Postgraduate Certificate

Design-User Interaction and Artificial Intelligence

tech technological university

Postgraduate Certificate
Design-User Interaction 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/us/artificial-intelligence/postgraduate-certificate/design-user-interaction-artificial-intelligence

Index

01
Introduction

The interaction between Design and User, powered by Artificial Intelligence (AI) has emerged as a transformative paradigm in the creation of digital products and services. This collaborative approach not only enables designers to understand and anticipate user needs more effectively, but also facilitates the continuous personalization and adaptation of experiences. Artificial Intelligence plays a key role in analyzing User behavior patterns, providing valuable data to optimize usability and accessibility. That is why TECH has devised this program, based on the pioneering approach of Relearning, consisting of the reiteration of key concepts for optimal assimilation of content.

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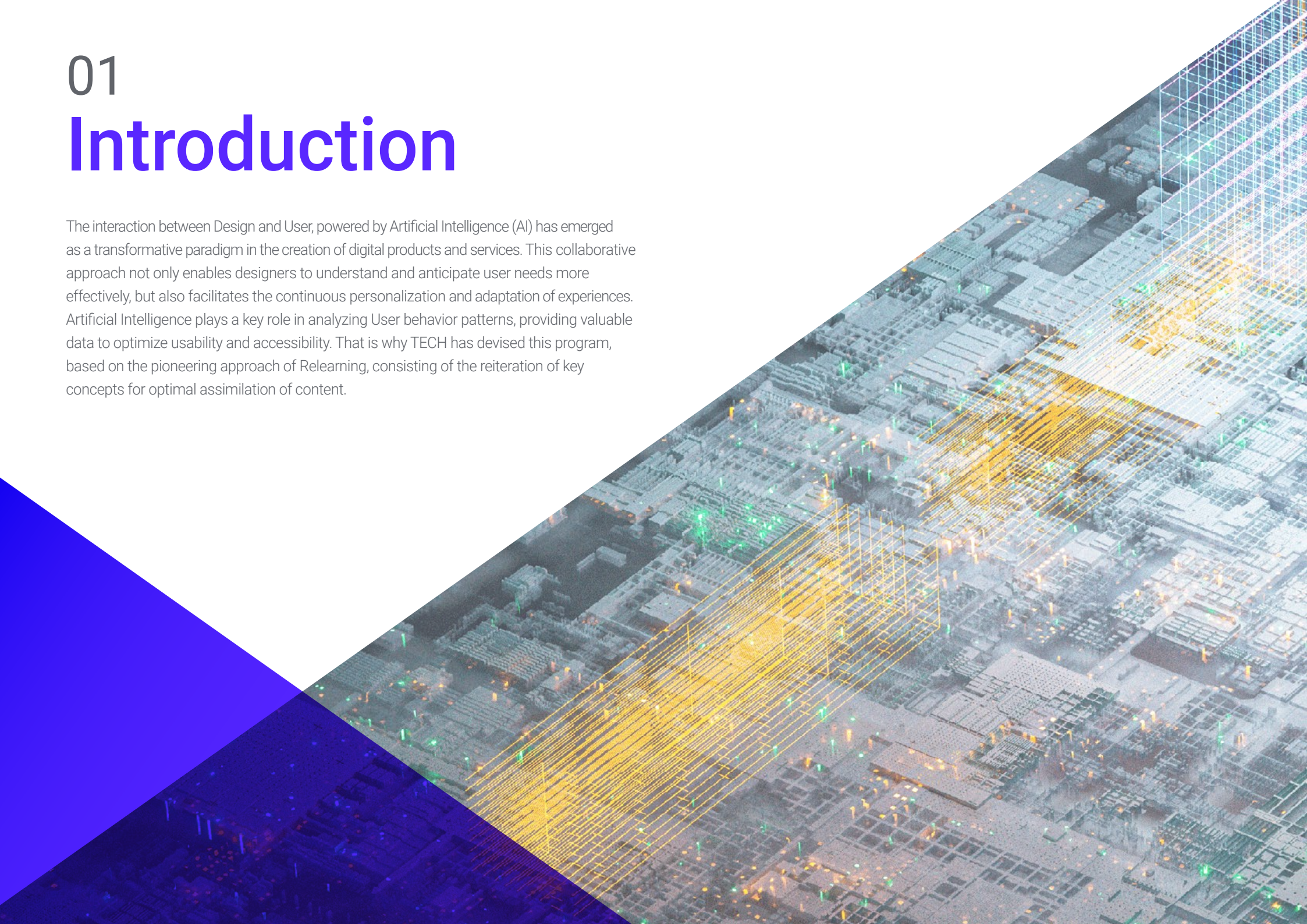
" *The synergy between Design-User Interaction and Artificial Intelligence will allow you to optimize the User experience and boost innovation, offering more intuitive, efficient and personalized solutions"*

