Postgraduate Diploma
Digital Product Design Projects

tech global university

tech global university

Postgraduate Diploma
Digital Product Design Projects

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/design/postgraduate-diploma/postgraduate-diploma-digital-product-design-projects

Index

01

Introduction

To undertake a digital product design project, it is necessary to know all the specific features of this type of initiatives. Therefore, this program is essential for professionals who want to focus on this field, as it provides all the knowledge and tools required to develop in digital design.

Therefore, throughout the program, students will be able to delve into emerging technologies such as Blockchain and the Internet of Things and, upon completing the course, they will be in a position to master all the essential aspects to undertake a project in this area. This will be achieved through a 100% online teaching methodology that can be completely adapted to your personal circumstances, allowing you to study when and where you want.

Having in-depth knowledge of the emerging technologies and agile project management methods will turn you into a Digital Product Designer"

The enormous social, cultural and economic changes that have occurred due to digitalization have also affected areas such as Design. Therefore, nowadays, no business, commercial or artistic project is conceivable without perfect knowledge of its integration within the Internet and the digital environment. For this reason, specialist designers are increasingly in demand in initiatives where digital product design is required.

This new situation has forced many professionals to update their knowledge, and this Postgraduate Diploma has been developed specifically to provide them with the opportunity to learn about the latest innovations in this area. Therefore, throughout the program, the designer will be able to delve into issues such as design applied to mobile technologies, the Internet of Things and its integration into daily personal and work life or agile methodologies in project entrepreneurship.

With this knowledge, the student will have the opportunity to position themselves as a leading figure in the field of design, being able to aspire to work for large companies and institutions in this sector. All this, through TECH's online learning system and numerous multimedia materials, which will facilitate the teaching of these innovative contents.

The **Postgraduate Diploma in Digital Product Design Projects** contains the scientific most complete and up-to-date educational program on the market The most important features include:

- The development of case studies presented by experts in Digital Product Design
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and practical information on the 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

This program will make you a specialist in the carrying out projects focused on Digital Product Design. Don't miss the opportunity to access a highly sought-after professional field and enroll with us now"

Digital Product Design is one of the most booming fields today and this program gives you the opportunity to become a professional with great job prospects"

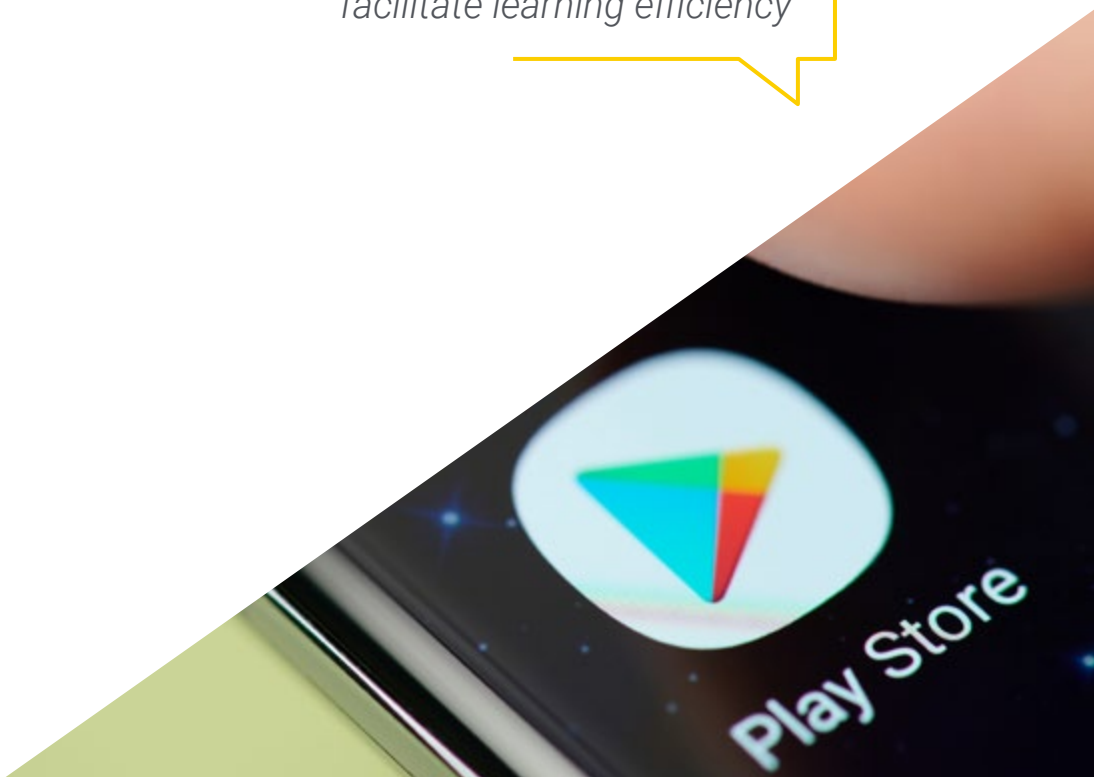
The online methodology used in this program will allow you to combine your work with your studies, without being fixed to strict schedules or having to commute

