



## Postgraduate Certificate

Website 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/engineering/postgraduate-certificate/website-security-systems

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### tech 06 | Introduction

Dozens of news reports are published every week about different cyber-attacks on websites, from large company websites to personal and small business websites. It is, therefore, a topical issue that has continued to grow in prominence over time. More and more users and potential customers are aware that adequate Internet security can be the difference between browsing comfortably or not visiting certain digital environments at all.

Thus, security is a central issue when using the Internet. As a result, more and more engineering professionals are building their knowledge on Website Security. The demand for specific website security services is on the rise, and companies seek qualified professionals to develop an effective security system that will safeguard them against the threat of computer attacks and infection by different types of malware.

Website security is a field that necessitates continuous professional development on new advances, the use of tools, the emergence of new forms of malware, vulnerabilities discovered, etc. Thus, this Postgraduate Certificate in Website Security Systems offers its students the possibility of gaining specialized and up-to-date knowledge, enabling them to face the challenges posed by this area.

Thanks to this comprehensive program, engineers will be able to explore and specialize in Website Security, guided by the best faculty, who know the needs of the market and who will reveal their best security techniques to students.

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

- Specialized contents on Website Security
- A focus on new developments in web security, attacks and malware
- Practical learning, in order to successfully apply the knowledge developed
- Content that is accessible from any fixed or portable device with an Internet connection





Security is one of the most important considerations when surfing the Internet: Don't you want to become a qualified expert?"

The teaching staff includes professionals from the sector who contribute their professional 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.

Website security is changing rapidly: you need to keep your knowledge up to date. There is no better way to do it than this Postgraduate Certificate.



# 02 Objectives

TECH is aware of the importance of website security and so the objectives of this Postgraduate Certificate are aligned with those of the students. Thus, the student will be able to build the expertise necessary to establish effective security systems for different types of websites, tailored to the requirements of employers, users and customers.





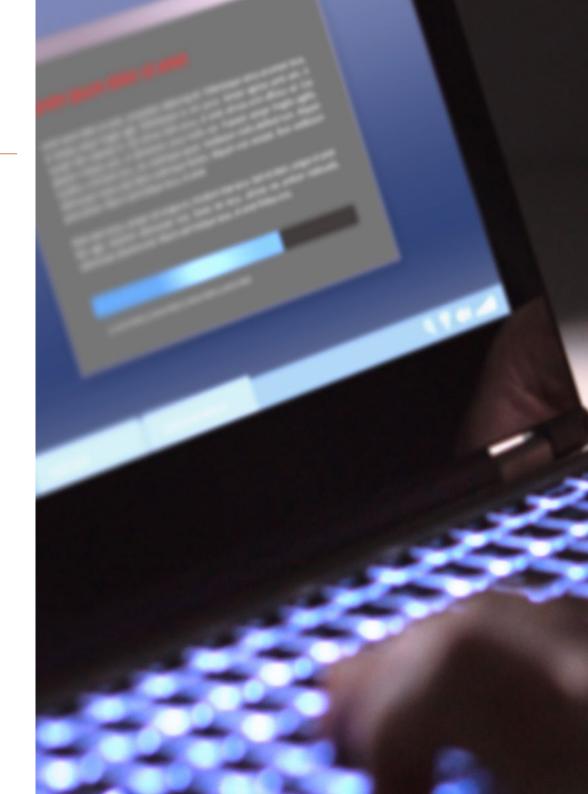
### tech 10 | Objectives



### **General Objectives**

- Address the most relevant aspects of web security
- Analyze the most detected and exploited web vulnerabilities at a global level and how to prevent them
- Establish guidelines to perform web audits to detect and prevent such risks and vulnerabilities
- Establish a security incident response process, since, as we will see, a 100% secure environment does not exist







