

Postgraduate Diploma Artificial Intelligence and Big Data Technologies for Medical Imaging Processing





Postgraduate Diploma Artificial Intelligence and Big Data Technologies for Medical Imaging Processing

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

Website: www.techtute.com/us/artificial-intelligence/postgraduate-diploma/postgraduate-diploma-artificial-intelligence-big-data-technologies-medical-imaging-processing

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01

Introduction

The convergence of Artificial Intelligence and Big Data is radically transforming the field of Imaging, offering new opportunities to improve diagnostic accuracy. According to a report by the International Telecommunication Union, the global market for Artificial Intelligence in healthcare is expected to reach US\$34.8 billion by next year, driven by applications in Medical Image Processing. In view of this, specialists need to handle the most advanced Deep Learning techniques to analyze large volumes of data and facilitate the early detection of diseases. For this reason, TECH presents a pioneering online university program focused on Artificial Intelligence and Big Data Technologies for Medical Image Processing.



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Thanks to this Relearning-based Postgraduate Diploma, you will create Artificial Intelligence models that enable the early identification of diseases from the analysis of Medical Images”

The field of Medicine faces the challenge of handling and analyzing an increasing volume of data from various imaging modalities such as MRI, CT and ultrasound scans. Faced with this situation, Artificial Intelligence and Big Data technologies emerge as key tools to address these challenges, offering advanced solutions for the processing and analysis of Medical Images. For this reason, specialists need to handle these tools to optimize the interpretation of complex images, facilitating accurate disease detection and informed clinical decision making.

In this context, TECH is developing an innovative program in Artificial Intelligence and Big Data Technologies for Medical Image Processing. The academic itinerary will delve into factors ranging from the analysis of large image datasets to the training of Machine Learning algorithms. Along the same lines, the didactic materials will address in detail the legal and ethical aspects related to the use of Artificial Intelligence in Diagnostic Imaging.

Therefore, graduates will acquire advanced skills to implement solutions based on Artificial Intelligence to increase the accuracy of clinical diagnoses.

For the mastery of all the contents of this itinerary, doctors have a disruptive methodology: Relearning. This TECH-driven system promotes the gradual assimilation of the most complex concepts through repetition. Also, the program is developed 100% online, another significant advantage that provides autonomy to the graduates, allowing them to organize their learning pace depending on their other obligations. Besides, the university program is supported by a variety of complementary materials such as updated scientific articles and infographics. All of this is accompanied by explanatory videos, interactive summaries and self-assessment tests that enhance the comprehensive specialization of specialists, making this academic option a truly unparalleled opportunity.

This **Postgraduate Diploma in Artificial Intelligence and Big Data Technologies for Medical Imaging Processing** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ Development of practical cases presented by experts in Artificial Intelligence
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable 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



You will learn valuable lessons through real cases in simulated learning environments"

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You will use Artificial Intelligence to identify subtle patterns in Images to enable early detection of Neurodegenerative Diseases”

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 and experienced experts.

Are you looking to implement classification and detection techniques to categorize different pathologies in Medical Imaging? Achieve it through this program in only 6 months.

Study at your own pace, with the convenience offered by TECH's online mode.



02

Objectives

Through this Postgraduate Diploma, practitioners will have a comprehensive understanding of the principles of Artificial Intelligence and Big Data for Medical Imaging Processing. Likewise, graduates will acquire advanced skills to apply different Machine Learning algorithms (such as Convolutional Neural Networks or Deep Learning). In line with this, professionals will use Big Data tools to analyze large volumes of medical imaging data, which will enable them to provide more efficient and accurate health care.





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You will handle the most cutting-edge Deep Learning tools for efficient analysis of Medical Images”



General Objectives

- ♦ Understand the theoretical foundations of Artificial Intelligence
- ♦ Study the different types of data and understand the data life cycle
- ♦ Evaluate the crucial role of data in the development and implementation of AI solutions
- ♦ Delve into algorithms and complexity to solve specific problems
- ♦ Explore the theoretical basis of neural networks for Deep Learning development
- ♦ Explore bio-inspired computing and its relevance in the development of intelligent systems
- ♦ Develop skills to use and apply advanced Artificial Intelligence tools in the interpretation and analysis of medical images, improving diagnostic accuracy
- ♦ Implement Artificial Intelligence solutions that allow the automation of processes and the personalization of diagnostics
- ♦ Apply Data Mining and Predictive Analytics techniques to make evidence-based clinical decisions
- ♦ Acquire research skills that allow experts to contribute to the advancement of Artificial Intelligence in Medical Imaging





