3.2. Projection of Results in Mammoplasty and Other Body Procedures (VECTRA 3D)
- 2.3.3. Prediction of Changes in Post-Surgery Facial Symmetry (Geomagic Freeform)
- 2.3.4. Visualization of Facelift and Facelift Results (Canfield Scientific)

2.4. Scar Reduction and Skin Regeneration Simulation
- 2.4.1. Simulation of Dermal Regeneration in Laser Treatments (Canfield VECTRA)
- 2.4.2. Prediction of Scar Evolution with AI Algorithms (DermaCompare)
- 2.4.3. Modeling the Effects of Chemical Peels in Skin Regeneration (SkinIO)
- 2.4.4. Projection of Results in Advanced Healing Treatments (Medgadget SkinAI)

2.5. Projection of Results in Rejuvenation Therapies
- 2.5.1. Modeling the Effects of Expression Line Reduction (DeepFaceLab)
- 2.5.2. Simulation of Radiofrequency Therapies and Their Impact on Firmness (Visage Technologies)
- 2.5.3. Prediction of Results in Laser Resurfacing Procedures (Syneron Candela eTwo)
- 2.5.4. Visualization of the Effect of Intense Pulsed Light (IPL) Treatments (3D LifeViz)

2.6. Facial Symmetry Analysis
- 2.6.1. Evaluation of Facial Proportions by Means of Reference Points (Face++)
- 2.6.2. Real-Time Symmetry Measurement for Aesthetic Procedures (Dlib)
- 2.6.3. Analysis of Facial Proportions in Harmonization Procedures (MorphoStudio)
- 2.6.4. Comparison of Symmetry before and after Aesthetic Treatments (MediCapture)

2.7. Volume Evaluation in Body Contouring
- 2.7.1. Volumetric Measurement in Liposuction and Contouring Simulation (3D Sculptor)
- 2.7.2. Analysis of Volume Changes in Buttock Augmentation Procedures (Sculpt My Body)
- 2.7.3. Post-Lifting Body Contouring Evaluation (Virtual Surgical Planning)
- 2.7.4. Prediction of Volume Changes in Non-Invasive Body Contouring (CoolSculpting Virtual Consult)

2.8. Simulation of Hair Treatments
- 2.8.1. Visualization of Results in Hair Transplantation (HairMetrix)
- 2.8.2. Projection of Hair Growth in PRP Treatments (TruScalp AI)
- 2.8.3. Simulation of Hair Loss and Density in Alopecia (Keeps AI)
- 2.8.4. Evaluation of the Effects of Mesotherapy Treatments on Hair (HairDX)

2.9. Simulation for Body Weight Reduction
- 2.9.1. Projection of Results of Reductive and Shaping Treatments (Weight Loss Predictor)
- 2.9.2. Analysis of Body Changes in Cryolipolysis Procedures (SculpSure Consult)
- 2.9.3. Simulation of Volume Reduction in Ultrasonic Cavitation (UltraShape AI)
- 2.9.4. Visualization of Body Radiofrequency Treatment Results (InMode BodyTite)

2.10. Modeling of Liposuction Procedures
- 2.10.1. 3D Simulation of Abdominal Liposuction Procedure Results (VASER Shape)
- 2.10.2. Evaluation of Changes in Hips and Thighs after Liposuction (Body FX)
- 2.10.3. Modeling of Fat Reduction in Small and Targeted Areas (LipoAI)
- 2.10.4. Visualization of Laser-Assisted Liposuction Results (SmartLipo Triplex)

Module 3. Diagnosis and Analysis with Artificial Intelligence in Aesthetic Medicine

3.1. Diagnosis of Cutaneous Anomalies
- 3.1.1. Detection of Melanomas and Suspicious Skin Lesions (SkinVision)
- 3.1.2. Identification of Pre-Cancerous Lesions with AI Algorithms (DermaSensor)
- 3.1.3. Real-Time Analysis of Mole and Mole Patterns (MoleScope)
- 3.1.4. Classification of Skin Lesion Types with Neural Networks (SkinIO)

3.2. Skin Tone and Texture Analysis
- 3.2.1. Advanced Evaluation of Skin Texture Using Computer Vision (HiMirror)
- 3.2.2. Uniformity and Skin Tone Analysis Using AI Models (Visia Complexion Analysis)
- 3.2.3. Comparison of Texture Changes after Aesthetic Treatments (Canfield Reveal Imager)
- 3.2.4. Measurement of Firmness and Smoothness in Skin Using AI Algorithms (MySkin AI)

