

Postgraduate Certificate

Ethics and Environment in Design and Artificial Intelligence



Postgraduate Certificate Ethics and Environment in Design and Artificial Intelligence

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

Website: www.techtitute.com/in/artificial-intelligence/postgraduate-certificate/ethics-environment-design-artificial-intelligence

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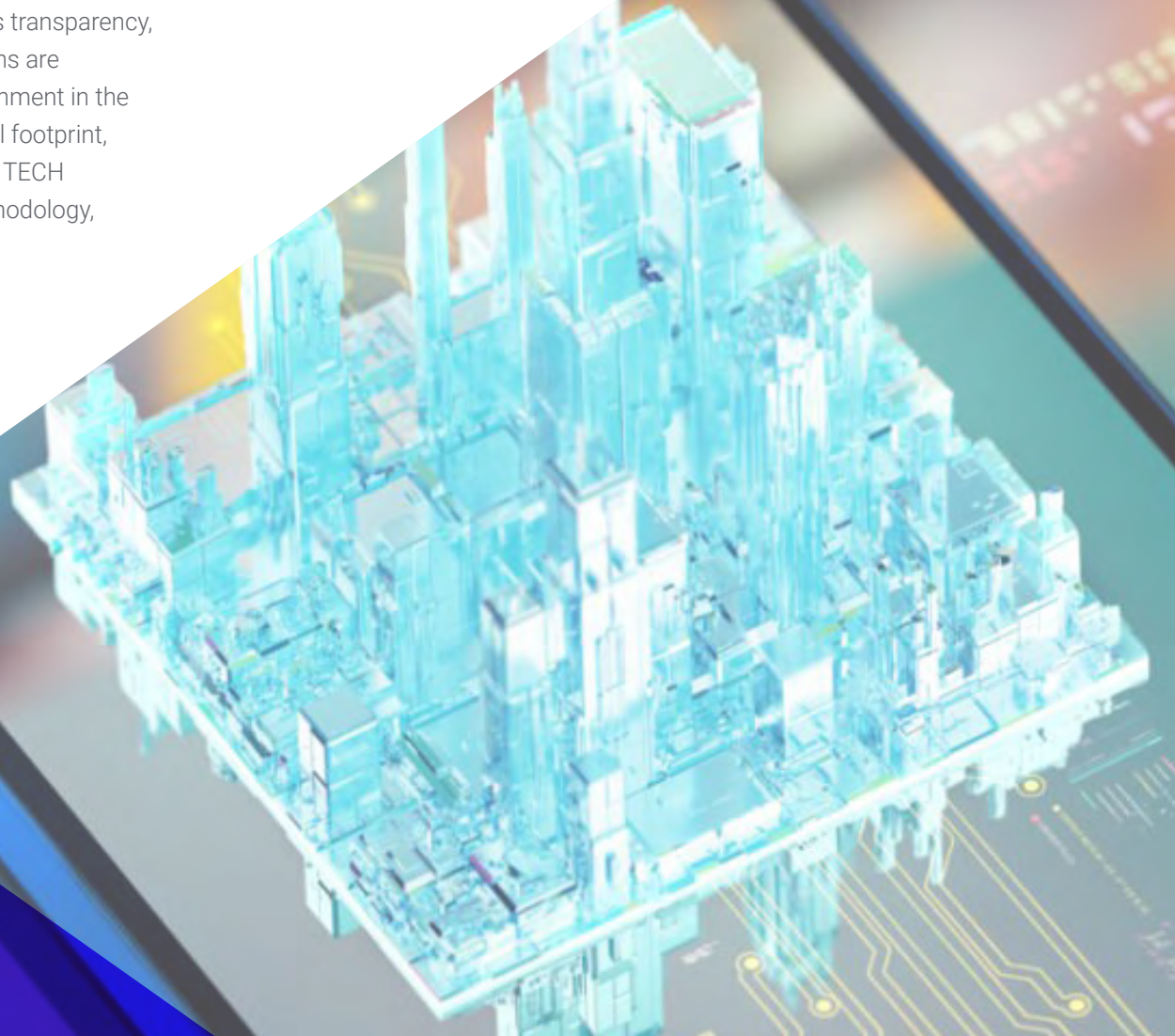
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01

