

# Postgraduate Certificate Mobile Security



## Postgraduate Certificate Mobile Security

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

Website: [www.techtute.com/us/information-technology/postgraduate-certificate/mobile-security](http://www.techtute.com/us/information-technology/postgraduate-certificate/mobile-security)

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# 01

# Introduction

As well as the advantages, we must also understand the disadvantages of using mobile devices and one of the most important has to do with security. The risks involved in wireless communications today are diverse; these devices must be considered as small computers that store a large amount of data through the use they are given: communications, business, transactions, and so on. This is one of the prices to pay for the innumerable services offered by this technology. However, the IT specialist's job is to provide alternatives and solutions, and for this purpose an exclusive program on Mobile Security has been designed, where you will be enhance your knowledge on the subject and acquire new skills. A 100% online program developed by experts.



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*In the near future, cell phones may completely displace the computer, so developing better security aspects is critical for IT"*

There are more and more mobile users and, consequently, more and more transactions are carried out through the network. Undoubtedly, they are an essential technical element in the lives of more than 60% of the population. Thanks to the improvement in wireless networks, it is easier to send information and it is increasingly common to make any type of transaction by cell phone for convenience and speed. It is important to consider that, as time goes by, this utility will increase even more, so it is now when more effective security designs must be considered.

This Postgraduate Certificate in Mobile Security, develops the most advanced aspects related to protection against threats to privacy present in the use of mobile devices for a user, analyzing the different levels of the device, from its hardware to the official application markets, delving into the way they communicate with other devices and, therefore, applications.

In short, it addresses the most important aspects related to the mobile devices themselves, applicable to any form of wireless communication: 5G, Bluetooth, Wi-Fi and others: It analyzes the threats and provides practical tips and tricks to improve mobile security, determines the existing cross-platform solutions for enterprises. The objective is to establish experimental discussions and raise awareness of the importance of mobile security.

A 100% online program, designed by experts in the area of application development and new technologies, with more than 25 years of experience as computer engineers, who will share their most outstanding experiences with outstanding professional and human value. Throughout 6 weeks, the student will delve in each of the concepts of Mobile Security, through an avant-garde methodology based on Relearning and a variety of formats that will make the learning process much more dynamic and practical.

This **Postgraduate Certificate in Mobile Security** 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 Application Development
- ◆ The graphic, schematic, and practical contents with which they are created, provide 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 for experts and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



*This program specially dedicated to Mobile Security provides you with the most up-to-date knowledge"*

“

*In just a few weeks you will master the techniques for securing hardware, operating systems and mobile applications in general”*

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

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

The design of this program focuses on Problem-Based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*TECH Technological University brings to you a unique and 100% online training on the most demanded topics in the workplace.*

*It includes everything about Mobile Security architecture for private and corporate Mobile Devices.*



# 02 Objectives

This program aims to determine the elements and levels of security that exist in a mobile, so that the computer scientist can understand the different types of common errors present today and those that may arise in the future in order to generate better protection techniques, starting now. The fact of offering efficient solutions to your clients or employers will provide you with a professional background that will make you stand out in your work environment, which will translate into benefits for your professional projection.







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*Providing efficient security solutions for mobiles is a guarantee that your customers will appreciate"*



## General Objectives

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- ◆ Analyze user needs and behavior in relation to mobile devices and their applications
- ◆ Execute the design of architectures, iterations and user interfaces through the programming languages of the most representative mobile platforms on the market (Web, iOS and Android)
- ◆ Apply error control, testing and debugging mechanisms in mobile application development
- ◆ Address different practical and business cases for publishing, distributing and disseminating mobile applications in the main application markets
- ◆ Master the practical knowledge to plan and manage technology projects related to mobile technologies
- ◆ Develop the skills, aptitudes and tools necessary to learn to develop mobile applications in an autonomous and professional manner, on multi-platform devices
- ◆ Explore content related to app monetization and mobile marketing





## Specific Objectives

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- ◆ Determine the security features and levels of security on a mobile device
- ◆ Establish the techniques to used to *secure* a device
- ◆ Analyze the common errors in security
- ◆ Examine the mechanisms enabled in programming to avoid security breaches
- ◆ Specify the recommendations given by the security agencies
- ◆ Compile the different solutions available on the market for managing the security of mobile devices within the enterprise
- ◆ Analyze the cryptographic processes applied to mobile security

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*This program is for you if you are looking to generate efficient solutions in your next projects and want to stand out in the competitive environment of new technologies”*

03

# Course Management

A team of expert teachers has designed this refresher program that seeks to benefit all those professionals working in IT environments. Computer engineers with more than 25 years of experience in the area of application development, new technologies, solution architecture and digital infrastructure have been chosen by TECH to offer you the most up-to-date knowledge in the field of Mobile Security.