3.3. Detection of Sun Damage and Pigmentation
- 3.3.1. Identification of Hidden Sun Damage in Deep Skin Layers (VISIA Skin Analysis)
- 3.3.2. Segmentation and Classification of Hyperpigmentation Areas (Adobe Sensei)
- 3.3.3. Detection of Sunspots in Different Skin Types (SkinScope LED)
- 3.3.4. Evaluating the Efficacy of Treatments for Hyperpigmentation (Melanin Analyzer AI)

3.4. Diagnosis of Acne and Blemishes
- 3.4.1. Identification of Acne Types and Severity of Lesions (Aysa AI)
- 3.4.2. Classification of Acne Scars for Treatment Selection (Skinome)
- 3.4.3. Real-Time Analysis of Facial Blemish Patterns (Face++)
- 3.4.4. Evaluation of Skin Improvements after Acne Treatment (Effaclar AI)

3.5. Prediction of Skin Treatment Effectiveness
- 3.5.1. Modeling Skin Response to Rejuvenation Treatments (Rynkl)
- 3.5.2. Prediction of Results in Hyaluronic Acid Therapies (Modiface)
- 3.5.3. Evaluation of the Efficacy of Customized Dermatological Products (SkinCeuticals Custom D.O.S.E.)
- 3.5.4. Follow-Up of Skin Response in Laser Therapies (Spectra AI)

3.6. Facial Aging Analysis
- 3.6.1. Projection of Apparent Age and Signs of Facial Aging (PhotoAge)
- 3.6.2. Modeling of Skin Elasticity Loss Over Time (FaceLab)
- 3.6.3. Detecting Expression Lines and Deep Wrinkles in the Face (Visia Wrinkle Analysis)
- 3.6.4. Evaluation of the Progression of Signs of Aging (AgingBooth AI)

3.7. Detection of Vascular Skin Damage
- 3.7.1. Identification of Varicose Veins and Capillary Damage in the Skin (VeinViewer Vision2)
- 3.7.2. Evaluation of Telangiectasias and Spider Veins on the Face (Canfield Vascular Imager)
- 3.7.3. Analysis of the Effectiveness of Vascular Sclerosis Treatments (VascuLogic AI)
- 3.7.4. Follow-Up of Changes in Vascular Damage Post-Treatment (Clarity AI)

3.8. Diagnosis of Facial Volume Loss
- 3.8.1. Analysis of Volume Loss in Cheekbones and Facial Contours (RealSelf AI Volume Analysis)
- 3.8.2. Facial Fat Redistribution Modeling for Filler Planning (MirrorMe3D)
- 3.8.3. Tissue Density Assessment in Specific Areas of the Face (3DMDface System)
- 3.8.4. Simulation of Filler Results in Facial Volume Replenishment (Crisalix Volume)

3.9. Skin Elasticity and Sagging Detection
- 3.9.1. Measurement of Skin Elasticity and Firmness (Cutometer)
- 3.9.2. Analysis of Sagging in Neck and Jaw Lines (Visage Technologies Elasticity Analyzer)
- 3.9.3. Evaluation of Changes in Elasticity after Radiofrequency Procedures (Thermage AI)
- 3.9.4. Prediction of Improvement in Firmness with Ultrasound Treatments (Ultherapy AI)

3.10. Evaluation of Laser Treatment Results
- 3.10.1. Analysis of Skin Regeneration in Fractional Laser Therapies (Fraxel AI)
- 3.10.2. Monitoring of Laser Blemish and Pigmentation Removal (PicoSure AI)
- 3.10.3. Evaluation of Scar Reduction with Laser Therapy (CO2RE AI)
- 3.10.4. Comparison of Rejuvenation Results after Laser Therapy (Clear + Brilliant AI)

You will have at your fingertips a variety of multimedia support resources, including interactive summaries, practical exercises and explanatory videos"

04

Teaching Objectives

Through this Postgraduate Diploma, physicians will have the necessary knowledge to apply sophisticated Artificial Intelligence tools in Aesthetic Medicine. In this sense, graduates will obtain advanced technical skills to design and implement algorithms capable of early identification of different skin abnormalities. At the same time, professionals will handle specialized software such as Google AutoML Vision to customize therapeutic plans according to patients' requirements and improve operational efficiency considerably. In addition, they will use predictive modeling systems to anticipate individual responses to aesthetic treatments and ensure their efficiency.

