Postgraduate Certificate

Design-User Interaction and Artificial Intelligence

tech *global university*

Postgraduate Certificate
Design-User Interaction and Artificial Intelligence

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

Website: **www.techtitute.com/us/design/postgraduate-certificate/design-user-interaction-artificial-intelligence**

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Introduction

One of the challenges for designers is to create more sustainable and environmentally friendly solutions. Artificial Intelligence (AI) plays a key role in this respect, as it can make improvements that reduce environmental impact. For example, Machine Learning is used to analyze the complete cycle of a product, from the extraction of raw materials to its final disposal. This is useful for identifying areas where improvements can be made. Likewise, these systems detect opportunities to reduce waste in both production and consumption, contributing to the efficient use of resources. Given this, TECH develops a digital program that will provide strategies and practical projects to improve sustainability with AI.

You will drive innovation to offer more intuitive, efficient and customized solutions thanks to this 100% online program."

The Design-User Intersection and Machine Learning allows you to create more effective, intuitive and personalized digital product or service experiences. In this way, AI is useful for understanding the behavior and preferences of the public, which enables specific functionalities aimed at improving their satisfaction. In addition, virtual assistants provide real-time assistance to individuals, answering their questions. This significantly improves communication between people and the system. In addition, AI helps to design user interfaces that automatically adapt to both the needs and preferences of the audience, which facilitates the navigation and use of websites.

In this context, TECH implements a Postgraduate Certificate that will provide a deep dive into the convergence between Interactive Design, User Experience and AI. Designed by specialists in the field, the syllabus will analyze key aspects ranging from contextual adaptation to the seamless integration of virtual assistants. The program will equip students with advanced skills to drive personalized and innovative digital experiences. At the same time, the syllabus will delve into adaptive design for different devices with Machine Learning, keeping in mind the algorithms and interface optimization for both mobile and desktop experiences.

TECH has designed a solid academic program based on the revolutionary Relearning methodology. This educational system is characterized by reiterating key concepts to ensure a complete understanding of the content. Similarly, accessibility is a priority, since students will only require an electronic device connected to the Internet (such as a cell phone, tablet or computer) to access the material, freeing them from the obligation of face-to-face attendance or complying with specific schedules. Undoubtedly, a learning experience that will serve graduates to raise their professional horizons to a higher level.

The **Postgraduate Certificate in Design-User Interaction and Artificial Intelligence** contains the most complete and up-to-date academic program on the market. Its most notable features are:

- Case studies presented by experts in Design-User Interaction and Artificial Intelligence
- 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

You will gain a holistic approach that will drive your excellence in People Driven Design and cutting-edge technology."

You'll delve into Adaptive Design, which will equip you with greater control when designing device-specific versions for different devices with Machine Learning."

Do you want to specialize in Predictive User Interaction Analysis? Achieve it with this Postgraduate Certificate in only 180 hours.

Relearning will allow you to learn with less effort and more performance, getting more involved in your professional specialization.