Design-User Interaction, in the context of Artificial Intelligence, offers a unique synergy. In fact, AI can analyze user behavior patterns, preferences and needs quickly and accurately, allowing designers to create more intuitive and personalized interfaces. This collaboration enables continuous optimization, as Artificial Intelligence can learn from user-interface interaction to better adapt to changing demands, improving usability, user satisfaction and fostering brand loyalty.

This Postgraduate Certificate in Design-User Interaction and Artificial Intelligence represents a deep dive into the convergence between Interactive Design, User Experience and Artificial Intelligence. Throughout this program, fundamental aspects will be explored, ranging from contextual adaptation to the seamless integration of virtual assistants and emotional analysis of the user. In this sense, it is intended to equip graduates with skills to conceive and develop innovative and highly personalized digital experiences.

Likewise, professionals will not only acquire theoretical knowledge, but will also be immersed in case studies and case studies to understand how Artificial Intelligence can improve and transform the interaction between humans and technology. In addition, through applied projects and design exercises, creativity will be stimulated to devise innovative solutions that respond to the changing demands of today's digital environment, focusing on continuous improvement and adaptability of the experiences offered.

In this way, TECH has devised a rigorous academic program, supported by the innovative method of Relearning. This educational methodology focuses on the repetition of fundamental concepts, guaranteeing a complete assimilation of the contents. Accessibility will also be key, since only an electronic device with an Internet connection will be required to access the material, anytime and anywhere, freeing students from the need to attend in person or comply with fixed schedules.

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

- 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

The symbiosis between Design-User Interaction and Artificial Intelligence will open the doors to new forms of Design, focused on the real needs and desires of people"

You will address the dynamics of interaction and the application of strategies that use Artificial Intelligence to anticipate and satisfy the User's needs. Enroll now!

You will delve into Adaptive Design, giving you greater control when designing specific versions for different devices with Artificial Intelligence.

" *Thanks to this 100% online Postgraduate Certificate you will acquire a comprehensive vision that will foster your excellence in people-centered design and the most advanced technology"*
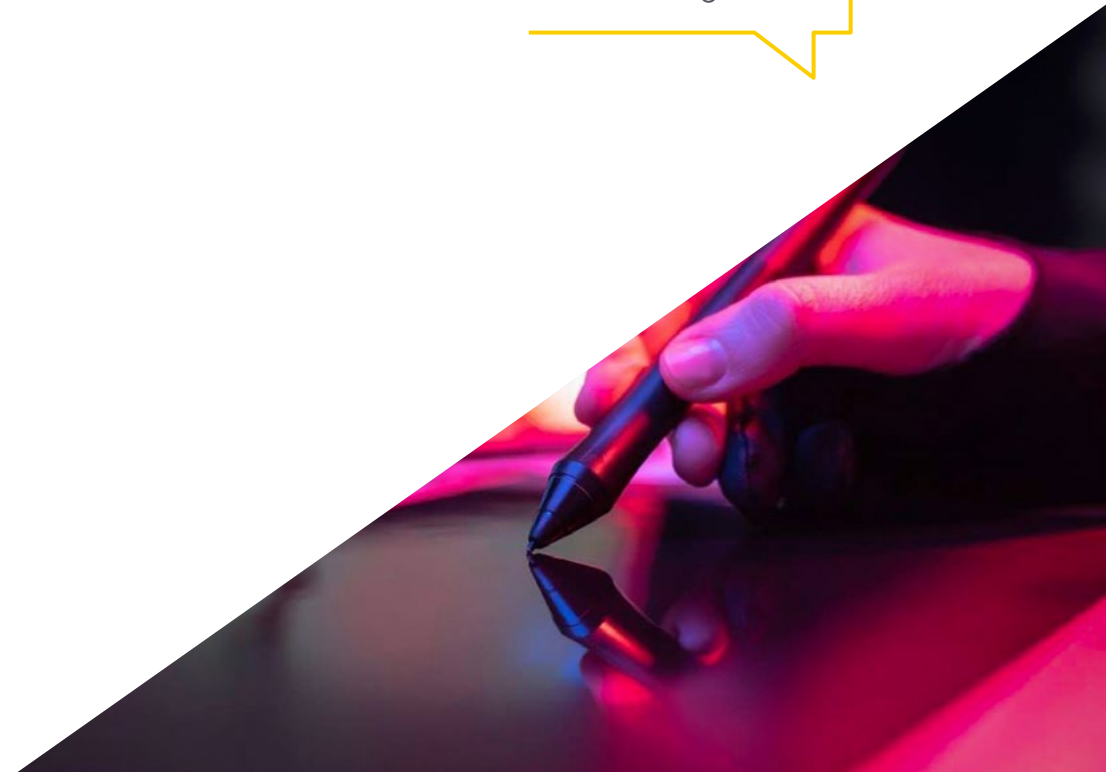
The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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