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*Computer engineers with more than 25 years of experience have designed this refresher program to help you master Mobile Security techniques”*

## 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 España SL

## Professors

### Mr. Gozalo Fernández, Juan Luis

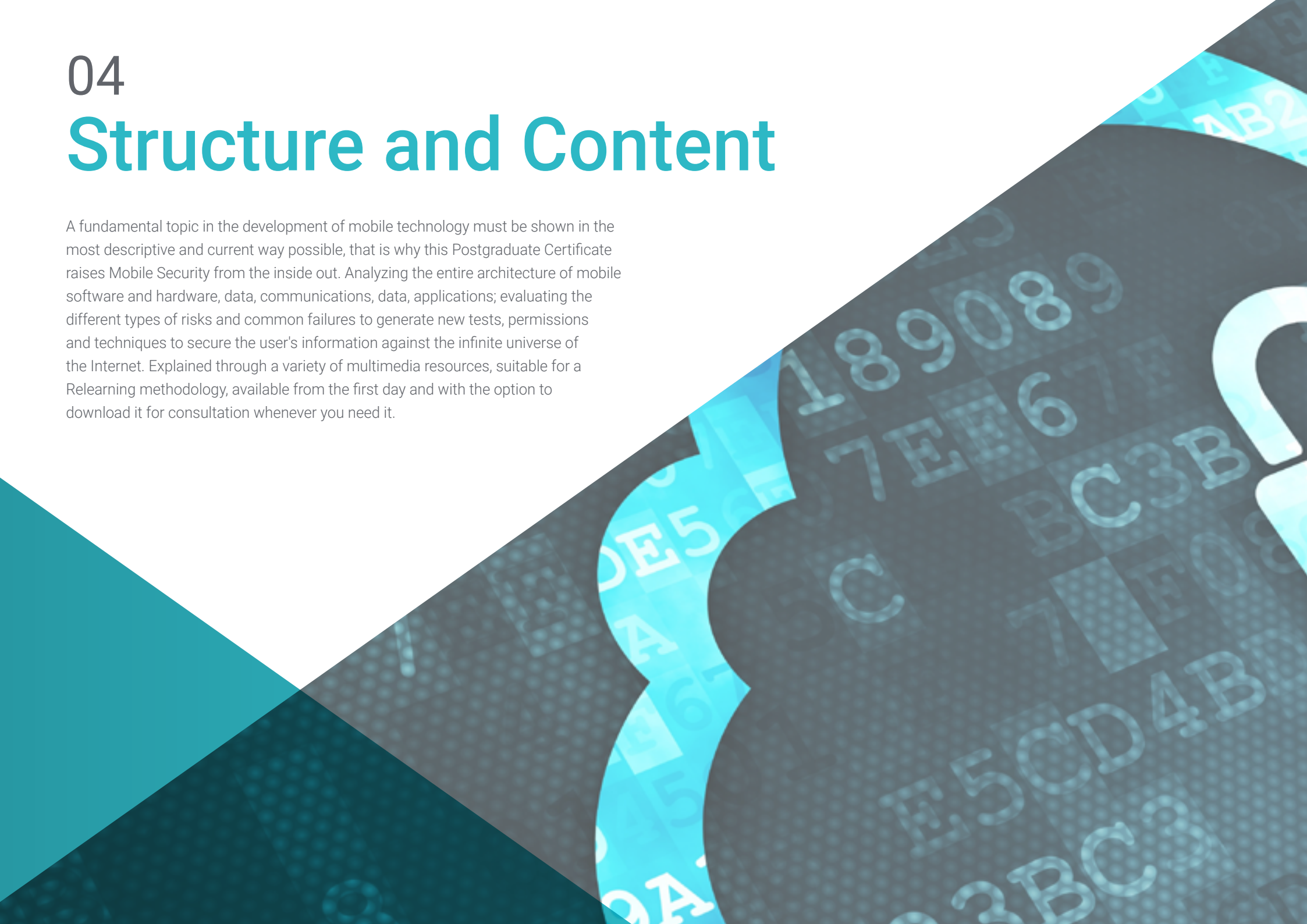
- ♦ Blockchain-based Product Manager for Open Canarias
- ♦ Blockchain DevOps Director at Alastria
- ♦ Director of Service Level Technology at Santander Spain
- ♦ Tinkerlink Mobile Application Development Manager at Cronos Telecom
- ♦ IT Service Management Technology Director at Barclays Bank Spain
- ♦ Bachelor's Degree in Computer Engineering from UNED
- ♦ Deep Learning Specialization in DeepLearning.ai