Specific Objectives

Module 1. Artificial Intelligence Innovations in Diagnostic Imaging

- ♦ Master tools such as IBM Watson Imaging and NVIDIA Clara to automatically interpret clinical tests
- ♦ Gain skills to perform clinical experiments and results analysis using Artificial Intelligence, with an approach based on improving diagnostic accuracy

Module 2. Big Data and Predictive Analytics in Medical Imaging

- ♦ Manage large volumes of data using Data Mining techniques and Machine Learning algorithms
- ♦ Create clinical prognostic tools based on Big Data analysis in order to optimize clinical decisions

Module 3. Ethical and Legal Aspects of Artificial Intelligence in Diagnostic Imaging

- ♦ Have a holistic understanding of the regulatory and deontological principles governing the use of Artificial Intelligence in the field of Health, including aspects such as informed consent
- ♦ Be able to audit Artificial Intelligence models used in clinical practice, ensuring their transparency and accountability in medical decision making

03

Course Management

TECH's main premise is to offer the most comprehensive and up to date programs in the academic panorama, which is why it carries out a meticulous process to form its teaching staff. Thanks to this, this Postgraduate Diploma has the collaboration of recognized experts in Artificial Intelligence and Big Data Technologies for Medical Imaging Processing. In this way, they have created a wide range of teaching materials characterized by their high quality and adaptation to the needs of the labor market. Therefore, graduates will enter into an intensive experience that will allow them to optimize their daily clinical practice considerably.



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A teaching team made up of specialists in Artificial Intelligence and Big Data Technologies for Medical Imaging Processing will guide you through the course of the academic itinerary”

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
- ♦ PhD. in Psychology from the University of Castilla La Mancha
- ♦ PhD in Economics, Business and Finance from the Camilo José Cela University
- ♦ PhD in Psychology from University of Castilla La Mancha
- ♦ Máster in Executive MBA por la Universidad Isabel I
- ♦ Master's Degree in Sales and Marketing Management, 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 Teaching and Scientific Content
- ◆ Nutritionist and Community Dietitian
- ◆ Community Pharmacist
- ◆ Researcher
- ◆ Master's Degree in Nutrition and Health at 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

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Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"

04

Structure and Content

This program has been put together by true experts in Artificial Intelligence and Big Data Technologies for Medical Imaging Processing. The study plan will delve into issues ranging from the analysis of large volumes of image data or Machine Learning algorithms to the application of Machine Learning to analyze epidemic outbreaks. In addition, the agenda will delve into the legal and ethical considerations related to the use of Artificial Intelligence applied to Diagnostic Imaging. Therefore, graduates will develop advanced skills to implement Artificial Intelligence solutions to improve the accuracy of medical diagnoses.



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You will implement the most innovative algorithms to improve diagnostic accuracy and efficiency in Medical Image Processing”

Module 1. Artificial Intelligence Innovations in Diagnostic Imaging

- 1.1. Artificial Intelligence Technologies and Tools in Diagnostic Imaging with IBM Watson Imaging Clinical Review
 - 1.1.1. Leading Software Platforms for Medical Image Analysis
 - 1.1.2. Radiology-Specific Deep Learning Tools
 - 1.1.3. Innovations in Hardware to Accelerate Image Processing
 - 1.1.4. Integration of Artificial Intelligence Systems in Existing Hospital Infrastructures
- 1.2. Statistical Methods and Algorithms for Medical Image Interpretation with DeepMind AI for Breast Cancer Analysis
 - 1.2.1. Image Segmentation Algorithms
 - 1.2.2. Classification and Detection Techniques in Medical Images
 - 1.2.3. Use of Convolutional Neural Networks in Radiology
 - 1.2.4. Noise Reduction and Image Quality Improvement Methods
- 1.3. Design of Experiments and Analysis of Results in Diagnostic Imaging with Google Cloud Healthcare API
 - 1.3.1. Design of Validation Protocols for Artificial Intelligence Algorithms
 - 1.3.2. Statistical Methods for Comparing the Performance of Artificial Intelligence and Radiologists
 - 1.3.3. Setting Up Multicenter Studies for Artificial Intelligence Testing
 - 1.3.4. Interpretation and Presentation of Performance Test Results
- 1.4. Detection of Subtle Patterns in Low-Resolution Images
 - 1.4.1. Artificial Intelligence for Early Diagnosis of Neurodegenerative Diseases
 - 1.4.2. Artificial Intelligence Applications in Interventional Cardiology
 - 1.4.3. Use of Artificial Intelligence for the Optimization of Imaging Protocols
- 1.5. Biomedical Image Analysis and Processing
 - 1.5.1. Pre-Processing Techniques to Improve Automatic Interpretation
 - 1.5.2. Texture and Pattern Analysis in Histological Images
 - 1.5.3. Extraction of Clinical Features from Ultrasound Images
 - 1.5.4. Methods for Longitudinal Analysis of Images in Clinical Studies