You will have access to the latest contents in this field of design, presented in a multimedia format to facilitate learning efficiency

The program's teaching staff includes professionals from the sector who contribute their work experience to this 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 an immersive program designed 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 student will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

Objectives

The main goal of this Postgraduate Diploma in Digital Product Design Projects is to provide the professional with the most advanced knowledge in this field, so that they can carry out all kinds of initiatives, creating products for the digital environment. To achieve this objective, this program offers students the most innovative and complete contents, and a methodology that can be completely adjusted to their needs and schedules.

This program will allow you to advance in your professional career through managing Digital Product Design Projects"

General objectives

- Know the basis of design, as well as the references, styles and movements that have shaped it from its beginnings to the present day
- Understand the creative, analytical and study process for the realization of any work
- Know the most important softwares in the current context of design
- Master visual communication technology resources
- Distinguish the phases of the design process and the appropriate user experience analysis techniques for each phase

Specific Objectives

Module 1. Emerging Technologies

- Know the different technologies and mobile services currently available in the market
- Learn how to design user experiences adapted to the new emerging technologies that are currently available
- Understand how the internet of things (IOT) works, its fundamentals, main components, cloud computing and smart cities
- Acquire the basic knowledge to understand the fundamentals of blockchain and blockchain-based applications and services
- Learn about the latest innovative technologies and introduce the bases of research

Module 2. Internet of Things (IoT)

- Know, in detail, the functioning of IOT and industry 4.0 And its combinations with other technologies, its current situation, its main devices and uses and how hyperconnectivity gives rise to new business models where all products and systems are connected and in permanent communication
- Gain in-depth knowledge of an IOT platform and the elements that compose it, the challenges and opportunities in implementing IOT platforms in factories and companies, the main business areas related to IOT platforms and the relationship between IOT platforms, robotics and other emerging technologies
- Know the main existing wearable devices, their usefulness, the security systems to be applied in any IOT model and its variant in the industrial world, called IIOT