You will use NVIDIA Clara to segment facial images and evaluate the most relevant features in diagnostic laboratory tests"

General Objectives

- Develop advanced skills in the collection, cleaning and structuring of clinical and aesthetic data, ensuring the quality of the information
- Create and train predictive models based on Artificial Intelligence, able to anticipate aesthetic treatment results with high precision and personalization
- Manage specialized 3D simulation software to project potential outcomes of therapies
- Implement AI algorithms to improve accuracy in factors such as skin anomaly detection, sun damage assessment or skin texture
- Design clinical protocols tailored to the individual characteristics of each patient; taking into account their clinical data, environmental factors, and lifestyle
- Apply techniques for anonymization, encryption and ethical management of sensitive data
- Develop strategies to assess and adjust treatments based on the evolution of individuals, using visualization and predictive analytics tools
- Use synthetic data to train Artificial Intelligence models, extending predictive capabilities and respecting patients' privacy
- Adopt emerging Artificial Intelligence techniques to adjust and continuously improve therapeutic plans
- Be able to lead innovation projects, applying advanced technological knowledge to transform the Aesthetic Medicine sector

Specific Objectives

Module 1. Clinical Data Processing for Predictive Modeling in Aesthetic Medicine

- Securely store clinical and aesthetic data, integrating medical devices and wearables into advanced databases
- Master data cleansing, normalization, and preprocessing techniques to remove inconsistencies or biases
- Design medical imaging data structures to train neural networks and predictive models
- Apply Machine Learning algorithms to develop customized models that accurately anticipate aesthetic outcomes

Module 2. Modeling and Simulation in Aesthetic Medicine

- Gain proficiency in three-dimensional simulation of aesthetic procedures, from facial rejuvenation to body contouring
- Generate realistic 3D models based on anatomical data and individual patient characteristics
- Visualize real-time projections of non-invasive and surgical treatments, enhancing aesthetic planning
- Implement analysis of parameters such as facial symmetry, body volume and skin regeneration to optimize results

Module 3. Diagnosis and Analysis with Artificial Intelligence in Aesthetic Medicine

- Apply Artificial Intelligence methods for advanced diagnosis of skin anomalies, sun damage and facial aging
- Implement predictive models to evaluate skin tone, texture and firmness in different types of people
- Use neural networks to classify lesions, scars and other aesthetic problems, facilitating the personalization of treatments
- Evaluate skin responses to therapies and products using advanced analysis tools

You will gain a multidisciplinary approach based on aesthetic problem solving, which will allow you to tackle any challenge using AI-based solutions"

05

Career Opportunities

Through this Postgraduate Diploma, physicians will master the most innovative tools of Artificial Intelligence to significantly optimize their procedures in Aesthetic Medicine. In the same vein, graduates will develop advanced clinical skills to handle technologies such as algorithms or Machine Learning to obtain valuable insights from large amounts of data. In this way, this information will allow them to personalize therapeutic plans according to patients' needs. Likewise, professionals will use software specialized in predictive models to anticipate the results of treatments and increase the satisfaction of individuals.

You will work as a Clinical Innovation Project Supervisor in the most prestigious Aesthetic Medicine entities"

Graduate Profile

Upon completion of this curriculum, physicians will stand out for their ability to integrate Artificial Intelligence tools in aesthetic environments to improve both user care and to manage resources efficiently. In turn, graduates will be able to design intelligent systems that individualize therapies, optimize the precision of interventions and even monitor people's condition in real time. Thanks to this, professionals will guarantee top-quality care and safety; optimizing patients' quality of life considerably.

You will create clinical practice policies that ensure both ethical and legal compliance with the use of Machine Learning during aesthetic procedures.

