# Postgraduate Certificate
## Information Security Architectures and Models

**tech** technological university

# Postgraduate Certificate
## Information Security Architectures and Models

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

Website: **www.techtitute.com/in/information-technology/postgraduate-certificate/information-security-architectures-models**

# Index

# 01
# Introduction

The world has undergone a great transformation in recent years due to new technologies. These have allowed companies and individuals to carry out numerous activities and offer services of all kinds in a simple and fast way. The Internet and the digital environment, therefore, offer enormous possibilities. But they are also open to attack, as they can suffer from vulnerabilities. Thus, each company and service must have the best cybersecurity model available, and this program offers professionals the possibility of specializing in this area, so that they can identify and apply the best security architectures applicable to each case.

*You will be able to apply the best security models according to the needs of your clients through a 100% online teaching system that will allow you to combine your work with your studies"*

Today's many new technologies mean that there are many different services that require proper maintenance. But this maintenance has to be adapted to each tool, and the same goes for cybersecurity. Each device requires a security model tailored to its needs and vulnerabilities. Companies are aware of this situation, and are looking for experts who can provide them with the solutions they are looking for.

Thus, the professional profile of the specialist in information security architectures and models is in great demand. Therefore, this Postgraduate Certificate is perfect for the IT specialist who wishes to advance their career in this field, as it offers the most advanced knowledge on issues such as models based on security policies, protection tools or work teams, as well as the latest developments in access management or continuous risk management.

The computer scientist will be able to deepen their knowledge of this discipline through an online learning methodology specially designed for working professionals. In addition, you will benefit from the knowledge of a teaching staff of great international prestige in this area of cybersecurity, and numerous multimedia materials with which the teaching will be very agile and simple.

This **Postgraduate Certificate in Information Security Architectures and Models** contains the most complete and up-to-date educational program on the university panorama. The most important features include:

◆ 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 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

"

*This program will make you a great specialist in information security architectures and models"*

*The best multimedia materials will be at your disposal: videos, theoretical-practical exercises, interactive summaries, master classes"*

*Study how, when and where you want thanks to TECH's innovative learning methodology.*

*Delve into aspects such as business processes and information security in this program.*

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

## 02
# Objectives

The main objective of this Postgraduate Certificate in Information Security Architectures and Models is to provide professionals with all the necessary tools to offer their clients and employers the best cybersecurity solutions. Thus, with this program, the computer scientist will not only be a specialist in security applied to information technologies, but will be able to become a reference figure by being able to protect the digital services of all types of companies and institutions.

*Offering the best security to your clients is your main objective and TECH will help you achieve it with this Postgraduate Certificate"*

## General Objectives

- Develop an Information Security Management System (ISMS)
- Identify the key elements that make up an ISMS
- Evaluate the different security architecture models to establish the most appropriate model for the organization
- Identify the regulatory frameworks of application and their regulatory bases

*You will progress professionally in a very fast way when you complete this program: don't wait any longer and enroll"*
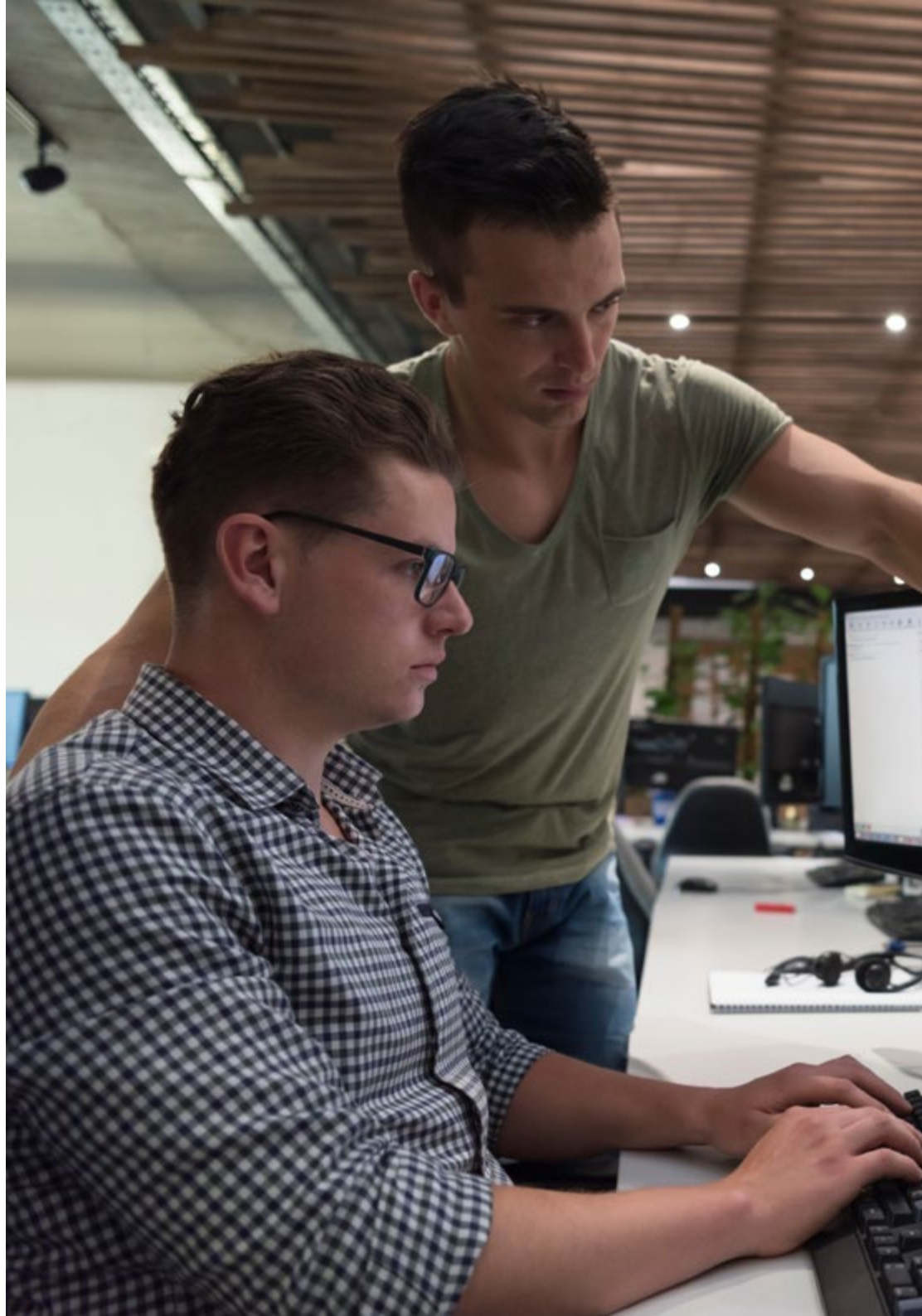
## Specific Objectives

