Postgraduate Certificate

Artificial Intelligence Ethics in Education

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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/in/education/postgraduate-certificate/artificial-intelligence-ethics-education**

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Introduction

The creation of Ethical Frameworks to guide the use of Artificial Intelligence (AI) in Education is vital to ensure that this technology is implemented responsibly and respecting the rights of all those involved in the educational process. For its establishment, teaching professionals must take into account a series of considerations. These include the involvement of all *stakeholders* (from educators to parents and representatives of the educational community) in the design process to ensure a diverse representation of perspectives. To help them with this task, TECH implements a university and 100% online program that will offer the most effective methods to evaluate the ethical implications of Machine Learning applications in educational environments.

Delve into institutional policies for the ethical use of Machine Learning at the world's best digital university according to Forbes"

The Ethics of Machine Learning in the educational field is of utmost importance, because of its impact on the teaching and development of people. In this sense, this system certifies that the privacy and data protection rights of students are respected, avoiding the misuse of personal information. This standard also requires that AI systems in education be transparent and that the decisions they make be explainable. This ensures that students, teachers and parents understand how the data are used once they have given informed consent.

In this context, TECH is launching a Postgraduate Certificate that will thoroughly address the ethical and legal aspects of Artificial Intelligence in the educational system. The syllabus will provide students with strategies to ensure transparency and privacy in data collection. In addition, the syllabus will delve into the current regulations applicable to Artificial Intelligence in Education, so that entrants perform safe procedures. In line with this, the didactic materials will focus on exploring opportunities to improve teaching processes. Throughout the training, professionals will be encouraged to contribute innovative proposals to improve learning.

This is a university program that equips students with robust competencies, so that they can use them in their daily practice, facing real situations. All this thanks to the support of an excellent teaching staff and access to a revolutionary teaching methodology, pioneer in TECH: *Relearning*, based on the repetition of key concepts to ensure optimal acquisition of knowledge. All that is required is that students have a device with Internet access (such as a cell phone, *tablet* or computer) to access the Virtual Campus and enjoy the most dynamic content on the academic market.

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 of the book provide theoretical and practical information on those 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

Apply strategies to involve all stakeholders in ethical decision making"

You will implement state-of-the-art methods for assessing the ethical implications of Artificial Intelligence applications"

You will address the most innovative ethical solutions in the academic environment, ensuring the privacy of student data at all times.

The Relearning system applied by TECH in its programs reduces the long hours of study so frequent in other teaching methods.

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 academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

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Objectives

Upon completion of this university program, teachers will stand out for their comprehensive approach to the ethical foundations linked to Artificial Intelligence in Education. In this way, the teaching practice of graduates 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 acquire 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 environments.

This program gives you the opportunity to update your knowledge in a real scenario, with the maximum scientific rigor of an institution at the forefront of technology"

General Objectives

- 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

- 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

Access 24 hours a day to the most innovative didactic material offered by this university program"

03

Course Management

One of TECH's top priorities when designing its programs is the formation of a teaching staff that provides knowledge and experience. Therefore, for this Postgraduate Certificate, TECH has selected outstanding professionals with a great trajectory in Artificial Intelligence Ethics in Education. They will present to the students, through audiovisual resources and practical exercises, the most recent advances and updates in the field, providing an exclusive and highly useful material.

An experienced teaching group will guide you throughout the learning process and resolve any doubts that may arise"

Management

Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus 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
- 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
- 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 Seguridad España
- 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

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Structure and Content

This Postgraduate Certificate will address in detail both the ethics and legislation of Artificial Intelligence in education. The syllabus will focus on factors such as data policies when dealing with confidential information. At the same time, the syllabus will delve into the impact of Machine Learning in promoting cultural diversity and gender equity in Education. The didactic contents will also balance technological innovation and ethical considerations in the classroom. Graduates will apply strategies to develop inclusive and diversity-sensitive Artificial Intelligence systems.

A complete and current syllabus configured as a high-quality training tool of exceptional quality"

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 training program offers 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 Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.

It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.

