Postgraduate Certificate Practical Implementation of Security Policies against Attacks

technological university



## **Postgraduate Certificate** Practical Implementation of Security Policies against Attacks

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h week
- » Schedule: at your own pace
- » Tests: online
- » Target Group: University Graduates, Postgraduates and Degree holders who have previously completed any of the following programs in the field of Social and Legal Sciences, Administration and Economics.

Website: www.techtitute.com/in/school-of-bisness/postgraduate-certificate/practical-implementation-security-policies-against-attacks

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## 01 Welcome

Knowing in detail the main vulnerabilities of an entity to implement the most effective Security Policies is a fundamental requirement for any professional who wants to excel in this business sector. That is why TECH has developed this very complete program that delves into the exhaustive analysis of the most common attacks and the measures to take to mitigate them or to complete the elimination of the associated risk. It is a 100% online program perfect for any graduate who wants to give a boost to their career through the course of a theoretical and practical training that will allow them, not only to specialize in the most effective techniques and strategies of cybersecurity, but hone their managerial skills and leadership skills to adapt to current labour market demand.

> Postgraduate Certificate in Practical Implementation of Security Policies against Attacks TECH Technological University

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TECH presents this Postgraduate Certificate as a unique and unparalleled opportunity to reach your highest professional level through a program 100% online and in just 6 weeks"

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# 02 Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class center for intensive managerial skills education.

## Why Study at TECH? | 07 tech

TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"

## tech 08 | Why Study at TECH?

## At TECH Technological University



### Innovation

The university offers an online learning model that balances the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

*"Microsoft Europe Success Story"*, for integrating the innovative, interactive multi-video system.



## The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...



## of TECH students successfully complete their studies



### Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.



executives prepared each year

## +200

different nationalities



#### Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.



collaborative agreements with leading companies

### Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



#### **Multicultural Context**

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.



## Why Study at TECH? | 09 tech

TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



#### Analysis

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



#### Learn with the best

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.

At m

At TECH, you will have access to the most rigorous and up-to-date case analyses in academia"



#### Academic Excellence

TECH offers students the best online learning methodology. The university combines the Relearning method (postgraduate learning methodology with the best international valuation) with the Case Study. Tradition and vanguard in a difficult balance, and in the context of the most demanding educational itinerary.



#### **Economy of Scale**

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a ground-breaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.

# 03 Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.

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We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you education of the highest academic level"

## tech 12 | Why Our Program?

This program will provide you with a multitude of professional and personal advantages, among which we highlight the following:



#### A Strong Boost to Your Career

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

70% of students achieve positive career development in less than 2 years.



## Develop a strategic and global vision of the company

TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional fields.

Our global vision of companies will improve your strategic vision.



## Consolidate the student's senior management skills

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

You will work on more than 100 real senior management cases.



#### You will take on new responsibilities

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

45% of graduates are promoted internally.

## Why Our Program? | 13 tech



#### Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

> You will find a network of contacts that will be instrumental for professional development.



### Thoroughly develop business projects.

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different fields in companies.

20% of our students develop their own business idea.



#### Improve soft skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

Improve your communication and leadership skills and enhance your career.



#### You will be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified teachers from the most prestigious universities in the world: the TECH Technological University community.

We give you the opportunity to study with a team of world-renowned teachers.

# 04 **Objectives**

The aim of this Postgraduate Certificate is to provide the graduates with the most upto-date, comprehensive and complete information on the practical implementation of security policies in the event of attacks. To do this, TECH has used the most innovative and effective academic tools in the university sector, as well as the best material available, so that, in just 6 weeks, they can exceed their most ambitious expectations, perfecting their professional skills to levels hitherto unknown to the student.

A Postgraduate Certificate that will, with total guarantee, live up to your highest expectations. Don't you believe us? Enroll now and see for yourself"

## tech 16 | Objectives

### TECH makes the goals of their students their own goals too Working together to achieve them

The Postgraduate Certificate in Practical Implementation of Security Policies against Attacks will enable students to:



Determine the different actual and possible attacks to information systems



Analyze what *System Hacking*, DoS, *and Session* and *Ramsonware* are and how to avoid them