Module 3. Agile Methodologies

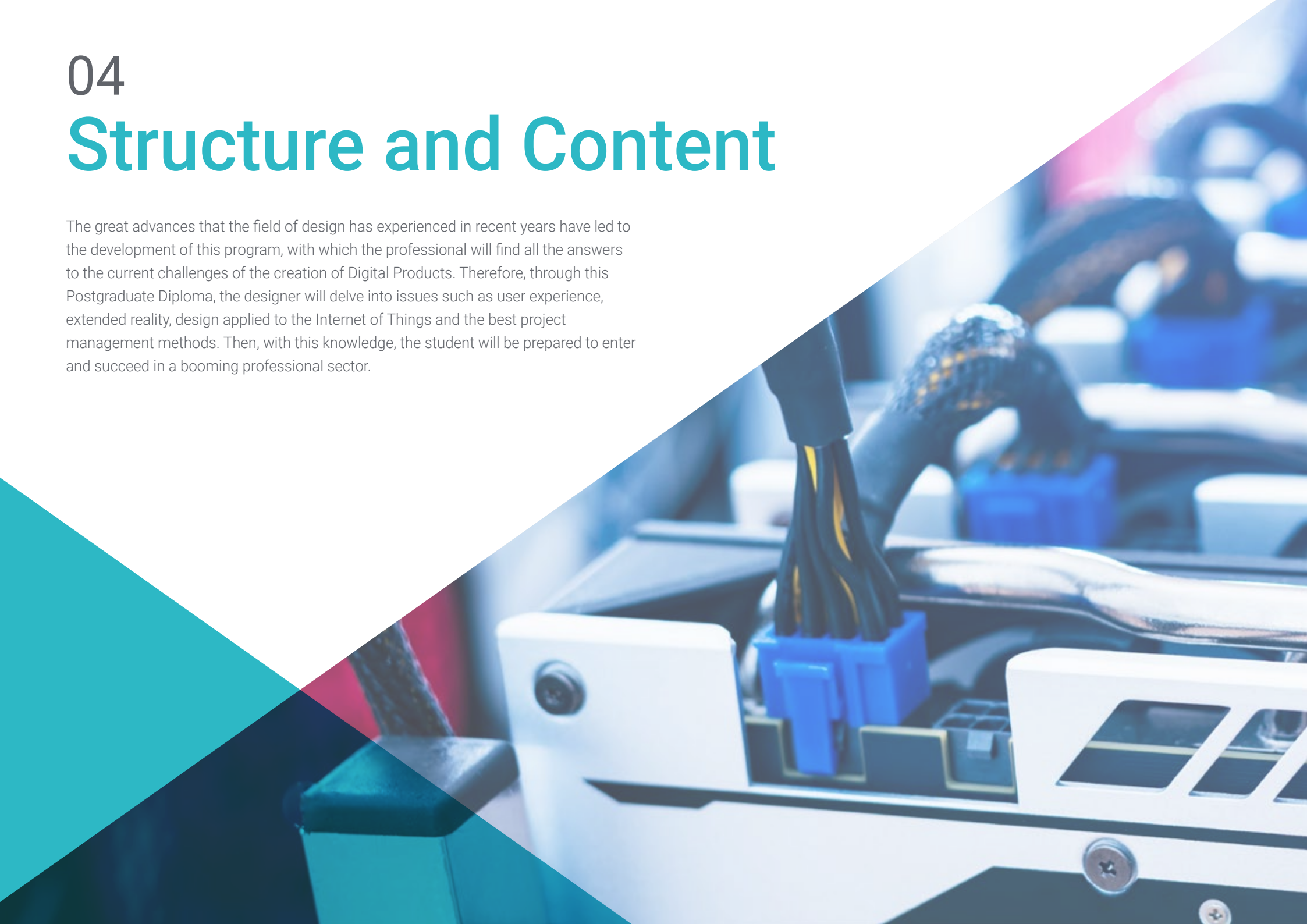
- Determine the key elements of a business case, product vision, and user stories
- Plan iterations based on equipment speed and iteration length
- Gather and prioritize requirements for an agile project
- Recognize guidelines for decomposing, estimating and assigning user stories
- Analyze the keys to contracting for agile projects
- Examine the leadership strategies of self-managed high-performance teams

You will experience great professional progress once you have completed this program, which will provide you with the most cutting-edge knowledge in a design sector which is currently booming"

04

Structure and Content

The great advances that the field of design has experienced in recent years have led to the development of this program, with which the professional will find all the answers to the current challenges of the creation of Digital Products. Therefore, through this Postgraduate Diploma, the designer will delve into issues such as user experience, extended reality, design applied to the Internet of Things and the best project management methods. Then, with this knowledge, the student will be prepared to enter and succeed in a booming professional sector.