This Postgraduate Certificate has a clear purpose: to train creative and visionary minds to shape exceptional digital experiences. In this sense, the program goes beyond theory, since its objective is to trace the path towards a deep understanding of how Artificial Intelligence can enhance the interaction between humans and technology. Professionals will be challenged to reinvent User-Centered Design, equipping them with the skills necessary to lead the digital experience revolution and redefine the future of human-AI interaction.

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You will design digital experiences that are not only aesthetically appealing, but also deeply personalized and efficient, all thanks to the most innovative multimedia resources"

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

Through understanding contextual adaptation, effective integration of virtual assistants and insightful analysis of user emotions, you will be able to anticipate and meet User needs"

Specific Objectives

- Understand the symbiosis between Interactive Design and Artificial Intelligence to optimize user experience

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

- Critically analyze the challenges and opportunities when implementing personalized designs in the industry using Artificial Intelligence

- 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

03
Course Management

The program's faculty is committed to academic excellence and practical application, and is comprised of experienced professionals who combine a solid theoretical background with extensive industry experience. In fact, their approach goes beyond transmitting knowledge, focusing on inspiring graduates to explore new boundaries, fostering creativity and critical thinking, and guiding them towards the creation of innovative solutions.
By immersing themselves in the learning dynamics of this program, students will benefit from the wisdom and guidance of these mentors.

"
The faculty of this Postgraduate Certificate in Design-User Interaction and Artificial Intelligence will help you become an integral and highly skilled professional"

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
- 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 at the University of Murcia
- Manager in Research & Innovation in European Projectsat 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