# 04

# Structure and Content

A fundamental topic in the development of mobile technology must be shown in the most descriptive and current way possible, that is why this Postgraduate Certificate raises Mobile Security from the inside out. Analyzing the entire architecture of mobile software and hardware, data, communications, data, applications; evaluating the different types of risks and common failures to generate new tests, permissions and techniques to secure the user's information against the infinite universe of the Internet. Explained through a variety of multimedia resources, suitable for a Relearning methodology, available from the first day and with the option to download it for consultation whenever you need it.





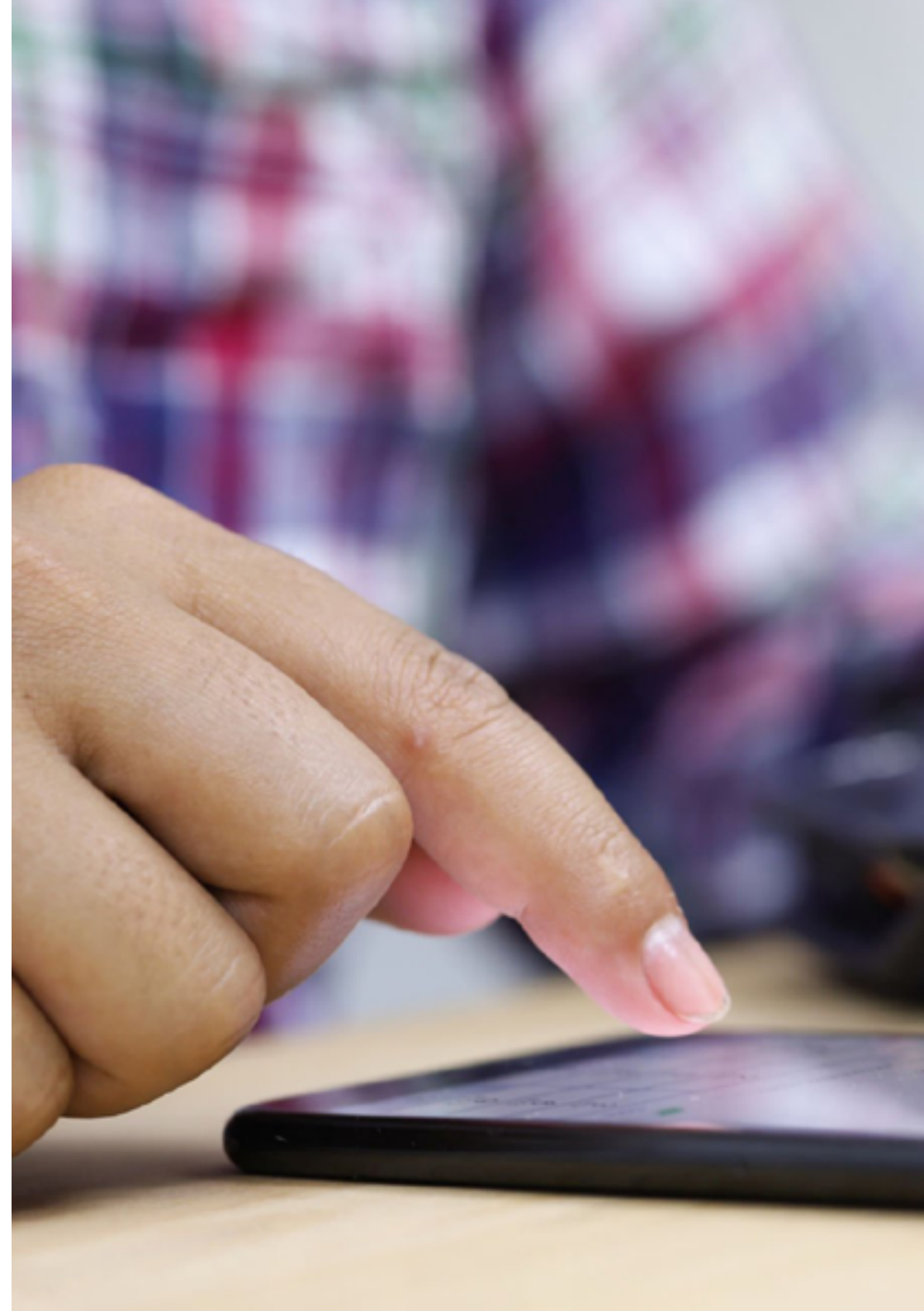



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*The 100% online and Relearning-based methodology of this program provides you with the convenience you need to become a professional in today's times"*

## Module 1. Security on Mobile Devices

- 1.1. Mobile Device Security Architecture
  - 1.1.1. Physical Security of Devices
  - 1.1.2. Operating System Security
  - 1.1.3. Application Security
  - 1.1.4. Data Security
  - 1.1.5. Communications Security
  - 1.1.6. Security of Enterprise Devices
- 1.2. Securing Mobile Hardware
  - 1.2.1. Mobile Devices
  - 1.2.2. Wearables Devices
  - 1.2.3. Automotive
  - 1.2.4. IoT Devices
  - 1.2.5. TV Devices
- 1.3. Operating System Security
  - 1.3.1. Android Mobile Devices
  - 1.3.2. Apple IOS Mobile Devices
  - 1.3.3. Other Existing Mobile Devices: Blackberry, etc
  - 1.3.4. Wearables Devices
  - 1.3.5. Automotive Operating Systems
  - 1.3.6. Mobile Devices in the Internet of Things (IoT)
  - 1.3.7. SmartTV Devices
- 1.4. Securing Mobile Applications
  - 1.4.1. Android Mobile Devices
  - 1.4.2. Apple IOS Mobile Devices
  - 1.4.3. Other Mobile Devices Blackberry
  - 1.4.4. Wearables Devices
  - 1.4.5. Automotive Operating Systems
  - 1.4.6. Mobile Devices in the Internet of Things (IoT)
  - 1.4.7. SmartTV Devices



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- 1.5. Securing Data in Mobile Applications
    - 1.5.1. Android Mobile Devices
    - 1.5.2. Apple IOS Mobile Devices
    - 1.5.3. Other Mobile Devices Blackberry
    - 1.5.4. Wearables Devices
    - 1.5.5. Automotive Operating Systems
    - 1.5.6. Mobile Devices in the Internet of Things (IoT)
    - 1.5.7. SmartTV Devices
  - 1.6. Mobile Market Places Security
    - 1.6.1. Google Play by Google
    - 1.6.2. Play Store by Apple
    - 1.6.3. Other Market Places
    - 1.6.4. Mobile Rooting