Through 3 specialized modules, you will learn all the keys to carry out the best Digital Product Design Projects"

Module 1. Emerging Technologies

1.1. Mobile Technology
- 1.1.1. Mobile Devices
- 1.1.2. Mobile Communications

1.2. Mobiles Services
- 1.2.1. Types of Applications
- 1.2.2. Decision on the Type of Mobile Application
- 1.2.3. Mobile Interaction Design

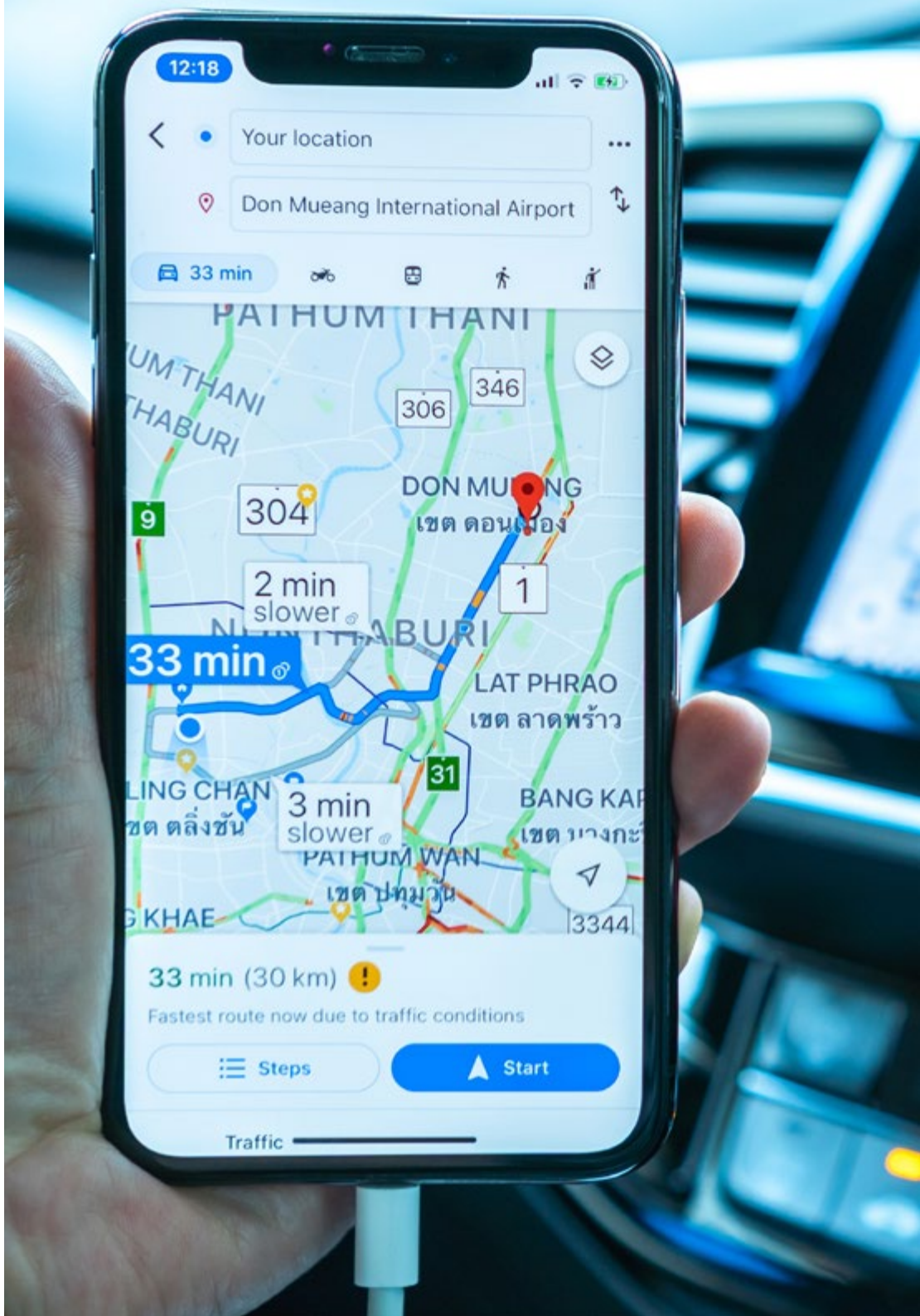
1.3. Services Based on Localization
- 1.3.1. Services Based on Localization
- 1.3.2. Technologies for Mobile Localization
- 1.3.3. GNSS-Based Localization
- 1.3.4. Precision and Accuracy in Localization Technologies
- 1.3.5. Beacons: Location by Proximity

