

# Postgraduate Certificate

## Artificial Intelligence Ethics in Education



## Postgraduate Certificate Artificial Intelligence Ethics in Education

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

Website: [www.techtitute.com/us/artificial-intelligence/postgraduate-certificate/artificial-intelligence-ethics-education](http://www.techtitute.com/us/artificial-intelligence/postgraduate-certificate/artificial-intelligence-ethics-education)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 16*

05

Methodology

---

*p. 20*

06

Certificate

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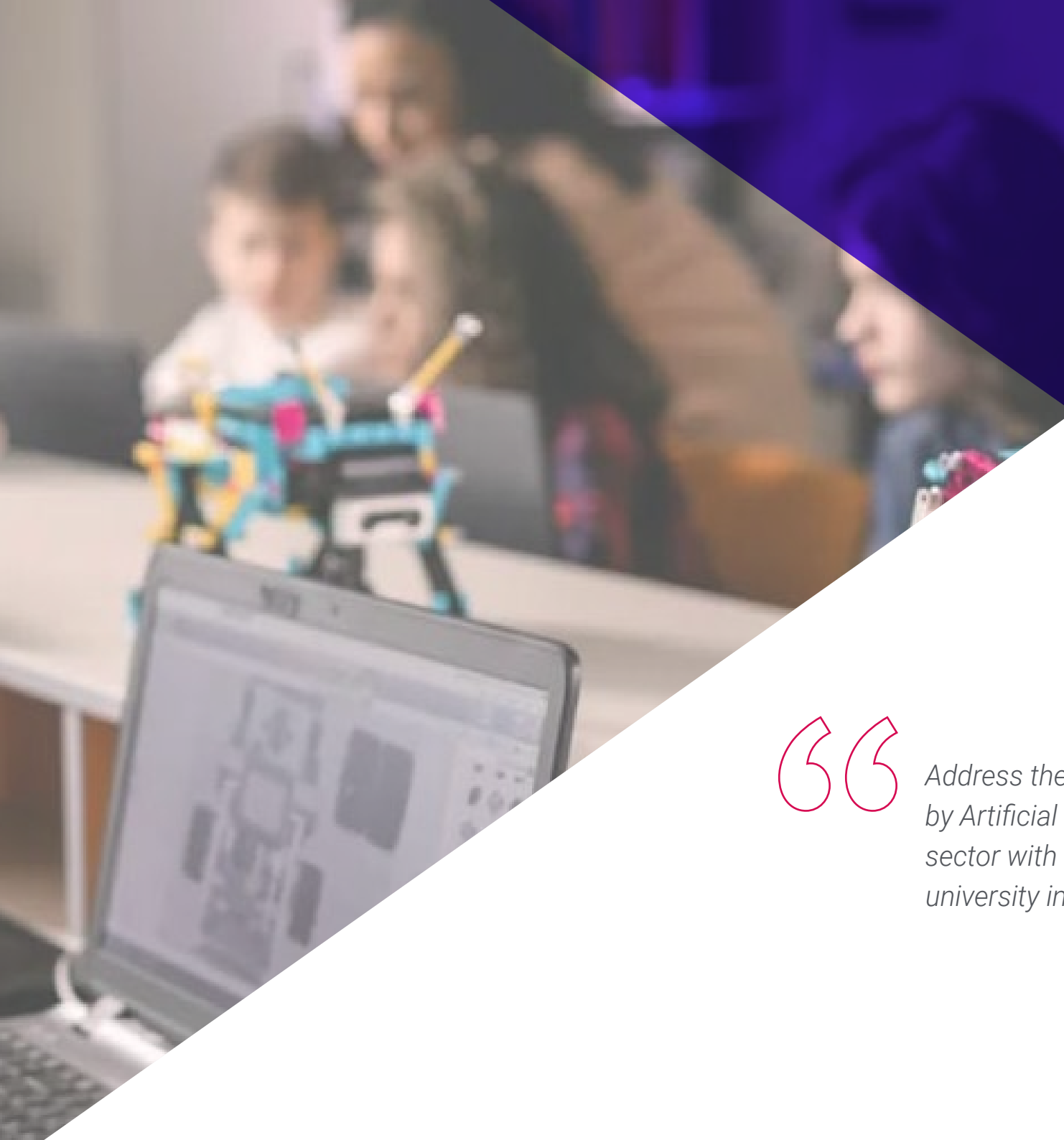
*p. 28*

# 01

# Introduction

In all schools, teachers handle sensitive student data. For example, contact information, academic records or even health information. Faced with this situation, teachers have a duty to ensure the privacy of such content to ensure the safety of students at all times. The consequences of improper data processing could range from legal repercussions to problems in the exercise of their profession. Hence the importance of teachers to have a thorough knowledge about the ethical considerations for the use of tools belonging to Artificial Intelligence (AI). For this reason, TECH launches this 100% online program that provides the keys to an ethical treatment of information in schools and other educational institutions.