- **Technological Innovation in Aesthetic Medicine:** Ability to implement Artificial Intelligence tools in aesthetic procedures, optimizing results and customizing treatments according to patient needs
- **Data-Driven Decision Making:** Ability to use data obtained through intelligent systems to develop accurate diagnoses and design effective treatment plans
- **Ethical Commitment and Safety in Advanced Technologies:** Responsibility in the application of ethical and privacy regulations in the use of technological tools, ensuring confidentiality and protection of user data
- **Critical Thinking in Aesthetic Solutions:** Skill in assessing and solving clinical challenges through the use of Artificial Intelligence, ensuring safe procedures tailored to patients' expectations

After completing the program, you will be able to use your knowledge and skills in the following positions:

1. **Technological Innovation Specialist in Aesthetic Medicine:** Responsible for integrating and managing intelligent systems in aesthetic settings to improve both clinical efficiency and patient experience.
2. **Clinical Aesthetic Data Manager:** Responsible for the management of large volumes of aesthetic data through Artificial Intelligence, ensuring its analysis and protection to optimize to optimize the attention to users.
3. **Specialist in Aesthetic Telemedicine with Artificial Intelligence:** Their work consists of remote monitoring of patients, using machine learning tools for continuous evaluation of therapies and preventive intervention.
4. **Consultant in Artificial Intelligence Projects in Aesthetic Medicine:** Dedicated to the implementation of technological tools in healthcare environments, collaborating with multidisciplinary teams to ensure that the technological solutions are adapted to clinical needs.
5. **Personalized Care Coordinator:** Focuses on developing and managing individualized treatment plans, using algorithms to adapt to the specific needs of each individual.
6. **Supervisor of Clinical Innovation Projects in Aesthetic Medicine:** Leads initiatives that seek to incorporate Artificial Intelligence into medical practice, improving workflows and optimizing care resources.
7. **Expert in Safety and Ethics in Artificial Intelligence:** Proficient in the regulations and ethics applied to the use of deep learning in Aesthetic Medicine, being in charge of assessing and mitigating risks related to data privacy.
8. **Researcher in Artificial Intelligence and Aesthetic Medicine:** Engages in advanced research on new applications of intelligent systems in the clinical context, contributing to the development of technological innovations in the field.

You will set up alert systems generated by smart devices and make quick decisions to avoid health complications for individuals"

Academic and Research Opportunities

In addition to all the jobs you will be qualified for by studying this TECH Postgraduate Diploma, you will also be able to continue with a solid academic and research career. After completing this university program, you will be ready to continue your studies associated with this field of knowledge and thus progressively achieve other scientific merits.

06

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career"

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.
The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

"At TECH you will NOT have live classes (which you might not be able to attend)"

The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

> *TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want"*

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.

Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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

A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

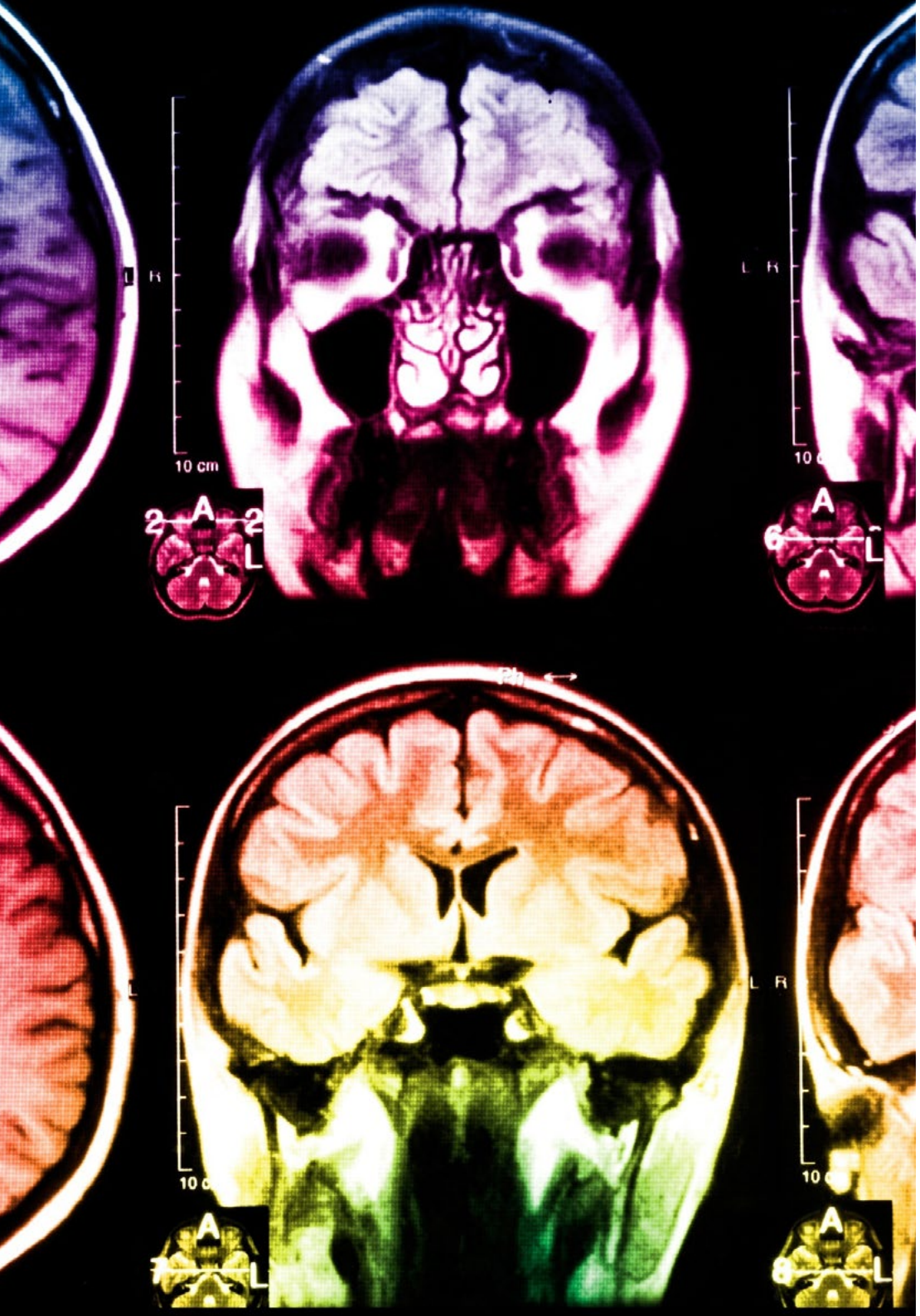
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.

