Postgraduate Certificate
Security Systems

tech technological university

Postgraduate Certificate
Security Systems

- » 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/security-systems**

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Introduction

The information systems and technological infrastructure of any company are strategic elements that store vital data. While the widespread digitization of these systems only puts them at risk, being within reach of third parties. Ransomware and phishing are the order of the day. As a result, companies are hiring hackers who think like the attackers and can stop these invasions. In this sense, TECH has proposed a qualification that details the key security aspects that any technological platform must have. Including both the systems and the processes to be implemented. These contents will be taught in a 100% online mode and without schedules, thereby favoring the organization by the student, and, consequently, learning.

"

In TECH you will learn the cryptographic techniques and protocols used by the world's largest multinationals to protect their data"

Cybersecurity is one of the areas in which multinationals are investing the most. Every now and then there is a major attack, with banks and governments being some of the preferred victims. One of the most notorious examples in recent years was the attack on the Play Station Network, owned by Sony, in which hackers stole the data of 77 million users.

To avoid making the same mistakes that Sony made, TECH offers a Postgraduate Certificate that begins by defining the challenges of information systems security. As well as the governance and management of these systems.

It then describes digital certificates and cryptographic techniques and protocols. In addition to security in networks and communications, identity and permissions management systems and data security and operating systems.

Finally, it dives into the detection of threats and attacks through different systems. With its corresponding response through incident plans and other techniques. Likewise, a topic has been reserved for security in *Cloud* environments given the proliferation of data storage in the cloud.

All this, through an online format, without schedules and with the entire syllabus available from the first day. All you need is a device with an Internet connection. In this way, the students will be able to organize themselves at their own convenience, thereby promoting learning.

This **Postgraduate Certificate in Security Systems** contains the most complete and up-to-date educational program on the market. The most important features include:

» The development of practical cases presented by experts in Security Systems

» 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

By taking this program, you will learn how to perform risk analysis to identify the weak points of your website or platform"

Authentication screens can become entry points for attackers. Learn how to protect them with the section dedicated to identity and permissions management"

TECH teachers will show you the peculiarities of security in Linux and Windows operating systems.

Throughout this Postgraduate Certificate you will work with SIEM systems to detect and respond quickly and accurately to any threat.

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

Objectives

This Postgraduate Certificate in Security Systems focuses on the design of security strategies as a corporate service. This implies the ability to identify the different areas of security and apply the appropriate tools to each of them. In this way, the graduate will be prepared to propose appropriate response actions to possible incidents.

With TECH, you will learn how to ensure the continuity of a business, regardless of the type of attack it receives"

General Objectives

» Analyze the process of designing a security strategy when deploying corporate services

» Identify security areas

» Analyze the services and tools in each of the security areas

Cloud security has certain particularities. Learn how to work with them thanks to the topic dedicated to security in Cloud environments"

Specific Objectives

» Define security requirements

» Develop a security plan

» Determine the security systems to be deployed for the execution of a security plan

» Identify the operations necessary for the prevention mechanisms

» Establish guidelines for a logging and monitoring system

» Propose incident response actions

» Analyze the process of designing a security strategy when deploying corporate services

» Identify security areas

» Analyze the services and tools in each of the security areas

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Course Management

Cybersecurity requires constant updating, as attackers renew their methods when they observe that they no longer work. In this sense, TECH has selected a faculty with experience in cybersecurity. This ensures that the content of this program is up to date and its implementation is useful.

Throughout the Postgraduate Certificate you will learn how to create Firewalls so that attackers cannot invade your website"

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 Spain S.L

Professors

Mr. Gómez Rodríguez, Antonio

- » Principal Cloud Solutions Engineer for Oracle
- » Co-organizer of Málaga Developer Meetup
- » Specialist Consultant for Sopra Group and Everis
- » Team Leader at System Dynamics
- » Software Developer at SGO Software
- » Master's Degree in E-Business from La Salle Business School
- » Postgraduate Degree in Information Technologies and Systems, Catalan Institute of Technology
- » Degree in Telecommunications Engineering from the Polytechnic University of Catalonia

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Structure and Content

This program begins by defining security systems and the most common types of threats, as well as governance and management. It then introduces cryptography and certificate technologies and network and communications security, teaching how to build Firewalls. It then moves on to identity and permissions management, i.e., authentication, as well as data security and operating systems. Lastly, it delves into threat detection and response, reserving a space for protection in Cloud environments.