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*Address the many opportunities offered by Artificial Intelligence for the education sector with TECH, in the best digital university in the world according to Forbes"*

The implementation of AI in Education has a growing future. The most important educational centers globally demand the incorporation of experts who handle these technological tools to improve the learning experience of students. However, to take advantage of these opportunities, teachers need to be vigilant about the challenges involved in computerized systems. This is especially relevant when it comes to accessing the personal data of third parties, as the security of this information is paramount to prevent problems such as harassment, identity theft and misuse of records.

In this context, TECH implements an advanced Postgraduate Certificate that will address in detail the ethical challenges faced by teachers during their work. In this way, professionals will be prepared to overcome any obstacle and guarantee their students the highest level of excellence in data processing. To this end, the syllabus will delve into the social and cultural impact of AI in the educational prism. At the same time, the syllabus will provide teachers with a broad understanding of the legislation in force regarding information policy in educational environments. The university program will also stand out for offering the most effective solutions to avoid actions far from deontology, so that students do not have to worry about their privacy. In addition, the training will provide global case studies of AI in education, so that experts can learn valuable lessons.

To strengthen the mastery of these contents, the program will apply the innovative *Relearningsystem*, a pioneer in TECH, which promotes the assimilation of complex concepts through the natural and progressive reiteration of the same. For the analysis of its contents, students will only need a device with Internet access (such as a cell phone, computer or *tablet*).

The **Postgraduate Certificate in Artificial Intelligence Ethics in Education** 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 in Education
- ♦ The graphic, schematic and practical contents with which it is conceived gather practical theoretical information on those 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



*Master the most cutting-edge technological tools to solve the ethical and technological challenges you face during your teaching work. And in 6 weeks only!"*

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*You will address the most innovative ethical solutions in the academic environment, guaranteeing the privacy of student data, through this program"*

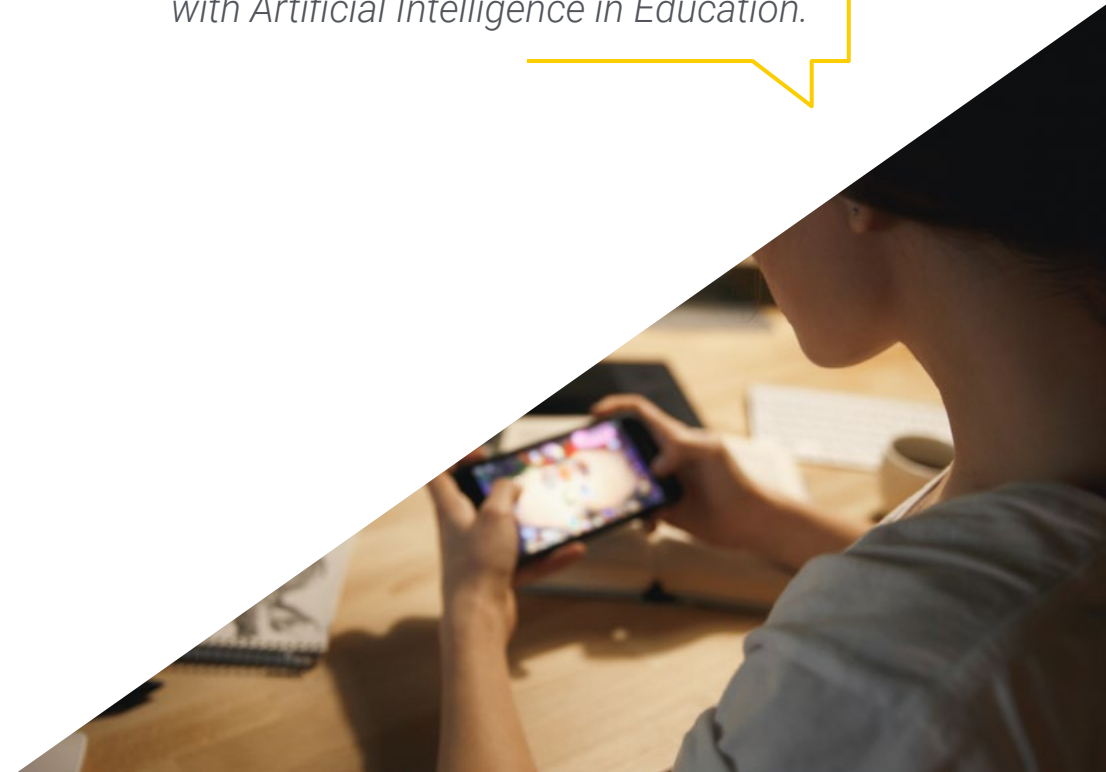
*After completing this academic pathway, you will be fully aware of the social and cultural impact of Machine Learning in education to promote responsible practices.*