1.4. Design of User Experience (UX)
- 1.4.1. Introduction to User Experience (UX)
- 1.4.2. Technologies for Mobile Localization
- 1.4.3. Methodology for UX Design
- 1.4.4. Best Practices in the Prototyping Process

1.5. Extended Reality
- 1.5.1. Concepts of Extended Reality
- 1.5.2. Technologies for Mobile Localization
- 1.5.3. AR and VR Application and Services

1.6. Internet of Things (IoT) (I)
- 1.6.1. Fundamentals of IoT
- 1.6.2. IoT Devices and Communications

1.7. Internet of Things (IoT) (II)
- 1.7.1. Beyond Cloud Computing
- 1.7.2. Smart Cities
- 1.7.3. Digital Twins
- 1.7.4. IoT Projects



1.8. Blockchain
- 1.8.1. Fundamentals of Blocks Chain
- 1.8.2. Applications and Services Based on Blockchain

1.9. Autonomous Driving
- 1.9.1. Technology for Autonomous Driving
- 1.9.2. V2X Communication

1.10. Innovative Technology and Research
- 1.10.1. Fundamentals of Quantum Computing
- 1.10.2. Applications of Quantum Computing
- 1.10.3. Introduction to Research

Module 2. Internet of Things (IoT)

2.1. Cyber-Physical Systems (CPS) in the Industry 4.0 Vision
- 2.1.1. Internet of Things (IoT)
- 2.1.2. Components Involved in IoT
- 2.1.3. Cases and Applications of IoT

2.2. Internet of Things and CyberPhysical Systems
- 2.2.1. Computing and Communication Capabilities to Physical Objects
- 2.2.2. Sensors, Data and Elements in Cyber-Physical Systems

2.3. Device Ecosystem
- 2.3.1. Typologies, Examples and Uses
- 2.3.2. Applications of the Different Devices

2.4. IoT Platforms and Their Architecture
- 2.4.1. IoT Market Typologies and Platforms
- 2.4.2. Operation of an IoT Platform

2.5. Digital Twins
- 2.5.1. Digital Twin
- 2.5.2. Uses and Applications the Digital Twin

2.6. Indoor & Outdoor Geolocation (Real Time Geospatial)
- 2.6.1. Indoor and Outdoor Geolocation Platforms
- 2.6.2. Implications and Challenges of Geolocation in an IoT Project

2.7. Security Intelligence Systems
- 2.7.1. Typologies and Platforms for Security Systems Implementation
- 2.7.2. Components and Architectures in Intelligent Safety Systems

2.8. IoT and IIoT Platform Security
- 2.8.1. Security Components in an IoT System
- 2.8.2. IoT Security Implementation Strategies

2.9. *Wearables at Work*
- 2.9.1. Types of *Wearables* in Industrial Environments
- 2.9.2. Lessons Learned and Challenges in Implementing *Wearables* in the Workplace

2.10. Implementing an API to Interact with a Platform
- 2.10.1. Types of APIs Involved in an IoT Platform
- 2.10.2. API Market
- 2.10.3. Strategies and Systems to Implement API Integrations

Module 3. Agile Methodologies

3.1 Agile Management of Projects. Foundation for the Development of Web Applications
- 3.1.1. The Agile Approach
- 3.1.2. Values and Agile Principles
- 3.1.3. Project Management: Traditional and Agile
- 3.1.4. The Agile Model for Project Management
- 3.1.5. Agile Methodologies

3.2. Adopting an Agile Approach to Web Application Development
- 3.2.1. Myths and Realities about Agility
- 3.2.2. Agile Practices
- 3.2.3. Choosing Agile Practices for a Project
- 3.2.4. Development of an Agile Mentality
- 3.2.5. Implementing and Communicating the Adoption of Agile Principles

3.3. Agile Methodologies for Web Application Development
- 3.3.1. Lean Development
- 3.3.2. Extreme Programming (XP)
- 3.3.3. Crystal Methods
- 3.3.4. *Feature Driven Development* (FDD)
- 3.3.5. DSDM and Agile Unified Process