Introduction

The convergence between Ethics and Environment in Design and Artificial Intelligence (AI) is fundamental to shaping a sustainable and responsible future. Indeed, this approach ensures that emerging technologies respect human rights, promoting equity and inclusion. Ethics in Design and AI thus drives transparency, responsibility and accountability, ensuring that automated decisions are understandable and fair. On the other hand, attention to the environment in the development of digital technologies seeks to reduce the ecological footprint, minimizing the consumption of resources and energy. That is why TECH has devised this program, based on the pioneering *Relearning* methodology, consisting of the reiteration of key concepts for optimal learning.



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The combination of ethics, environment and design in AI will be essential to drive innovations that are not only effective, but also respectful of the planet"

The inclusion of Ethics and Environment in the Design and implementation of Artificial Intelligence (AI) brings crucial and multifaceted benefits. In ethical terms, this approach ensures that AI systems are developed and used in a responsible manner, considering principles such as equity, privacy and social justice. On the other hand, by integrating environmental concerns, it encourages the creation of more resource-efficient AI technologies, reducing their impact on the planet and promoting sustainable practices.

This is the origin of this Postgraduate Certificate in Ethics and Environment in Design and Artificial Intelligence, a comprehensive program that will examine the crucial intersection between Ethics, Environment and emerging technologies, with a particular focus on Artificial Intelligence.

In this way, the designers will be immersed in a variety of fundamental areas, with the purpose of understanding and promoting ethical and sustainable practices.

In addition, the ethical dilemmas inherent to the integration of AI in Design will be explored, with an emphasis on equity, transparency and the social impact of these technologies. In addition, the importance of adopting design practices that minimize the environmental footprint, promoting the use of sustainable materials and strategies for responsible resource management will be addressed.

Likewise, this university program will provide a solid foundation for future Design and AI professionals, equipping them with the skills and awareness necessary to address the ethical and environmental challenges inherent in the creation and application of emerging technologies.

For this reason, TECH has designed an academic program based on the innovative *Relearning* method. This educational approach focuses on reiterating essential principles to ensure a thorough understanding of the content. In addition, accessibility is key: only a device with an Internet connection is required to access the material at any time, freeing the students from the need to be physically present or adhere to fixed schedules.

This **Postgraduate Certificate in Ethics and Environment in Design and Artificial Intelligence** contains the most complete and up-to-date program on the market.

The most important features include:

- ♦ Practical cases presented by experts in Ethics and Environment in Design and AI
- ♦ The graphic, schematic and practical contents of the book provide technical and practical 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



Concern for Ethics and the Environment will lay the foundation for a future where innovation and care for the environment complement each other"

“

You will explore how waste reduction, integration of emotion recognition and environmental responsibility can converge in the Design industry to create innovative and conscious solutions”

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.

By incorporating ethical and environmental elements into your design projects, you will benefit the environment and improve the user experience and functionality of products and services.

You will become an agent of change, promoting responsible innovation and sustainable development in an increasingly technology-driven world.



02 Objectives

This course presents the convergence between technological innovation and ethical and environmental responsibility. Its main objective will be to train a new generation of Design and AI professionals, imbued with a deep ethical commitment and a sustainable perspective. In this sense, the program will challenge traditional paradigms, inciting graduates to embrace ethics as a cornerstone in AI development, thus infusing practices that preserve the environment and foster equity in every line of code and Design.





