

Postgraduate Diploma

Application of Artificial
Intelligence Technologies
in Clinical Research



Postgraduate Diploma Application of Artificial Intelligence Technologies in Clinical Research

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

Website: www.techtitute.com/in/medicine/postgraduate-diploma/postgraduate-diploma-application-artificial-intelligence-technologies-clinical-research

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 22

06

Certificate

p. 30

01

Introduction

The Application of Artificial Intelligence (AI) Technologies in Clinical Research, by leveraging huge data sets, can identify complex patterns in patients' health, enabling healthcare professionals to make more informed and accurate decisions. In addition, this deep analysis capability enables the personalization of medical treatments, tailoring therapies and medications specifically to the individual needs of each patient.

This not only improves the effectiveness of treatments, but also reduces the risk of side effects. For all this, TECH has developed a 100% online academic program, with an innovative educational approach inspired by the revolutionary *Relearning* methodology, which consists of the repetition of key concepts for an optimal assimilation of the contents.





“

Thanks to this comprehensive program, you will be able to improve patients' quality of life by providing more effective and personalized medical care"

The Application of AI Technologies in Clinical Research allows to identify patterns, correlations and trends that might go unnoticed in conventional studies. This data-driven approach facilitates informed decision making by healthcare professionals, improving diagnostic accuracy and personalizing treatments according to the individual characteristics of each patient.

That is why TECH presents this Postgraduate Diploma, which will cover from the theoretical foundations of machine learning, to its practical application in the analysis of clinical and biomedical data. In this way, the physician will investigate the various AI tools and platforms, along with advanced techniques for data visualization and natural language processing in scientific documentation.

Likewise, graduates will be immersed in the most recent technologies and the most innovative applications of AI in Clinical Research. Therefore, they will analyze biomedical imaging, the incorporation of robotics in clinical laboratories and the personalization of therapies through precision medicine. In addition, they will delve into emerging topics, such as the development of AI-assisted vaccines and treatments and the application of AI in immunology.

This program will also delve into the ethical challenges and legal considerations inherent in the implementation of AI in Clinical Research. From informed consent management to research accountability, the need to address these concerns in the use of advanced technologies in the biomedical field will be emphasized.

In this way, TECH offers a comprehensive program, based on the cutting-edge *Relearning* methodology, in order to prepare highly skilled experts in Artificial Intelligence. This learning method focuses on repetition of essential concepts to ensure a solid understanding. Only an electronic device connected to the Internet will be needed to access the materials at any time, eliminating the obligation to be physically present or adhere to predetermined schedules.

This **Postgraduate Diploma in Application of Artificial Intelligence Technologies in Clinical Research** contains the most complete and up-to-date scientific program on the market

Its most notable features are:

- ♦ The development of case studies presented by experts in Application of AI Technologies in Clinical Research
- ♦ 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



Immerse yourself in the field of AI applied to healthcare and you will be able to provide more accurate, efficient medical care tailored to the unique needs of each patient"

“

Through an extensive library of the most innovative multimedia resources, you will be able to integrate wearable devices and remote monitoring in clinical studies. Enroll now!”

