



# Postgraduate Certificate

Mobile Security

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Credits: 6 ECTS

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/us/information-technology/postgraduate-certificate/mobile-security

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# tech 06 | Introduction

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-todate 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 Global 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.





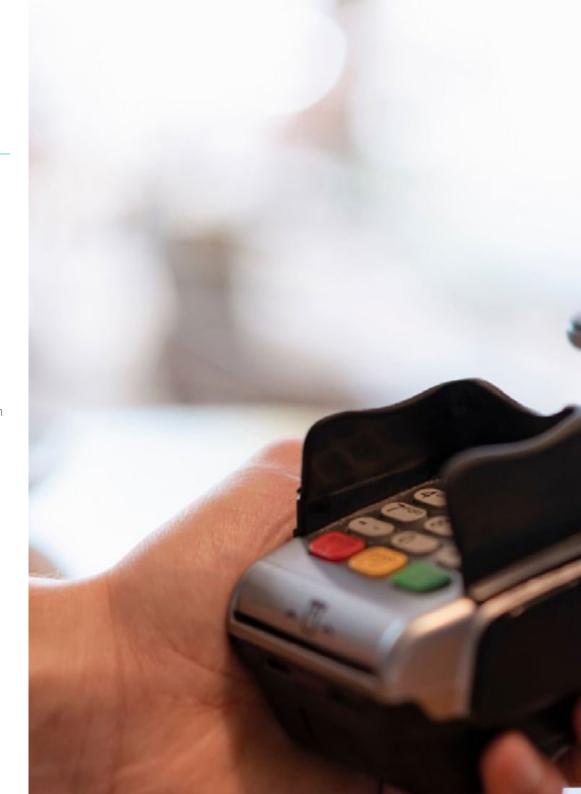


# tech 10 | Objectives



## **General Objectives**

- 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**

- 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



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"







# tech 14 | Course Management

#### Management



#### Mr. Olalla Bonal, Martín

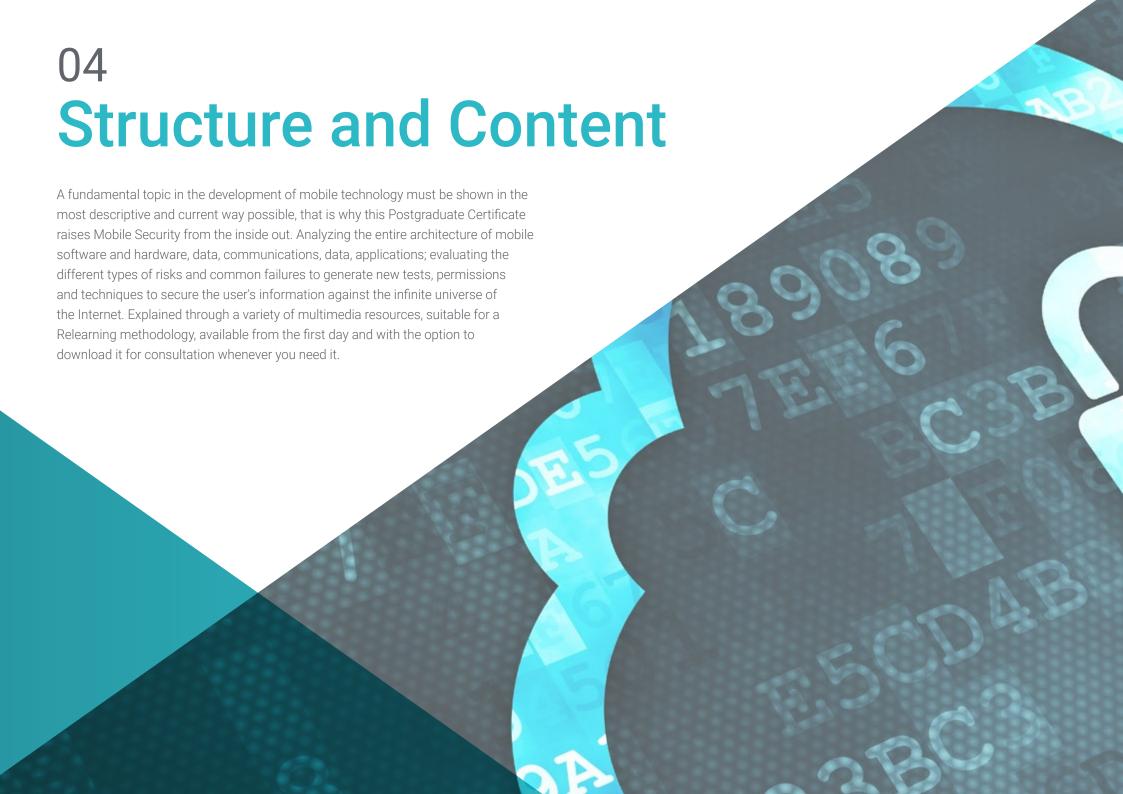
- Senior Blockchain Practice Manager at EY
- Blockchain Client Technical Specialist for IBM
- Director of Architecture for Blocknitive
- Non-Relational Distributed Databases Team Coordinator for wedoIT (IBM Subsidiary)
- Infrastructure Architect at Bankia
- Head of Layout Department at T-Systems
- Department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