The program's teaching staff includes professionals from the sector who contribute their work experience to this specializing 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 and experienced experts.
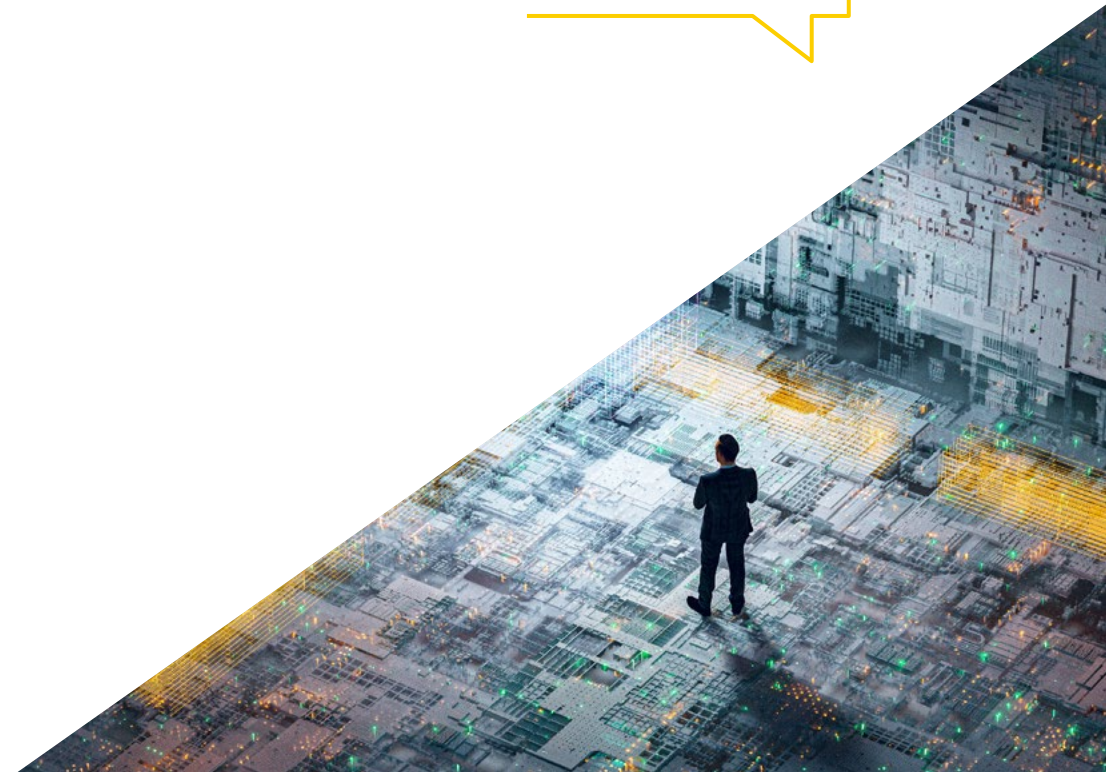
02
Objectives

This university program will provide graduates with a solid understanding of the relationship between User-Design and Machine Learning. This will enable professionals to shape exceptional digital experiences. Upon completion of the program, designers will have gained advanced competencies that will enable them to lead the digital revolution and redefine the future of human-IA interaction. They will be highly capable of successfully overcoming the challenges they will face during the course of their work.

Through insightful analysis of user emotions, you will be able to anticipate and satisfy User needs."

General Objectives

- Develop skills in adaptive design, considering user behavior and applying advanced artificial intelligence tools.

- Use predictive AI algorithms to anticipate user interactions, enabling proactive and efficient design responses

- Critically analyze the challenges and opportunities when implementing personalized designs in industry using artificial intelligence

Study through innovative multimedia didactic formats that will optimize your updating process"

Specific Objectives

- Understand the symbiosis between Interactive Design and AI to optimize the user experience
- Develop skills in Adaptive Design, considering user behavior and applying advanced AI tools
- Critically analyze the challenges and opportunities when implementing personalized designs in industry using AI
- Use predictive AI algorithms to anticipate user interactions, enabling proactive and efficient design responses
- Develop AI-based recommender systems that suggest relevant content, products or actions to users

Course Management

In order to provide an education based on excellence, TECH has an exclusive syllabus created by experts in Design-User Interaction and Machine Learning. These professionals have extensive professional experience, after working for prestigious companies in this field. For this reason, the academic itinerary emphasizes a content with the most recent developments that have occurred in this field of specialization. Therefore, graduates have the guarantees they demand to become professionals, where they will increase their knowledge with the support of the best teaching staff.

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

International Guest Director

Flaviane Peccin is a leading **data scientist** with more than a decade of international experience applying **predictive modeling** and **machine learning** in various industries. Throughout her career, she has led innovative projects in the field of **Artificial Intelligence, data analytics and data-driven business decision making**, consolidating herself as an influential figure in the **digital transformation** of large corporations.

In this regard, she has held roles of great importance at **Visa**, as **Director of Artificial Intelligence and Machine Learning**, where she has been responsible for defining and executing the company's global **data science** strategy, with a particular focus on **Machine Learning** as a service. In addition, her leadership has ranged from collaboration with **commercial and scientific stakeholders**, to the implementation of **advanced algorithms** and **scalable technology solutions**, which have driven efficiency and accuracy in decision making. As such, her experience in integrating emerging trends in **Artificial Intelligence and Gen AI** has positioned her at the forefront of her field.