- Align the Safety Management Plan with the strategic objectives of the organization
- Establish an ongoing risk management framework as an integral part of the Security Management Plan
- Determine appropriate indicators for monitoring the implementation of the ISMS
- Establish a policy-based security strategy
- Analyze the objectives and procedures associated with the employee, supplier and partner awareness plan
- Identify, within the regulatory framework, the regulations, certifications and laws applicable in each organization
- Develop the fundamental elements required by the ISO 27001:2013 standard
- Implement a privacy management model in line with the European GDPR/RGPD regulation

## 03
# Course Management

To ensure that students enjoy an optimal learning process, TECH has selected the best faculty specialized in cybersecurity. Thus, this Postgraduate Certificate in Information Security Architectures and Models has internationally renowned experts among its faculty. The computer scientist will not have another opportunity like this one to improve their professional profile and become the information security model specialist of the future.

*The extensive experience of the program's faculty is one of its great strengths"*

## Management

**Mr. Olalla Bonal, Martín**

- 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 program has been designed by internationally renowned specialists who are well versed in the latest advances in cybersecurity architectures and models. Thus, they have structured this Postgraduate Certificate in 1 module through which the professional will be able to delve into issues such as risk identification in security models, risk assessment based on business parameters or the selection and standardization of technologies, among many others.

*Security architecture specialists are increasingly in demand. This is the professional opportunity you were looking for"*

## Module 1. Information Security Architectures and Models

1.1. Information Security Architecture
   1.1.1. ISMSI / PDS
   1.1.2. Strategic Alignment
   1.1.3. Risk Management
   1.1.4. Performance Measurement
1.2. Information Security Models
   1.2.1. Based on Security Policies
   1.2.2. Based on Protection Tools
   1.2.3. Bases on Teamwork
1.3. Security Model Key Components
   1.3.1. Risk Identification
   1.3.2. Definition of Controls
   1.3.3. Continuous Assessment of Risk Levels
   1.3.4. Awareness Plan for Employees, Suppliers, Partners, etc.
1.4. Risk Management Process
   1.4.1. Asset Identification
   1.4.2. Threat Identification
   1.4.3. Risk Assessment
   1.4.4. Prioritization of Controls
   1.4.5. Reassessment and Residual Risk
1.5. Business Processes and Information Security
   1.5.1. Business Processes
   1.5.2. Risk Assessment Based on Business Parameters
   1.5.3. Business Impact Analysis
   1.5.4. Business Operations and Information Security

# 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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

**30%**

**10%**

**8%**

**20%**

**25%**

**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.

# 06
# Certificate

The Postgraduate Certificate in Information Security Architectures and Models 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 Information Security Architectures and Models** contains the most complete and up-to-date educational program on the market.

After the student has passed the assessments, they will receive their corresponding **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 labor exchanges, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in Information Security Architectures and Models**
Official Number of Hours: **150 h.**

tech technological university

Awards the following
CERTIFICATE
to
Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in

Information Security Architectures and Models

This is a qualification awarded by this University, equivalent to 200 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

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

# tech technological university

## Postgraduate Certificate
Information Security Architectures and Models

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

# Postgraduate Certificate
## Information Security
## Architectures and Models

tech *technological university*