Postgraduate Certificate
Web Applications Security

tech global university

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Postgraduate Certificate

Web Applications Security

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Global University**
- Credits: **6 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/information-technology/postgraduate-certificate/web-applications-security

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Introduction

In an increasingly digitized and connected world, app security has become a vitally important issue. governed as a top priority. The increasing reliance on apps in everyday life, from banking and shopping apps to social networking apps, means that protecting users' information and privacy is an absolute priority. The main objective of this 100% online academic Postgraduate Certificate is to provide participants with a solid understanding of the fundamental principles and practices for ensuring application security. In this sense, this program is a valuable opportunity to enter the world of IT security and learn how to protect applications and data from increasingly sophisticated threats.

Develop with this online Postgraduate Certificate the practical skills necessary for the implementation of advanced security measures in Web Applications"

Application security is approached as a continuous process from the development phase through to deployment and monitoring in production. Given the constant evolution of cyber threats, it is essential that organizations and developers maintain constant vigilance and take a proactive approach to application security in order to protect sensitive information and ensure the integrity of their systems. In this regard, IT professionals should focus their efforts on key aspects such as the design of secure web architectures, client and network security.

Given their relevance, IT professionals must be aware of the tools used to prevent attacks and master the most effective responses in case they occur. In this line, this Postgraduate Certificate offers the students a solid learning about Application Security throughout 180 teaching hours.

In this process, the graduate will thoroughly explore the importance of adopting measures to strengthen applications, analyze the associated risks and delve into best practices to ensure a secure digital future. For this, TECH has a team of highly specialized professionals in the area, which will allow the graduate to raise their level with real experts.

In addition, thanks to the numerous didactic materials, the computer scientist will keep up to date with the latest trends in encryption techniques, protection against bots or web security tools and services. Furthermore, this learning will be much easier and more attractive with the Relearning method, based on the repetition of content, which will allow the computer scientist to assimilate key concepts in a much simpler way.

A 100% online Postgraduate Certificate offers students the convenience of taking it anywhere and at any time they choose. All that is required is a device with Internet access to access the syllabus of this Postgraduate Certificate hosted on the virtual platform. A unique academic experience that only TECH, the best digital university in the world according to Forbes.

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

- The development of case studies presented by experts in Software, Systems and Computing
- The graphic, schematic and eminently practical contents with which it is conceived gather practical theoretical information on those 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

Access an advanced program in Application Security developed by TECH, a Google Partner Premier academic institution"

Delve, when and where you want, into the most advanced training materials in Application Security"

The Relearning system will allow you reduce the long hours of study and memorization.

Reduce the long hours of study thanks to the Relearning system and get with it, a really effective learning.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its 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 an immersive education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned experts.