She has also worked as **Director** of **Data Science** in this same organization, leading a team of experts that has provided **analytical consulting** to clients in Latin America, developing predictive models that have optimized the cardholder lifecycle and significantly improved the management of credit and debit portfolios. Her career has also included key positions at **Souza Cruz, HSBC, GVT** and Telefónica, where she has contributed to the development of innovative solutions for risk management, **analytical models and fraud control.**

Therefore, with extensive experience in Latin American and US markets, Flaviane Peccin has been instrumental in the adaptation of products and services, using **advanced statistical techniques and deep data analysis.**

Ms. Peccin, Flaviane

- Director of Artificial Intelligence and Machine Learning at Visa, Miami, United States
- Director of Data Science at Visa
- Customer Analytics Manager at Visa
- Coordinator/Data Science Specialist at Souza Cruz
- Quantitative Modeling Analyst at HSBC
- Credit and Collections Analyst at GVT
- Statistical Analyst at Telefónica
- Master's Degree in Numerical Methods in Engineering from Universidade Federal do Paraná
- Bachelor's Degree in Statistics from Universidade Federal do Paraná

Thanks to TECH, you will be able to learn with the best professionals in the world"

Management

Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometeus Global Solutions
- CTO at Korporate Technologies
- CTO at AI Shepherds GmbH
- Consultant and Strategic Business Advisor at Alliance Medical
- Director of Design and Development at DocPath
- 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 the University of Castilla La Mancha
- Master in Executive MBA from Universidad Isabel I
- Master's Degree in Sales and Marketing Management, Isabel I University
- Expert Master's Degree in Big Data by Hadoop Training
- Master's Degree in Advanced Information Technologies from the University of Castilla La Mancha
- Member of: SMILE Research Group

Mr. Maldonado Pardo, Chema

- 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, Graphic Studio
- Graphic Designer and Craftsman Printer in 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 at the University of Murcia*
- Technical Developer & Energy Communities Engineer at the University of Murcia
- Manager in Research & Innovation in European Projects at the University of Murcia
- Content Creator in Global UC3M Challenge
- Ginés Huertas Martínez Award (2023)
- Master's Degree in Renewable Energies by the Polytechnic University of Cartagena
- Degree in Electrical Engineering (bilingual) from the Carlos III University of Madrid

Structure and Content

This university program will focus on the Intersection between Design, User Experience and cutting-edge technology. To this end, the syllabus will cover everything from the essential fundamentals to the latest trends in the field. Throughout the syllabus, students will delve into aspects such as contextual adaptation, strategic implementation of virtual assistants and emotional analysis of consumers. In this way, graduates will design highly personalized and effective digital experiences. In tune with this, students will develop indispensable practical skills with which they will revolutionize the digital world.

"The combination of theory and practice will allow you to develop key skills, such as emotional user analysis, contextual adaptation and effective implementation of virtual assistants"

Module 1. Design-User Interaction and AI

1.1. Contextual Suggestions for Behavior-Based Design
- 1.1.1. Understanding User Behavior in Design
- 1.1.2. AI-based Contextual Suggestion Systems
- 1.1.3. Strategies to Ensure Transparency and User Consent
- 1.1.4. Trends and Possible Improvements in Behavior-based Personalization

1.2. Predictive Analysis of User Interactions
- 1.2.1. Importance of Predictive Analytics in User-Design Interactions
- 1.2.2. Machine Learning Models for Predicting User Behavior
- 1.2.3. Integration of Predictive Analytics in User Interface Design
- 1.2.4. Challenges and Dilemmas in Predictive Analytics

1.3. Adaptive Design to Different Devices with AI
- 1.3.1. Principles of Device Adaptive Design
- 1.3.2. Content Adaptation Algorithms
- 1.3.3. Interface Optimization for Mobile and Desktop Experiences
- 1.3.4. Future Developments in Adaptive Design with Emerging Technologies

1.4. Automatic Generation of Characters and Enemies in Video Games
- 1.4.1. The Need for Automatic Generation in the Development of Video Games
- 1.4.2. Algorithms for Character and Enemy Generation
- 1.4.3. Customization and Adaptability in Automatically Generated Characters
- 1.4.4. Development Experiences: Challenges and Lessons Learned

1.5. AI Improvement in Game Characters
- 1.5.1. Importance of Artificial Intelligence in Video Game Characters
- 1.5.2. Algorithms to Improve the Behavior of Characters
- 1.5.3. Continuous Adaptation and Learning of AI in Games
- 1.5.4. Technical and Creative Challenges in Character AI Improvement