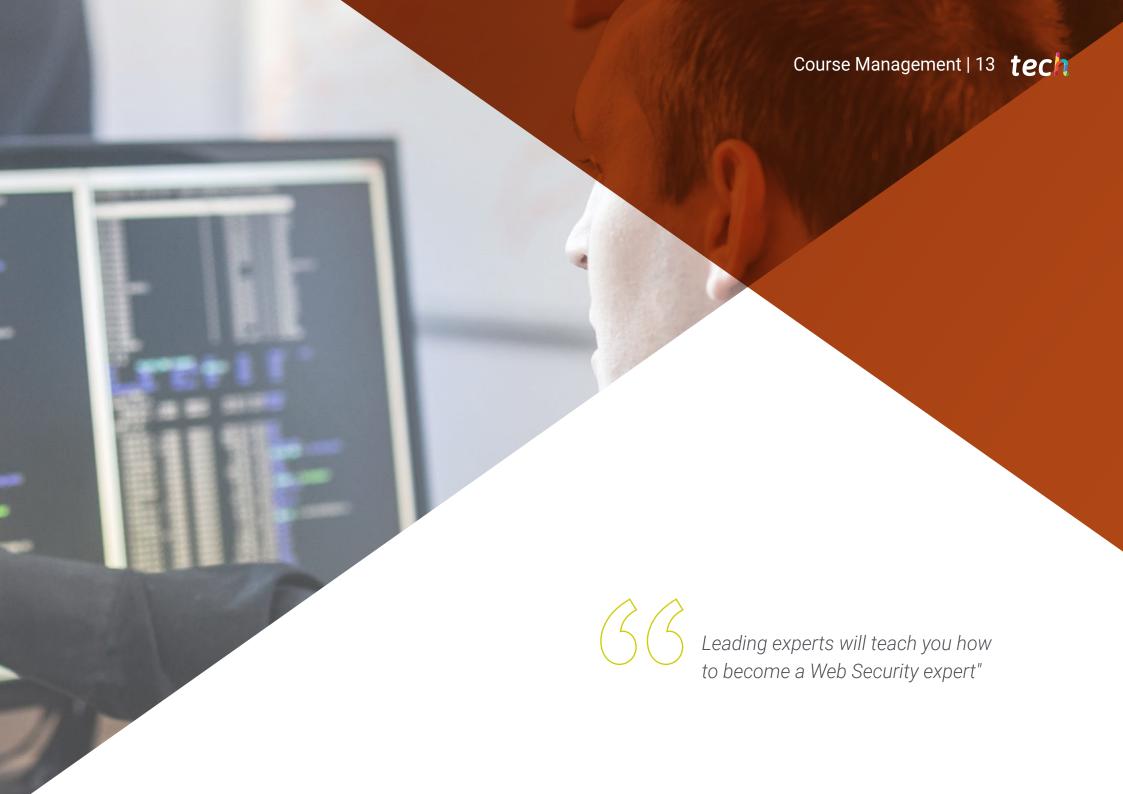


### **Specific Objectives**

- Analyze the OWASP Top 10 project
- Manage CMS Environment Security
- Check the differences between the different authentication methods
- Determine the most common vulnerabilities found in web applications
- Identify the different attacks and risks in APIs
- Analyze the different HTTP headers in terms of security
- Distinguish the different types of web audits that we can establish
- Evaluate web vulnerabilities associated with communications







### tech 14 | Course Management

### Management



### Mr. Gris Ramos, Alejandro

- Director of Persatrace, web development and digital marketing agency
- Director of Club de Talentos
- Computer Engineer UNED
- Master's Degree in Digital Teaching and Learning Tech Education
- Master's Degree in High Abilities and Inclusive Education
- Business Development Director at Alenda Golf
- Director of Web Applications Engineering Department at Brilogic
- Web programmer at Grupo Ibergest
- Software/web programmer at Reebok Spain

### **Professors**

#### Mr. Méndez Martínez, Brandon

- Specialist in Web Services and Applications Development from the University of Alicante
- Web design and development HIADIS Graduated in Multimedia Engineering, University of Alicante
- Natural Language Processing (NLP) GPLSI (University of Alicante)
- Master's Degree in Web Services and Applications Development from the University of Alicante
- "Analysis of gamification techniques to learn complex subjects through collaborative applications" Bulletin of the Technical Committee on Learning Technology
- "Grama: a web application for learning and generating creative language" INTED Proceedings
- Research in Human Language Technologies (TLH) GPLSI (University of Alicante)

