

# Postgraduate Certificate Ethical and Regulatory Aspects of AI in Finance



## Postgraduate Certificate Ethical and Regulatory Aspects of AI in Finance

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

Website: [www.techtute.com/us/artificial-intelligence/postgraduate-certificate/ethical-regulatory-aspects-ai-finance](http://www.techtute.com/us/artificial-intelligence/postgraduate-certificate/ethical-regulatory-aspects-ai-finance)

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# 01

# Introduction

Regulation and ethical aspects of Artificial Intelligence in the financial sector. In fact, the European Union is moving forward with an AI Regulation, which classifies applications according to their level of risk and establishes specific requirements for financial institutions, especially those using AI for credit assessments and automated decisions. In addition, ethical aspects, such as transparency, fairness and privacy, are critical, as algorithms can perpetuate biases if not properly managed. In this scenario, TECH has created a fully online program that is ideally suited to the work and personal schedules of graduates, using the innovative learning methodology called Relearning.



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*With this 100% online Postgraduate Certificate, you will gain a comprehensive understanding of the ethical and regulatory challenges associated with AI implementation, addressing these issues in financial models”*

The increasing adoption of Artificial Intelligence technologies has raised concerns about fairness and transparency in automated decision making, especially in critical areas such as credit and risk management. Indeed, financial institutions face the challenge of implementing regulations that not only ensure regulatory compliance, but also promote ethical practices in the use of algorithms.

This is how this Postgraduate Certificate was created, in which critical issues such as transparency, explainability and fairness in financial models, essential to ensure that algorithm-driven decisions do not perpetuate bias and discrimination, will be analyzed. In this sense, professionals will be able to identify and address the ethical implications that arise in the interaction between technology and finance.

They will also delve into relevant regulations and international standards, as well as their impact on the creation and implementation of AI-based solutions. As a result, experts will be able to meet regulatory requirements, enabling them to develop technologies that are compliant and offer added value to organizations, while aligning with the expectations of regulators.

Finally, students will be encouraged to integrate practices that ensure ethical and safe use of these technologies, prioritizing economic and social well-being. This holistic approach will enable them to address ethical and regulatory challenges proactively, promoting innovative solutions that not only comply with legal requirements, but also contribute to sustainable development and the well-being of society.

In this way, TECH has developed a complete all-digital program that will only require an electronic device with an Internet connection to access the educational materials. This eliminates problems such as the need to travel to a physical location and the imposition of a rigid schedule. Additionally, it will be based on the innovative Relearning methodology, consisting of the repetition of key concepts to ensure proper understanding of the contents.

The **Postgraduate Certificate in Ethical and Regulatory Aspects of AI in Finance** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Artificial Intelligence applied to Stock Exchanges and Financial Markets
- ♦ The graphic, schematic, and practical contents with which they are created, provide 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



*You will be able to develop innovative solutions that comply with global regulations and promote social and economic well-being, thanks to an extensive library of innovative multimedia resources”*

“

*You will acquire skills to contribute to the development of a financial ecosystem that maximizes profits and respects ethical principles, promoting equity in access to financial services. Enroll now!”*

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

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts in the field of educational coaching with extensive experience.

*You will analyze key issues such as transparency, explainability and fairness in financial models, through the best teaching materials, at the forefront of technology and education.*

*You will develop solutions that meet these regulatory requirements, enabling you to navigate an increasingly complex and ever-changing financial environment.  
With all TECH's quality guarantees!*



# 02

# Objectives

This university program will seek to develop a deep understanding of the ethical principles that should guide the use of AI in the financial sector. In addition, professionals will become familiar with the global regulations that govern the application of AI in financial markets, in order to design and implement solutions that comply with these standards. They will also cultivate a culture of responsibility and sustainability in the use of technology, adopting practices that seek economic efficiency and promote a positive impact on society and collective well-being.





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*The objectives of this Postgraduate Certificate in Ethical and Regulatory Aspects of Artificial Intelligence in Finance are multiple and fundamental for the training of professionals in this field”*



## General Objectives

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- ♦ Foster the ability to create and apply Artificial Intelligence models that are explainable and transparent, ensuring that AI-based financial decisions are understandable and justifiable
- ♦ Develop a thorough understanding of the ethical and regulatory challenges associated with the use of Artificial Intelligence in finance
- ♦ Equip students with the tools and knowledge necessary to develop innovative financial solutions that integrate Artificial Intelligence
- ♦ Apply AI technologies in finance in an ethical and responsible manner, incorporating fairness, transparency and privacy considerations into their solutions





## Specific Objectives

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- Explore the ethical challenges associated with the use of Artificial Intelligence in finance, including transparency, explainability, and fairness in financial modeling
- Understand the global regulations affecting the use of AI in financial markets, and learn how to develop solutions that meet these requirements
- Foster a culture of responsible development, integrating practices that ensure that AI technologies are used ethically, safely, and for the benefit of economic and social welfare



*You will be prepared to lead responsible initiatives in the financial arena, positioning yourself as an agent of change in an environment increasingly oriented towards the ethical use of technology”*

# 03

# Course Management

The faculty is composed of a multidisciplinary team of experts in ethics, law, finance and technology. Indeed, they have practical experience in the financial sector and in the implementation of Artificial Intelligence solutions, providing valuable insight into the current and future challenges facing the industry. In addition, they are involved in cutting-edge research on the ethical and regulatory implications of Artificial Intelligence, which will enable them to provide graduates with up-to-date and relevant knowledge.



