# Postgraduate Certificate

## Mobile Technology and Development

tech technological university

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# Postgraduate Certificate

## Mobile Technology and Development

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Technological University**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/information-technology/postgraduate-certificate/mobile-technology-development

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01

# Introduction

Recent studies claim that the cell phone is the device that generates the most traffic on the Internet. Surpassing computers and becoming an essential tool in everyday life. The cell phone offers immediacy, a feature of communication that is becoming more and more relevant. This is the reason why many companies are focusing their digitalization processes on it. In this sense, TECH has developed a syllabus that addresses mobile technology from different perspectives. Trying to foresee possible scenarios for the future and making a comparison between the two most used operating systems for mobile phones, iOS and Android. All this, through an online methodology without schedules that favors learning and allows students to organize themselves properly.

*This program showcases the benefits of wireless communications that have influenced the success of mobile devices. As well as the challenges it must face to continue to grow"*

One of the pieces of evidence of the massive use of mobile phones is the proliferation of the vertical format. The adaptation of websites, platforms and applications has become normal. But this trend is being extrapolated to the real world, where more and more publishers are adopting the vertical format to increase their chances of being picked up by mobiles.

With the intention of offering up-to-date information, this course begins by analyzing the main characteristics of the mobile phone: mobility, manageability and operability. It also details the most commonly used types of devices and their components.

Next, it delves into wireless communications, highlighting their advantages, disadvantages and classifications. It then goes on to discuss different aspects of mobile applications. Such as environments, programming languages, distribution or hybrid and native applications.

Finally, the program dives into the Android vs. iOS conflict, focused from the point of view of applications. It also reserves a topic for security on mobile devices applicable to communications, users, applications and operating systems.

These contents will be taught in a 100% online mode and without schedules. In addition, the materials will be available in their entirety from the first day. You will only need a device with an Internet connection to access them. Always, with the intention of promoting learning and that students can organize themselves according to their time.

This **Postgraduate Certificate in Mobile Technology and Development** contains the most complete and up-to-date program on the market. The most important features include:

- The development of practical cases presented by experts in Mobile Technology and Development
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

*Learn, thanks to TECH, the functioning of the elements that are part of the hardware of a cellular phone: screen, touch keyboard, processor, etc"*

*Android is the most widely used mobile operating system in the world. This program details all the tools involved in its software"*

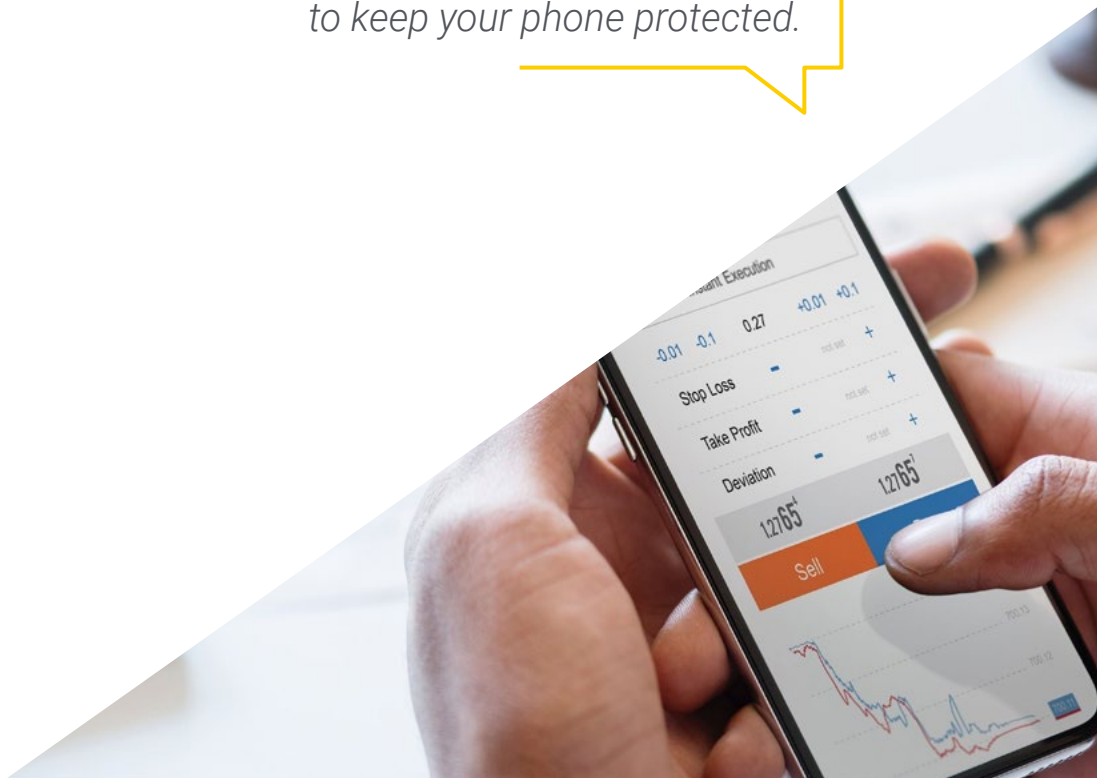
*TECH teachers will show you how to program applications with the programming languages used by professionals in the sector.*

