



## Postgraduate Certificate Security in Communications and Software Operation

» Modality: online

» Duration: 6 weeks

» Certificate: TECH Global University

» Accreditation: 6 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/information-technology/postgraduate-certificate/security-communications-software-operation

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Certificate



This program prepares professionals to design and assess a company's cybersecurity systems. Through 6 weeks of learning, the computer scientist will be able to incorporate into their daily practice the best techniques of protection against threats to HTTP and PHP protocols and in the cloud, or the most advanced methods of forensic analysis in cybersecurity. All this, through a 100% online methodology that will allow you to combine your studies with your work, since it adapts completely to your professional and personal circumstances.



#### tech 06 | Introduction

Numerous digital tools are used by companies and users on a daily basis. Browsers, applications, electronic devices, etc. Any device with an internet connection is susceptible to attacks. For this reason, investment in audits and cybersecurity has increased in recent years, leading to a huge demand for specialists in communications security and software operation.

Therefore, this Postgraduate Certificate offers the professional the opportunity to specialize in this field, preparing them to access important job options. And to achieve this goal, it has a 100% online teaching methodology with which you can choose the time and place to study. You will also benefit from numerous multimedia materials throughout the learning process, and the teaching staff will guide you through the entire educational process.

In this way, the computer scientist will be able to learn about the latest developments in aspects such as protection against malware and phishing, physical and logical security, SIEM technologies, the main computer attacks or the best methods of computer forensics. With these contents, you will be ready to experience great professional progress.

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

- Practical cases studies are presented by experts in Engineering in data analysis
- 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



The best methods of computer forensics can be found in this program, with which you can access the latest developments in communications security"



The most cutting-edge educational materials are waiting for you: practical exercises, interactive summaries, readings, master classes, videos, etc. Everything to bring you up to date in this area of cybersecurity"

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.

TECH's online methodology was designed with working professionals in mind who want to take advantage of every minute of study time invested.

This Postgraduate Certificate will allow you to learn the best techniques for secure software development.







### tech 10 | Objectives



#### **General Objectives**

- Generate specialized knowledge about the IT security ecosystem
- Assessing knowledge in terms of cybersecurity
- Develop best practices in secure development
- Present the risks for companies of not having an IT security environment



The field of cybersecurity is on the rise and with this program you have the opportunity to differentiate yourself and enhance your professional profile"









#### **Specific Objectives**

- Develop specialized physical and logical security knowledge
- Demonstrate knowledge of communications and networks
- Identify major malicious attacks
- Establish a secure development framework
- Demonstrate knowledge of the main information security management system regulations
- Support the operation of a cybersecurity operations center
- Demonstrate the importance of having cybersecurity practices for organizational disasters





#### tech 14 | Course Management

#### 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. Ávila, Javier

- Enterprise Cloud and sourcing senior consultant. Quint
- Cloud and Technology Consultant. Indra
- Associate Technology Consultant. Accenture
- Graduate from Jaen University and University of Technology and Economics of Budapest (BME)
- Degree in Industrial Organization Engineering







#### tech 18 | Structure and Content

#### Module 1. Security in Communications and Software Operation

- 1.1. Computer Security in Communications and Software Operation
  - 1.1.1. IT Security
  - 1.1.2. Cybersecurity in
  - 1.1.3. Cloud Security
- 1.2. IT Security in Communications and Software Operation Types
  - 1.2.1. Physical Security
  - 1.2.2. Logical Security
- 1.3. Communications Security
  - 1.3.1. Main Elements
  - 1.3.2. Network Security
  - 1.3.3. Best Practices
- 1.4. Cyberintelligence
  - 1.4.1. Social Engineering
  - 1.4.2. Deep Web
  - 1.4.3. Phishing
  - 1.4.4. Malware
- 1.5. Secure Development in Communications and Software Operation
  - 1.5.1. Secure Development HTTP Protocol
  - 1.5.2. Secure Development Life Cycle
  - 1.5.3. Secure Development PHP Security
  - 1.5.4. Secure Development NET Security
  - 1.5.5. Secure Development Best Practices
- 1.6. Information Security Management Systems in Communications and Software Operation
  - 1.6.1. GDPR
  - 1.6.2. ISO 27021
  - 1.6.3. ISO 27017/18