Evaluate the various security policies to mitigate attacks





Technically implement measures to mitigate major threats



Develop Firewall/IDS evasion techniques and how to remedy them

## Objectives | 17 tech



Establish countermeasures to prevent threats to web servers and web applications



Establish the types of social engineering and learn how to mitigate them





Establish the most appropriate Security Policies for each case



Examine the vulnerabilities of mobile and IoT platforms and how to avoid them



Develop a thorough and specialized knowledge on the technical framework of the practical and technical implementation of a good computer defense

## 05 Structure and Content

TECH has based the structure and content of this Postgraduate Certificate on three fundamental pillars: on the recommendation of the teaching team, currently immediately in the sector of Computer Engineering and the use of *Relearning*methodology. All this has been compacted into a complete and comprehensive 100% online program with which the graduates can specialize from anywhere and with a fully personalized schedule based on their work and personal availability.

GG You w theore

You will have 150 hours of the best theoretical, practical and additional material in different formats, so you can delve into those aspects that you consider most relevant to your professional performance"

## tech 20 | Structure and Content

## Syllabus

The syllabus of this Postgraduate Certificate in Practical Implementation of Security Policies against Attacks has been designed by TECH and the teaching team to serve as a guide to the graduates in their comprehensive specialization during the 6 weeks in which this program is developed.

Through the study and analysis of vulnerabilities and risks associated with the security infrastructures of companies, the students will acquire a broad knowledge, theoretical and practical, which will help you manage the main professional strategies to mitigate such threats.

It is a unique and 100% online opportunity to take a program that will allow you to improve your professional skills, adapting your profile to the current demand of the labor market. Therefore, overcoming this Postgraduate Certificate will be a boost for the graduates career that will allow them not only to opt for a significant job improvement, but also to project their career towards more important companies in the cybersecurity sector.

This Postgraduate Certificate is developed over 6 week and is divided into 1 module:

## Module 1

Practical Implementation of Security Policies against Attacks



## Structure and Content | 21 tech

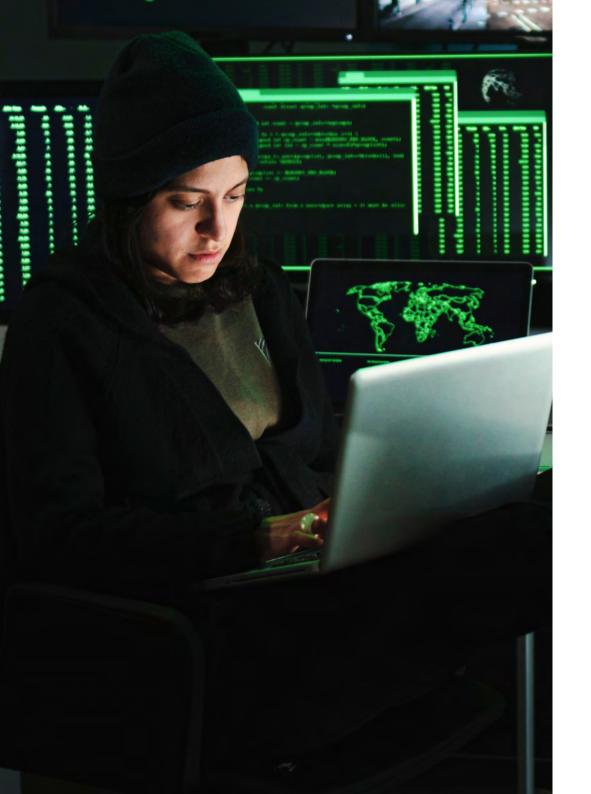
### Where, When and How is it Taught?

TECH offers the possibility to develop this Postgraduate Certificate in Practical Implementation of Security Policies against Attacks completely online. During the 6 weeks of the specialization, the students will be able to access all the contents of this program at any time, which will allow the students to selfmanage their study time.

A unique, key, and decisive educational experience to boost your professional development.