3.4. Agile Methodologies for Advanced Web Application Development
- 3.4.1. Kanban Method
- 3.4.2. Scrum and Scrumban
- 3.4.3. DA Disciplined Agile
- 3.4.4. Hybrid Methodologies
- 3.4.5. Comparison of Agile Methodologies

3.5. Web Development Project Planning Process
- 3.5.1. Starting an Agile Project
- 3.5.2. Process of Agile Planning
- 3.5.3. Requirements Gathering and User Stories
- 3.5.4. Project Scoping Using Agile Methods: Product Backlog
- 3.5.5. Agile Tools to Prioritize Requirements

3.6. Stakeholders of Agile Projects for Web Application Development
- 3.6.1. Stakeholders in Agile Projects
- 3.6.2. Encouraging Effective Stakeholder Engagement
- 3.6.3. Participatory Decision Making
- 3.6.4. Agile Knowledge Sharing and Agile Knowledge Gathering

3.7. Launching Plan and Creation of Estimates
- 3.7.1. Launching Plan
- 3.7.2. Estimating the Size of the User Story
- 3.7.3. Speed Estimation
- 3.7.4. Agile Estimation Techniques
- 3.7.5. Prioritization of User Stories

3.8. Planning and Monitoring Iterations
- 3.8.1. Iteration and Progressive Development
- 3.8.2. Iteration Planning Process
- 3.8.3. Creating the Iteration Backlog
- 3.8.4. The Agile Schedule and Buffers
- 3.8.5. Iteration Progress Tracking
- 3.8.6. Release Progress Tracking and Reporting

3.9. Leading a Web Application Development Team
- 3.9.1. Agile Teams

3.9.2. The Leader of an Agile Project
3.9.3. The Agile Team
3.9.4. Virtual Agile Team Management
3.9.5. Coaching for Team Performance Improvement

3.10. Managing and Delivering Value in Web Development Projects
3.10.1. Processes for Value-Centered Delivery
3.10.2. The Quality of the Product
3.10.3. Agile Practices of Quality
3.10.4. Risk Management
3.10.5. Agile Contracts
3.10.6. Earned Value Management in Agile Projects

This program will prepare you to become a reference in Product Design, providing you with the essential tools to effectively manage projects in this professional field"

05

Methodology

This program provides you with 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 we use the Case Method

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

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

We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition

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

A learning method that is different and innovative.

This intensive design program at TECH Technological University will prepare you to face all the challenges in this area, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why TECH uses the Harvard case studies, with which we have a strategic agreement that allows us to provide our students with material from the best university the world.

"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 by 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.