*The Relearning system using TECH will lead you to advance in a much more agile way through legislation and data policies with Artificial Intelligence in Education.*

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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

Thanks to this university program and its didactic resources, graduates will stand out for their vast knowledge of the ethical foundations linked to AI in Education. In this way, the students' teaching practice will stand out for its personalized attention and quality. At the same time, the experts will understand the current legislative framework in order to perform their tasks with full confidence. Moreover, they will develop critical skills with which to evaluate the ethical and social impact of Machine Learning in the academic framework. In addition, they will generate innovative solutions to promote the responsible use of data in educational contexts.





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*Enter into an immersive and first class educational experience that will raise your professional horizons with an exclusive 100% online methodology. Enroll now!*



## General Objectives

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- ◆ Understand the theoretical foundations of Artificial Intelligence
- ◆ Study the different types of data and understand the data lifecycle
- ◆ 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
- ◆ Analyze bio-inspired computing and its relevance in the development of intelligent systems
- ◆ Analyze current strategies of Artificial Intelligence in various fields, identifying opportunities and challenges
- ◆ Understand the fundamental ethical principles related to the application of AI in educational settings
- ◆ Analyze the current legislative framework and the challenges associated with the implementation of AI in educational settings
- ◆ Encourage the responsible design and use of AI solutions in educational contexts, considering cultural diversity and gender equity
- ◆ Provide an in-depth understanding of the theoretical foundations of AI, including machine learning, neural networks, and natural language processing
- ◆ Understand the applications and impact of AI in teaching and learning, critically assessing its current and potential uses





## Specific Objectives

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- ♦ Identify and apply ethical practices in the handling of sensitive data within the educational context, prioritizing responsibility and respect
- ♦ Analyze the social and cultural impact of AI in Education, assessing its influence on educational communities
- ♦ Understand legislation and policies related to the use of data in educational settings involving AI
- ♦ Define the intersection between AI, cultural diversity, and gender equity in the educational context
- ♦ Evaluate the impact of AI on educational accessibility, ensuring equity in access to knowledge