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:

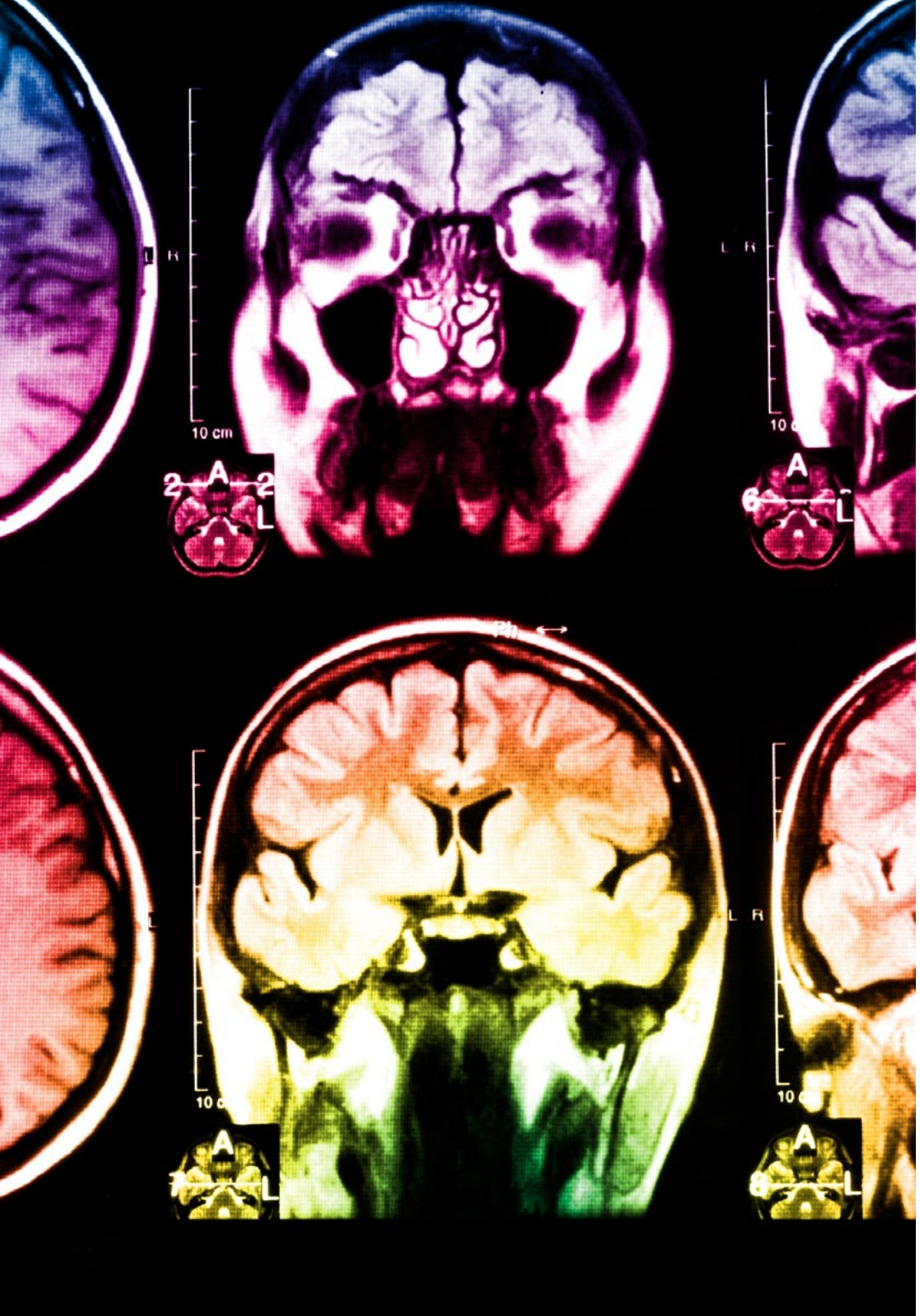
1. Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
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

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our University is the first in the world to combine case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

Educators will learn through real cases and by solving 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 we have trained more than 85,000 educators with unprecedented success in all specialties. 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 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 our 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 specialist educators who teach the course, specifically for the course, so that the teaching content is really 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.

Educational Techniques and Procedures on Video

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.