Relearning Methodology

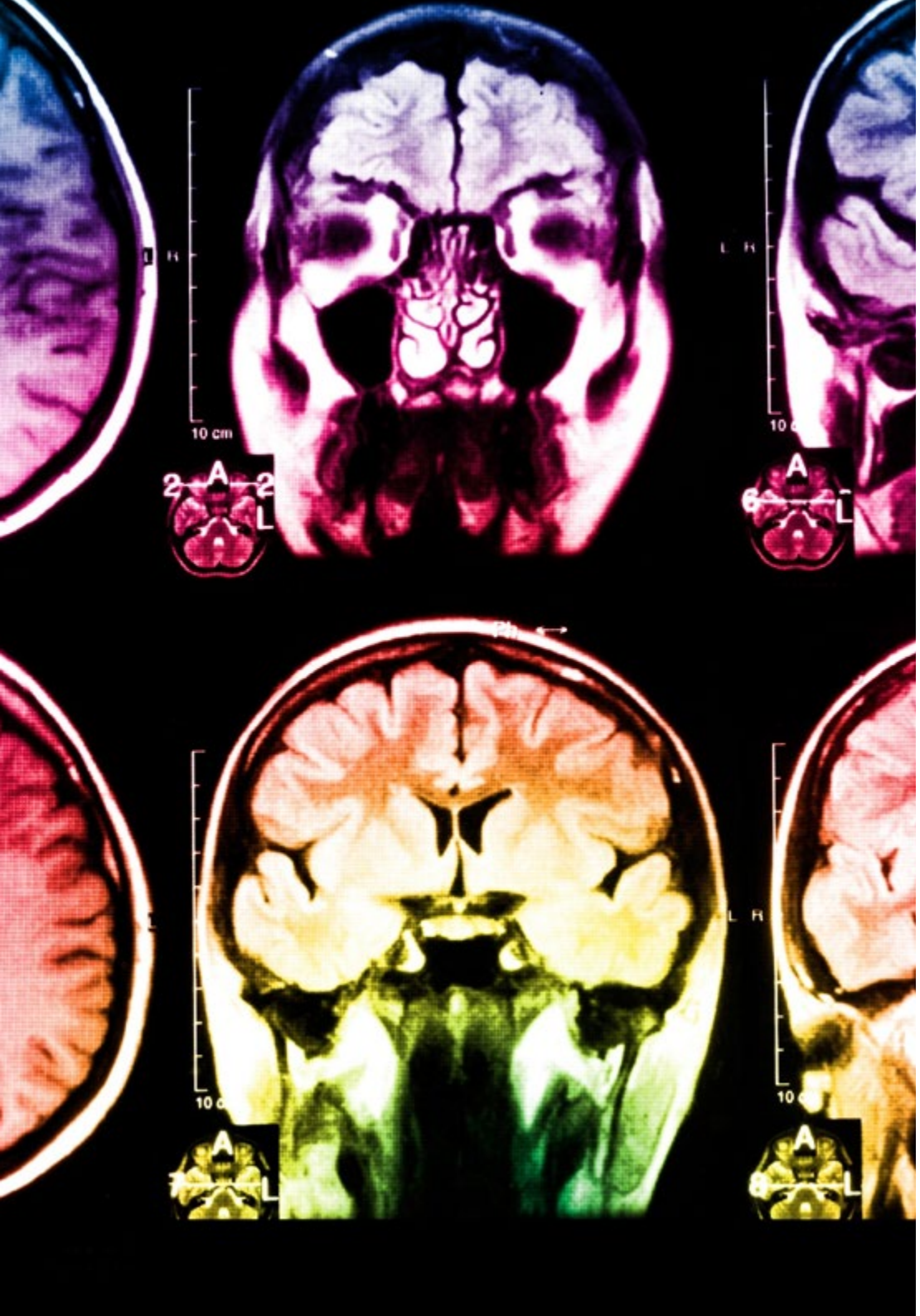
Our university is the first in the world to combine the Harvard University case studies method with a 100% online learning system based on repetition, combining 8 different educational elements in each lesson.

We enhance Harvard case studies with the best 100% online teaching method: Relearning.

In 2019 we obtained the best learning results of all Spanish-language 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 university qualified 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 Spanish 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. 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 learning, 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.

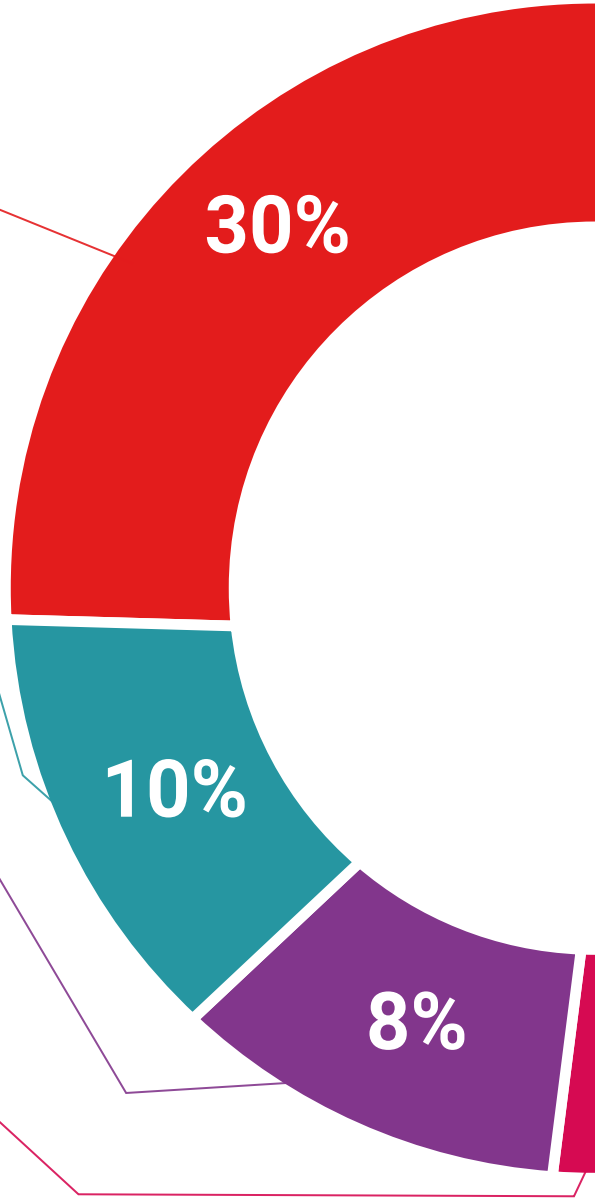
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