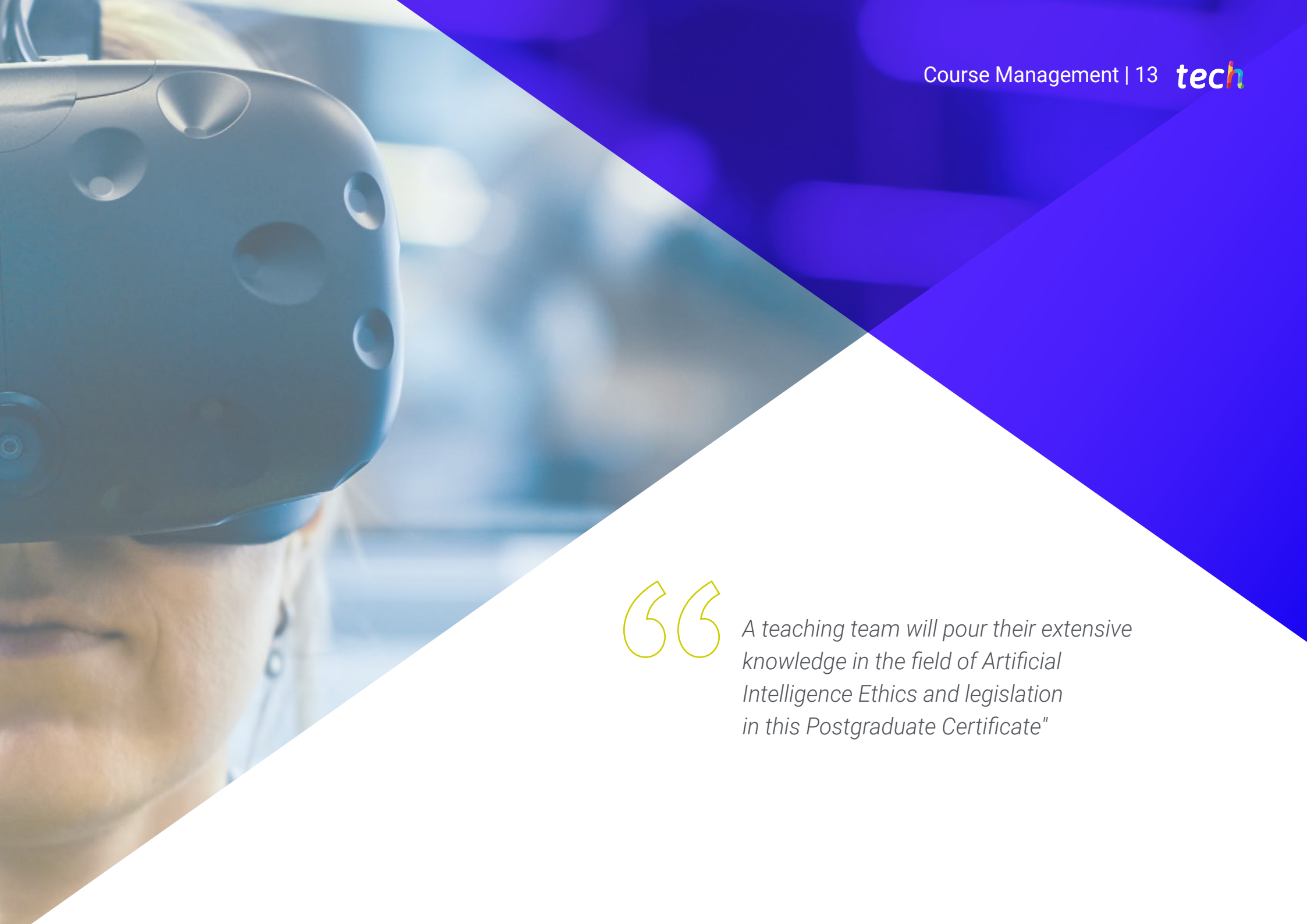
*Enhance your teaching skills thanks to a complete syllabus, which includes audiovisual content that will facilitate your assimilation of knowledge"*

03

# Course Management

TECH is widely recognized for providing educational excellence through its training. In order to maintain its quality intact, it has a teaching staff of international prestige for the delivery of this Teaching Staff. These specialists are more than authoritative voices in the Ethics and legislation of AI in Education: they have an extensive professional background, which has led them to be part of distinguished educational institutions to offer innovative solutions. In addition to their in-depth knowledge of the subject, these professionals possess advanced skills that allow them to master the most modern technological tools in the academic field.





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*A teaching team will pour their extensive knowledge in the field of Artificial Intelligence Ethics and legislation in this Postgraduate Certificate”*

## 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
- ♦ Professional Master's Degree in Executive MBA by the Isabel I University
- ♦ Professional Master's Degree in Sales and Marketing Management, Isabel I University
- ♦ Expert Master's Degree in Big Data by Hadoop Training
- ♦ Professional Master's Degree in Advanced Information Technologies from the University of Castilla - La Mancha
- ♦ Member of: SMILE Research Group



### Mr. Nájera Puente, Juan Felipe

- ♦ Data Analyst and Data Scientist
- ♦ Director of Studies and Research at the Council for Quality Assurance in Higher Education
- ♦ Production Programmer at Confiteca C.A
- ♦ Processes Consultant at Esefex Consulting
- ♦ Academic Planning Analyst at San Francisco de Quito University
- ♦ Professional Master's Degree in Big Data and Data Science at the International University of Valencia
- ♦ Industrial Engineer from San Francisco de Quito University