#### Mr. Vicente Miralles, David

- (CSO) Head of Expansion Strategies at 'ICU Medical Technologies'
- (CEO) Executive Director / Co-Founder at 'CE Informática'
- Professor / Trainer in private entities
- Postgraduate Certificate in Technical Computer Engineering from Miguel Hernández University of Elche
- Development Engineer at 'Computer Elche' (COO)
- (COO) Operations Manager at 'VinoTrade'

#### Mr. Del Moral García, Francisco José

- Security Analyst at Page Group
- Degree in Telecommunication Technologies Engineering, University of Granada Specialism: Telecommunication Systems
- Master's Degree in IT Security, International University of La Rioja
- Roca Sanitario (Cyber Security Analyst)
- Allianz Technology (Information Security Analyst)
- Clover Technologies (IT Security Airbus Defense and Space)
- EVERIS (Solutions Assistant)

#### Mr. Boix Tremiño, Jorge

- Founder of HostingTG, professional web hosting services company
- Founder of GrupoTG, a digital marketing and web design services company
- Co-Founder of TiendaWebOnline, a Digital Dropshipping business creation company
- Nortempo, trainer in the field of programming and marketing strategies
- Intergon2000, Graphic designer
- Ibertex, Graphic designer
- Xion Animation, information technology project manager
- Kingest, Sales and marketing director
- Computer Engineer at UNED
- Award for Business Excellence from the Institute for Professional Excellence in 2019
- European Medal of Merit in the Workplace for Professional Career Achievement from the European Association for Economics and Competitiveness
- Gold Star for Professional Excellence from the Institute for Professional Excellence in 2016

#### Mr. Alfaro, José

- Team Leader at DisneyLand Paris
- Journalism Graduate
- Course in Project Management Methodologies

#### Mr. Herrero García, Diego

- Computer Applications Analyst, Manager and Developer
- Industrial Technical Engineer, University of La Rioja
- Industrial Engineer, University of La Rioja
- Postgraduate Diploma in Innovation Management, University of La Rioja



Take this opportunity to learn about the latest advances in this area in order to apply them to your daily practice"





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#### Module 1. Website Security Systems

- 1.1. Perimeter Security
  - 1.1.1. Network Firewall
  - 1.1.2. Demilitarized Zone (DMZ)
  - 1.1.3. Load Balancers
    - 1.1.3.1. Content Delivery Network (CDN)
  - 1.1.4. Web Application Firewall (WAF)
- 1.2. Encrypted Web Communications
  - 1.2.1. SSL Certified
  - 1.2.2. Protocols
  - 1.2.3. Cipher Suit
  - 1.2.4. Vulnerabilities
    - 1.2.4.1. Poodle
    - 1.2.4.2. Ticketbleed
    - 1.2.4.3. Beast Attack
    - 1.2.4.4. ROBOT
    - 1.2.4.5. Heartbleed
- 1.3. Vulnerability Analysis
  - 1.3.1. XXS (Cross Site Scripting)
  - 1.3.2. SQL Injection
  - 1.3.3. CSRF
  - 1.3.4. Code Injection
  - 1.3.5. DoS
    - 1.3.5.1. DDoS
- 1.4. Security Headers
  - 1.4.1. X-Frame Options
  - 1.4.2. X-XSS-Protection
  - 1.4.3. X-Content-Type-Options
  - 1.4.4. Referrer Policy
  - 1.4.5. HTTPS Strict Transport Security (HSTS)

- 1.5. Authentication and Authorization
  - 1.5.1. HTTP Authentication
    - 1.5.1.1. Basic
    - 1.5.1.2. Digest
    - 1.5.1.3. NTLM
  - 1.5.2. Protocols and Standards
    - 1.5.2.1. Oauth
    - 1.5.2.2. OpenID
- 1.6. Web Auditing
  - 1.6.1. Auditing Technique
    - 1.6.1.1. Black Box
    - 1.6.1.2. White Box
    - 1.6.1.3. Grey Box
  - 1.6.2. OWASP Methodology
  - 1.6.3. Bug Bounty
- 1.7. Application Programming Interface (API) Security
  - 1.7.1. Types of APIs
    - 1.7.1.1. REST
    - 1.7.1.2. SOAP
    - 1.7.1.3. Others
  - 1.7.2. Attacks and Risks
  - 1.7.3. Traffic Analysis
- 1.8. Content Management System (CMS) Security Management
  - 1.8.1. WordPress
  - 1.8.2. Joomla
  - 1.8.3. Drupal
  - 1.8.4. Magento