Module 1. The Most Relevant Taxes			
<b>1.1.</b> <i>System Hacking</i> 1.1.1. Risks and Vulnerabilities 1.1.2. Countermeasures	<ul><li><b>1.2.</b> DoS Attack</li><li>1.2.1. Risks and Vulnerabilities</li><li>1.2.2. Countermeasures</li></ul>	<ul> <li><b>1.3.</b> Session Hijacking</li> <li>1.3.1. The process of Hijacking</li> <li>1.3.2. Hijacking Countermeasures</li> </ul>	<ul> <li>1.4. Evading IDS, Firewalls and Honeypots</li> <li>1.4.1. Avoidance Techniques</li> <li>1.4.2. Implementation of Countermeasures</li> </ul>
<ul> <li>1.5. Hacking Web Servers</li> <li>1.5.1. Attacks on Web Servers</li> <li>1.5.2. Implementation of Defense Measures</li> </ul>	<b>1.6.</b> <i>Hacking Web Applications</i> 1.6.1. Attacks on Web Applications 1.6.2. Implementation of Defense Measures	<ul> <li>1.7. Hacking Wireless Networks</li> <li>1.7.1. Vulnerabilities in Wi-Fi Networks</li> <li>1.7.2. Implementation of Defense Measures</li> </ul>	<ul> <li>1.8. Hacking Mobile Platforms</li> <li>1.8.1. Vulnerabilities of Mobile Platforms</li> <li>1.8.2. Implementation of Countermeasures</li> </ul>
<b>1.9.</b> <i>Ransomware</i> 1.9.1. Ramsonware Vulnerabilities 1.9.2. Implementation of Countermeasures	<b>1.10. Social Engineering</b> 1.10.1. Types of Social Engineering 1.10.2. Countermeasures for Social Engineering		



## Structure and Content | 23 tech



With this Postgraduate Certificate you will place special emphasis on Security Policies as defense that you must implement to mitigate the different threats that may arise in your company"

# 06 **Methodology**

This academic program offers students a different way of learning. Our methodology follows a cyclical learning process:**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.

## Methodology | 25 tech

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"

## tech 26 | Methodology

### TECH Business School uses the Case Study to contextualize all content.

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

666 At TECH, you will experience a way of learning that is shaking way of learning that is shaking the foundations of traditional universities around the world"



This program prepares you to face business challenges in uncertain environments and achieve business success.

## Methodology | 27 tech



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

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch to present executives with challenges and business decisions at the highest level, whether at the national or international level. 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 business reality is taken into account.

You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments"

The case method has been the most widely used learning system among the world's leading business 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, argue and defend their ideas and decisions.

## tech 28 | Methodology

### **Relearning Methodology**

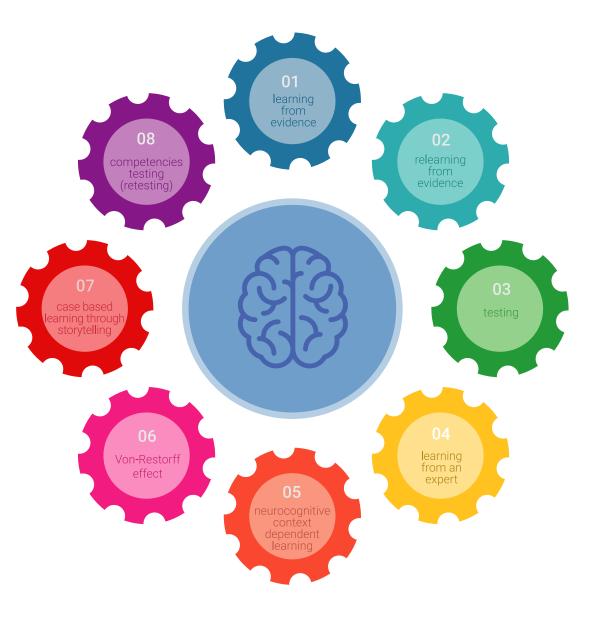
TECH effectively balances the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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

Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an Internet connection.

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

Our online business school is the only one in the world licensed to incorporate 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.



