Postgraduate Diploma

Data Analysis with Artificial Intelligence in Clinical Research

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Postgraduate Diploma
Data Analysis with Artificial Intelligence 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/artificial-intelligence/postgraduate-diploma/postgraduate-diploma-data-analysis-artificial-intelligence-clinical-research

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01

Introduction

The use of Data Analytics using Artificial Intelligence (AI) techniques transforms healthcare data into useful knowledge to health data into useful knowledge to further improve medical processes. In this way, this information helps doctors to improve their healthcare and offer more personalized therapeutic treatments. As a result, professionals can analyze the efficacy or adverse effects of drugs while monitoring the evolution of patients in real time. In this context, it is essential for specialists to have advanced skills to handle these technological tools and provide users with care based on clinical excellence. To help them with this, TECH is developing an online program that will delve into AI methods for Clinical Research.

You will explore significant trends in the response to various treatments, as well as the prediction of clinical outcomes, thanks to this 100% online program"

One of the challenges that medical professionals face on a daily basis involves the study of large volumes of data such as medical records, clinical cases, test results, etc. However, this information is essential for the correct planning and implementation of therapeutic treatments. Faced with this situation, Machine Learning has become a fundamental pillar in overcoming this challenge. Thanks to Big Data, specialists can prevent accidents or decide what is the best therapy for a given patient. Undoubtedly, these analytical techniques significantly improve medical care and contribute to increasing the quality of life of citizens.

Therefore, TECH has implemented a Postgraduate Diploma that will focus on the analysis of Big Data and Machine Learning in Clinical research. Therefore, the syllabus will delve into the main methodologies for Data Mining and anomaly detection in biomedical records. In relation to this, the agenda will deal with Deep Learning given its importance to boost precision medicine. At the same time, the program will analyze the processing of natural language in scientific and clinical documentation. To this end, the program will provide experts with the most effective tools for extracting relevant information from medical texts. It will also delve into the use of neural networks for disease modeling and treatment prediction.

Moreover, to reinforce such contents, the methodology of this program reinforces its innovative character. TECH offers a 100% online learning environment, adapted to the needs of busy professionals seeking to advance their careers. In addition, it will employ the Relearning methodology, based on the repetition of key concepts to fix knowledge and facilitate learning. In this way, the combination of flexibility and a robust pedagogical approach makes it highly accessible.

This **Postgraduate Diploma in Data Analysis with Artificial Intelligence in Clinical Research** contains the most complete and up-to-date program on the market
Its most notable features are:

- Development of practical cases presented by experts in Analysis of AI Technologies in Clinical Practice
- 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 the self-assessment process can be carried out 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 develop the most optimal strategies to take advantage of Artificial Intelligence and optimize clinical research thanks to TECH"

You will delve into pharmaceuticals and treatment simulation as part of the contribution of Artificial Intelligence to health research"

Do you want to successfully face the challenges related to the management of large volumes of data? Specialize in Big Data with this program in just 6 months.

You will face the challenges associated with the management of large data sets, information security and practical applications of Big Data in the biomedical field.

The program's teaching staff includes professionals from the industry 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 academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

02

Objectives

This university program will provide experts with a comprehensive and up-to-date understanding of the applications of Machine Learning in healthcare. Graduates will acquire state-of-the-art skills to implement data analysis tools and specific AI techniques in both clinical and biomedical settings. Likewise, specialists will be qualified to overcome complex challenges such as the analysis of large volumes of clinical data, the identification of relevant patterns in medical care and the simulation of biological processes.

You will receive specialized knowledge adapted to your profession in order to improve every day in the treatment of your patients"

General Objectives

- Gain 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, 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
- Apply computational models to simulate biological processes and responses to treatments, using AI to improve understanding of complex biomedical phenomena
- Obtain solid knowledge of model validation and simulations in the biomedical domain, exploring the use of synthetic datasets and practical applications of AI in health research
- Gain a solid understanding of the concepts of Big Data in the clinical setting and become familiar with essential tools for its analysis

Specific Objectives

Module 1. AI Methods and Tools for Clinical Research

- Gain a comprehensive view of the 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. Biomedical Research with AI

- Acquire solid knowledge on the validation of models and simulations in the biomedical field, ensuring their accuracy and clinical relevance
- Integrate heterogeneous data using advanced methods to enrich the multidisciplinary analysis in Clinical Research
- Develop deep learning algorithms to improve the interpretation and analysis of biomedical data in clinical trials
- Explore the use of synthetic datasets in clinical studies and understand the practical applications of AI in health research
- Understand the crucial role of computational simulation in drug discovery, analysis of molecular interactions, and modeling of complex diseases