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*You won't just create technology!
You will create the best, most
ethical and sustainable technology
for a world that needs it"*



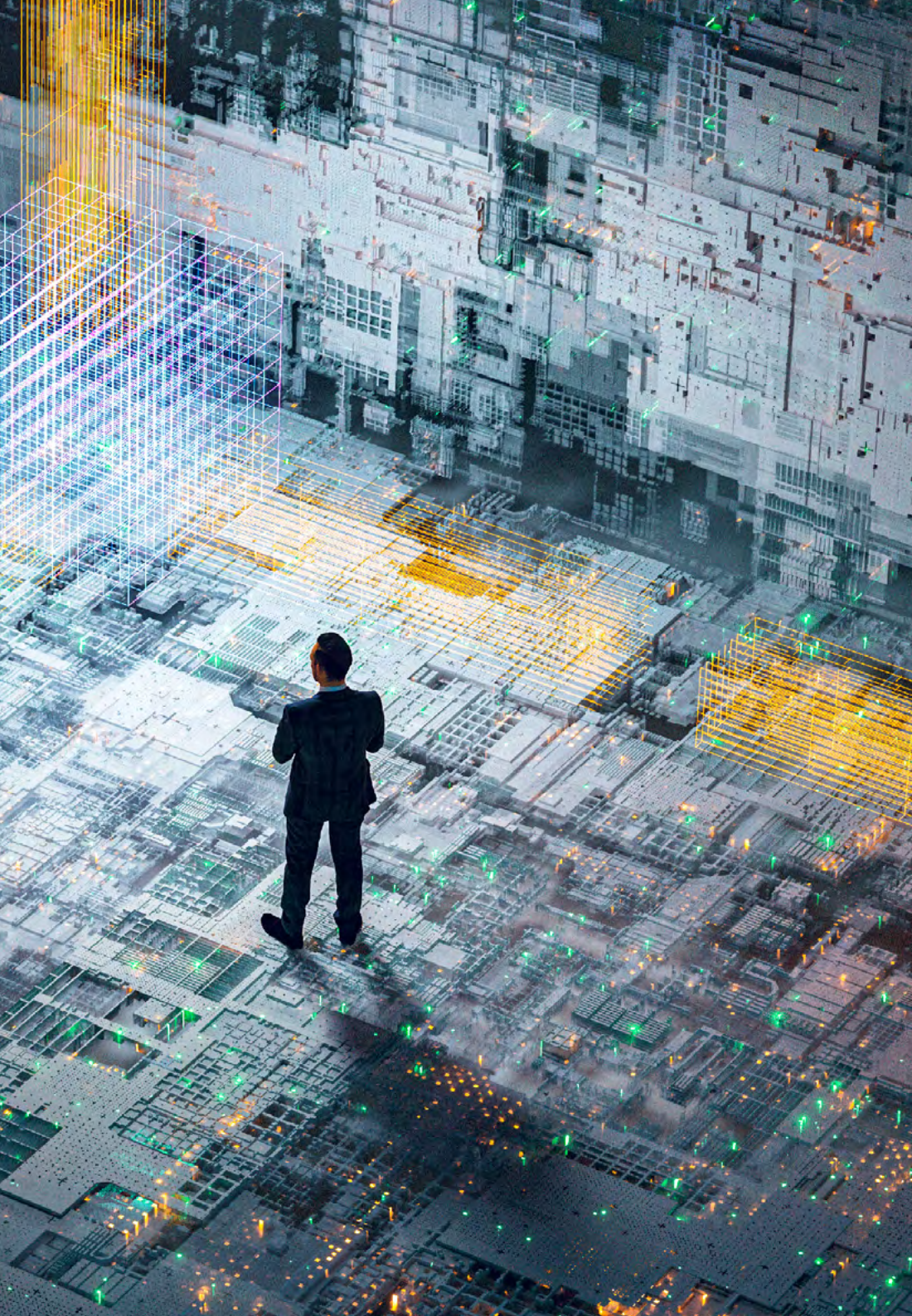
General Objectives

- ♦ Develop skills to implement artificial intelligence tools in design projects, including automatic content generation, design optimization and pattern recognition
- ♦ Critically analyze the challenges and opportunities when implementing personalized designs in industry using Artificial Intelligence
- ♦ Understand the transformative role of Artificial Intelligence in design and manufacturing process innovation