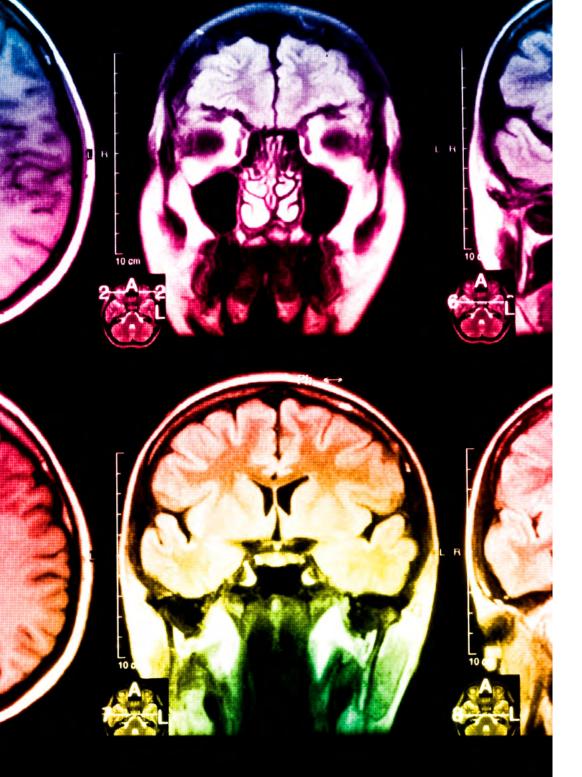
## Methodology | 29 tech

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we balance each of these elements concentrically. With this methodology, we have prepared 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, markets, and financial 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to 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.



## tech 30 | Methodology

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 adapted in 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.

30%

10%

8%

3%



#### 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.



#### **Management Skills Exercises**

They will carry out activities to develop specific executive skills in each thematic field. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



#### **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 | 31 tech



#### **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 senior management 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.

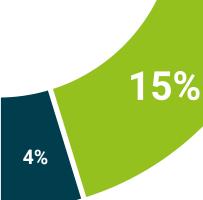
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### **Testing & Retesting**

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





## 07 Our Students' Profiles

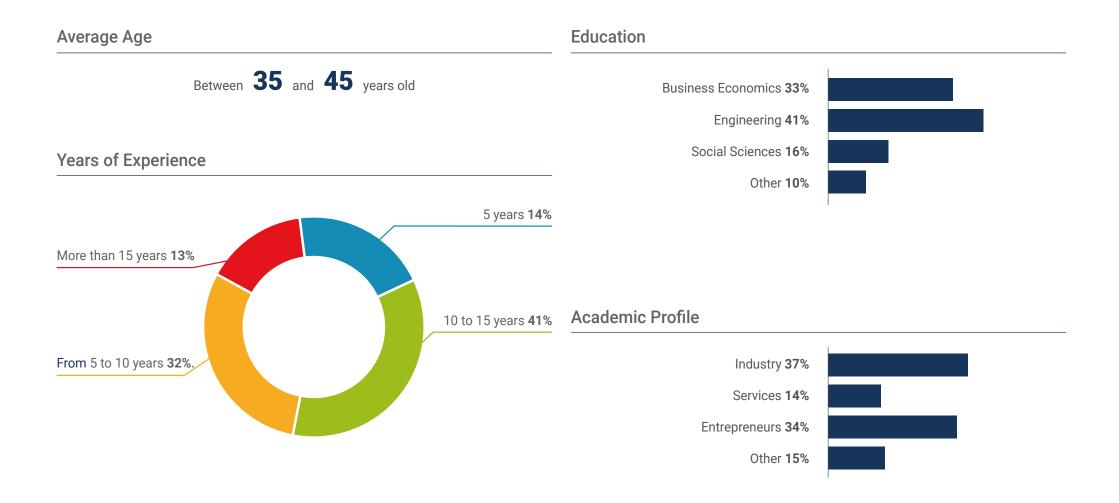
The Postgraduate Certificate is aimed at University Graduates, Postgraduates and Degree holders who have previously completed any of the following programs in the field of Social and Legal Sciences, Administrative and Economic Sciences.

The diversity of participants with different academic profiles and from multiple nationalities makes up the multidisciplinary approach of this program.

The Postgraduate Certificate may also be held by professionals who, being university graduates in any area, have a work experience of two years in the field of practical implementation of security policies in the face of attacks.

The best postgraduate option to specialize in and complete your professional profile in just
 6 weeks and through a 100% online qualification"

## tech 34 | Our Students' Profiles



## Our Students' Profiles | 35 tech







## María Rodríguez

Technical Director of Network Security and Server Systems

"This Postgraduate Certificate was the perfect finishing touch for my career. I could specialize in something I really like and start working on it immediately. Soon after starting in the new company, I demonstrated, thanks to all the knowledge acquired with TECH, that I was ready to take responsibility for a great security project, and so, it was as I managed the ascent to the position that I had always dreamed"

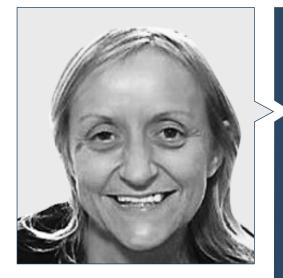
## 08 Course Management

The teaching staff of this Postgraduate Certificate is formed by a team of Computer Engineering professionals with a wide experience in the management and management of projects related to the implementation of Security Policies in large companies. In addition, it is a group of specialists characterized, according to their letters of recommendation, by their human quality. That is why they will make available to the graduates, not only the best academic material, but their own experience, so that the training is even more complete and personalized.