Module 3. Big Data Analytics and Machine Learning in Clinical Research

- Gain a solid understanding of the concepts fundamental of Big Data in the clinical setting and become familiar with essential tools used for its analysis
- Explore advanced data mining techniques, machine learning algorithms, predictive analytics, and AI applications in epidemiology and public health
- Analyze biological networks and disease patterns to identify connections and potential treatments
- Address data security and manage the challenges associated with large volumes of data in biomedical research
- Investigate case studies that demonstrate the potential of Big Data in biomedical research

With the highest rated learning assistance methods in online teaching, this program will allow you to learn smoothly, steadily and effectively"

03

Course Management

With the aim of preserving intact the educational quality so characteristic of TECH's university programs, this institution has selected leading specialists in the area of Artificial Intelligence in Clinical Research to teach this Postgraduate Diploma. These professionals are characterized by their extensive handling of advanced technologies and tools for assisted diagnosis. Therefore, they will pour into the didactic materials both their extensive knowledge and their years of professional experience so that physicians can enjoy a complete applicability in daily practice.

The diversity of talents and knowledge of the faculty will create a enriching learning environment. Learn with the best!"

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
- Ph.D. in Psychology from the University of Castilla - La Mancha
- Ph.D. in Economics, Business and Finance from the Camilo José Cela University
- Ph.D. in Psychology from University of Castilla – La Mancha
- 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 Didactic and Scientific Contents
- Nutritionist and Community Dietitian
- Community Pharmacist
- Researcher
- Master's Degree in Nutrition and Health at the Universidad Oberta de Catalunya
- Master's Degree in Psychopharmacology, University of Valencia
- Pharmacist by the Complutense University of Madrid
- Nutritionist-Dietician by the European University Miguel de Cervantes

Professors

Dr. Carrasco González, Ramón Alberto

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

04

Structure and Content

This Postgraduate Diploma will provide students with a first-class educational experience, which will raise their professional horizons thanks to the use of AI in their medical practice. The program is composed of 3 complete modules, which will delve into the fundamentals of Machine Learning, biomedical data interpretation and natural language processing. Also, the syllabus will address the ethical and regulatory complexities surrounding this discipline with the aim of ensuring that graduates maintain a deontological behavior. Moreover, the program will include simulations of biological processes, synthetic data generation and model validation.

You will be equipped with the skills required to lead the transformation of Clinical Research through Machine Learning"

Module 1. AI Methods and Tools for Clinical Research

1.1. AI Technologies and Tools in Clinical Research
- 1.1.1. Use of 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 for Improved Patient Recruitment
- 1.1.4. Implementation of AI Systems for the Real-Time Analysis of groups Data

1.2. Statistical Methods and Algorithms in Clinical Trials
- 1.2.1. Application of Advanced Statistical Techniques for the Analysis of Clinical Data
- 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 Efficient Clinical Trial Design 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 the 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 Imaging
- 1.4.3. AI Tools for Improving Accuracy in Diagnostic Image
- 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 for Identifying Biomarkers in Clinical Research
- 1.5.4. Predictive Analytics 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 the Easy Interpretation of Research Results
- 1.6.4. Augmented and Virtual Reality Tools for the 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 in Identifying 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 Clinical and Demographic Data Correlation
- 1.8.4. Analysis of Multidimensional Data to Obtain 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 the Classification of Genetic Diseases
- 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 Clinical Trial Optimization
- 1.10.4. Risk Analysis of Medical Treatments Using Predictive Modeling

Module 2. Biomedical Research with AI

2.1. Design and Execution of Observational Studies with AI
- 2.1.1. Implementation of AI for the Selection and Segmentation of Populations in Studies
- 2.1.2. Use of Algorithms for Real-Time Monitoring of Observational Study Data
- 2.1.3. AI Tools for the Identification of Patterns and Correlations in Observational Studies
- 2.1.4. Automation of the Data Collection and Analysis Process in Observational Studies

2.2. Validation and Calibration of Models in Clinical Research
- 2.2.1. AI Techniques for Ensuring the Accuracy and Reliability of Clinical Models
- 2.2.2. Use of AI in the Calibration of Predictive Models in Clinical Research
- 2.2.3. Cross-validation Methods Applied to Clinical Models using AI
- 2.2.4. AI Tools for the Evaluation of the Generalization of Clinical Models