*In this Postgraduate Certificate you will learn how to establish different security protocols to keep your phone protected.*

The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

# Objectives

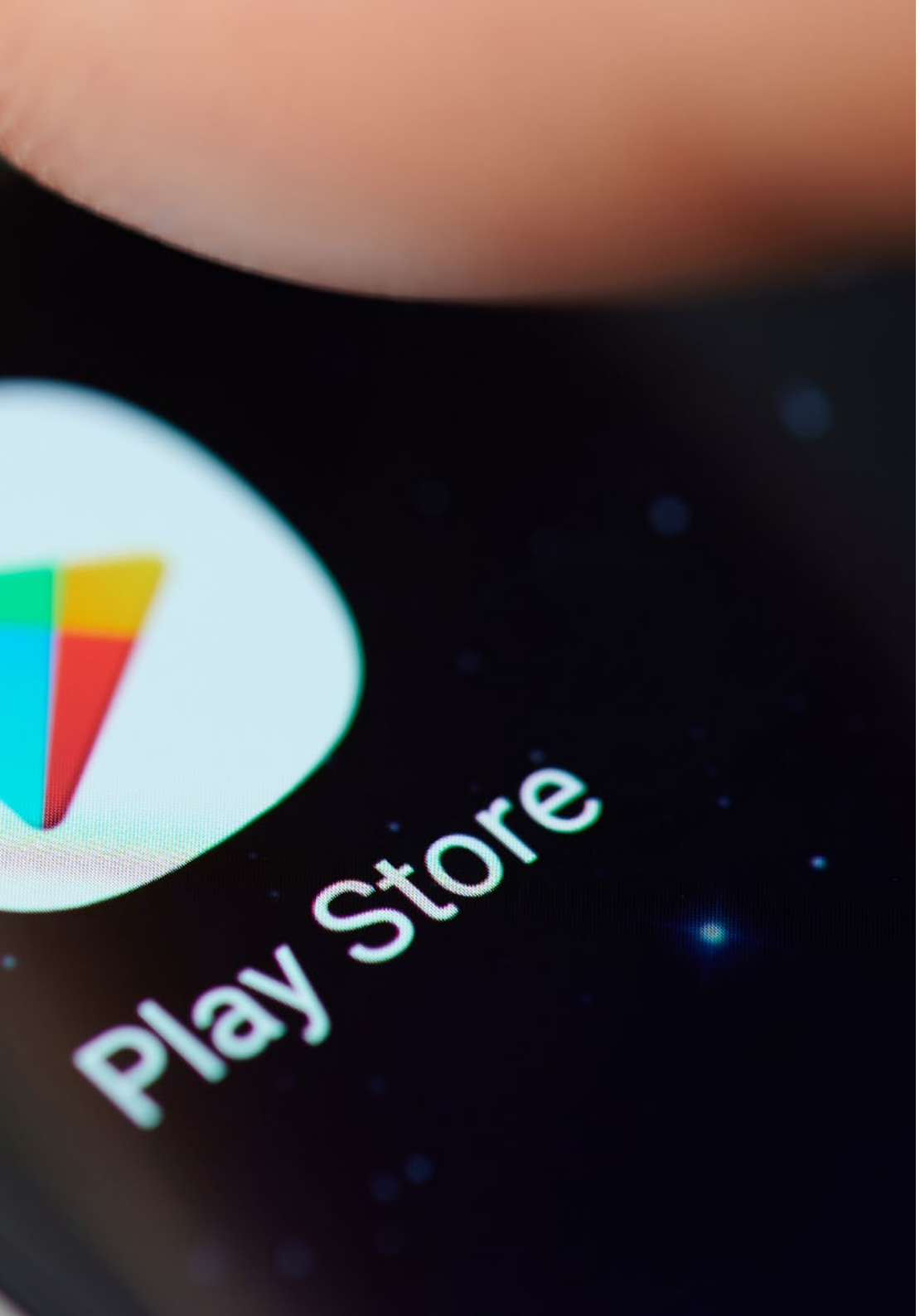
Graduates of the Postgraduate Certificate in Mobile Technology and Development will know the alternatives that exist in the world of wireless communications. They will have acquired the ability to select the one that best suits their needs. They will also be aware of the options presented by the development of mobile applications and their possibilities in terms of security.

