

# Postgraduate Certificate IT Security Management



## Postgraduate Certificate IT Security Management

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/in/information-technology/postgraduate-certificate/it-security-management](http://www.techtute.com/in/information-technology/postgraduate-certificate/it-security-management)

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# 01

# Introduction

Cybersecurity is a fundamental element in any company that works in the digital

environment. Thus, digitalization has expanded everywhere, and companies in all areas are using technologies that require the Internet.

They are therefore looking for professionals who can manage their security,

as the profile of specialists adapted to the recent transformations in this field is not abundant. This program has been designed to offer the computer scientist an update that will position them as an expert in administration and management of security applied to IT. All this, based on an online teaching methodology that will allow you to work and study at the same time, without interrupting your career.





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*Numerous companies are looking for IT Security Management experts, so this program is perfect for you to progress professionally"*

Although companies of different sizes and types have traditionally relied on IT technicians to solve their daily incidents, there is a new professional profile sought after in this field: the IT Security Manager. The increasing digitization of processes in companies and all types of institutions has also brought with it an increase in cyber threats. Therefore, it is no longer only necessary to have technical support specialists, but also security experts.

Thus, this Postgraduate Certificate in IT Security Management has been developed with this situation in mind, offering the professional the most specialized knowledge in this sector. And this is done by means of an online learning system to which the student will have access to all the program materials 24 hours a day. This, together with the absence of rigid schedules, is a great advantage for the IT specialist.

With this method, the professional will also be able to delve into issues such as identity and access management, the risk monitoring committee, security audits or official cyber-incident management guides, among many others.

This **Postgraduate Certificate in IT Security Management** contains the most complete and up-to-date program on the market. Its most notable features are:

- ◆ Case studies presented by IT and cybersecurity experts
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development
- ◆ 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
- ◆ Access to content from any fixed or portable device with an Internet connection



*TECH's 100% online method will allow you to study when and where you decide, without rigid schedules or uncomfortable journeys to an academic center"*

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*An internationally renowned faculty will accompany you throughout the learning process, ensuring that every minute you spend studying will have a positive impact on your career”*

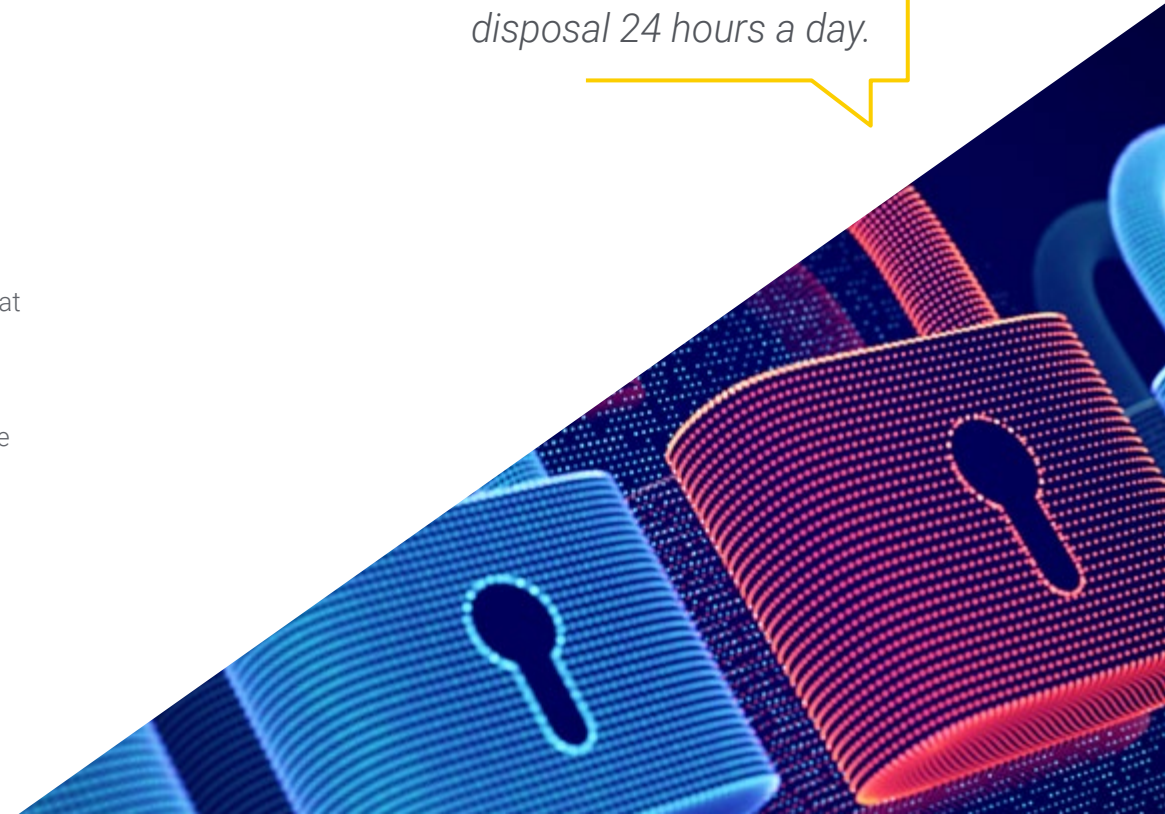
The program includes, in its teaching staff, professionals from the sector who bring to this training the experience of their work, in addition to recognized specialists from prestigious reference societies and universities.