You will be able to merge creativity and ethics in the creation of innovative solutions that not only improve people's lives, but also contribute to the preservation of the planet"





Specific Objectives

- ◆ Understand the ethical principles related to Design and Artificial Intelligence, cultivating an ethical awareness in decision making
- ◆ Focus on the ethical integration of technologies, such as emotion recognition, ensuring immersive experiences that respect the user's privacy and dignity
- ◆ Promote social and environmental responsibility in Game Design and in the industry in general, considering ethical aspects in representation and gameplay
- ◆ Generate sustainable practices in design processes, ranging from waste reduction to the integration of responsible technologies, contributing to the preservation of the environment
- ◆ Analyze how AI technologies can affect society, considering strategies to mitigate their possible negative impacts

03

Course Management

The teachers in this Postgraduate Certificate are pioneers in their field, committed and passionate professionals who combine their vast practical experience with a deep theoretical understanding. These educators will not only teach, but inspire their students to explore the transformative potential of ethical and sustainable design in the age of Artificial Intelligence. Their approach will not be limited to transmitting information, but to foster critical reflection and innovative thinking to address complex challenges.





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Teachers will guide you to become engaged, aware of the ethical and environmental impact of your creations on society"

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. Maldonado Pardo, Chema

- ♦ Graphic Design Specialist
- ♦ Graphic Designer at DocPath Document Solutions S.L
- ♦ Founding Partner and Head of the Design and Advertising Department at D.C.M. Difusión Integral de Ideas, C.B
- ♦ Head of the Design and Digital Printing Department at Ofipaper, La Mancha S.L
- ♦ Graphic Designer in Ático, Estudio Gráfico
- ♦ Graphic Designer and Craftsman Printer at Lozano Artes Gráficas
- ♦ Layout and Graphic Designer in Gráficas Lozano
- ♦ ETSI Telecommunications by the Polytechnic University of Madrid
- ♦ ETS Computer Systems ETSI by the University of Castilla-La Mancha