1.6. Custom Design in Industry: Challenges and Opportunities
- 1.6.1. Transformation of Industrial Design with Personalization
- 1.6.2. Enabling Technologies for Customized Design
- 1.6.3. Challenges in Implementing Customized Design at Scale
- 1.6.4. Opportunities for Innovation and Competitive Differentiation
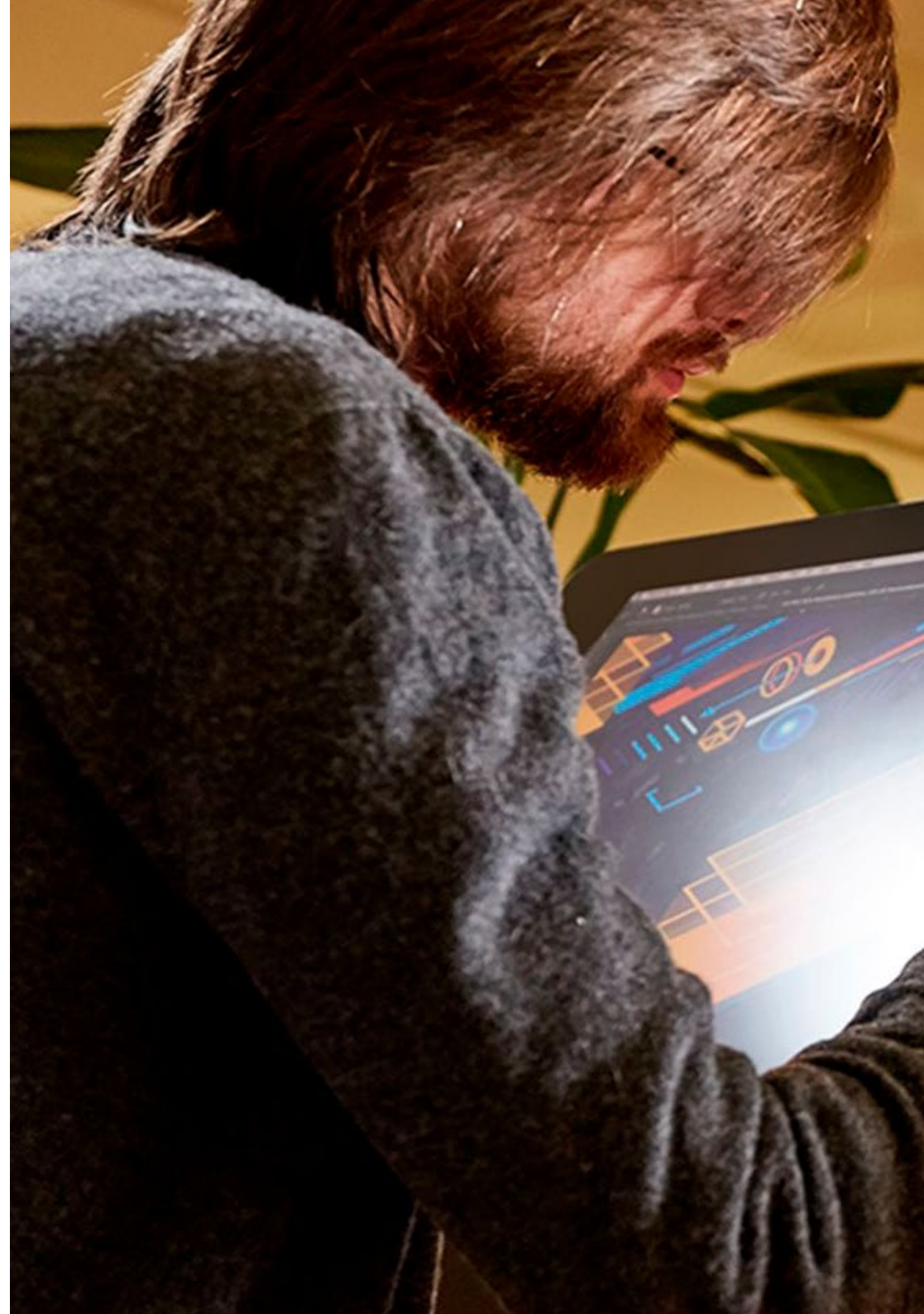
1.7. Design for Sustainability Through AI