> *The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"*

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

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of 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.



The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.

As such, the best educational materials, thoroughly prepared, will be available in this program:

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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.

Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.

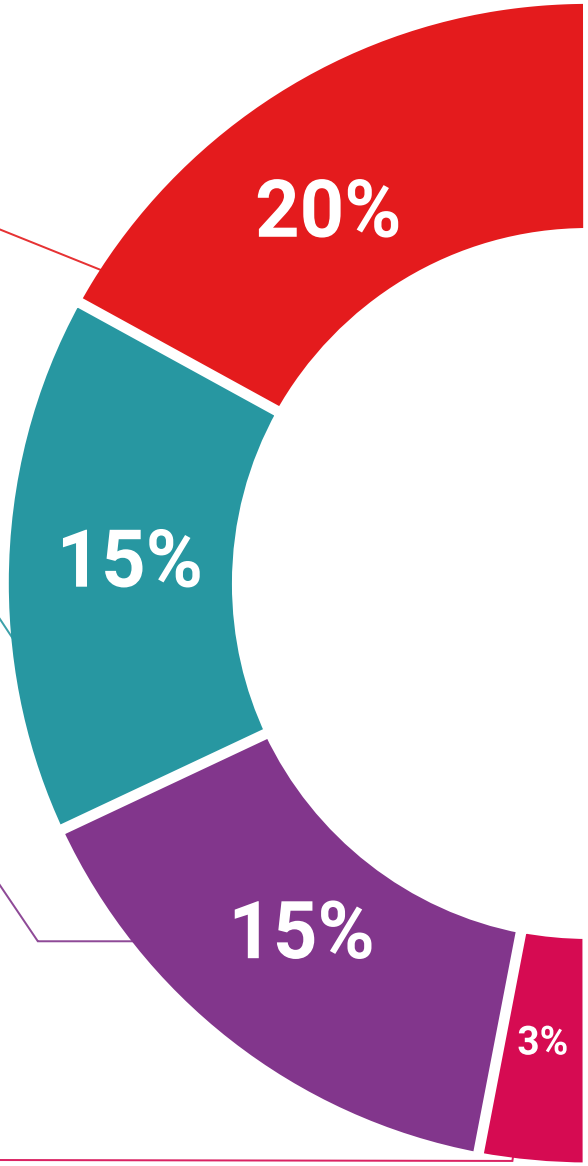
Interactive Summaries

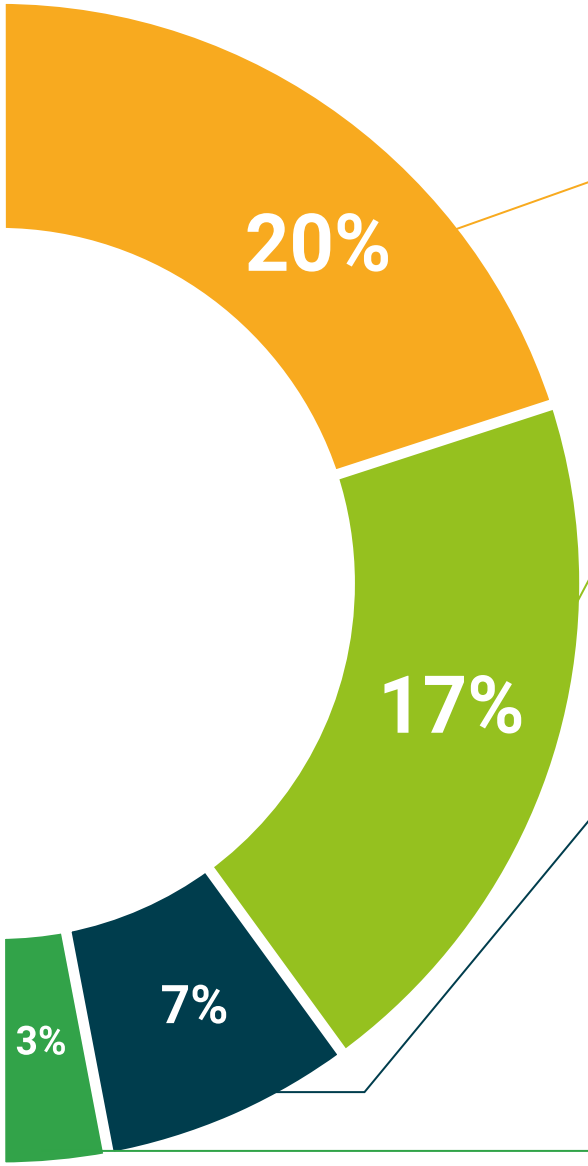
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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

Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

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 for 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.

07

Teaching Staff

TECH's fundamental premise is based on providing the most complete, up-to-date and pragmatic university programs in the academic market. For this reason, it carries out a thorough process to form their respective teaching staff. For the teaching of this Postgraduate Diploma, it has brought together the best specialists in the field of Artificial Intelligence applied to Aesthetic Medicine. These professionals have an extensive professional background, where they have used advanced intelligent systems to optimize the general welfare of multiple patients. Therefore, graduates will enter into an immersive experience that will allow them to increase the quality of their clinical practice considerably.

The teaching team of this university program is made up of true experts in the integration of Artificial Intelligence in the area of Aesthetic Medicine"

Management

Dr. Peralta Martín-Palomino, Arturo

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

Professors

Mr. Popescu Radu, Daniel Vasile

- Independent Specialist in Pharmacology, Nutrition and Dietetics
- Freelance Producer of Didactic and Scientific Content
- Nutritionist and Community Dietitian
- Community Pharmacist
- Researcher