Professors

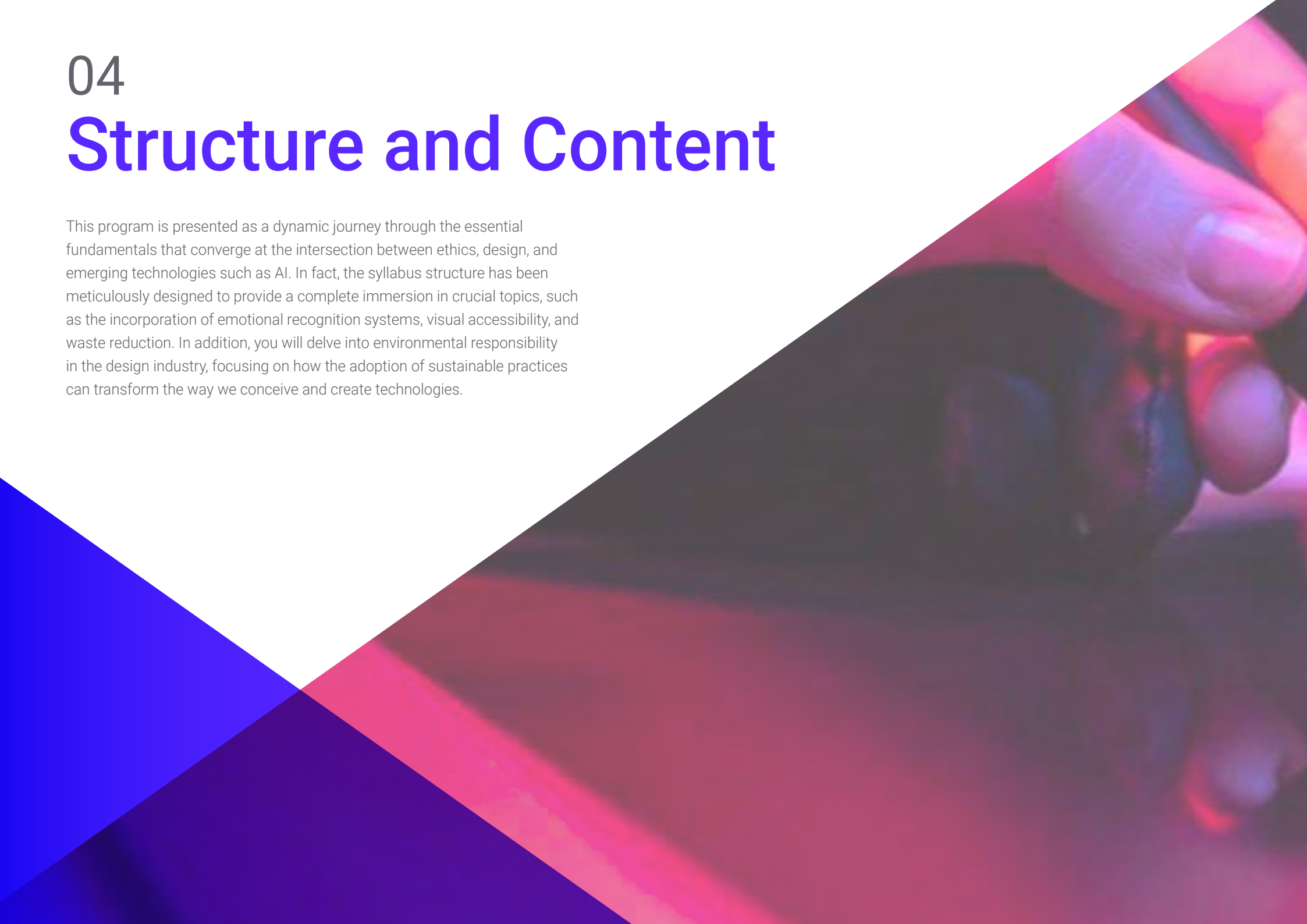
Ms. Parreño Rodríguez, Adelaida

- ♦ Technical Developer & Energy Communities Engineer
- ♦ *Technical Developer & Energy Communities Engineer* at the University of Murcia
- ♦ *Manager in Research & Innovation in European Projects* at the University of Murcia
- ♦ *Technical Developer & Energy/Electrical Engineer & Researcher* in PHOENIX Project and FLEXUM (ONENET) Project
- ♦ Content Creator in Global UC3M Challenge
- ♦ Ginés Huertas Martínez Award (2023)
- ♦ Professional Master's Degree in Renewable Energies from the Polytechnic University of Cartagena
- ♦ Degree in Electrical Engineering (bilingual) from Carlos III University of Madrid

04

Structure and Content

This program is presented as a dynamic journey through the essential fundamentals that converge at the intersection between ethics, design, and emerging technologies such as AI. In fact, the syllabus structure has been meticulously designed to provide a complete immersion in crucial topics, such as the incorporation of emotional recognition systems, visual accessibility, and waste reduction. In addition, you will delve into environmental responsibility in the design industry, focusing on how the adoption of sustainable practices can transform the way we conceive and create technologies.