With a dynamic and updated structure, this program will cover from the essential fundamentals to the latest trends at the intersection of design, user experience and cutting-edge technology. Designers will analyze contextual adaptation, strategic implementation of virtual assistants and emotional analysis of the user, unraveling the complexities of creating effective and personalized digital experiences.
In addition, students will develop practical skills indispensable for leading in an ever-evolving digital world.
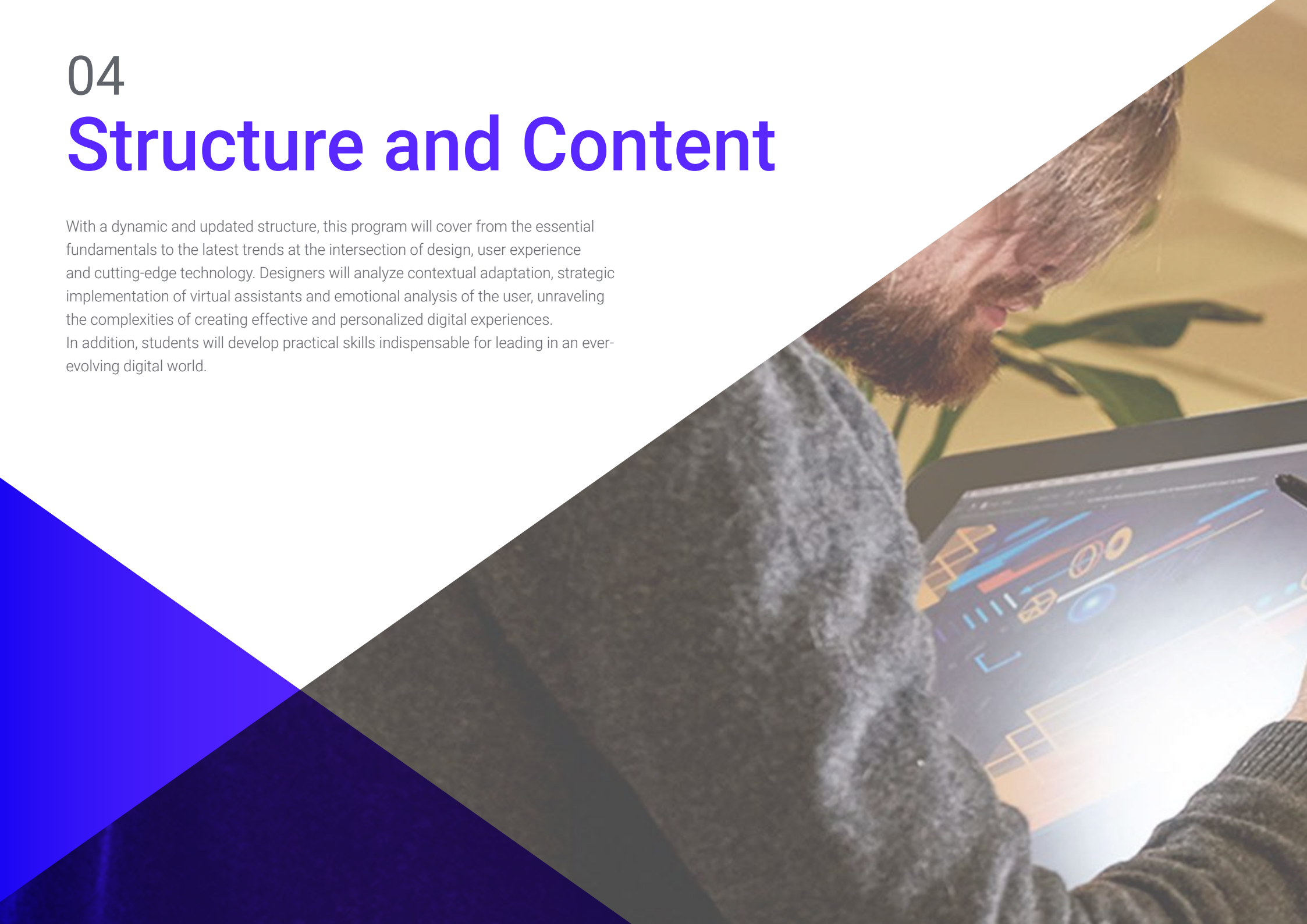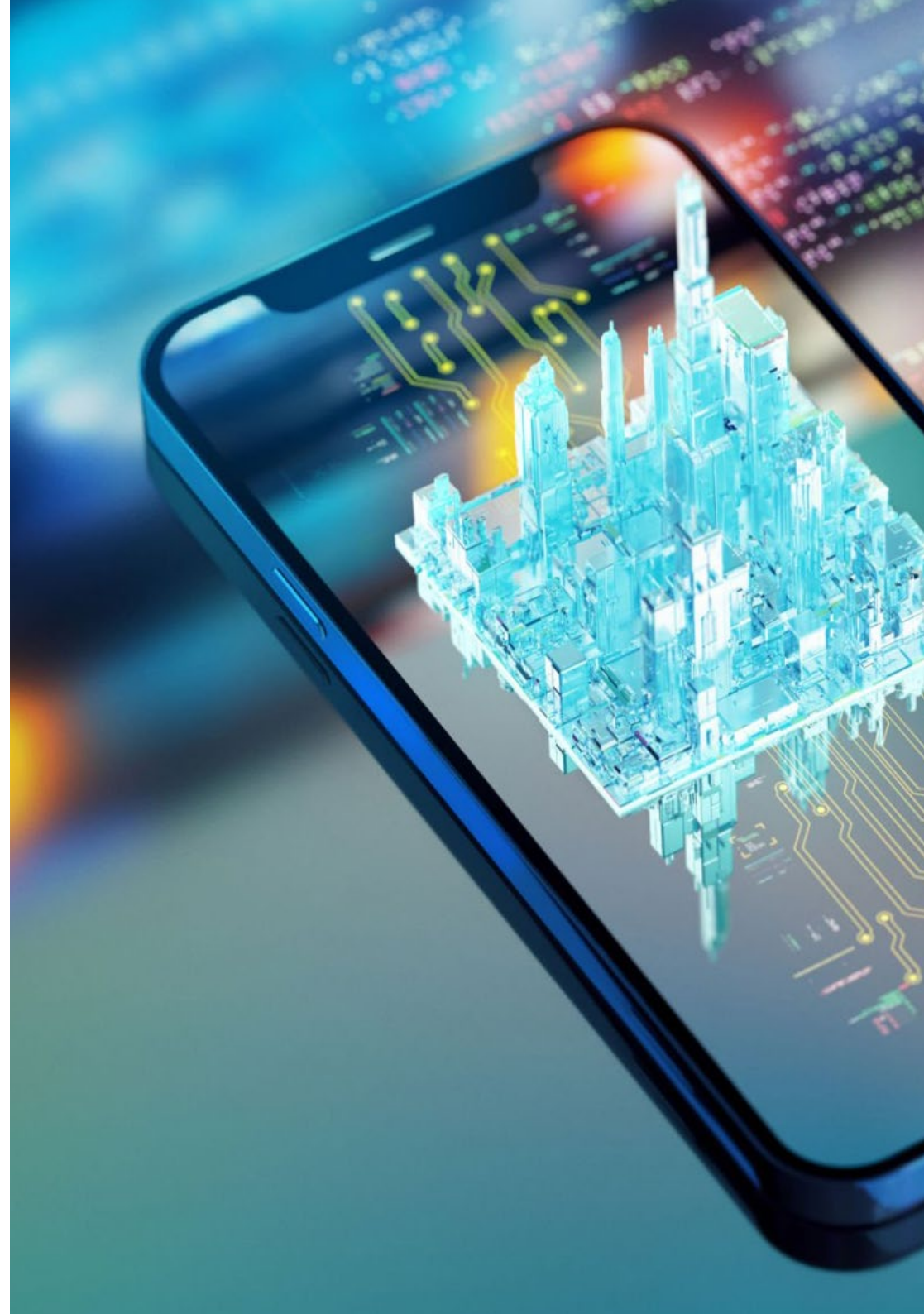
" *You will master the skills necessary to become a visionary designer and expert in Design-User Interaction and Artificial Intelligence"*