    1.7.1. Life Cycle Analysis and Traceability with Artificial Intelligence

    1.7.2. Optimization of Recyclable Materials

    1.7.3. Improvement of Sustainable Processes

    1.7.4. Development of Practical Strategies and Projects

1.8. Integration of Virtual Assistants in Design Interfaces with Adobe Sensei, Figma and AutoCAD

    1.8.1. Role of Virtual Assistants in Interactive Design

    1.8.2. Development of Virtual Assistants Specialized in Design

    1.8.3. Natural Interaction with Virtual Assistants in Design Projects

    1.8.4. Implementation Challenges and Continuous Improvement

1.9. Continuous User Experience Analysis for Improvement

    1.9.1. Continuous Improvement Cycle in Interaction Design

    1.9.2. Tools and Metrics for Continuous Analysis

    1.9.3. Iteration and Adaptation in User Experience

    1.9.4. Ensuring Privacy and Transparency in the Handling of Sensitive Data

1.10. Application of AI Techniques to Improve Usability

    1.10.1. Intersection of AI and Usability

    1.10.2. Sentiment and User Experience (UX) Analysis

    1.10.3. Dynamic Interface Personalization

    1.10.4. Workflow and Navigation Optimization

TECH presents a unique course that will help you, in just 6 weeks, to take a leap in your profession. Enroll now!"

Methodology

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

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

"

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

Case Study to contextualize all content

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

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

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

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 is the most widely used learning system in the best faculties in the world. 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies 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.

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

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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. With this methodology we have 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, markets, and financial 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:
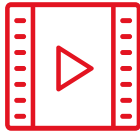
Study Material

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 competencies and skills in each thematic 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.

30%

10%

8%

20%

25%

4%

3%
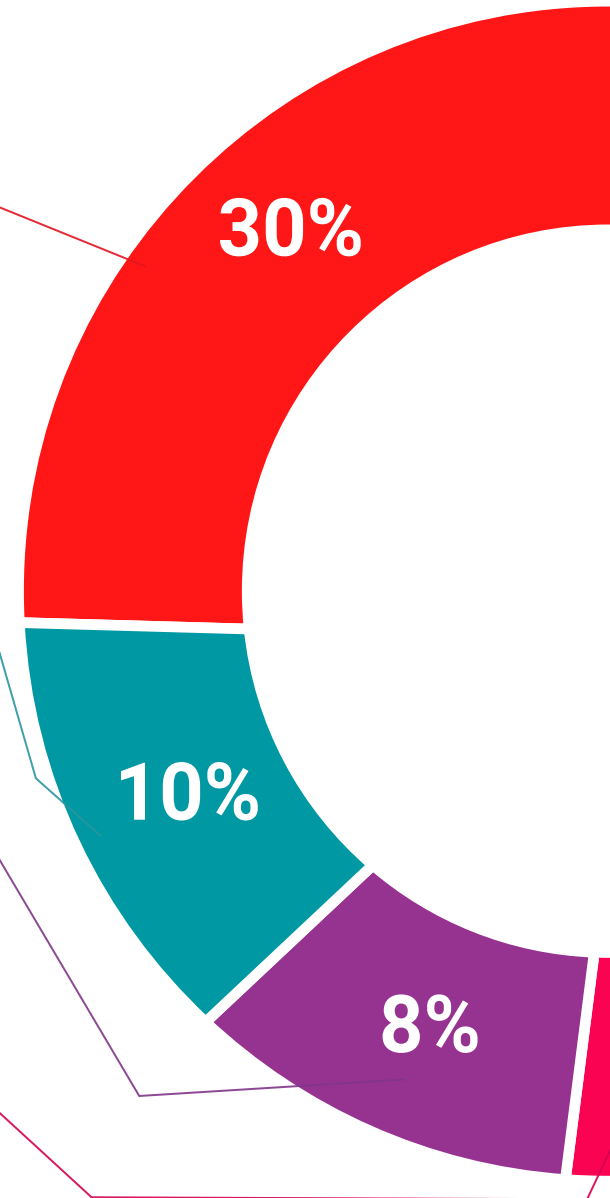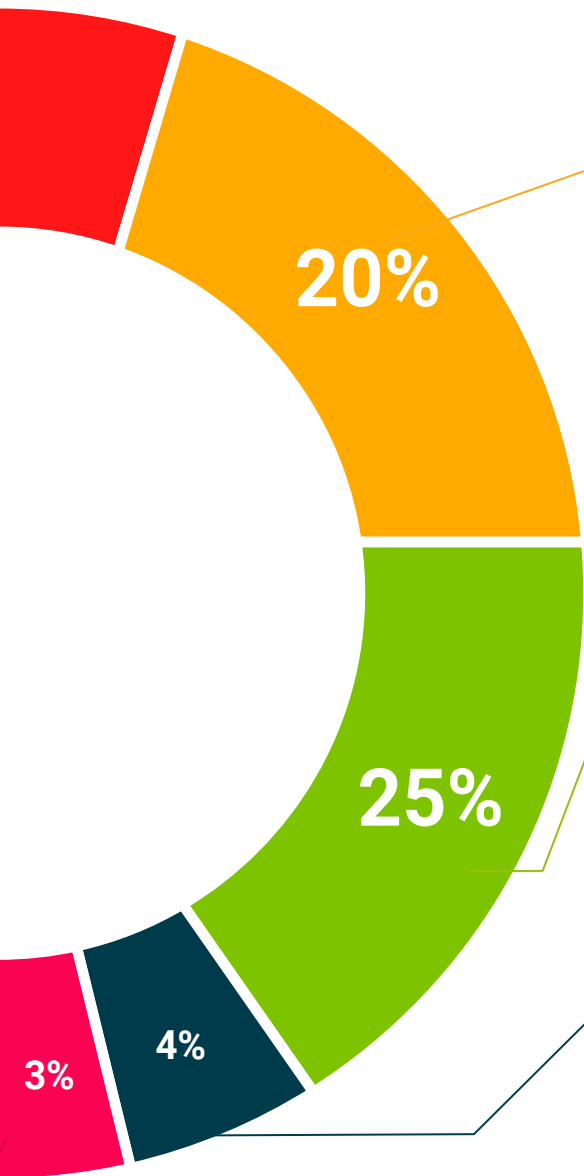
Case Studies