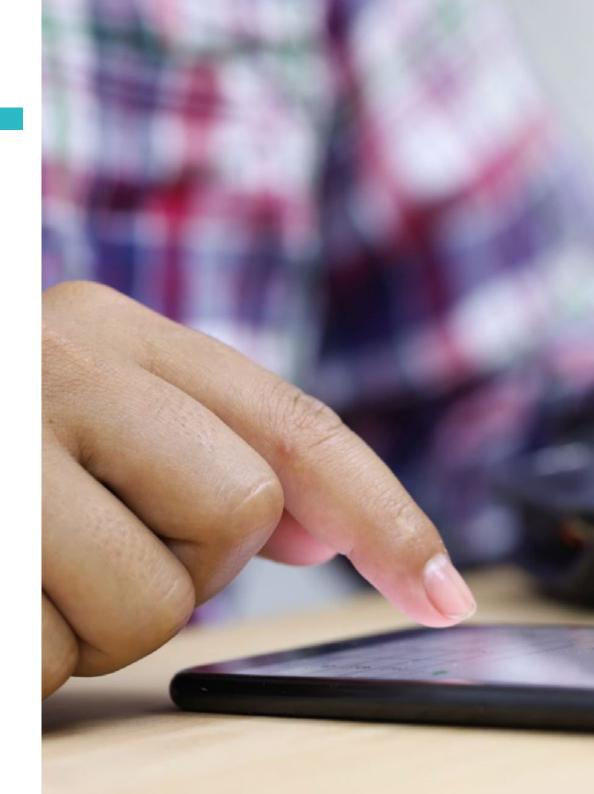




# tech 18 | Structure and Content

#### 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

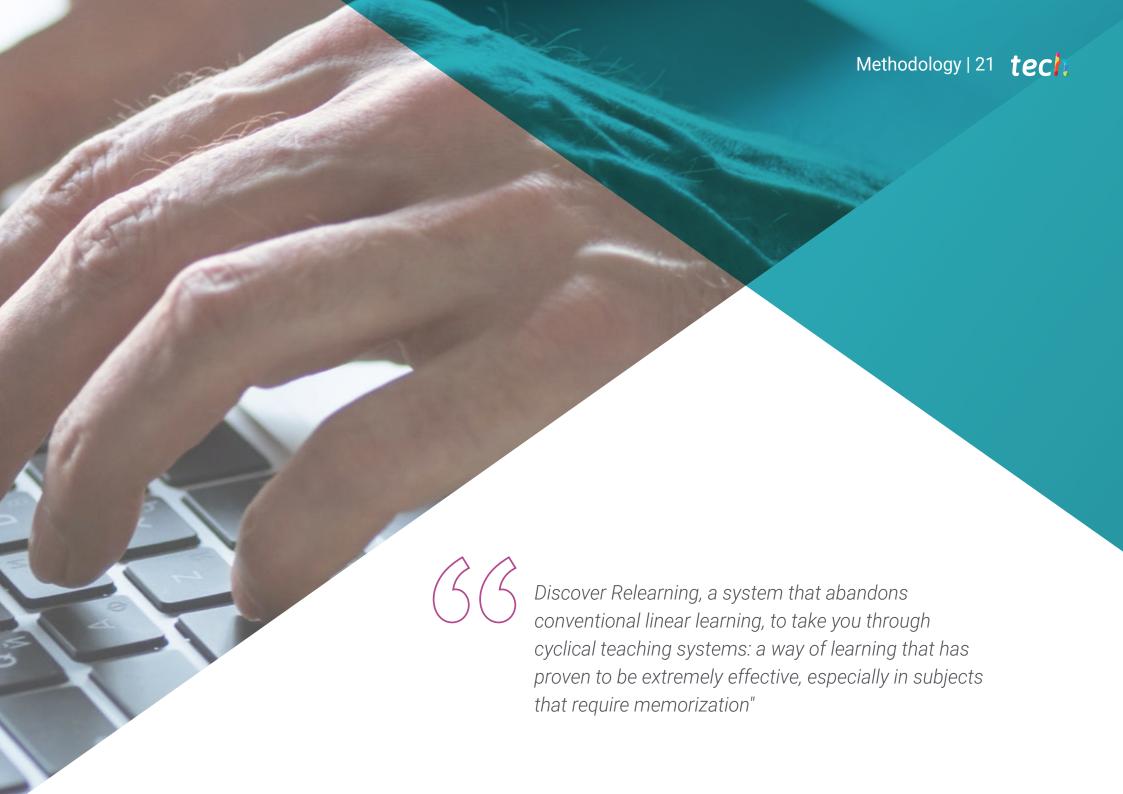




# Structure and Content | 19 tech

- 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





# tech 22 | Methodology

#### 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.



# Methodology | 25 tech

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.



# Methodology | 27 tech



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.





# tech 30 | Certificate

This program will allow you to obtain your **Postgraduate Certificate in Mobile Security** 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 Certificate in Mobile Security

Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



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

#### Postgraduate Certificate in Mobile Security

This is a program of 180 hours 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 2024



health confidence people
education information tutors
guarantee accreditation teaching



# Postgraduate Certificate Mobile Security

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