Module 1. Design-User Interaction and AI

1.1.   Behavior-Based Design Contextual Suggestions
      1.1.1.   Understanding User Behavior in Design
      1.1.2.   AI-based Contextual Suggestion Systems
      1.1.3.   Strategies to Ensure User Transparency and Consent
      1.1.4.   Trends and Potential Improvements in Behavioral 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.   Device Adaptive Design Principles
      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 Videogames
      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 Enhancement

1.6.   Custom Design in the Industry: Challenges and Opportunities
      1.6.1.   Transformation of Industrial Design with Customization.
      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

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"

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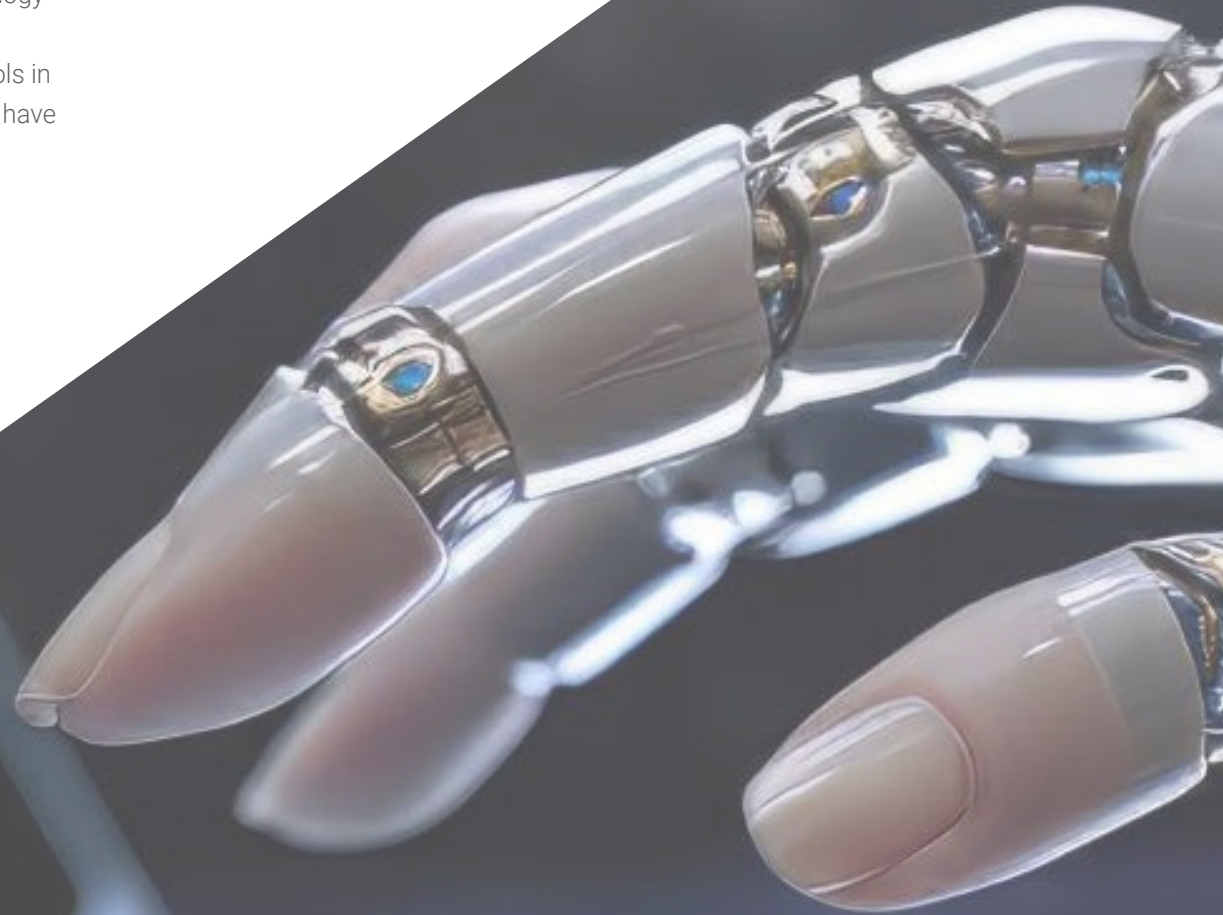
"
Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