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You will be empowered to lead significant change in the world of Design and AI towards a more ethical, equitable and sustainable future”

Module 1. Ethics and Environment in Design and Artificial Intelligence

- 1.1. Environmental Impact in Industrial Design: Ethical Approach
 - 1.1.1. Environmental Awareness in Industrial Design
 - 1.1.2. Life Cycle Assessment and Sustainable Design
 - 1.1.3. Ethical Challenges in Design Decisions with Environmental Impact
 - 1.1.4. Sustainable Innovations and Future Trends
- 1.2. Improving Visual Accessibility in Graphic Design with Responsibility
 - 1.2.1. Visual Accessibility as an Ethical Priority in Graphic Design
 - 1.2.2. Tools and Practices for the Improvement of Visual Accessibility
 - 1.2.3. Ethical Challenges in the Implementation of Visual Accessibility
 - 1.2.4. Professional Responsibility and Future Improvements in Visual Accessibility
- 1.3. Waste Reduction in the Design Process: Sustainable Challenges
 - 1.3.1. Importance of Waste Reduction in Design
 - 1.3.2. Strategies for Waste Reduction at Different Stages of Design
 - 1.3.3. Ethical Challenges in Implementing Waste Reduction Practices
 - 1.3.4. Corporate Commitments and Sustainable Certifications
- 1.4. Sentiment Analysis in Editorial Content Creation: Ethical Considerations
 - 1.4.1. Analysis of Sentiment and Ethics in Editorial Content
 - 1.4.2. Algorithms for Sentiment Analysis and Ethical Decisions
 - 1.4.3. Impact on Public Opinion
 - 1.4.4. Challenges in Sentiment Analysis and Future Implications
- 1.5. Integration of Emotion Recognition for Immersive Experiences
 - 1.5.1. Ethics in the Integration of Emotion Recognition in Immersive Experiences
 - 1.5.2. Emotion Recognition Technologies
 - 1.5.3. Ethical Challenges in Creating Emotionally Aware Immersive Experiences
 - 1.5.4. Future Perspectives and Ethics in the Development of Immersive Experiences
- 1.6. Ethics in Video Game Design: Implications and Decisions
 - 1.6.1. Ethics and Responsibility in Videogame Design
 - 1.6.2. Inclusion and Diversity in Video Games: Ethical Decisions
 - 1.6.3. Microtransactions and Ethical Monetization in Videogames
 - 1.6.4. Ethical Challenges in the Development of Narratives and Characters in Videogames



- 1.7. Responsible Design: Ethical and Environmental Considerations in the Industry
 - 1.7.1. Ethical Approach to Responsible Design
 - 1.7.2. Tools and Methods for Responsible Design
 - 1.7.3. Ethical and Environmental Challenges in the Design Industry
 - 1.7.4. Corporate Commitments and Certifications for Responsible Design
- 1.8. Ethics in the integration of AI in User Interfaces
 - 1.8.1. Exploration of How Artificial Intelligence in User Interfaces Raises Ethical Challenges
 - 1.8.2. Transparency and Explainability in AI Systems in User Interfaces
 - 1.8.3. Ethical Challenges in the Collection and Use of User Interface Data
 - 1.8.4. Future Perspectives on the Ethics of AI in User Interfaces
- 1.9. Sustainability in Design Process Innovation
 - 1.9.1. Recognition of the Importance of Sustainability in the Innovation of Design Processes
 - 1.9.2. Development of Sustainable Processes and Ethical Decision Making
 - 1.9.3. Ethical Challenges in the Adoption of Innovative Technologies
 - 1.9.4. Business Commitments and Sustainability Certifications in Design Processes
- 1.10. Ethical Aspects in the Application of Technologies in Design
 - 1.10.1. Ethical Decisions in the Selection and Application of Design Technologies
 - 1.10.2. Ethics in the Design of User Experiences with Advanced Technologies
 - 1.10.3. Intersections of Ethics and Technologies in Design
 - 1.10.4. Emerging Trends and the Role of Ethics in the Future Direction of Design with Advanced Technologies