- 1.6. Advanced Data Visualization in Diagnostic Imaging with OsiriX MD
 - 1.6.1. Development of Graphical Interfaces for 3D Image Exploration
 - 1.6.2. Tools for Visualization of Temporal Changes in Medical Images
 - 1.6.3. Augmented Reality Techniques for the Teaching of Anatomy
 - 1.6.4. Real-Time Visualization Systems for Surgical Procedures
- 1.7. Natural Language Processing in Medical Image Documentation and Reporting with Nuance PowerScribe 360
 - 1.7.1. Automatic Generation of Radiological Reports
 - 1.7.2. Extraction of Relevant Information from Electronic Medical Records
 - 1.7.3. Semantic Analysis for the Correlation of Imaging and Clinical Findings
 - 1.7.4. Image Search and Retrieval Tools Based on Textual Descriptions
- 1.8. Integration and Processing of Heterogeneous Data in Medical Imaging
 - 1.8.1. Fusion of Imaging Modalities for Complete Diagnostics
 - 1.8.2. Integration of Laboratory and Genetic Data in the Image Analysis
 - 1.8.3. Systems for Handling Large Volumes of Imaging Data
 - 1.8.4. Strategies for Normalization of Datasets from Multiple Sources
- 1.9. Applications of Neural Networks in Medical Image Interpretation with Zebra Medical Vision
 - 1.9.1. Use of Generative Networks for the Creation of Synthetic Medical Images
 - 1.9.2. Neural Networks for Automatic Tumor Classification
 - 1.9.3. Deep Learning for the Analysis of Time Series in Functional Imaging
 - 1.9.4. Fitting of Pre-Trained Models on Specific Medical Image Datasets
- 1.10. Predictive Modeling and its Impact on Diagnostic Imaging with IBM Watson Oncology
 - 1.10.1. Predictive Models for Risk Assessment in Oncology Patients
 - 1.10.2. Predictive Tools for Chronic Disease Follow-Up
 - 1.10.3. Survival Analysis Using Medical Imaging Data
 - 1.10.4. Prediction of Disease Progression using Machine Learning Techniques

Module 2. Big Data and Predictive Analytics in Medical Imaging

- 2.1. Big Data in Diagnostic Imaging: Concepts and Tools with GE Healthcare Edison
 - 2.1.1. Fundamentals of Big Data applied to Imaging
 - 2.1.2. Technological Tools and Platforms for Handling Large Volumes of Imaging Data
 - 2.1.3. Challenges in the Integration and Analysis of Big Data in Imaging
 - 2.1.4. Use Cases of Big Data in Diagnostic Imaging
- 2.2. Data Mining in Biomedical Image Registries with IBM Watson Imaging
 - 2.2.1. Advanced Data Mining Techniques to Identify Patterns in Medical Images
 - 2.2.2. Strategies for Extracting Relevant Features in Large Image Databases
 - 2.2.3. Applications of Clustering and Classification Techniques in Image Registries
 - 2.2.4. Impact of Data Mining on Improving Diagnosis and Treatment
- 2.3. Machine Learning Algorithms in Image Analysis with Google DeepMind Health
 - 2.3.1. Development of Supervised and Unsupervised Algorithms for Medical Imaging
 - 2.3.2. Innovations in Machine Learning Techniques for Recognition of Disease Patterns
 - 2.3.3. Applications of Deep Learning in Image Segmentation and Classification
 - 2.3.4. Evaluation of the Efficacy and Accuracy of Machine Learning Algorithms in Clinical Studies
- 2.4. Predictive Analytics Techniques Applied to Diagnostic Imaging with Predictive Oncology
 - 2.4.1. Predictive Models for the Early Identification of Diseases from Images
 - 2.4.2. Use of Predictive Analytics for Monitoring and Treatment Evaluation
 - 2.4.3. Integration of Clinical and Imaging Data to Enrich Predictive Models
 - 2.4.4. Challenges in the Implementation of Predictive Techniques in Clinical Practice
- 2.5. Image-Based Artificial Intelligence Models for Epidemiology with BlueDot
 - 2.5.1. Application of Artificial Intelligence in the Analysis of Epidemic Outbreaks Using Images
 - 2.5.2. Models of Disease Spread Visualized by Imaging Techniques
 - 2.5.3. Correlation Between Epidemiological Data and Imaging Findings
 - 2.5.4. Contribution of Artificial Intelligence to the Study and Control of Pandemics