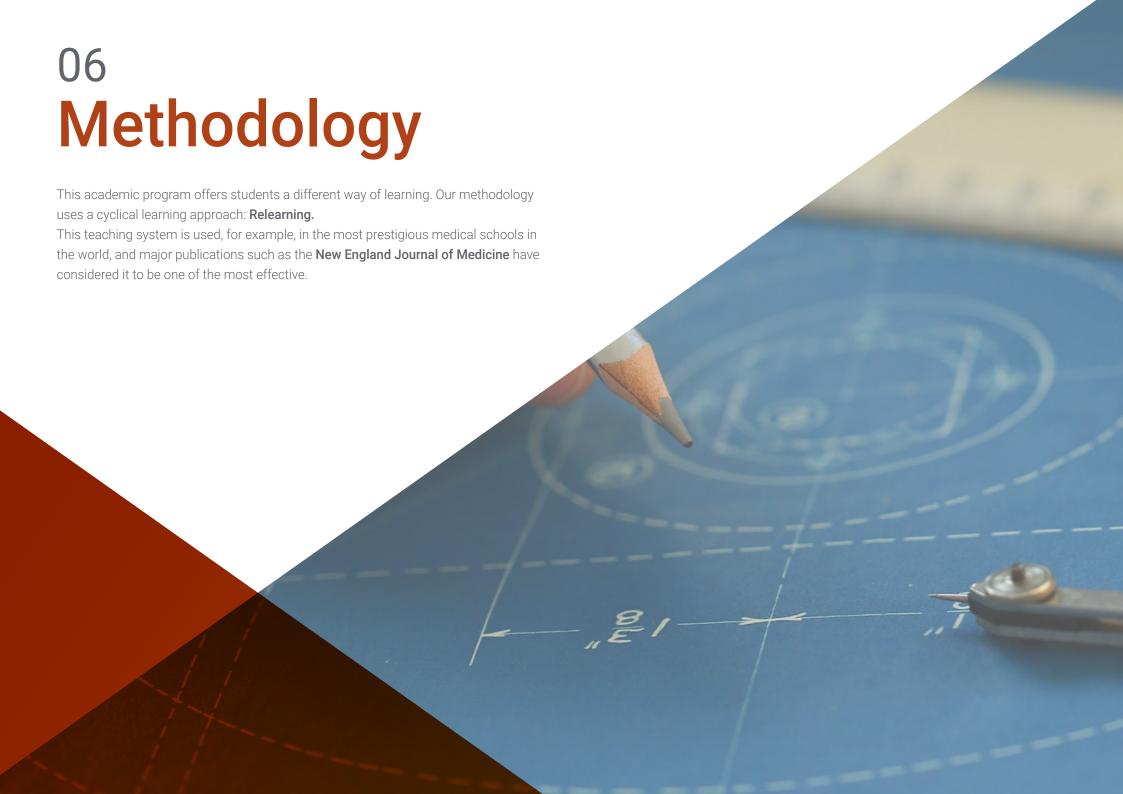


### Structure and Content | 19 tech

- 1.9. Secure Application Development
  - 1.9.1. Secure Software Development Life Cycle
  - 1.9.2. Risk Assessment
  - 1.9.3. Security Tests
  - 1.9.4. Good Practices
- 1.10. Crisis Management and Resilience
  - 1.10.1. Crisis Management and Incident Response
  - 1.10.2. Security Incident Response Process
    - 1.10.2.1. Preparation
    - 1.10.2.2. Identification
    - 1.10.2.3. Containment
    - 1.10.2.4. Eradication
    - 1.10.2.5. Recovery
    - 1.10.2.6. Lessons Learned
  - 1.10.3. Backup Copies



With this content, you will become the best website security expert around"





### 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.





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 is the most widely used learning system in the best faculties in the world. 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 program, the studies 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.

### tech 24 | Methodology

### **Relearning Methodology**

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 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





#### **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.





20%





### tech 30 | Certificate

This **Postgraduate Certificate in Website 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 Website Security Systems Official N° of hours: 150 h.



<sup>\*</sup>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.

technological university

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