2.3. Methods for Integrating Heterogeneous Data in Clinical Research
- 2.3.1. AI Techniques for Combining Clinical, Genomic, and Environmental Data
- 2.3.2. Use of Algorithms for Handling and Analyzing Unstructured Clinical Data
- 2.3.3. AI Tools for Normalization and Standardization of Clinical Data
- 2.3.4. AI Systems for Correlating Different Types of Research Data

2.4. Integration of Multidisciplinary Biomedical Data
- 2.4.1. AI Systems to Combine Data from Different Biomedical Disciplines
- 2.4.2. Algorithms for the Integrated Analysis of Clinical and of Laboratory Data
- 2.4.3. AI Tools for the Visualization of Complex Biomedical Data
- 2.4.4. Use of AI in the Creation of Holistic Health Models from Multidisciplinary Data

2.5. Deep Learning Algorithms in Biomedical Data Analysis
- 2.5.1. Implementation of Neural Networks in Analysis of Genetic and Proteomic Data
- 2.5.2. Using Deep Learning to Identify Patterns in Biomedical Data
- 2.5.3. Development of Predictive Models in Precision Medicine with Deep Learning
- 2.5.4. Application of AI in Advanced Biomedical Image Analysis

2.6. Optimization of Research Processes with Automation
- 2.6.1. Automation of Laboratory Routines with AI Systems
- 2.6.2. Use of AI for Efficient Management of Resources and Time in Research
- 2.6.3. AI Tools for Workflow Optimization in Clinical Research
- 2.6.4. Automated Systems for Tracking and Reporting of Research Progress

2.7. Simulation and Computational Modeling in Medicine with AI
- 2.7.1. Development of Computational Models to Simulate Clinical Scenarios
- 2.7.2. Use of AI for Simulation of Molecular and Cellular Interactions
- 2.7.3. AI Tools in the Creation of Predictive Disease Models
- 2.7.4. Application of AI in the Simulation of Drug and Treatment Effects

2.8. Use of Virtual and Augmented Reality in Clinical Trials
- 2.8.1. Implementation of Virtual Reality for Training and Simulation in Medicine
- 2.8.2. Use of Augmented Reality in Surgical and Diagnostic Procedures
- 2.8.3. Virtual Reality Tools for Behavioral and Psychological Studies
- 2.8.4. Application of Immersive Technologies in Rehabilitation and Therapy

2.9. Data Mining Tools Applied to Biomedical Research
- 2.9.1. Use of Data Mining Techniques to Extract Knowledge from Biomedical Databases
- 2.9.2. Implementation of AI Algorithms to Discover Patterns in Clinical Data
- 2.9.3. AI Tools for Trend Identification in Large Datasets
- 2.9.4. Application of Data Mining in the Generation of Research Hypotheses

2.10. Development and Validation of Biomarkers with Artificial Intelligence
- 2.10.1. Use of AI for the Identification and Characterization of New Biomarkers
- 2.10.2. Implementation of AI Models for the Validation of Biomarkers in Clinical Studies
- 2.10.3. AI Tools in Correlating Biomarkers with Clinical Results
- 2.10.4. AI Applications in the analysis of Biomarkers for Personalized Medicine

Module 3. *Big Data* Analytics and Machine Learning in Clinical Research

3.1. Big Data in Clinical Research: Concepts and Tools
- 3.1.1. The Explosion of Data in Clinical Research
- 3.1.2. Concept of Big Data and Main Tools
- 3.1.3. Applications of Big Data in Clinical Research

3.2. Data Mining in Clinical and Biomedical Registries
- 3.2.1. Main Methodologies for Data Mining
- 3.2.2. Data Integration from Clinical and Biomedical Registries
- 3.2.3. Detection of Patterns and Anomalies in Biomedical and Clinical Records

3.3. Machine Learning Algorithms in Biomedical Research
- 3.3.1. Classification Techniques in Biomedical Research
- 3.3.2. Regression Techniques in Biomedical Research
- 3.3.3. Unsupervised Techniques in Biomedical Research

3.4. Predictive Analytics Techniques in Clinical Research
- 3.4.1. Classification Techniques in Clinical Research
- 3.4.2. Regression Techniques in Clinical Research
- 3.4.3. Deep Learning in Clinical Research

3.5. AI Models in Epidemiology and Public Health
- 3.5.1. Classification Techniques in Epidemiology and Public Health
- 3.5.2. Regression Techniques in Epidemiology and Public Health
- 3.5.3. Unsupervised Techniques in Epidemiology and Public Health