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 training programmed to train 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 throughout the program.

*You will be able to perform IT security audits, one of the most requested services in the field of cybersecurity.*

*Videos, practical exercises, master classes, complementary readings, interactive summaries, etc. The best multimedia resources will be at your disposal 24 hours a day.*



# 02 Objectives

The popularity of many digital resources has also led to the emergence of new professional profiles in the field of IT. This is why the IT security management specialist is on the rise and more and more companies are looking for IT specialists who can provide them with the solutions they need. This Postgraduate Certificate is, therefore, a unique opportunity for the professional, providing them with all the tools to position them as an expert in this field, being able to experience immediate professional progress upon completion of the program.





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*Your goal is to advance professionally in the area of cybersecurity and with this program you will get everything you need to achieve it"*



## General Objectives

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- ◆ Analyze the organizational and functional structure of an information security department (the CISO's office)
- ◆ Establish an audit program that meets the organization's cybersecurity self-assessment needs
- ◆ Develop a vulnerability scanning and monitoring program and a cybersecurity incident response plan



*Now is the time to specialize and take advantage of this opportunity to improve your career and salary prospects"*





## Specific Objectives

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- ◆ Identify the different structures that an information security area can have
- ◆ Develop a security model based on three lines of defence
- ◆ Present the different periodic and extraordinary committees in which the cybersecurity area is involved
- ◆ Specify the technological tools that support the main functions of the security operations team (SOC)
- ◆ Evaluate vulnerability control measures appropriate to each scenario
- ◆ Develop the security operations framework based on the NIST CSF
- ◆ Specify the scope of the different types of audits (Red Team, Pentesting, Bug Bounty, etc.)
- ◆ Propose the activities to be carried out after a security incident
- ◆ Set up an information security command center that encompasses all relevant stakeholders (authorities, customers, suppliers, etc.)

# 03

## Course Management

Technology and cybersecurity are changing rapidly, so when looking for an update, IT professionals may find themselves faced with academic programs that are completely outdated. But that will not happen with this Postgraduate Certificate, since its professors are true specialists in IT security management and are professionally involved in this area. Thus, students will be able to learn directly from the most expert teachers the latest developments in this field, preparing them to work in the sector with the most advanced tools and techniques.



“

*You will benefit from the most up-to-date knowledge in IT security thanks to the teaching staff of this program, composed of active professionals specialized in this sector”*

## Management



### Mr. Olalla Bonal, Martín

- ♦ Director de Información en ePETID - Global Animal Health
- ♦ Blockchain Technical Specialist at IBM SPGI
- ♦ *Blockchain* Architect
- ♦ Infrastructure Architect in Banking
- ♦ Project management and implementation of solutions
- ♦ Digital Electronics Technician
- ♦ Teacher Hyperledger Fabric Training for companies
- ♦ Teacher Blockchain Training for Businesses