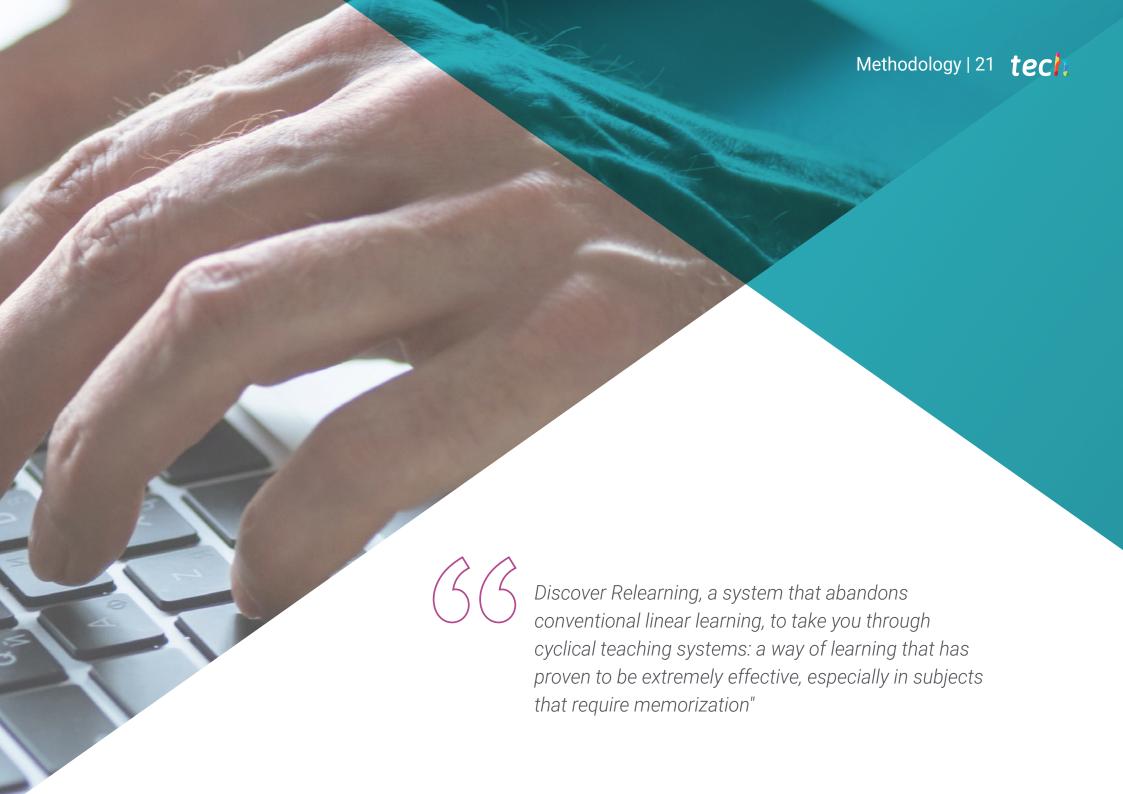
#### Structure and Content | 19 tech

- 1.7. SIEM Technologies
  - 1.7.1. SIEM Technologies
  - 1.7.2. SOC Operations
  - 1.7.3. SIEM Vendors
- 1.8. The Role of Security in Organizations
  - 1.8.1. Roles in Organizations
  - 1.8.2. Role of IoT Specialists in Companies
  - 1.8.3. Recognized Certifications in the Market
- 1.9. Forensic Analysis
  - 1.9.1. Forensic Analysis
  - 1.9.2. Forensic Analysis Methodology
  - 1.9.3. Forensic Analysis Tools and Implementation
- 1.10. Cybersecurity Today
  - 1.10.1. Main Cyber Attacks
  - 1.10.2. Employability Forecasts
  - 1.10.3. Challenges



The best content on security in communications and software operation are here. Enroll and advance your career immediately"





#### 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 private qualification will allow you to obtain an **Postgraduate Certificate in Security in Communications and Software Operation** 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** private qualification, 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 Security in Communications and Software Operation Modality: online

Duration: 6 weeks

Accreditation: 6 ECTS



#### Postgraduate Certificate in Security in Communications and Software Operation

This is a private qualification 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



<sup>\*</sup>Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

tech global university

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