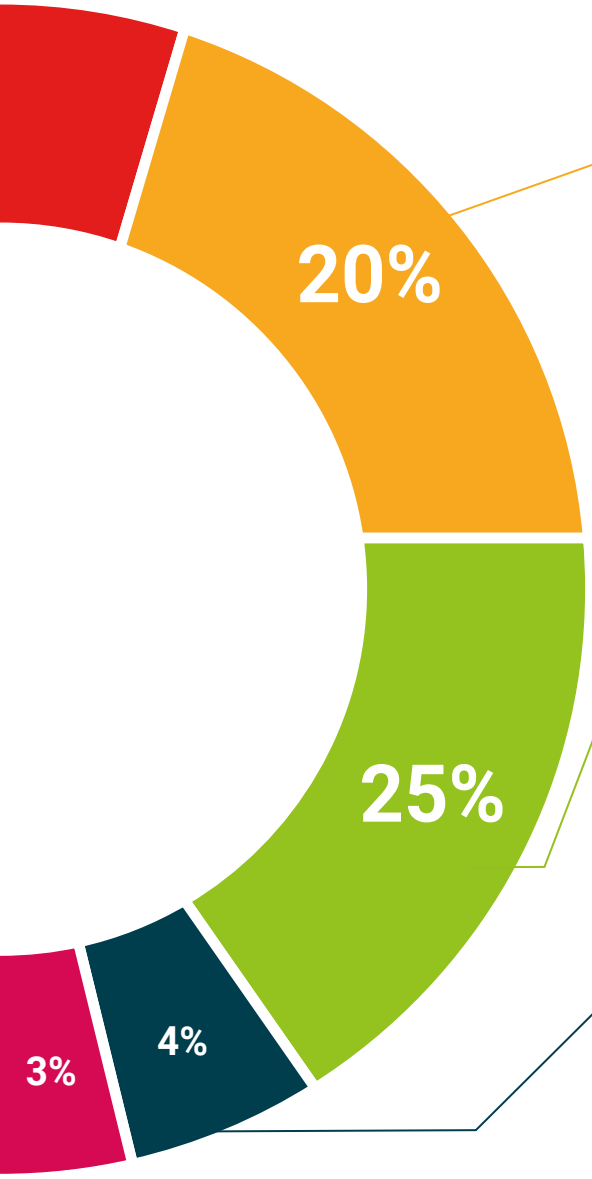
Practising Skills and Abilities

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 we live in.

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

They will complete a selection of the best case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management specialists in Latin America.

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 unique multimedia content presentation training system was awarded by Microsoft as a "European Success Story".

Testing & Re-testing

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 Diploma in Digital Product Design Projects guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.

Successfully complete this program and receive your diploma without travel or laborious paperwork"

This program will allow you to obtain your **Postgraduate Diploma in Digital Product Design Projects** endorsed by **TECH Global University**, the world's largest online university.

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** title 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 Diploma in Digital Product Design Projects**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

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

Postgraduate Diploma in Digital Product Design Projects

This is a program of 450 hours of duration equivalent to 18 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 2024

Dr. Pedro Navarro Illana
Rector

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.

tech global university

Postgraduate Diploma
Digital Product Design Projects

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Global University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Diploma
Digital Product Design Projects

tech global university