## Professors

### Mr. Tobal Redondo, Javier

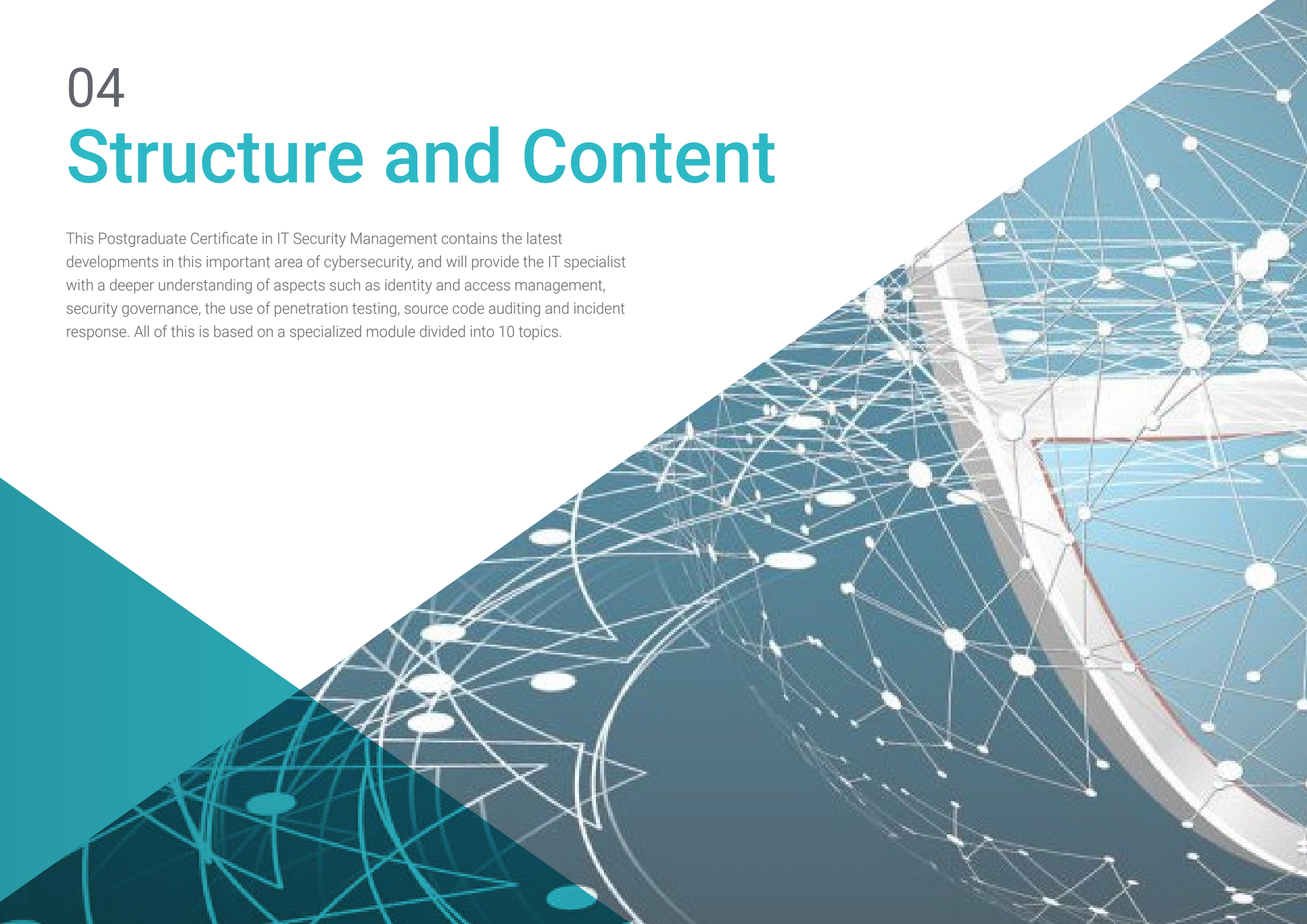
- ♦ Information Security Manager of the Payment Division Amadeus IT Group
- ♦ Chief Information Security Officer FINTONIC, Financial Services
- ♦ HUAWEI Application Innovation Program Manager
- ♦ Services Engineer and Architect in the Services and Security Planning and Architecture Area at Amena / Orange Spain
- ♦ Degree in Computer Science from the University of Deusto (Bilbao, Spain)
- ♦ Postgraduate degree in Industrial Computing Industrial Engineering School Bilbao



# 04

## Structure and Content

This Postgraduate Certificate in IT Security Management contains the latest developments in this important area of cybersecurity, and will provide the IT specialist with a deeper understanding of aspects such as identity and access management, security governance, the use of penetration testing, source code auditing and incident response. All of this is based on a specialized module divided into 10 topics.