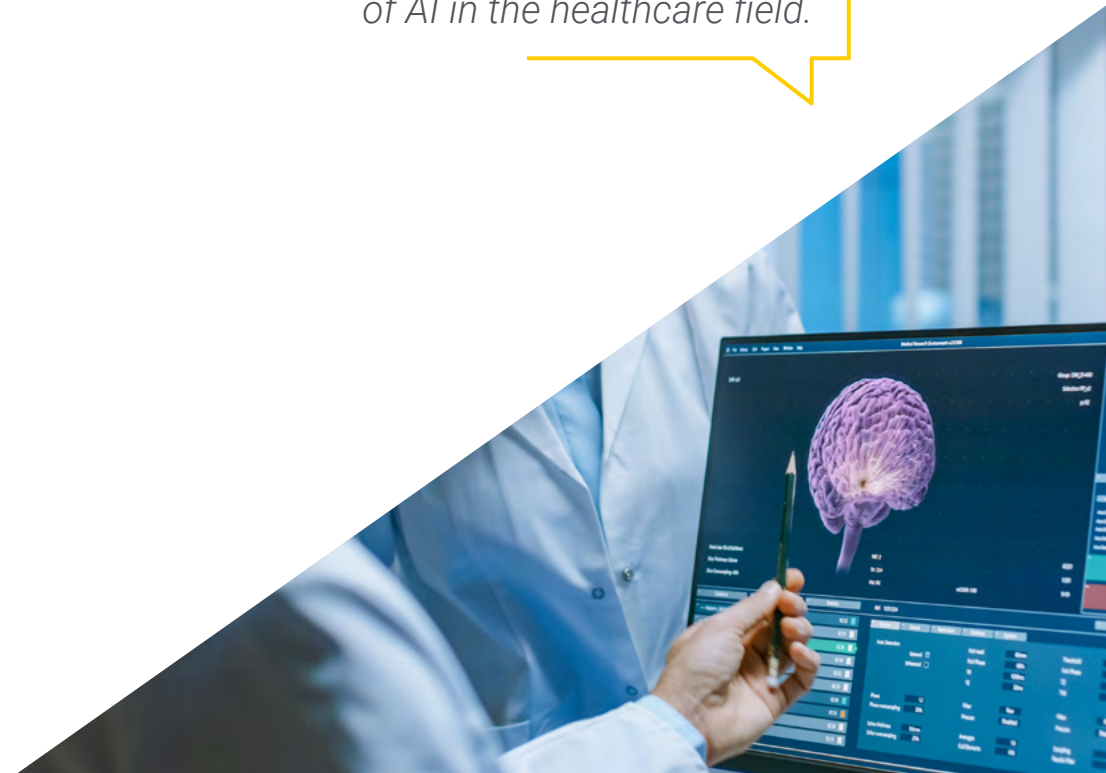
The program's teaching staff includes professionals from the sector who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

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, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

Bet on TECH! You will cover topics such as sustainability in biomedical research, future trends and innovation in the field of AI applied to clinical research.

You will delve into the use of neural networks in biomedical research, offering an up-to-date view on the integration of AI in the healthcare field.



02 Objectives

The main objective of this program is to equip healthcare professionals and scientists with the most cutting-edge tools and knowledge in the use of Artificial Intelligence in the clinical field. In this way, the program will enable graduates to understand, implement and advance the Application of Artificial Intelligence Technologies in Clinical Research, personalizing treatments based on the unique needs of each patient. The syllabus will be the catalyst that drives a new era of medicine, where AI will become the undisputed ally of the professional in their quest for optimal and personalized outcomes.





“

You will develop AI capabilities and address clinical problems with data-driven solutions, all through a 100% online program”



General Objectives

- ♦ Obtain a comprehensive view of the transformation of Clinical Research through artificial intelligence, from its historical foundations to current applications
- ♦ Acquire practical skills in the use of artificial intelligence tools, platforms, and techniques, addressing everything from data analysis to the application of neural networks and predictive modeling
- ♦ Learn effective methods for integrating heterogeneous data into Clinical Research, including natural language processing and advanced data visualization
- ♦ Understand and apply genomic sequencing technologies, AI data analysis and use of AI in biomedical imaging
- ♦ Acquire expertise in key areas such as personalization of therapies, precision medicine, AI-assisted diagnostics, and clinical trial management
- ♦ Develop skills to address contemporary challenges in the biomedical field, including the efficient management of clinical trials and the application of AI in immunology
- ♦ Delve into ethical dilemmas, review legal considerations, explore the socioeconomic impact and future of AI in healthcare, and promote innovation and entrepreneurship in the field of clinical AI





Specific Objectives

Module 1. Artificial Intelligence Methods and Tools for Clinical Research

- ♦ Gain a comprehensive view of how AI is transforming Clinical Research, from its historical foundations to current applications
- ♦ Implement advanced statistical methods and algorithms in clinical studies to optimize data analysis
- ♦ Design experiments with innovative approaches and perform comprehensive analysis of results in Clinical Research
- ♦ Apply natural language processing to improve scientific and clinical documentation in the Research context
- ♦ Effectively integrate heterogeneous data using state-of-the-art techniques to enhance interdisciplinary clinical research

Module 2. Practical Application of Artificial Intelligence in Clinical Research

- ♦ Acquire expertise in key areas such as personalization of therapies, precision medicine, AI-assisted diagnosis, clinical trial management and vaccine development
- ♦ Incorporate robotics and automation in clinical laboratories to optimize processes and improve the quality of results
- ♦ Explore the impact of AI in microbiome, microbiology, wearables and remote monitoring in clinical studies
- ♦ Address contemporary challenges in the biomedical field, such as efficient management of clinical trials, development of AI-assisted treatments, and application of AI in immunology and immune response studies
- ♦ Innovate in AI-assisted diagnostics to improve early detection and diagnostic accuracy in clinical and biomedical research settings