- 2.6. Analysis of Biological Networks and Disease Patterns from Images
 - 2.6.1. Application of Network Theory in the Analysis of Images to Understand Pathologies
 - 2.6.2. Computational Models to Simulate Biological Networks Visible in Images
 - 2.6.3. Integration of Image Analysis and Molecular Data for Mapping Diseases
 - 2.6.4. Impact of these Analyses on the Development of Personal Therapies
- 2.7. Development of Image-Based Tools for Clinical Prognosis
 - 2.7.1. Artificial Intelligence Tools for the Prediction of Clinical Course from Diagnostic Images
 - 2.7.2. Advances in the Generation of Automated Prognostic Reports
 - 2.7.3. Integration of Prognostic Models in Clinical Systems
 - 2.7.4. Validation and Clinical Acceptance of AI-Based Prognostic Tools
- 2.8. Advanced Visualization and Communication of Complex Data with Tableau
 - 2.8.1. Visualization Techniques for the Multidimensional Representation of Image Data
 - 2.8.2. Interactive Tools for the Exploration of Large Image Datasets
 - 2.8.3. Strategies for Effective Communication of Complex Findings Through Visualizations
 - 2.8.4. Impact of Advanced Visualization on Medical Education and Decision Making
- 2.9. Data Security and Challenges in Big Data Management
 - 2.9.1. Security Measures to Protect Large Volumes of Medical Imaging Data
 - 2.9.2. Challenges in Privacy and Ethics of Large-Scale Image Data Management
 - 2.9.3. Technological Solutions for the Secure Management of Healthcare Big Data
 - 2.9.4. Case Studies on Security Breaches and how they Were Addressed
- 2.10. Practical Applications and Case Studies on Biomedical Big Data
 - 2.10.1. Examples of Successful Applications of Big Data in the Diagnosis and Treatment of Diseases
 - 2.10.2. Case Studies on the Integration of Big Data
 - 2.10.3. Lessons Learned from Big Data Projects in the Biomedical Field
 - 2.10.4. Future Directions and Potentials of Big Data in Medicine

Module 3. Ethical and Legal Aspects of Artificial Intelligence in Diagnostic Imaging

- 3.1. Ethics in the Application of Artificial Intelligence in Diagnostic Imaging with Ethics and Algorithms Toolkit
 - 3.1.1. Fundamental Ethical Principles in the Use of Artificial Intelligence for Diagnosis
 - 3.1.2. Algorithmic Bias Management and its Impact on Diagnostic Fairness
 - 3.1.3. Informed Consent in the Era of Diagnostic Artificial Intelligence
 - 3.1.4. Ethical Challenges in the International Implementation of Artificial Intelligence Technologies
- 3.2. Legal and Regulatory Considerations in Artificial Intelligence Applied to Medical Imaging with Compliance.ai
 - 3.2.1. Current Regulatory Framework for Artificial Intelligence in Diagnostic Imaging
 - 3.2.2. Compliance with Privacy and Data Protection Regulations
 - 3.2.3. Validation and Certification Requirements for Artificial Intelligence Algorithms in Healthcare
 - 3.2.4. Legal Liability in Case of Diagnostic Errors due to Artificial Intelligence
- 3.3. Informed Consent and Ethical Aspects in the Use of Clinical Data
 - 3.3.1. Review of Informed Consent Processes Adapted to Artificial Intelligence
 - 3.3.2. Patient Education on the Use of Artificial Intelligence in their Medical Care
 - 3.3.3. Transparency in the Use of Clinical Data for Artificial Intelligence Training
 - 3.3.4. Respect for Patient Autonomy in Decisions Based on Artificial Intelligence
- 3.4. Artificial Intelligence and Accountability in Clinical Research
 - 3.4.1. Assignment of Responsibilities in the Use of Artificial Intelligence for Diagnosis
 - 3.4.2. Implications of Artificial Intelligence Errors in Clinical Practice
 - 3.4.3. Insurance and Coverage for Risks Associated with the Use of Artificial Intelligence
 - 3.4.4. Strategies for the Management of Incidents Related to Artificial Intelligence
- 3.5. Impact of Artificial Intelligence on Equity and Access to Health Care with AI for Good
 - 3.5.1. Assessment of the Impact of Artificial Intelligence on the Distribution of Medical Services
 - 3.5.2. Strategies to Ensure Equitable Access to AI Artificial Intelligence Technology
 - 3.5.3. Artificial Intelligence as a Tool to Reduce Health Disparities
 - 3.5.4. Case Studies on the Implementation of Artificial Intelligence in Resource-Limited Settings