“

*Security management is essential for many companies today. TECH provides you with the latest content in this field, offering you immediate professional improvement”*

## Module 1. IT Security Management

- 1.1. Safety Management
  - 1.1.1. Security Operations
  - 1.1.2. Legal and Regulatory Appearance
  - 1.1.3. Business Authorization
  - 1.1.4. Risk Management
  - 1.1.5. Identity and Access Management
- 1.2. Structure of the Security Area The CISO's office
  - 1.2.1. Organisational Structure. Position of the CISO in the Structure
  - 1.2.2. Lines of Defence
  - 1.2.3. CISO Office Organization Chart
  - 1.2.4. Budget Management
- 1.3. Government Security
  - 1.3.1. Security Committee
  - 1.3.2. Risk Monitoring Committee
  - 1.3.3. Audit Committee
  - 1.3.4. Crisis Committee
- 1.4. Government Security Functions
  - 1.4.1. Policies and Standards
  - 1.4.2. Security Management Plan
  - 1.4.3. Control Panels
  - 1.4.4. Awareness and Training
  - 1.4.5. Supply Chain Security
- 1.5. Security Operations
  - 1.5.1. Identity and Access Management
  - 1.5.2. Configuration of Network Security Rules Firewalls
  - 1.5.3. IDS/IPS Platform Management
  - 1.5.4. Vulnerability Analysis



- 1.6. Cybersecurity Framework NIST CSF
  - 1.6.1. NIST Methodology
    - 1.6.1.1. Log In
    - 1.6.1.2. Protect
    - 1.6.1.3. Detect
    - 1.6.1.4. Respond
    - 1.6.1.5. Recover
- 1.7. Security Operations Center (SOC) Functions
  - 1.7.1. Protection Red Team, Pentesting, Threat Intelligence
  - 1.7.2. Detection SIEM, User Behavior Analytics, Fraud Prevention
  - 1.7.3. Response
- 1.8. Security Audits
  - 1.8.1. Intrusion Test
  - 1.8.2. Red Team Exercises
  - 1.8.3. Source Code Audits Secure Development
  - 1.8.4. Component Safety (Software Supply Chain)
  - 1.8.5. Forensic Analysis
- 1.9. Incident Response
  - 1.9.1. Preparation
  - 1.9.2. Detection, Analysis and Reporting
  - 1.9.3. Containment, Eradication and Recovery
  - 1.9.4. Post-Incident Activity
    - 1.9.4.1. Retention of Evidence
    - 1.9.4.2. Forensic Analysis
    - 1.9.4.3. Gap Management
  - 1.9.5. Official Cyber Incident Management Guides
- 1.10. Vulnerability Management
  - 1.10.1. Vulnerability Analysis
  - 1.10.2. Vulnerability Assessment
  - 1.10.3. System Basing
  - 1.10.4. Day 0 Vulnerabilities Zero-Day

# 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.

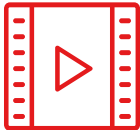
*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

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.