Module 3. Ethical, Legal and Future Aspects of Artificial Intelligence in Clinical Research

- ♦ Understand the ethical dilemmas that arise when applying AI in clinical research and review the relevant legal and regulatory considerations in the biomedical setting
- ♦ Address specific challenges in the management of informed consent in AI studies
- ♦ Investigate how AI can influence equity and access to healthcare
- ♦ Analyze future perspectives on how AI will shape Clinical Research, exploring its role in the sustainability of biomedical research practices and identifying opportunities for innovation and entrepreneurship
- ♦ Comprehensively address the ethical, legal and socioeconomic aspects of AI-driven Clinical Research



You will be immersed in the essential principles of machine learning and the Application of Artificial Intelligence Technologies in Clinical Research"

03

Course Management

This Postgraduate Diploma brings together a teaching team made up of recognized leaders in the field of health and Artificial Intelligence. This exclusive team of professionals combines solid experience in clinical research with an exceptional mastery of the latest AI tools and methodologies. Their commitment lies not only in imparting theoretical knowledge, but also in putting each concept into practice through real cases and innovative projects. With their expert guidance, they will provide invaluable insight into the ethical challenges, emerging trends and the most disruptive applications of AI in the medical field.





“

*You will access cutting-edge knowledge,
guided by professionals who will prepare
you to lead the transformation in healthcare”*

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



Mr. Popescu Radu, Daniel Vasile

- ♦ Pharmacology, Nutrition and Diet Specialist
- ♦ 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

Professors

Dr. Carrasco González, Ramón Alberto

- ♦ Specialist in Computer Science and Artificial Intelligence
- ♦ Researcher
- ♦ Head of Business Intelligence (Marketing) at the 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.
- ♦ Doctor in Artificial Intelligence by the University of Granada
- ♦ Computer Engineer from the University of Granada

04

Structure and Content

This university program is composed of carefully designed modules that cover from the theoretical foundations to the practical application of Artificial Intelligence in the clinical setting. Through innovative multimedia resources, real case studies and applied projects, graduates will acquire solid skills in biomedical data analysis, clinical information processing and AI-based treatment personalization. In addition, ethical challenges and legal considerations associated with the implementation of AI in Clinical Research will be addressed, providing a comprehensive perspective.



“

From biomedical image analysis, to the integration of AI in precision medicine, you will delve into a wide range of topics essential to modern healthcare"

Module 1. Artificial Intelligence Methods and Tools for Clinical Research

- 1.1. AI Technologies and Tools in Clinical Research
 - 1.1.1. Using Machine Learning to Identify Patterns in Clinical Data
 - 1.1.2. Development of Predictive Algorithms for Clinical Trials
 - 1.1.3. Implementation of AI Systems to Improve Patient Recruitment
 - 1.1.4. AI Tools for Real-Time Analysis of Research Data
- 1.2. Statistical Methods and Algorithms in Clinical Trials
 - 1.2.1. Application of Advanced Statistical Techniques for Clinical Data Analysis
 - 1.2.2. Use of Algorithms for the Validation and Verification of Trial Results
 - 1.2.3. Implementation of Regression and Classification Models in Clinical Studies
 - 1.2.4. Analysis of Large Data Sets using Computational Statistical Methods
- 1.3. Design of Experiments and Analysis of Results
 - 1.3.1. Strategies for the Efficient Design of Clinical Trials Using AI
 - 1.3.2. AI Techniques for Analysis and Interpretation of Experimental Data
 - 1.3.3. Optimization of Research Protocols Using AI Simulations
 - 1.3.4. Evaluation of Efficacy and Safety of Treatments Using AI Models
- 1.4. Interpretation of Medical Images Using AI in Research
 - 1.4.1. Development of AI Systems for the Automatic Detection of Pathologies in Images
 - 1.4.2. Use of Deep Learning for Classification and Segmentation in Medical Images
 - 1.4.3. AI Tools to Improve Accuracy in Image Diagnostics
 - 1.4.4. Analysis of Radiological and Magnetic Resonance Imaging Using AI
- 1.5. Clinical Analysis and Biomedical Data Analysis
 - 1.5.1. AI in Genomic and Proteomic Data Processing and Analysis
 - 1.5.2. Tools for the Integrated Analysis of Clinical and Biomedical Data
 - 1.5.3. Use of AI to Identify Biomarkers in Clinical Research
 - 1.5.4. Predictive Analysis of Clinical Outcomes Based on Biomedical Data
- 1.6. Advanced Data Visualization in Clinical Research
 - 1.6.1. Development of Interactive Visualization Tools for Clinical Data
 - 1.6.2. Use of AI in the Creation of Graphical Representations of Complex Data
 - 1.6.3. Visualization Techniques for Easy Interpretation of Research Results
 - 1.6.4. Augmented and Virtual Reality Tools for Visualization of Biomedical Data