3.6. Analysis of Biological Networks and Disease Patterns
- 3.6.1. Exploration of Interactions in Biological Networks for the Identification of Disease Patterns
- 3.6.2. Integration of Omics Data in Network Analysis to Characterize Biological Complexities
- 3.6.3. Application of Machine Learning Algorithms for Disease Pattern Discovery

3.7. Development of Tools for Clinical Prognostics
- 3.7.1. Creation of Innovative Tools for Clinical Prognosis Based on Multidimensional Data
- 3.7.2. Integration of Clinical and Molecular Variables in the Development of Prognostic Tools
- 3.7.3. Evaluating the Effectiveness of Prognostic Tools in Various Clinical Contexts

3.8. Advanced Visualization and Communication of Complex Data
- 3.8.1. Use of Advanced Visualization Techniques to Represent Complex Biomedical Data
- 3.8.2. Development of Effective Communication Strategies for Presenting Complex Analysis Results
- 3.8.3. Implementation of Interactivity Tools in Visualizations to Enhance Comprehension

3.9. Data Security and Challenges inBig DataManagement
- 3.9.1. Addressing Data Security Challenges in the Context of Biomedical Big Data
- 3.9.2. Strategies for Privacy Protection in the Management of Large Biomedical Data Sets
- 3.9.3. Implementation of Security Measures to Mitigate Risks in the Management of Sensitive Data

3.10. Practical Applications and Case Studies in Biomedical Big Data
- 3.10.1. Exploration of Successful Cases in the Implementation of Biomedical Big Data in Clinical Research
- 3.10.2. Development of Practical Strategies for the Application of Big Data in Clinical Decision Making
- 3.10.3. Impact Assessment and Lessons Learned through Case Studies in the Biomedical Domain

You will be able to access the Virtual Campus at any time and download the contents to consult them whenever you wish"

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.

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

Case Study to contextualize all content

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

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

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

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

A learning method that is different and innovative

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

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

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

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

Relearning Methodology

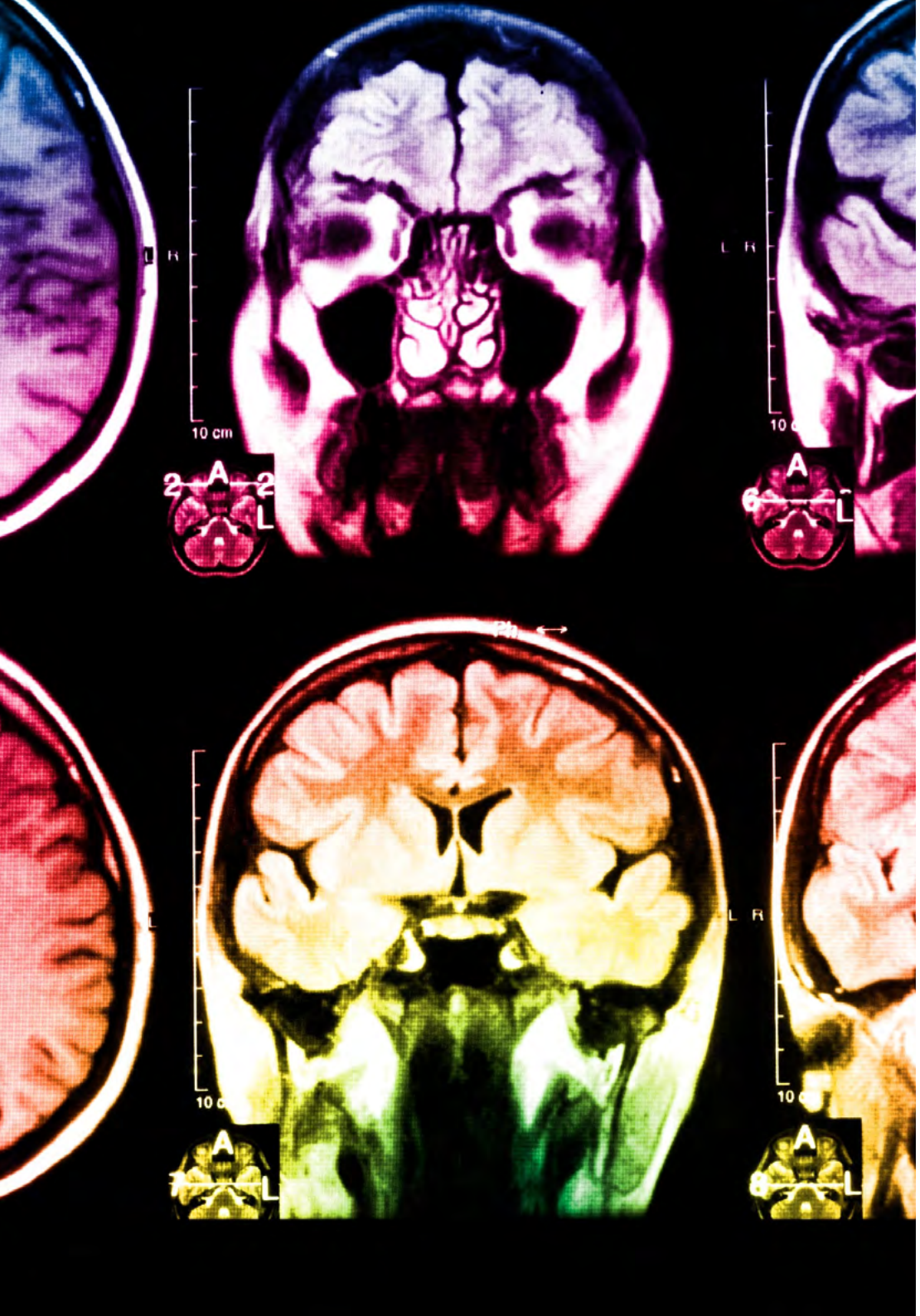
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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