- 3.6. Privacy and Data Protection in Research Projects using Duality SecurePlus
 - 3.6.1. Strategies for Ensuring Data Confidentiality in Artificial Intelligence Projects
 - 3.6.2. Advanced Techniques for Patient Data Anonymization
 - 3.6.3. Legal and Ethical Challenges in the Protection of Personal Data
 - 3.6.4. Impact of security breaches on public trust and confidence
- 3.7. Artificial Intelligence and Sustainability in Biomedical Research with Green Algorithm
 - 3.7.1. Use of Artificial Intelligence to Improve Efficiency and Sustainability in Research
 - 3.7.2. Life Cycle Assessment of Artificial Intelligence Technologies in Healthcare
 - 3.7.3. Environmental Impact of Artificial Intelligence Technology Infrastructure
 - 3.7.4. Sustainable Practices in the Development and Deployment of Artificial Intelligence
- 3.8. Auditing and Explainability of Artificial Intelligence Models in the Clinical Setting with IBM AI Fairness 360
 - 3.8.1. Importance of Regular Auditing of AI Algorithms
 - 3.8.2. Techniques to Improve the Explainability of AI Models
 - 3.8.3. Challenges in Communicating AI-Based Decisions to Patients and Physicians
 - 3.8.4. Regulations on the Transparency of Artificial Intelligence Algorithms in Healthcare
- 3.9. Innovation and Entrepreneurship in the Field of Clinical Artificial Intelligence with Hindsait
 - 3.9.1. Opportunities for Startups in Artificial Intelligence Technologies for Healthcare
 - 3.9.2. Collaboration Between the Public and Private Sectors in the Development of Artificial Intelligence
 - 3.9.3. Challenges for Entrepreneurs in the Healthcare Regulatory Environment
 - 3.9.4. Success Stories and Lessons Learned in Clinical Artificial Intelligence Entrepreneurship
- 3.10. Ethical Considerations in International Clinical Research Collaboration with Global Alliance for Genomics and Health with GA4GH
 - 3.10.1. Ethical Coordination in International AI Projects
 - 3.10.2. Managing Cultural and Regulatory Differences in International Collaborations
 - 3.10.3. Strategies for Equitable Inclusion in Global Studies
 - 3.10.4. Challenges and Solutions in Data Sharing