- 1.7. Natural Language Processing in Scientific and Clinical Documentation
 - 1.7.1. Application of NLP for the Analysis of Scientific Literature and Clinical Records
 - 1.7.2. AI Tools for the Extraction of Relevant Information from Medical Texts
 - 1.7.3. AI Systems for Summarizing and Categorizing Scientific Publications
 - 1.7.4. Use of NLP to Identify Trends and Patterns in Clinical Documentation
- 1.8. Heterogeneous Data Processing in Clinical Research
 - 1.8.1. AI Techniques for Integrating and Analyzing Data from Diverse Clinical Sources
 - 1.8.2. Tools for the Management of Unstructured Clinical Data
 - 1.8.3. AI Systems for Correlating Clinical and Demographic Data
 - 1.8.4. Analysis of Multidimensional Data for Clinical Insights
- 1.9. Applications of Neural Networks in Biomedical Research
 - 1.9.1. Use of Neural Networks for Disease Modeling and Treatment Prediction
 - 1.9.2. Implementation of Neural Networks in Genetic Disease Classification
 - 1.9.3. Development of Diagnostic Systems Based on Neural Networks
 - 1.9.4. Application of Neural Networks in the Personalization of Medical Treatments
- 1.10. Predictive Modeling and its Impact on Clinical Research
 - 1.10.1. Development of Predictive Models for the Anticipation of Clinical Outcomes
 - 1.10.2. Use of AI in the Prediction of Side Effects and Adverse Reactions
 - 1.10.3. Implementation of Predictive Models in the Optimization of Clinical Trials
 - 1.10.4. Risk Analysis in Medical Treatments Using Predictive Modeling

Module 2. Practical Application of Artificial Intelligence in Clinical Research

- 2.1. Genomic Sequencing Technologies and Data Analysis with Artificial Intelligence
 - 2.1.1. Use of AI for Rapid and Accurate Analysis of Genetic Sequences
 - 2.1.2. Implementation of Machine Learning Algorithms in the Interpretation of Genomic Data
 - 2.1.3. AI Tools for Identification of Genetic Variants and Mutations
 - 2.1.4. Development of AI Systems for Anomaly Detection in Medical Images
- 2.2. AI in the Analysis of Biomedical Images
 - 2.2.1. Development of AI Systems for the Detection of Anomalies in Medical Images
 - 2.2.2. Use of Deep Learning in the Interpretation of X-rays, MRI and CT Scans
 - 2.2.3. AI Tools to Improve Accuracy in Diagnostic Imaging
 - 2.2.4. Implementation of AI in Biomedical Image Classification and Segmentation