*TECH proposes to analyze the evolution of cell phones since their emergence in order to foresee where new developments will be heading"*

## General Objectives

- Assess the different alternatives within wireless communications
- Analyze the different current technologies with greater presence in the market
- Examine the different alternatives for the development of mobile applications
- Identify best practices to ensure mobile device security
- Develop the main trends in the development of mobile applications

*The program includes use cases applied to Artificial Intelligence, one of the most innovative opportunities offered by mobile applications"*






## Specific Objectives

- Identify the most important features of the main wireless communication protocols with the greatest presence and use today
- Analyze the evolution of mobile devices from their emergence to the present day
- Develop the main features of the essential components of mobile devices
- Establish the main differences between the two major operating systems for mobile applications, iOS vs. Android
- Determine the main tools for Android-based mobile application development
- Assess the main tools for the development of iOS-based mobile applications
- Examine the key aspects of security in terms of communications, users, applications and operating systems

03

# Course Management

The teaching staff of this Postgraduate Certificate has a wide and proven work experience. This gives them a vast knowledge about the subject, but also about the trends of the sector and the possibilities it offers. In this sense, TECH students will have the opportunity to complete their learning with professionals who will answer the most specific questions that may arise.

*TECH faculty will explain in detail different use cases related to mobile application development"*

## Management

### Mr. Olalla Bonal, Martín

- Senior Blockchain Practice Manager at EY.
- Blockchain Client Technical Specialist for IBM.
- Director of Architecture for Blocknitive
- Non-Relational Distributed Databases Team Coordinator for wedoIT (IBM Subsidiary)
- Infrastructure Architect at Bankia
- Head of Layout Department at T-Systems
- Department Coordinator for Bing Data Spain S.L.

## Professors

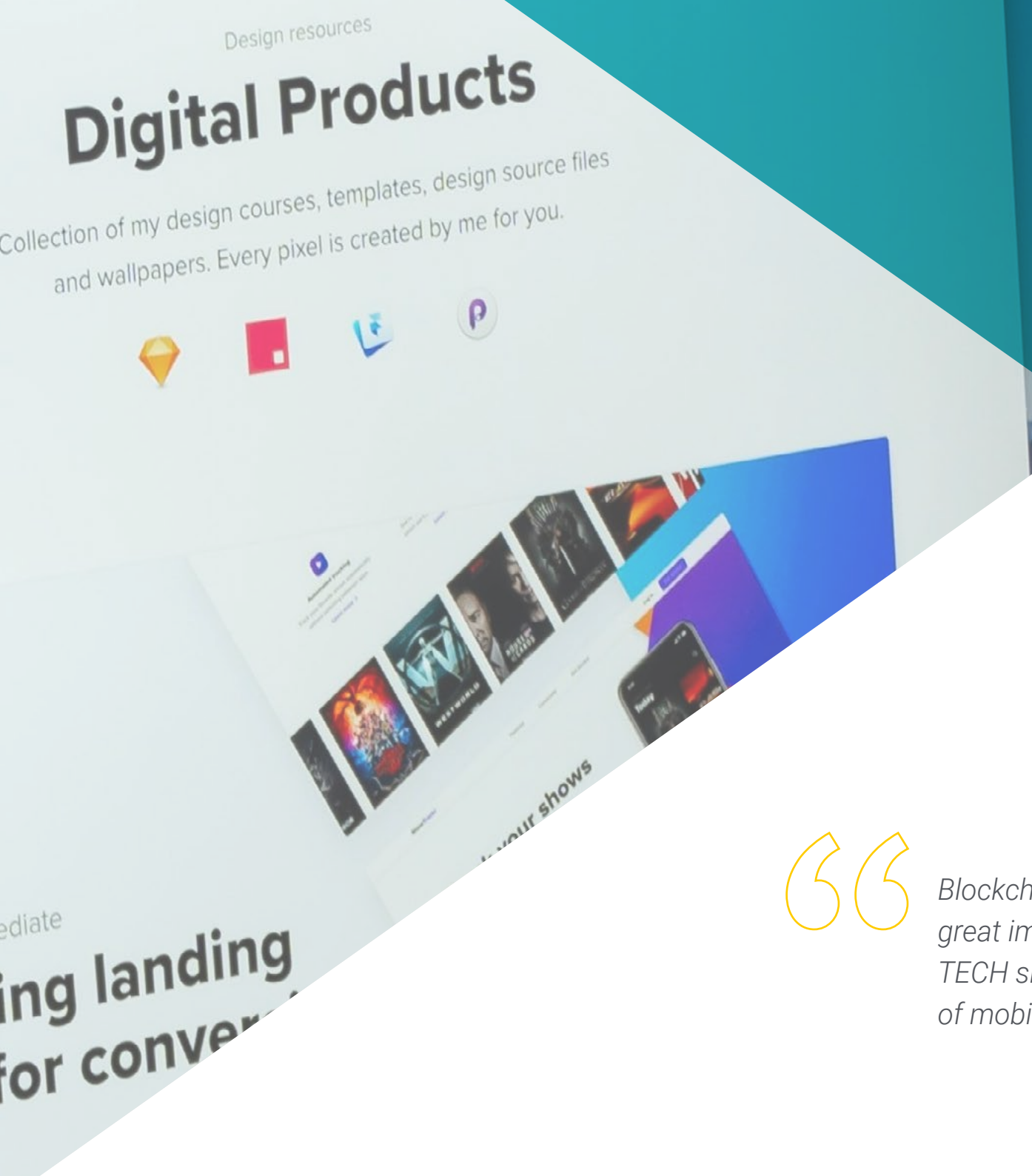
### Mr. Castro Robredo, Alejandro Enrique