- Master's Degree in Nutrition and Health from the Open University of Catalonia
- Master's Degree in Psychopharmacology from the University of Valencia
- Pharmacist from the Complutense University of Madrid
- Nutritionist-Dietitian by the European University Miguel de Cervantes

Mr. Del Rey Sánchez, Alejandro

- In Charge of Implementing Programs to Improve Tactical Emergency Care
- Degree in Industrial Organization Engineering
- Certification in Big Data and Business Analytics
- Certification in Microsoft Excel Advanced, VBA, KPI and DAX
- Certification in CIS Telecommunication and Information Systems

Ms. Del Rey Sánchez, Cristina

- Talent Management Administrator at Securitas Seguridad España, S.L
- Extracurricular Activities Center Coordinator
- Tutor and pedagogical interventions with Primary and Secondary Education students
- Postgraduate in Development, Delivery and Tutoring of e-Learning Training Actions
- Postgraduate in Early Childhood Care
- Degree in Pedagogy from the Complutense University of Madrid

08

Certificate

The Postgraduate Diploma in Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

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

This private qualification will allow you to obtain a **Postgraduate Diploma in Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine** 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** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

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

Postgraduate Diploma in Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine

This is a private qualification of 540 hours of duration equivalent to 18 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

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

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

Dr. Pedro Navarro Illana
Dean

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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Postgraduate Diploma

Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma

Application of Artificial Intelligence for Clinical Data Processing, Modeling and Diagnostics in Aesthetic Medicine

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