## Professors

### Ms. Martínez Cerrato, Yésica

- ♦ Education, Business and Marketing Specialist
- ♦ Responsible for Technical Training at Securitas Seguridad España
- ♦ Product Manager in Electronic Security at Securitas Direct
- ♦ Business Intelligence Analyst at Ricopia Technologies
- ♦ Computer Technician and Head of OTEC Computer Classrooms at the University of Alcalá de Henares
- ♦ Collaborator in the ASALUMA Association
- ♦ Degree in Electronic Communications Engineering at the Polytechnic School, University of Alcalá de Henares, Madrid

# 04

## Structure and Content

Throughout this university program, both the ethics and legislation of Machine Learning in the educational context will be addressed. The syllabus will focus on the understanding and ethical principles surrounding legislation. To this end, the syllabus will delve into aspects such as data policies when dealing with confidential information. In addition, the teaching materials will discuss how AI can be used responsibly in educational environments. In line with this, students will delve into concepts such as cultural diversity, gender equity and respect for human rights.







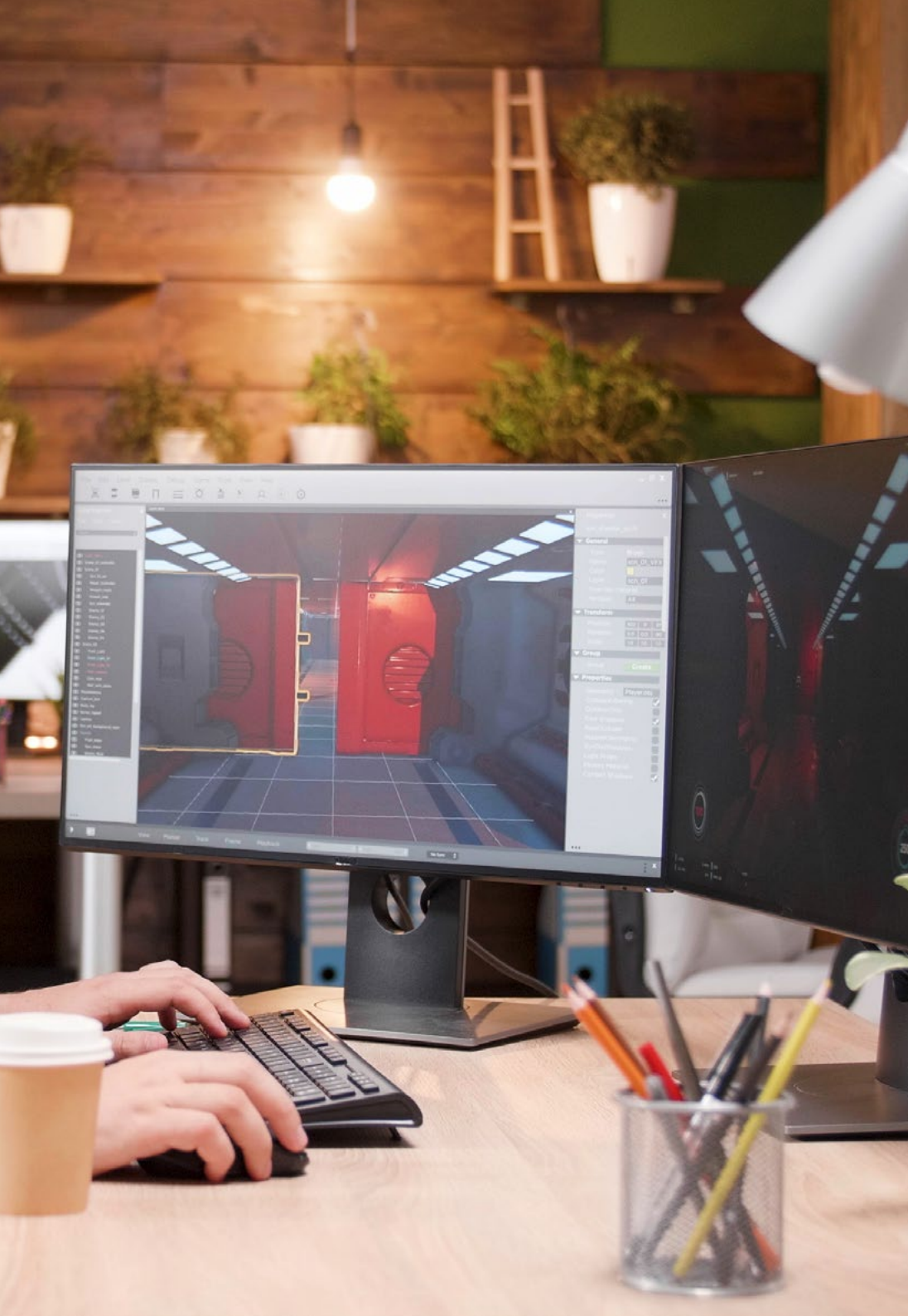
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*Through this Postgraduate Certificate, you will be highly prepared to overcome any ethical challenges you may face during your classes using Artificial Intelligence”*