  - 1.7. Multi-Platform Security Solutions
    - 1.7.1. Mobile Device Management (MDM)
    - 1.7.2. Types of Solutions on the Market
    - 1.7.3. Securing Devices Using MDM (Master Data Management)
  - 1.8. Secure Mobile Application Development
    - 1.8.1. Use of Patterns for Safe Development
    - 1.8.2. Integrated Security Test Management
    - 1.8.3. Secure Application Deployment
  - 1.9. Permission Management in Mobile Devices
    - 1.9.1. Permission Systems
    - 1.9.2. Digital Signatures in the Android Application Package (APK)
    - 1.9.3. Execution of Processes in the Core
    - 1.9.4. Execution Threads and Events
  - 1.10. Security Recommendations for Mobile Devices
    - 1.10.1. NSA Recommendations on Mobile Devices
    - 1.10.2. INCIBE Recommendations on Mobile Devices
    - 1.10.3. ISO 27001:2013 Annex 6.2. 1. Mobile Device Use Policies

# 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.

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



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



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

### A learning method that is different and innovative

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

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

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

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

## Relearning Methodology

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

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

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

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

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





In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.



This program offers the best educational material, prepared with professionals in mind:



### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

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



### Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





#### Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.



#### Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



# 06 Certificate

The Postgraduate Certificate in Mobile Security guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Mobile Security** 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 Security**

Official N° of hours: **150 h.**



\*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.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
online training  
development language  
classroom



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