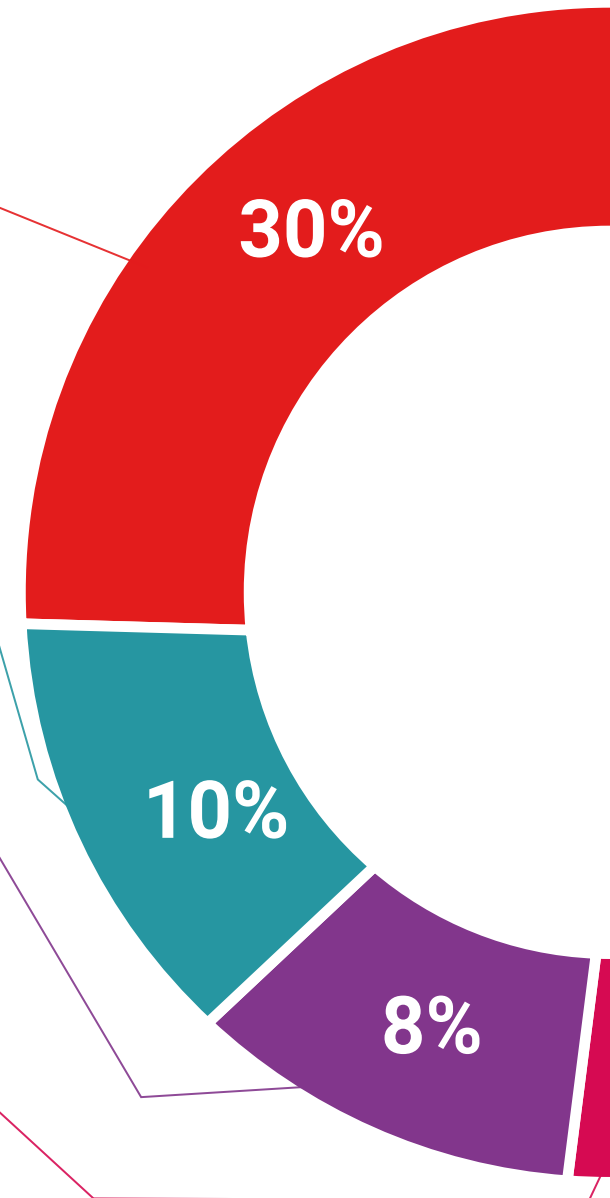
### Practising Skills and Abilities

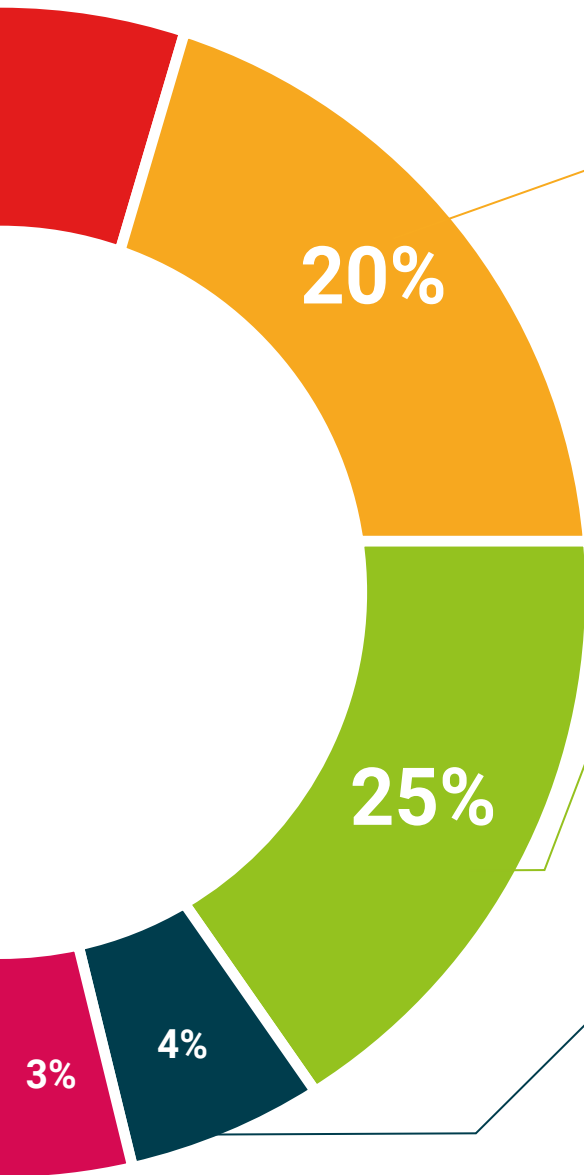
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### 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 IT Security Management 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 IT Security Management** 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 certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by job markets, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in IT Security Management**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper certificate 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 quality  
online training  
development language  
classroom



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