“

*The pedagogical approach will foster an environment of critical debate and reflection, stimulating independent thinking and innovation in the development of responsible and ethical solutions in the financial arena”*

## Management



### **Dr. Peralta Martín-Palomino, Arturo**

- ♦ CEO and CTO at Prometheus 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
- ♦ 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
- ♦ Master's Degree in Executive MBA from the Isabel I University
- ♦ 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. Sánchez Mansilla, Rodrigo

- ◆ Digital Advisor at AI Shepherds GmbH
- ◆ Digital Account Manager at Kill Draper
- ◆ Head of Digital at Kuarere
- ◆ Digital Marketing Manager at Arconi Solutions, Deltoid Energy and Brinergy Tech
- ◆ Founder and National Sales and Marketing Manager
- ◆ Master's Degree in Digital Marketing (MDM) by The Power Business School
- ◆ Bachelor's Degree in Business Administration (BBA) from the University of Buenos Aires

# 04

## Structure and Content

This program will begin with an exploration of the ethical foundations, analyzing concepts such as fairness, transparency and explainability in Artificial Intelligence models. As such, global and local regulations governing the use of AI will be examined, allowing professionals to understand the legal requirements and best practices for implementation. In addition, case studies and practical workshops will be included that will facilitate the analysis of real situations in which ethics and regulation, preparing graduates to face the challenges that may arise in their future careers.







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*The content of the Postgraduate Certificate will cover a wide range of topics crucial to the understanding and responsible application of Artificial Intelligence technology in the financial sector”*

## Module 1. Ethical and Regulatory Aspects of AI in Finance

- 1.1. Ethics in Artificial Intelligence Applied to Finance
  - 1.1.1. Fundamental Ethical Principles for the Development and Use of AI in Finance
  - 1.1.2. Case Studies on Ethical Dilemmas in Financial AI Applications
  - 1.1.3. Developing Ethical Codes of Conduct for Financial Technology Professionals
- 1.2. Global Regulations Affecting the Use of AI in Financial Markets
  - 1.2.1. Overview of the Main International Financial Regulations on AI
  - 1.2.2. Comparison of AI Regulatory Policies among Different Jurisdictions
  - 1.2.3. Implications of AI Regulation on Financial Innovation
- 1.3. Transparency and Explainability of AI Models in Finance
  - 1.3.1. Importance of Transparency in AI Algorithms for User Confidence
  - 1.3.2. Techniques and Tools to Improve the Explainability of AI Models
  - 1.3.3. Challenges of Implementing Interpretable Models in Complex Financial Environments
- 1.4. Risk Management and Ethical Compliance in the Use of AI
  - 1.4.1. Risk Mitigation Strategies Associated with the Deployment of AI in Finance
  - 1.4.2. Ethics Compliance in the Development and Application of AI Technologies
  - 1.4.3. Ethical Oversight and Audits of AI Systems in Financial Operations
- 1.5. Social and Economic Impact of AI in Financial Markets
  - 1.5.1. Effects of AI on the Stability and Efficiency of Financial Markets
  - 1.5.2. AI and Its Impact on Employment and Professional Skills in Finance
  - 1.5.3. Benefits and Social Risks of Large-Scale Financial Automation
- 1.6. Data Privacy and Protection in AI Financial Applications
  - 1.6.1. Data Privacy Regulations Applicable to AI Technologies in Finance
  - 1.6.2. Personal Data Protection Techniques in AI-Based Financial Systems
  - 1.6.3. Challenges in Managing Sensitive Data in Predictive and Analytics Models
- 1.7. Algorithmic Bias and Fairness in AI Financial Models
  - 1.7.1. Identification and Mitigation of Bias in Financial AI Algorithms
  - 1.7.2. Strategies to Ensure Fairness in Automated Decision-Making Models
  - 1.7.3. Impact of Algorithmic Bias on Financial Inclusion and Equity
- 1.8. Challenges of Regulatory Oversight in Financial AI
  - 1.8.1. Difficulties in the Supervision and Control of Advanced AI Technologies
  - 1.8.2. Role of Financial Authorities in the Ongoing Supervision of AI
  - 1.8.3. Need for Regulatory Adaptation in the Face of Advancing AI Technology





- 1.9. Strategies for Responsible Development of AI Technologies in Finance
  - 1.9.1. Best Practices for Sustainable and Responsible AI Development in the Financial Sector
  - 1.9.2. Initiatives and Frameworks for Ethical Assessment of AI Projects in Finance
  - 1.9.3. Collaboration between Regulators and Businesses to Encourage Responsible Practices
- 1.10. Future of AI Regulation in the Financial Sector
  - 1.10.1. Emerging Trends and Future Challenges in AI Regulation in Finance
  - 1.10.2. Preparation of Legal Frameworks for Disruptive Innovations in Financial Technology
  - 1.10.3. International Dialogue and Cooperation for Effective and Unified Regulation of AI in Finance

“ You will integrate social responsibility and economic well-being in the application of advanced technologies, making informed and ethical decisions, hand in hand with the best online university in the world, according to Forbes: TECH”

05

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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

## Case Study to contextualize all content

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

“

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



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



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

### A learning method that is different and innovative

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

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

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

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

## Relearning Methodology

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

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

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

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

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





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

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

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

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

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



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



### Study Material

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

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



### Classes

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

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



### Practising Skills and Abilities

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



### Additional Reading

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





#### Case Studies

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



#### Interactive Summaries

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

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



#### Testing & Retesting

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



06

# Certificate

The Postgraduate Certificate in Ethical and Regulatory Aspects of AI in Finance guarantees, in addition to the most accurate and up-to-date training, access to a Postgraduate Certificate 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 Certificate in Ethical and Regulatory Aspects of AI in Finance** 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 Certificate in Ethical and Regulatory Aspects of AI in Finance**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 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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