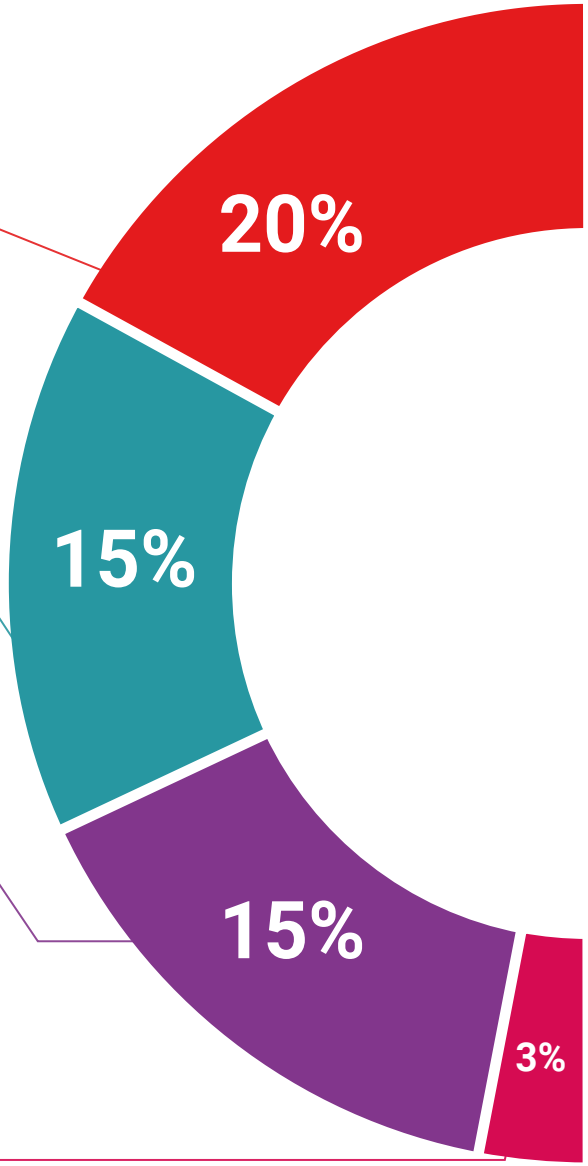
Interactive Summaries

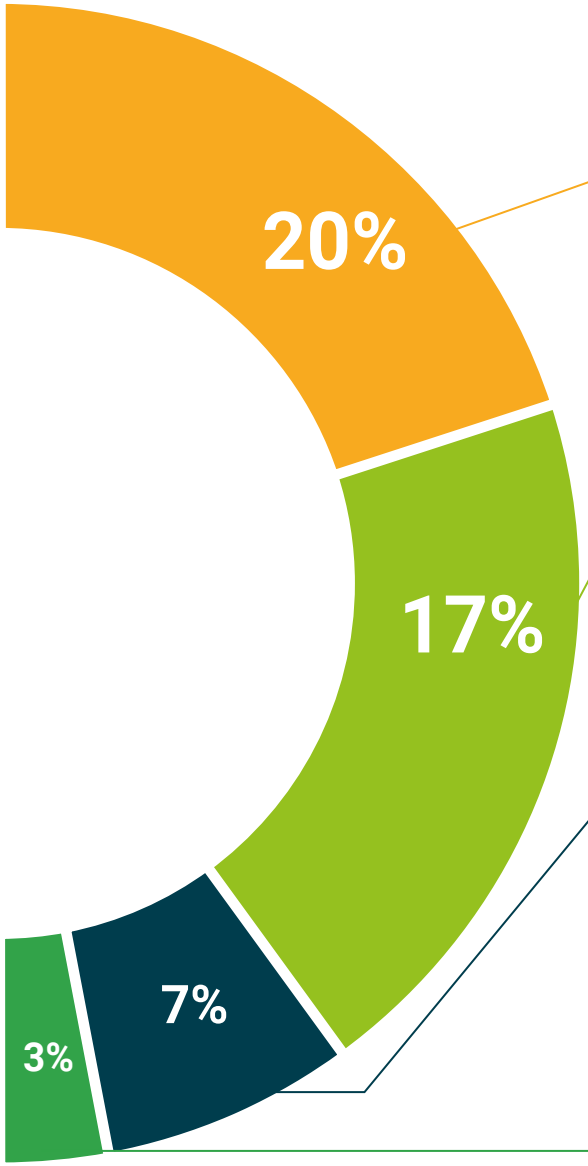
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive multimedia content presentation training Exclusive system 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 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 your goals.

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.

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 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.

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

The **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 certificate 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 Nº of Hours: **150 h.**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Awards the following

CERTIFICATE

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Artificial Intelligence Ethics in Education

This is a qualification awarded by this University, equivalent to 150 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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