Case Study to contextualize all content

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

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

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

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

A learning method that is different and innovative

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

"

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

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

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

Relearning Methodology

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

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

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

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

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

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. 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.

30%

10%

8%

20%

25%

4%

3%
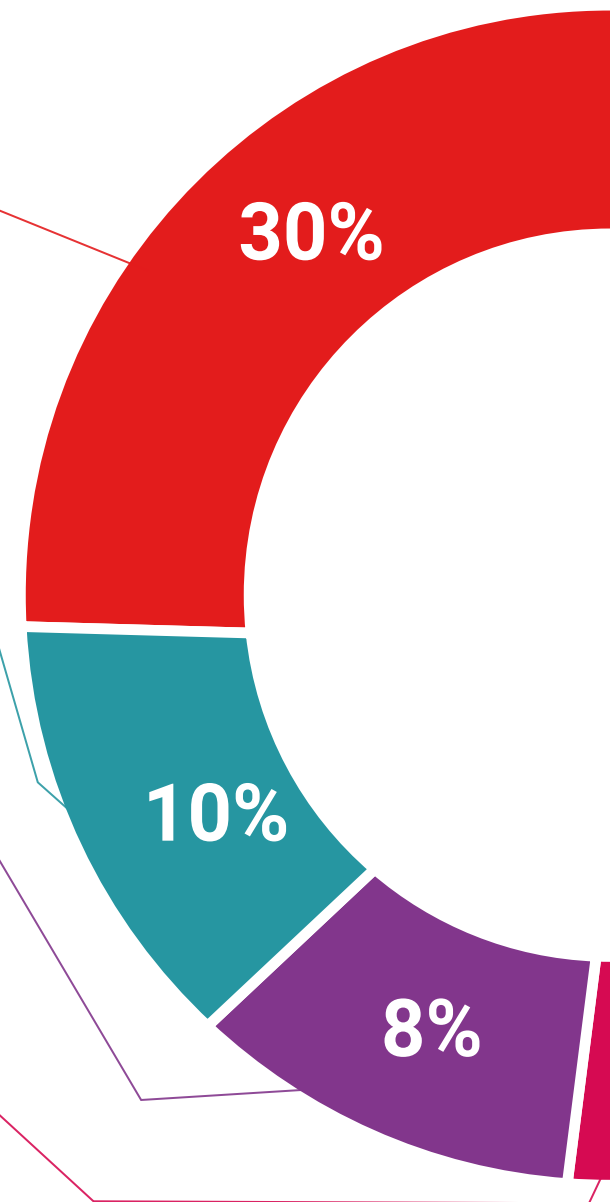
Case Studies

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.

06
Certificate

The Postgraduate Certificate in Design-User Interaction 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.

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

This **Postgraduate Certificate in Design-User Interaction 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 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 Design-User Interaction and Artificial Intelligence**
Official Nº of Hours: **150 h.**

tech technological university

Awards the following
DIPLOMA
to
Mr./Ms. _____, with identification number _____
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in
Design-User Interaction and Artificial Intelligence

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

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