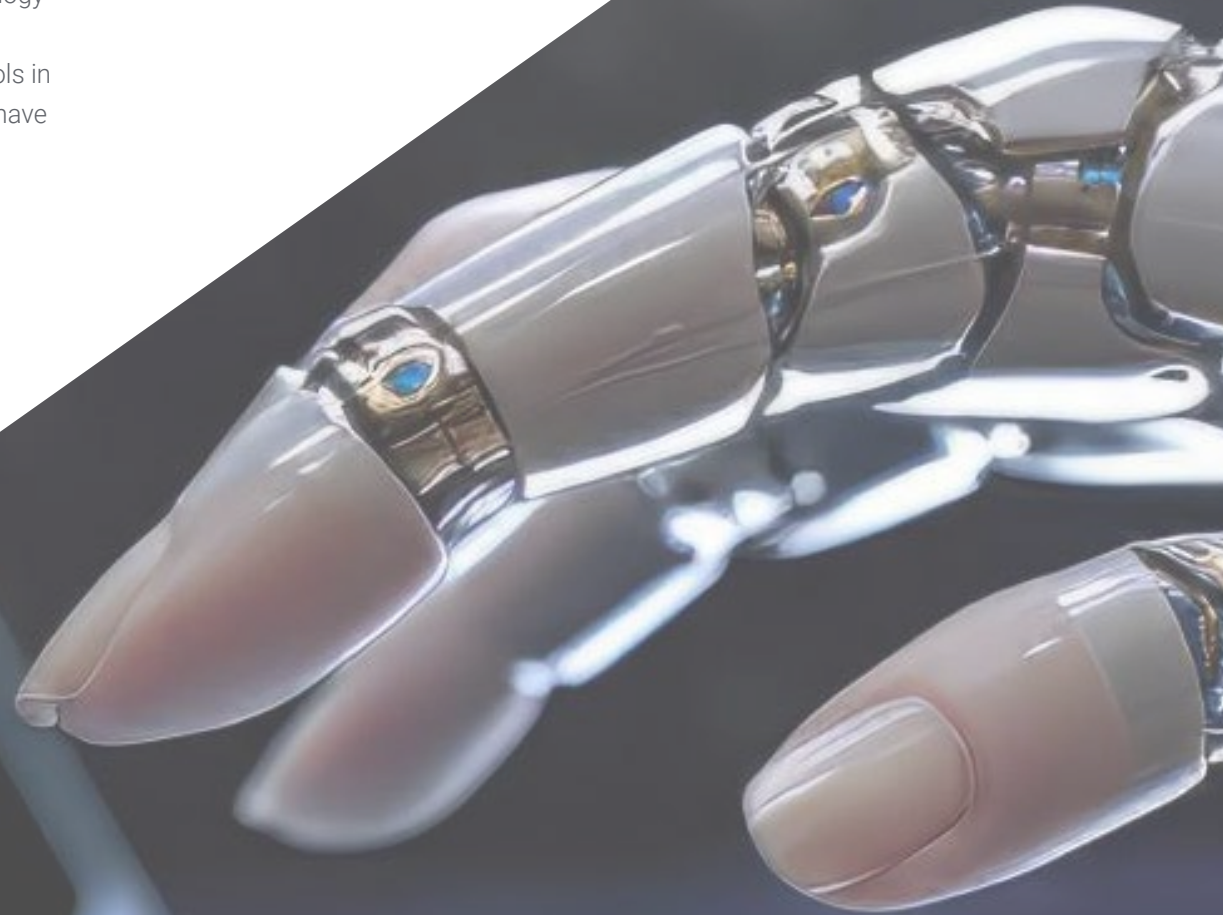
Are you looking to increase your safety in clinical decision making through the use of Artificial Intelligence? Achieve it with this university program in only 6 months”

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.