- 2.3. Robotics and Automation in Clinical Laboratories
 - 2.3.1. Use of Robots for the Automation of Tests and Processes in Laboratories
 - 2.3.2. Implementation of Automatic Systems for the Management of Biological Samples
 - 2.3.3. Development of Robotic Technologies to Improve Efficiency and Accuracy in Clinical Analysis
 - 2.3.4. AI Application in Optimization of Workflows in Laboratory
 - 2.4. AI in the Personalization of Therapies and Precision Medicine
 - 2.4.1. Development of AI Models for the Personalization of Medical Treatments
 - 2.4.2. Use of Predictive Algorithms in the Selection of Therapies based on Genetic Profiling
 - 2.4.3. AI Tools in the Adaptation of Drug Doses and Combinations
 - 2.4.4. Application of AI in the Identification of Effective Treatments for Specific Groups
 - 2.5. Innovations in AI-Assisted Diagnostics
 - 2.5.1. Implementation of AI Systems for Rapid and Accurate Diagnostics
 - 2.5.2. Use of AI in Early Identification of Diseases through Data Analysis
 - 2.5.3. Development of AI Tools for Clinical Test Interpretation
 - 2.5.4. Application of AI in Combining Clinical and Biomedical Data for Comprehensive Diagnostics
 - 2.6. AI Applications in Microbiome and Microbiology Studies
 - 2.6.1. Use of AI in the Analysis and Mapping of the Human Microbiome
 - 2.6.2. Implementation of Algorithms to Study the Relationship between Microbiome and Diseases
 - 2.6.3. AI Tools in the Identification of Patterns in Microbiological Studies
 - 2.6.4. Application of AI in Microbiome-Based Therapeutics Research
 - 2.7. Wearables and Remote Monitoring in Clinical Trials
 - 2.7.1. Development of Wearable Devices with AI for Continuous Health Monitoring
 - 2.7.2. Use of AI in the Interpretation of Data Collected by Wearables
 - 2.7.3. Implementation of Remote Monitoring Systems in Clinical Trials
 - 2.7.4. Application of AI in the Prediction of Clinical Events through Wearable Data
 - 2.8. AI in Clinical Trial Management
 - 2.8.1. Use of AI Systems for Optimization of Clinical Trial Management
 - 2.8.2. Implementation of AI in the Selection and Monitoring of Participants
 - 2.8.3. AI Tools for Analysis of Clinical Trial Data and Results
 - 2.8.4. Application of AI to Improve Trial Efficiency and Reduce Trial Costs
 - 2.9. Development of AI-Assisted Vaccines and Treatments
 - 2.9.1. Use of AI to Accelerate Vaccine Development
 - 2.9.2. Implementation of Predictive Models in the Identification of Potential Treatments
 - 2.9.3. AI Tools to Simulate Responses to Vaccines and Drugs
 - 2.9.4. Application of AI in the Personalization of Vaccines and Therapies
 - 2.10. AI Applications in Immunology and Immune Response Studies
 - 2.10.1. Development of AI Models to Understand Immunological Mechanisms
 - 2.10.2. Use of AI in the Identification of Patterns in Immune Responses
 - 2.10.3. Implementation of AI in Autoimmune Disorders Research
 - 2.10.4. Application of AI in the Design of Personalized Immunotherapies
- Module 3. Ethical, Legal and Future Aspects of Artificial Intelligence in Clinical Research**
- 3.1. Ethics in the Application of AI in Clinical Research
 - 3.1.1. Ethical Analysis of AI-Assisted Decision Making in Clinical Research Settings
 - 3.1.2. Ethics in the Use of AI Algorithms for Participant Selection in Clinical Trials
 - 3.1.3. Ethical Considerations in the Interpretation of Results Generated by AI Systems in Clinical Research
 - 3.2. Legal and Regulatory Considerations in Biomedical AI
 - 3.2.1. Analysis of Legal Regulations in the Development and Application of AI Technologies in the Biomedical Field
 - 3.2.2. Assessment of Compliance with Specific Regulations to Ensure the Safety and Efficacy of AI-Based Solutions
 - 3.2.3. Addressing Emerging Regulatory Challenges Associated with the Use of AI in Biomedical Research
 - 3.3. Informed Consent and Ethical Aspects in the Use of Clinical Data
 - 3.3.1. Development of Strategies to Ensure Effective Informed Consent in AI Projects
 - 3.3.2. Ethics in the Collection and Use of Sensitive Clinical Data in the Context of AI-Driven Research
 - 3.3.3. Addressing Ethical Issues Related to Ownership and Access to Clinical Data in Research Projects

- 3.4. AI and Liability in Clinical Research
 - 3.4.1. Evaluation of Ethical and Legal Accountability in the Implementation of AI Systems in Clinical Research Protocols
 - 3.4.2. Development of Strategies to Address Potential Adverse Consequences of the Application of AI in Biomedical Research
 - 3.4.3. Ethical Considerations in the Active Participation of AI in Clinical Research Decision Making
- 3.5. Impact of AI on Equity and Access to Health Care
 - 3.5.1. Evaluation of the Impact of AI Solutions on Equity in Clinical Trial Participation
 - 3.5.2. Development of Strategies to Improve Access to AI Technologies in Diverse Clinical Settings
 - 3.5.3. Ethics in the Distribution of Benefits and Risks Associated with the Application of AI in Health Care
- 3.6. Privacy and Data Protection in Research Projects
 - 3.6.1. Ensuring the Privacy of Participants in Research Projects Involving the Use of AI
 - 3.6.2. Development of Policies and Practices for Data Protection in Biomedical Research
 - 3.6.3. Addressing Specific Privacy and Security Challenges in the Handling of Sensitive Data in the Clinical Environment
- 3.7. AI and Sustainability in Biomedical Research
 - 3.7.1. Assessment of the Environmental Impact and Resources Associated with the Implementation of AI in Biomedical Research
 - 3.7.2. Development of Sustainable Practices in the Integration of AI Technologies into Clinical Research Projects
 - 3.7.3. Ethics in Resource Management and Sustainability in the Adoption of AI in Biomedical Research
- 3.8. Auditing and Explainability of AI Models in the Clinical Setting
 - 3.8.1. Development of Audit Protocols for Assessing the Reliability and Accuracy of AI Models in Clinical Research
 - 3.8.2. Ethics in Explainability of Algorithms to Ensure Understanding of Decisions Made by AI Systems in Clinical Contexts
 - 3.8.3. Addressing Ethical Challenges in the Interpretation of AI Model Results in Biomedical Research