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.

Certificate

The Postgraduate Certificate in Design-User Interaction and Artificial Intelligence guarantees, in addition to the most rigorous and up to date education, access to a Postgraduate Certificate issued by TECH Global University.

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

This program will allow you to obtain a **Postgraduate Certificate in Design-User Interaction and Artificial Intelligence** endorsed by TECH Global University, the largest digital university in the world.

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.
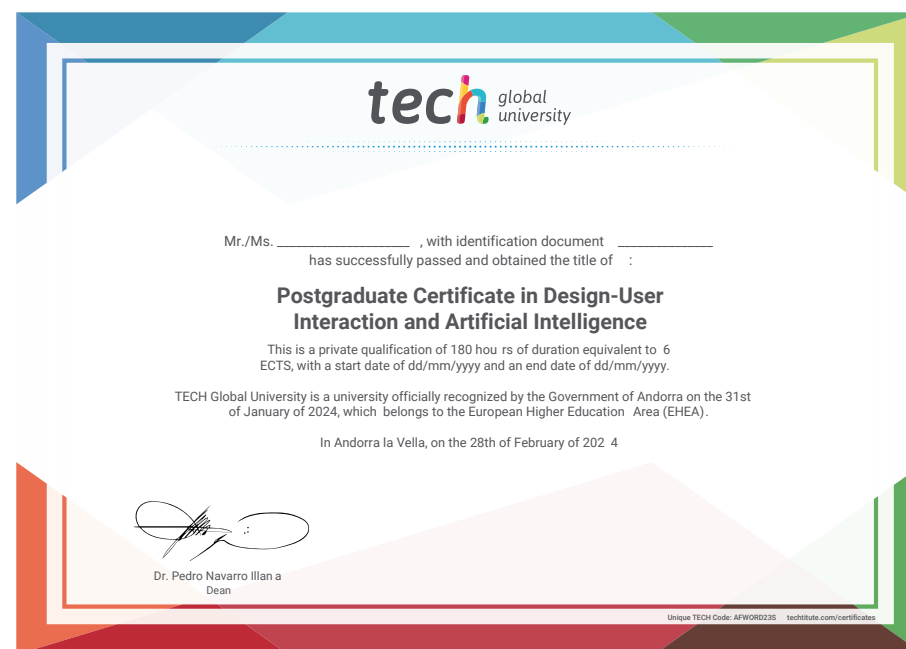
This **TECH Global University private qualification**, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Design-User Interaction and Artificial Intelligence**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

tech global university

Mr./Ms. _____ , with identification document _____
has successfully passed and obtained the title of :

**Postgraduate Certificate in Design-User
Interaction and Artificial Intelligence**

This is a private qualification of 180 hou rs of duration equivalent to 6
ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st
of January of 2024, which belongs to the European Higher Education   Area (EHEA).

In Andorra la Vella, on the 28th of February of 202 4

Dr. Pedro Navarro Illan a
Dean

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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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