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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.



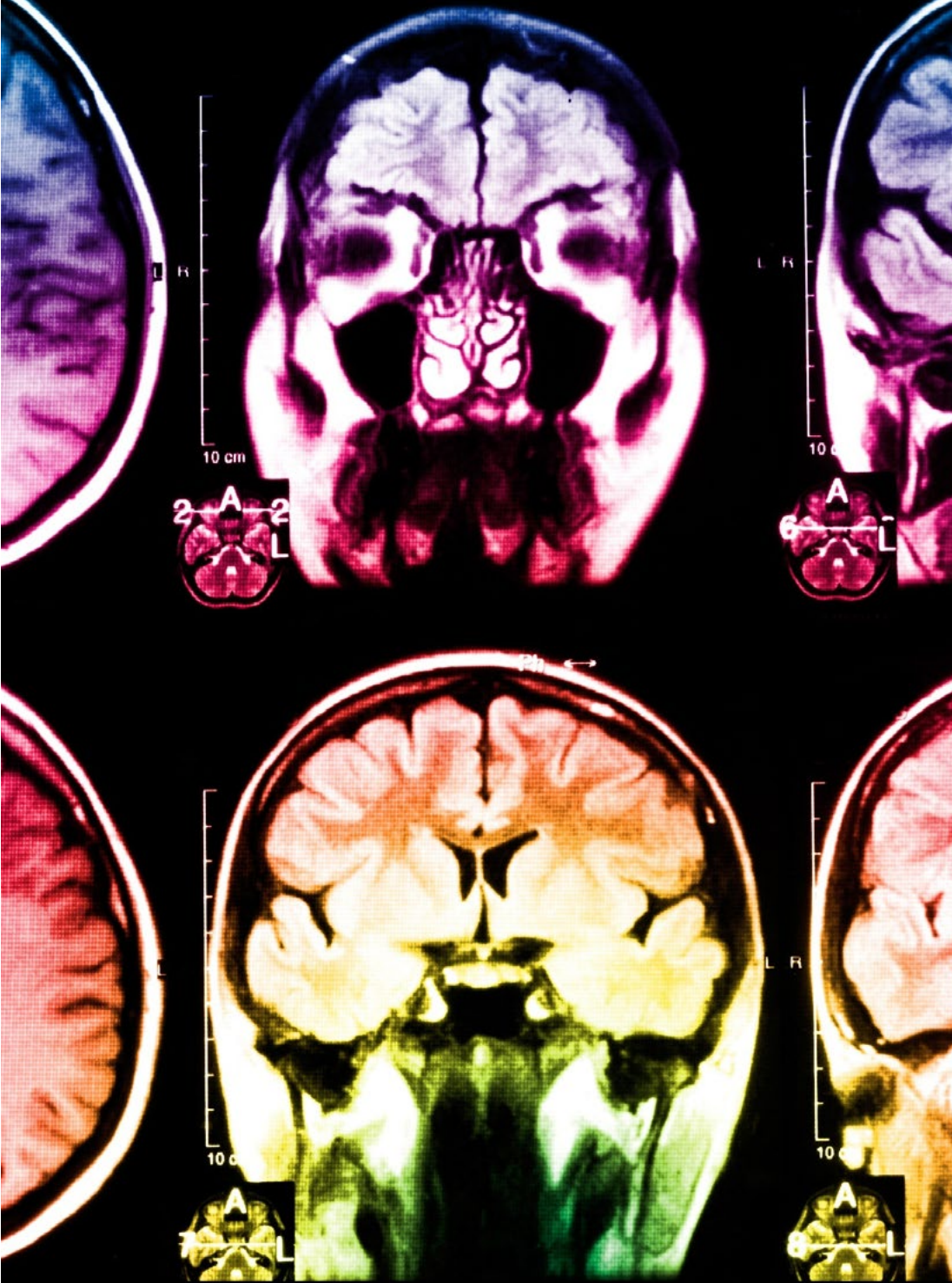
In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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.