- Head of EY's Digital Architecture Department
- Founder and Director of New Tech & Talent
- Head of the Digital Architecture Department at KPMG.
- Head of the Innovation Lab in Digital Architecture at Everis
- Director of Technology Solutions at Vermont Solutions
- Technology Manager at Ganetec Global Solutions
- Business Manager and Pre-Sales Manager at TCP Systems and Engineering
- Team Leader at Capgemi
- Master's Degree in Integral Management of Information Technologies by the European University
- Degree in Technical Engineering in Computer Management from the University of Las Palmas de Gran Canaria

04

# Structure and Content

This Postgraduate Certificate has been structured to start by talking about the basic characteristics of a cell phone, the most commonly used devices and the components that are part of the hardware. This is followed by the software part, explaining wireless communications and application development. Finally, iOS and Android operating systems, some concepts related to security and new trends and use cases in the field of mobile applications are introduced.




*Blockchain technology is having a great impact on various digital fields. TECH shows you its benefits in terms of mobile application development"*

## **Module 1.** Mobile Technology and Development

1.1. Mobile Devices
- 1.1.1. Mobility
- 1.1.2. Management
- 1.1.3. Operability

1.2. Types of Mobile Devices
- 1.2.1. Smartphones
- 1.2.2. Tablets
- 1.2.3. Smart Watches

1.3. Mobile Device Components
- 1.3.1. Screens
- 1.3.2. Touch Keypads
- 1.3.3. Processors
- 1.3.4. Sensors and Connectors
- 1.3.5. Batteries

1.4. Wireless Communication
- 1.4.1. Wireless Communication
- 1.4.2. Wireless Communication Advantages
- 1.4.3. Wireless Communication. Limitations

1.5. Wireless Communication. Classification
- 1.5.1. Personal Networks
- 1.5.2. Local Networks
- 1.5.3. Powerful Networks
- 1.5.4. Standards

1.6. Mobile Application Development
- 1.6.1. Hybrid and Native Applications
- 1.6.2. Environment
- 1.6.3. Programming Languages
- 1.6.4. Distribution and Business

1.7. Android Application Development
- 1.7.1. Android Application Development
- 1.7.2. Android System Kernel
- 1.7.3. Android Software Tools

1.8. IOS Application Development
- 1.8.1. IOS Application Development
- 1.8.2. IOS Application Core
- 1.8.3. IOS Application Tools

1.9. Security on Mobile Devices
- 1.9.1. Safety Layers
- 1.9.2. Communication
- 1.9.3. Users
- 1.9.4. Applications
- 1.9.5. Operating System

1.10. Mobile Application Development. Tendencies Case Uses
- 1.10.1. Augmented Reality
- 1.10.2. Artificial Intelligence
- 1.10.3. Payment Solutions
- 1.10.4. Advantages of Blockchain