With TECH, you will learn to work with shared management models in the topic dedicated to security in Cloud environments"

Module 1. Security Systems

1.1. Information Technology Security Systems

    1.1.1. Information Systems Security Challenges

    1.1.2. Types of Threats

    1.1.3. Network and Internet Systems

1.2. Information Security Governance and Management

    1.2.1. Security Governance. Safety Regulations

    1.2.2. Risk Analysis

    1.2.3. Security Planning

1.3. Cryptography and Certificate Technologies

    1.3.1. Cryptographic Techniques

    1.3.2. Cryptographic Protocols

    1.3.3. Digital Certificates. Applications

1.4. Network and Communications Security

    1.4.1. Security in Communication Systems

    1.4.2. Firewall Security

    1.4.3. Intrusion Detection and Prevention Systems

1.5. Identity and Permission Management Systems

    1.5.1. Authentication Management Systems

    1.5.2. Authorization Management System: Access Policies

    1.5.3. Key Management Systems

1.6. Data Security

    1.6.1. Securing of Storage Systems

    1.6.2. Protection of Database Systems

    1.6.3. Securing Data in Transit

1.7. Operating Systems Security

    1.7.1. Linux

    1.7.2. Windows

    1.7.3. Vulnerability Scanning and Patching

TECH teachers will teach you how to develop up-to-date incident response plans applicable to your company or business"

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%
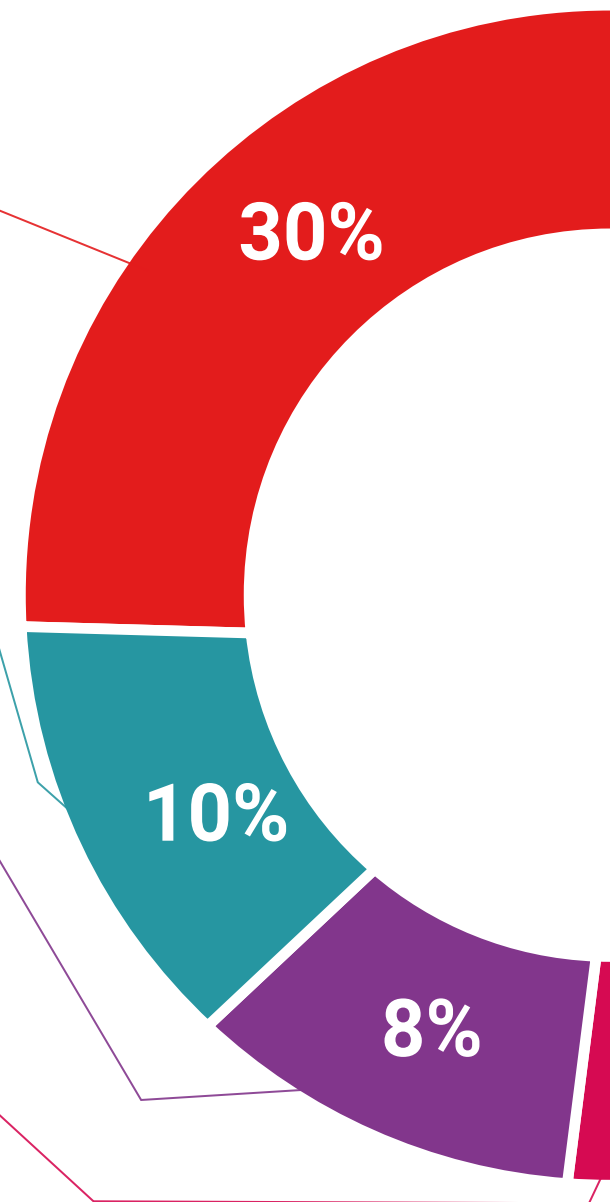
Case Studies

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.

Certificate

This Postgraduate Certificate in Security Systems 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 Security Systems** 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 labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Certificate in Security Systems**

Official N° 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

Security Systems

This is a qualification awarded by this University, equivalent to 150 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

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.

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