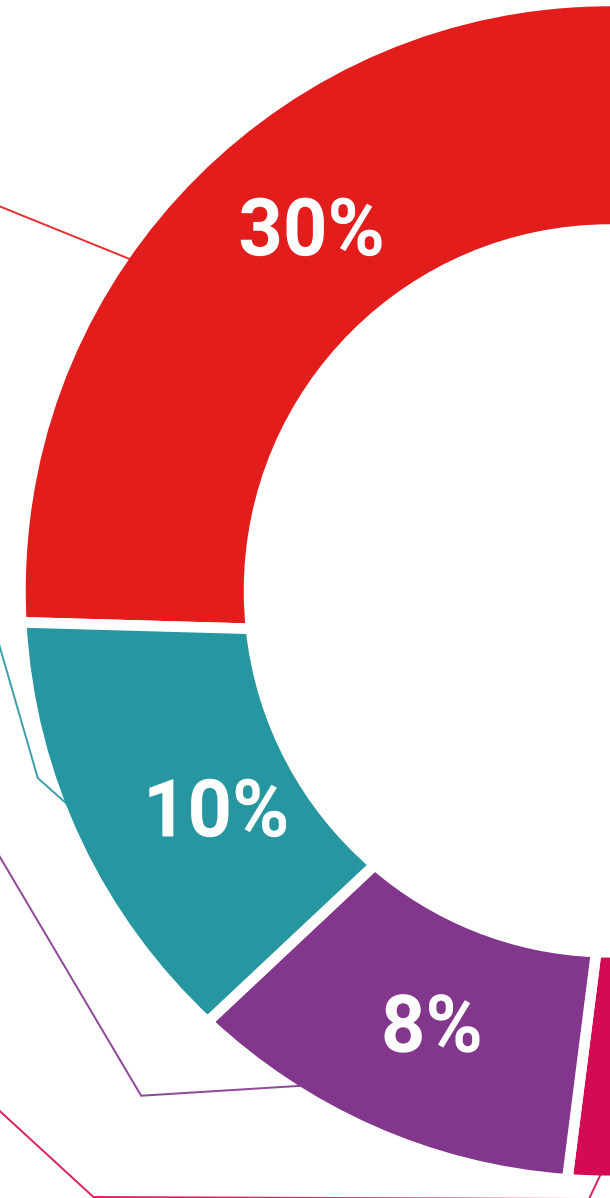
Practising Skills and Abilities

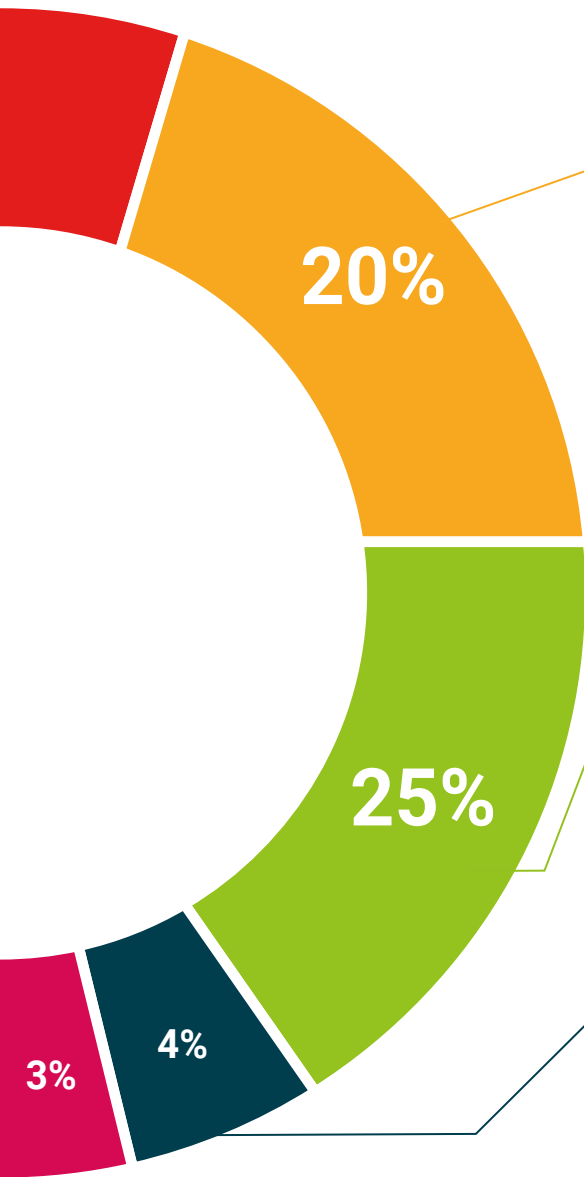
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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 Artificial Intelligence and Big Data Technologies for Medical Imaging Processing guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 private qualification will allow you to obtain a **Postgraduate Diploma in Artificial Intelligence and Big Data Technologies for Medical Imaging Processing** 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.

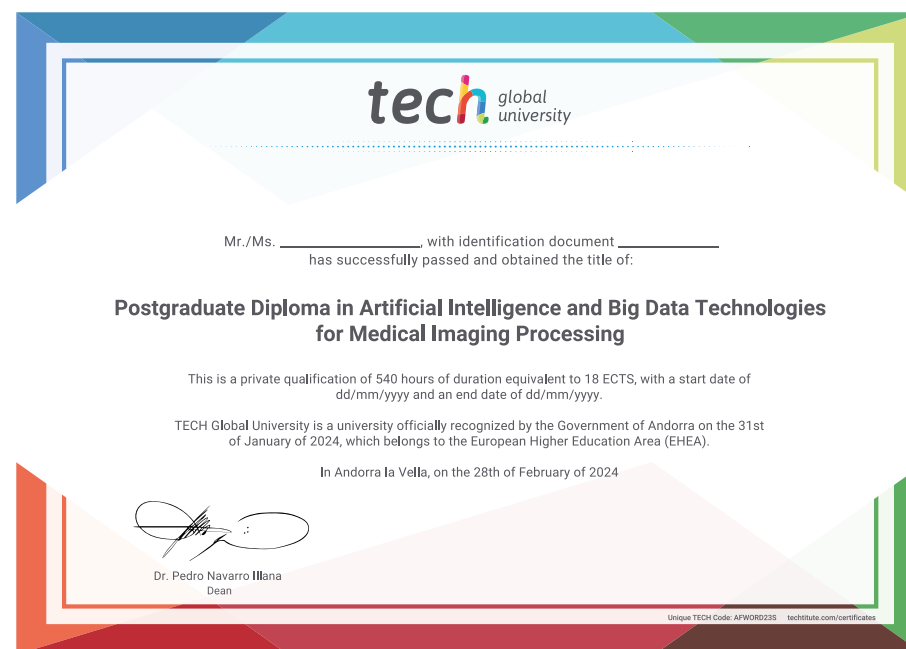
This **TECH Global University** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Artificial Intelligence and Big Data Technologies for Medical Imaging Processing**

Modality: **online**

Duration: **6 months**

Accreditation: **18 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.



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Artificial Intelligence and
Big Data Technologies for
Medical Imaging Processing

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- » Schedule: **at your own pace**
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Postgraduate Diploma

Artificial Intelligence and Big Data Technologies for Medical Imaging Processing