*How often do you pay in cash? Economic transactions with mobile devices are the future, learn all the keys in TECH"*

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

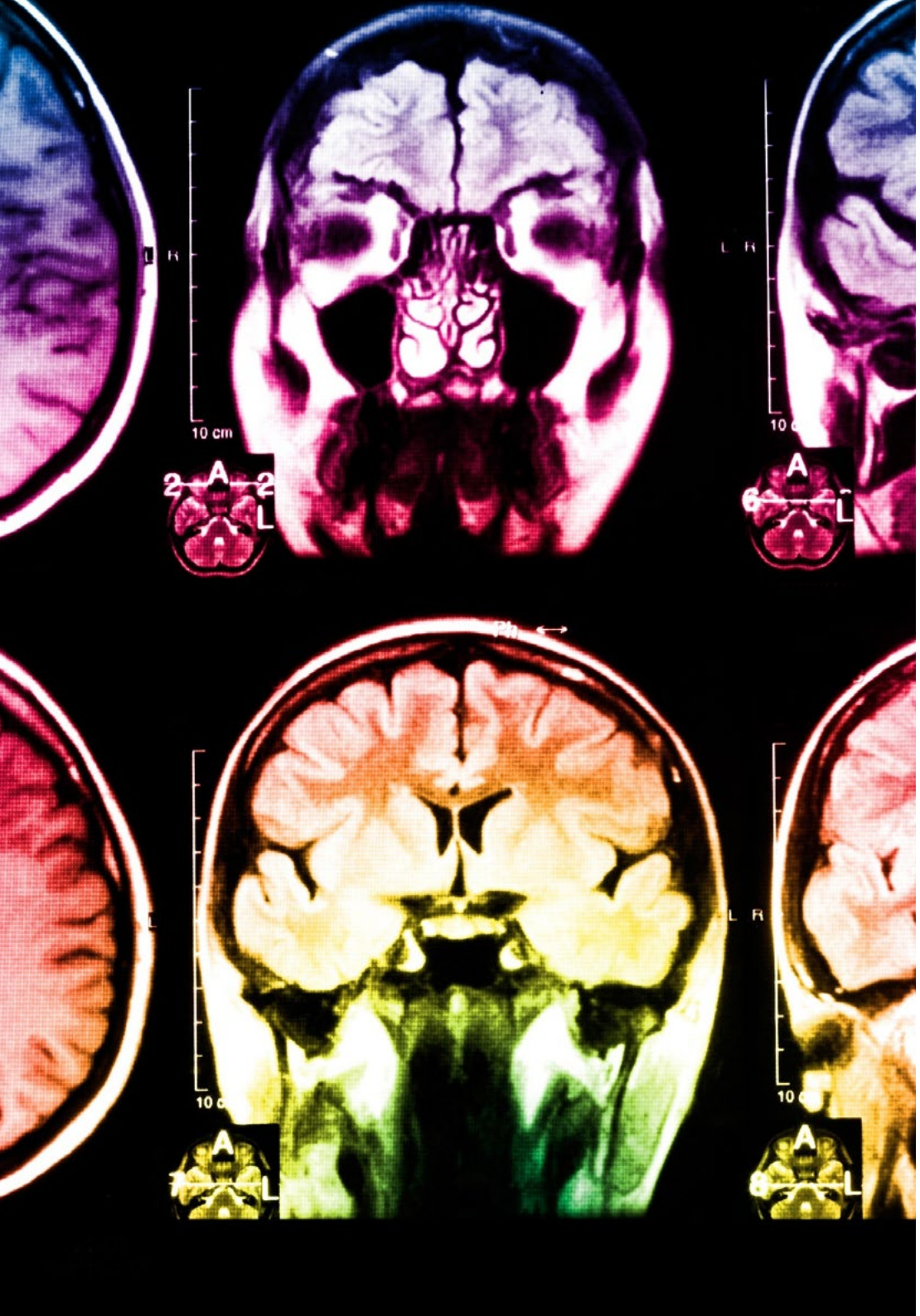
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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.



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.