## Module 1. Ethics and Legislation of Artificial Intelligence in Education

- 1.1. Identification and Ethical Treatment of Sensitive Data in the Educational Context
  - 1.1.1. Principles and Practices for the Ethical Handling of Sensitive Data in Education
  - 1.1.2. Challenges in Protecting the Privacy and Confidentiality of Student Data
  - 1.1.3. Strategies for Ensuring Transparency and Informed Consent in Data Collection
- 1.2. Social and Cultural Impact of AI in Education
  - 1.2.1. Analysis of the Effect of AI on Social and Cultural Dynamics in Educational Environments
  - 1.2.2. Exploration of how AI can Perpetuate or Mitigate Social Biases and Inequalities
  - 1.2.3. Assessing the Social Responsibility of Developers and Educators in the implementation of AI
- 1.3. AI Legislation and Data Policy in Educational Settings
  - 1.3.1. Review of Current Data and Privacy Laws and Regulations Applicable to AI in Education
  - 1.3.2. Impact of Data Policies on Educational Practice and Technological Innovation
  - 1.3.3. Development of Institutional Policies for the Ethical Use of AI in Education
- 1.4. Assessing the Ethical Impact of AI
  - 1.4.1. Methods for Assessing the Ethical Implications of AI Applications in Education
  - 1.4.2. Challenges in Measuring the Social and Ethical Impact of AI
  - 1.4.3. Creating Ethical Frameworks to Guide the Development and Use of AI in Education
- 1.5. Challenges and Opportunities of AI in Education
  - 1.5.1. Identification of Major Ethical and Legal Challenges in the Use of AI in Education
  - 1.5.2. Exploration of Opportunities for Improving Teaching and Learning through AI
  - 1.5.3. Balancing Technological Innovation and Ethical Considerations in Education
- 1.6. Ethical Application of AI Solutions in the Educational Environment
  - 1.6.1. Principles for Ethical Design and Deployment of AI Solutions in Education
  - 1.6.2. Case Studies on Ethical Applications of AI in Different Educational Contexts
  - 1.6.3. Strategies for Involving All Stakeholders in Ethical AI Decision-Making





- 1.7. AI, Cultural Diversity and Gender Equity
  - 1.7.1. Analysis of the Impact of AI on the Promotion of Cultural Diversity and Gender Equity in Education
  - 1.7.2. Strategies for Developing Inclusive and Diversity-Sensitive AI Systems
  - 1.7.3. Assessment of how AI can Influence the Representation and Treatment of Different Cultural and Gender Groups
- 1.8. Ethical Considerations for the use of AI Tools in Education
  - 1.8.1. Ethical Guidelines for the Development and Use of AI Tools in the Classroom
  - 1.8.2. Discussion on the Balance between Automation and Human Intervention in Education
  - 1.8.3. Analysis of Cases where the use of AI in Education has Raised Significant Ethical Issues
- 1.9. Impact of AI on Educational Accessibility
  - 1.9.1. Exploration of how AI can Enhance or Limit Accessibility in Education
  - 1.9.2. Analysis of AI Solutions designed to Increase Inclusion and Access to Education for All
  - 1.9.3. Ethical Challenges in Implementing AI Technologies to Improve Accessibility
- 1.10. Global Case Studies in AI and Education
  - 1.10.1. Analysis of International Case Studies on the Use of AI in Education
  - 1.10.2. Comparison of Ethical and Legal Approaches in Different Educational Cultural Contexts
  - 1.10.3. Lessons Learned and Best Practices from Global Cases in AI and Education

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

The Postgraduate Certificate in Artificial Intelligence Ethics in Education guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Artificial Intelligence Ethics in Education** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Certificate in Artificial Intelligence Ethics in Education**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma 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

**tech** technological  
university

personalized service innovation

knowledge present

online training

development

languages

virtual classroom

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