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

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

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



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically. This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

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

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

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

Study Material

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

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

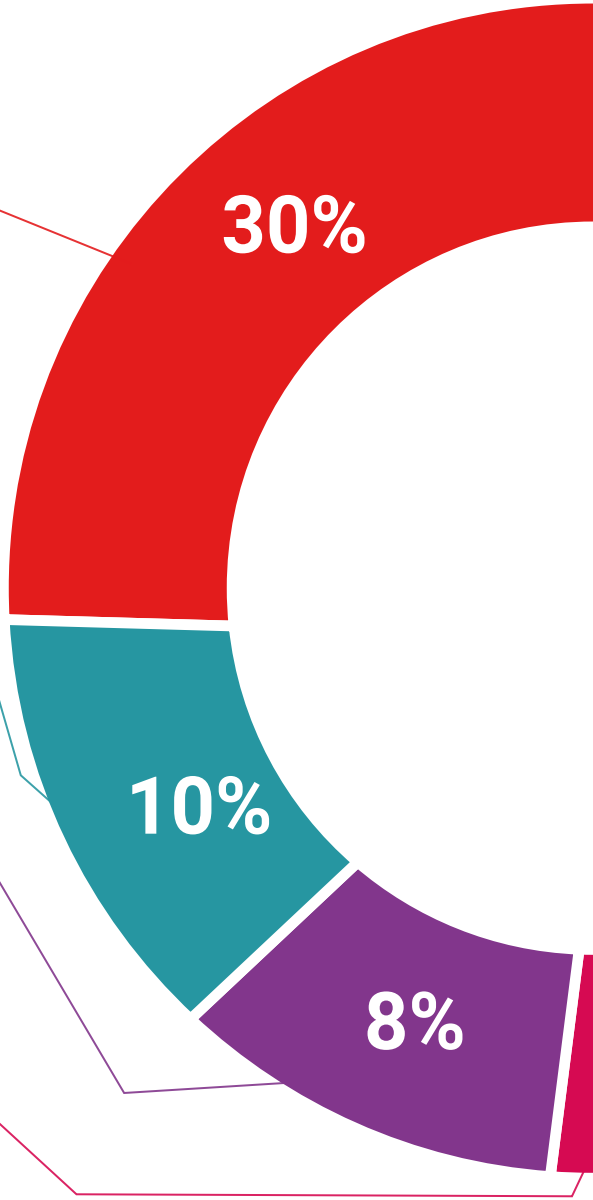
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