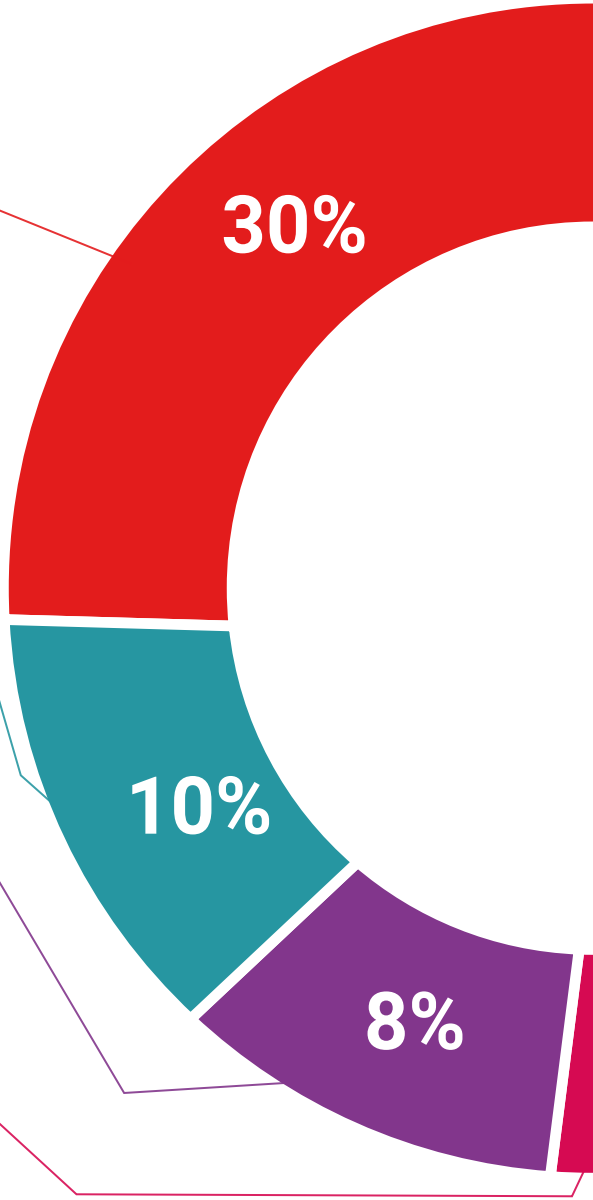
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

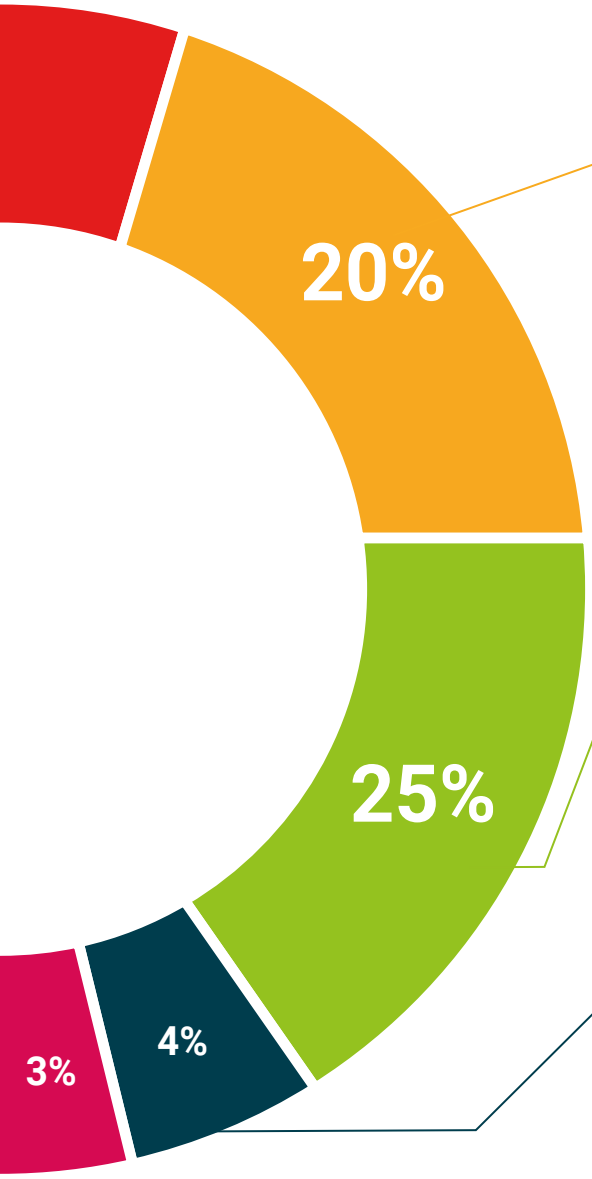
### Practising Skills and Abilities

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 Mobile Technology and Development 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 Mobile Technology and Development** 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 Mobile Technology and Development**

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

Mobile Technology and Development

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro

Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates

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

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