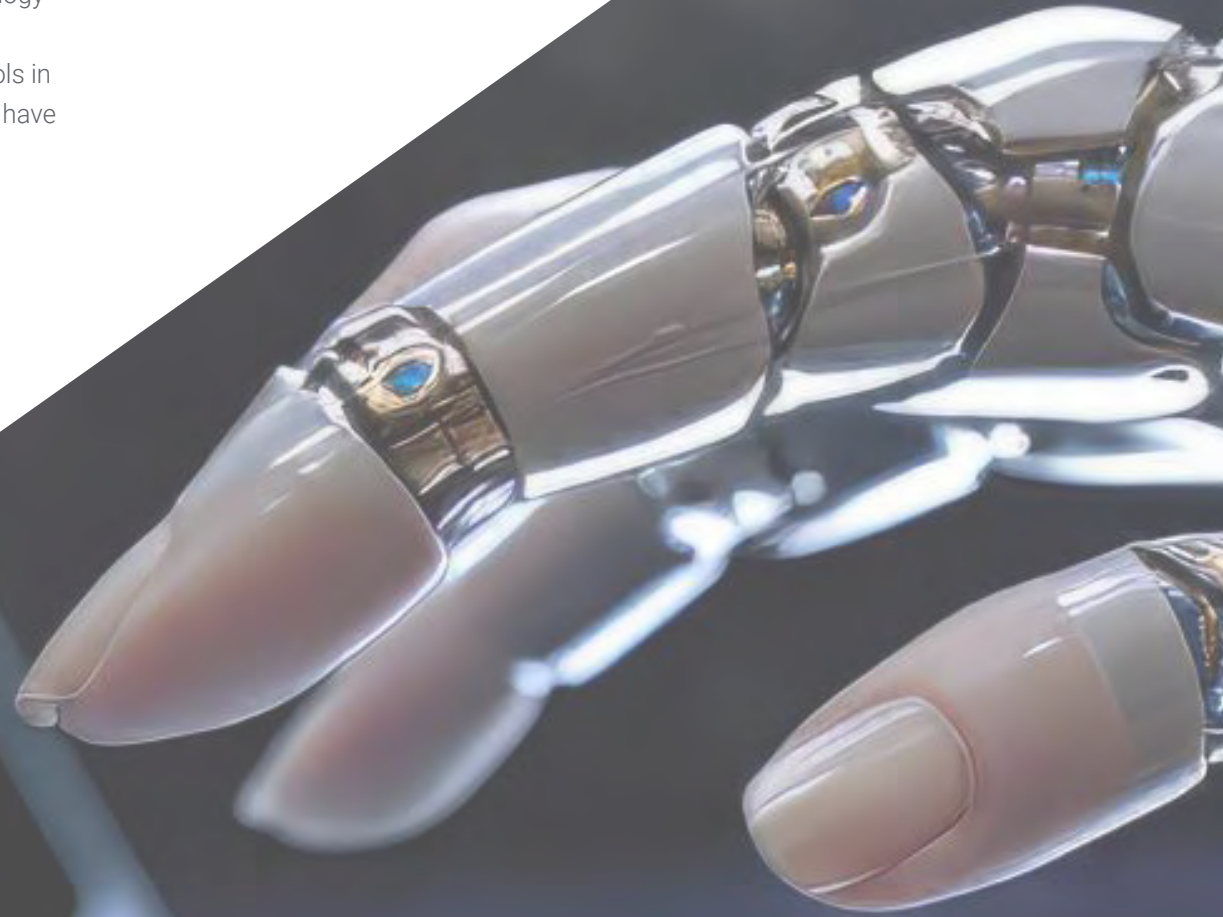
“*Immerse yourself in a comprehensive and advanced program, unique in creating highly qualified professionals in the application of Artificial Intelligence in Design*”

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 Ethics and Environment in Design and Artificial Intelligence 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 Ethics and Environment in Design and Artificial Intelligence** 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 Ethics and Environment in Design and Artificial Intelligence**

Official N° of Hours: **150 h.**



*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.



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Postgraduate Certificate

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