In the Virtual Classroom you will find a forum where you can discuss with colleagues from around the world about the most effective strategies to combat cyberattacks and threats"

## tech 38 | Course Management

#### Management



#### Ms. Fernández Sapena, Sonia

- Trainer in Computer Security and Ethical Hacking at the National Reference Center of Getafe in Computer Science and Telecommunications in Madrid
- Certified E-Council instructor
- Trainer in the following certifications: EXIN Ethical Hacking Foundation and EXIN Cyber & IT Security Foundation. Madrid
- Accredited expert trainer by the CAM of the following certificates of professionalism: Computer Security (IFCT0190), Voice and Data Network Management (IFCM0310), Departmental Network Administration (IFCT0410), Alarm Management in Telecommunications Networks (IFCM0410), Voice and Data Network Operator (IFCM0110), and Internet Services Administration (IFCT0509)
- External collaborator CSO/SSA (Chief Security Officer/Senior Security Architect) at the University of the Balearic Islands
- Degree in Computer Engineering from the University of Alcalá de Henares, Madrid
- Professional Master's Degree in DevOps: Docker and Kubernetes. Cas-Training
- Microsoft Azure Security Techonologies. E-Council

# Course Management | 39 tech

# 09 Impact on Your Career

all and to part

Exceeding the 150 hours of training of this Postgraduate Certificate will mean for the career of the graduates a boost that will translate in the long term in the job improvement that has sought for a long time. And it will acquire a series of unique knowledge that will make it stand out, besides that it will be able to work in a practical way in the most innovative and effective strategies related to security policies against computer attacks.

# Impact on Your Career | 41 tech

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The boost your career needs to place you at the top of the Cybersecurity sector is this Postgraduate Certificate endorsed by TECH"

#### Are you ready to take the leap?

#### Excellent professional development awaits you

The TECH Postgraduate Certificate in Practical Implementation of Security Policies against Attacks is an intensive program that prepares you to face challenges and business decisions in the field of information security. The main objective is to promote your personal and professional growth. Helping you achieve success. Give your career the boost it needs with this Postgraduate Certificate and forget about face-to-face classes and tight schedules.

A program that will give you the option to opt for a promotion and a considerable salary improvement.

When the change occurs



#### Type of change



#### Salary increase

The completion of this program represents a salary increase of more than **28.5%** for our students.





# 10 Benefits for Your Company

For any company, having in its staff a professional trained through the overcoming of this Postgraduate Certificate is undoubtedly a distinctive through which, not only will achieve raise the talent of the entity to levels above competition, but they will work with the security of having a specialist versed in the practical implementation of policies against attacks. It is undoubtedly the best opportunity to have the figure of a highly qualified manager who will grow the company.

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You will have the most comprehensive knowledge and with the most effective practical arguments to assume complex tasks with guarantee of success"

## tech 46 | Benefits for Your Company

Developing and retaining talent in companies is the best long-term investment.



#### Growth of talent and intellectual capital

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.



#### Building agents of change

You will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.



# Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the professional and opens new avenues for professional growth within the company.



#### Increased international expansion possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.



## Benefits for Your Company | 47 tech



#### Project Development

The professional can work on a real project or develop new projects in the field of R & D or business development of your company.



#### Increased competitiveness

This program will equip students with the skills to take on new challenges and drive the organization forward.

# 11 **Certificate**

The Executive Development Program in Executive Coaching guarantees students, in addition to the most rigorous and up-to-date education, access to an Executive Development Program diploma issued by TECH Technological University.

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

### tech 50 | Certificate

This **Postgraduate Certificate in Practical Implementation of Security Policies against Attacks** contains the most complete and up-to-date program on the market.

After the students have 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 labor exchanges, competitive examinations and professional career evaluation committees.

Title: Postgraduate Certificate in Practical Implementation of Security Policies against Attacks

Official No. of Hours: 150 h.





## **Postgraduate Certificate** Practical Implementation of Security Policies against Attacks

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- » Duration: 6 weeks
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