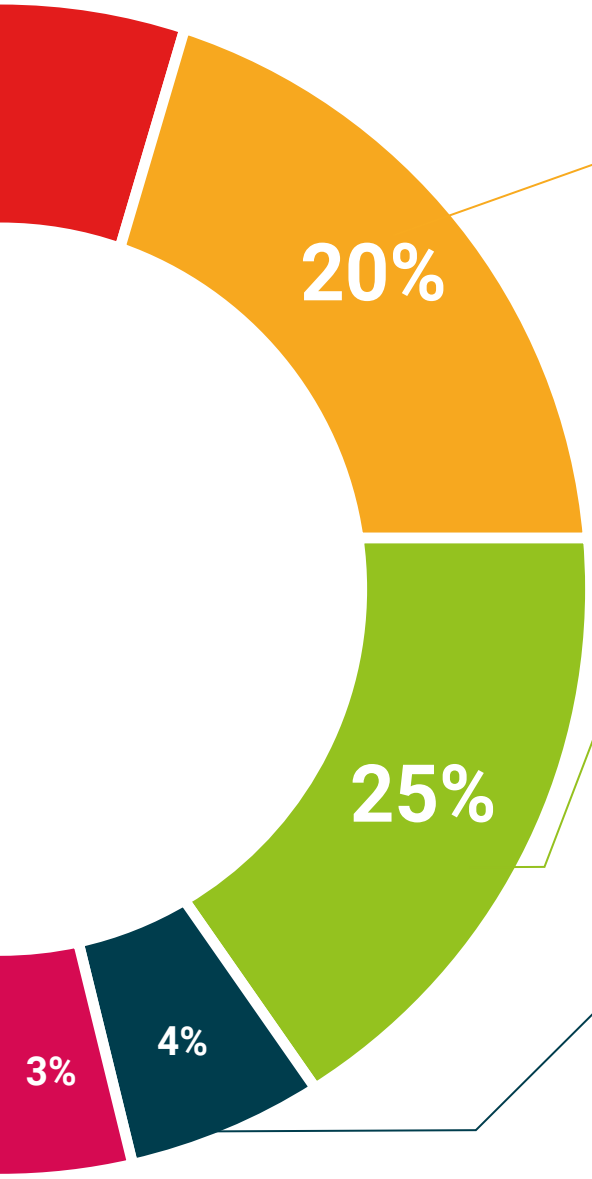
Practising Skills and Abilities

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

Additional Reading

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





Case Studies

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

Interactive Summaries

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

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

Testing & Retesting

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

06

Certificate

The Postgraduate Diploma in Data Analysis with Artificial Intelligence 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"

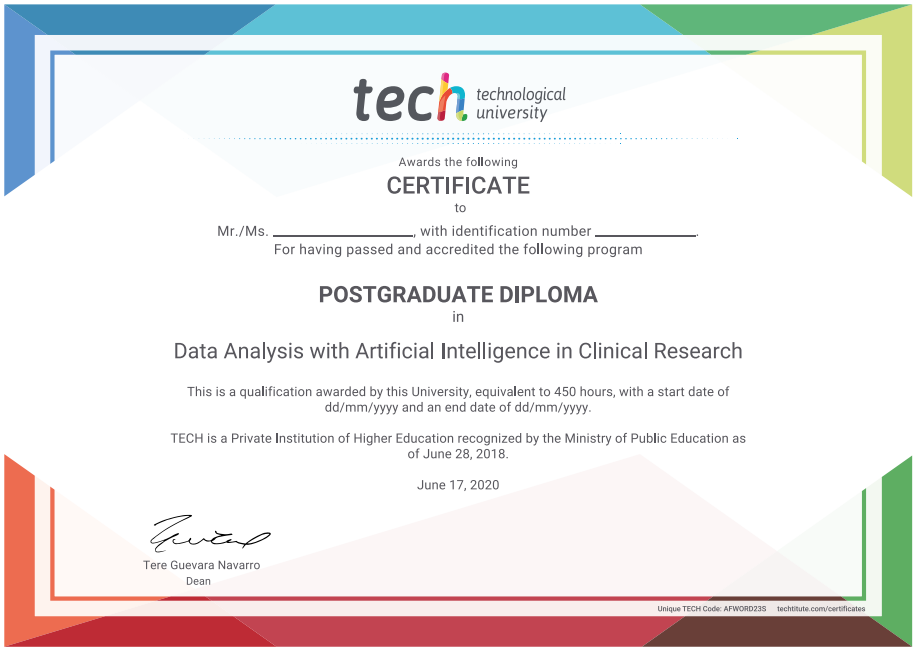
This **Postgraduate Diploma in Data Analysis with Artificial Intelligence in Clinical Research** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Diploma in Data Analysis with Artificial Intelligence in Clinical Research**

Official Nº of Hours: **450 h.**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Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Data Analysis with Artificial Intelligence in Clinical Research

This is a qualification awarded by this University, equivalent to 450 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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