- 3.9. Innovation and Entrepreneurship in the Field of Clinical AI
 - 3.9.1. Responsible Innovation Ethics in Developing AI Solutions for Clinical Applications
 - 3.9.2. Development of Ethical Business Strategies in the Field of Clinical AI
 - 3.9.3. Ethical Considerations in the Commercialization and Adoption of AI Solutions in the Clinical Sector
- 3.10. Ethical Considerations in International Collaboration in Clinical Research
 - 3.10.1. Development of Ethical and Legal Arrangements for International Collaboration in AI-Driven Research Projects
 - 3.10.2. Ethics in Multi-Institutional and Multi-Country Involvement in Clinical Research using AI Technologies
 - 3.10.3. Addressing Emerging Ethical Challenges Associated with Global Collaboration in Biomedical Research

05

Methodology

This 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.



“

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

At TECH, we use the Case Method

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

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



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a “case”, an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician’s professional practice.

“

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

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

1. 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.



Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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

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



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

With this methodology, more than 250,000 physicians have been prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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

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

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



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



Study Material

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

These contents are then adapted in 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.



Surgical Techniques and Procedures on Video

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



Interactive Summaries

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

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



Additional Reading

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





Expert-Led Case Studies and Case Analysis

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



Testing & Retesting

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



Classes

There is scientific evidence on the usefulness of learning by observing experts. The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



Quick Action Guides

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



06 Certificate

The Postgraduate Diploma in Application of Artificial Intelligence Technologies in Clinical Research guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Technological University.



“

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

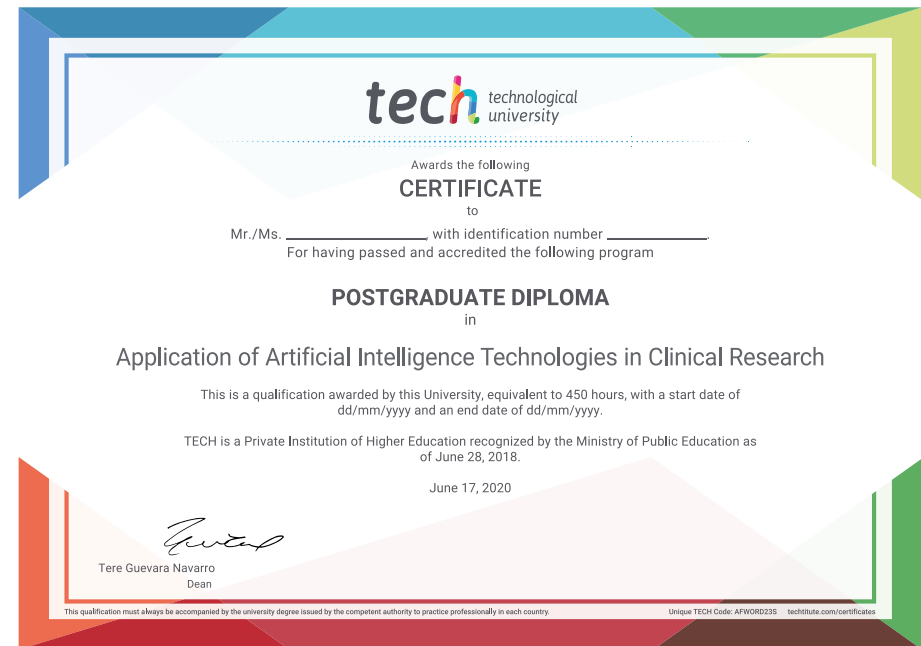
This **Postgraduate Diploma in Application of Artificial Intelligence Technologies in Clinical Research** contains the most complete and up-to-date scientific program on the market.

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 Artificial Intelligence Technologies in Clinical Research**

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
personalized service innovation
knowledge present
online training
development language
virtual classroom



Postgraduate Diploma
Application of Artificial
Intelligence Technologies
in Clinical Research

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

Postgraduate Diploma

Application of Artificial
Intelligence Technologies
in Clinical Research