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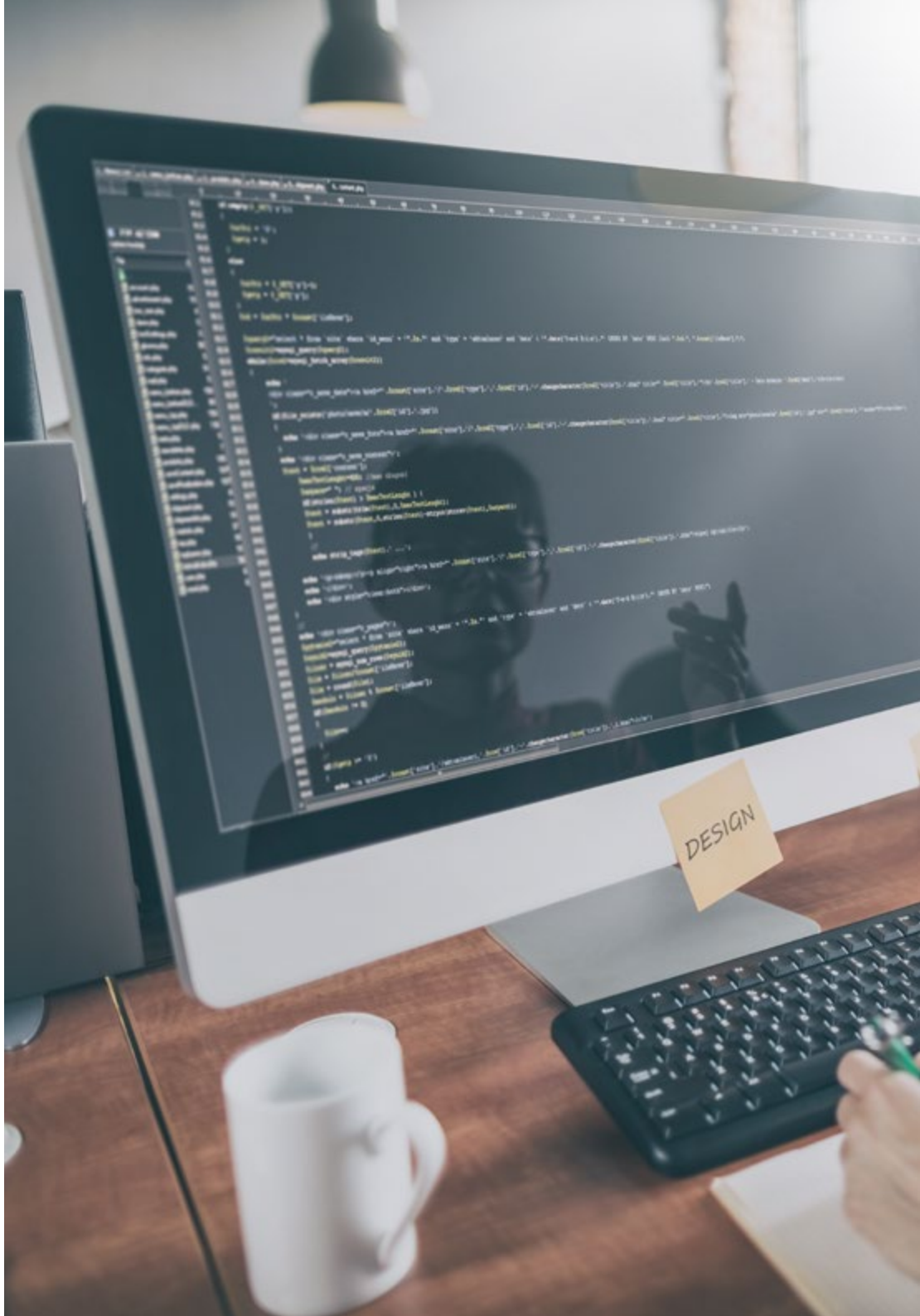
Objectives

This Postgraduate Certificate allows students to acquire knowledge and skills in the field of Application Security and be prepared to address current and future challenges in this area. Thanks to the theoretical and practical perspective of this program, students will be able to integrate in their professional performance, the fundamental concepts to address the most common threats and best practices to mitigate risks. In this way, they will be able to take a firm and ascending step in their professional career within this technological sector.

With this program you will be up to date with the main Web Security tools and services"

General Objectives

- Analyze in depth the aspects related to the security of web applications, with special a special focus on the most common attacks and the prevention, detection and mitigation mechanisms
- Review security recommendations and regulations
- Address security as one of the pillars of advanced web architectures



Specific Objectives

- Review data encryption mechanisms and web certificates.
- Identify, prevent and mitigate the main types of web attacks
- Determine the types of bots and protection mechanisms in place
- Examine the main web security tools and services
- Establish web industry security recommendations and regulations

Upon completion of this program you will have gained advanced knowledge in Open Worldwide Application Security Project"

03

Course Management

Students taking this Postgraduate Certificate will have access to a syllabus prepared by excellent professionals with extensive experience in the technology sector, occupying high standard profiles. In this sense, the teaching team has a high knowledge of the new trends in Application Security, Secure Web Architecture design and Encryption at Rest, which guarantees a complete learning for those graduates who wish to be updated in this field by the hand of the best specialists.

A team of highly trained specialists in Software, Systems and Computing will answer any questions you may have about the Postgraduate Certificate's syllabus"

Management

Dr. Pantaleón García del Valle, Eduardo

- Solutions Architect at Amazon Web Services (AWS)
- Solutions Architect at Liferay, Inc
- Technical Manager at Jungheinrich AG
- Senior Software Engineer and Team Manager at Liferay
- Project Manager at Protecmedia
- Organization and delivery of online technical webinars within the AWS Customer Proficiency Plan program
- Member of the Alumni Mentoring program at Carlos III University of Madrid, for career advice to students and recent graduates
- Graduated in Telecommunication Engineering from Carlos III University of Madrid
- PhD in Software, Systems and Computing from the Polytechnic University of Madrid
- Master's Degree in Computer Languages and Systems from the National University of Distance Education (UNED)
- Executive Data Science Specialization from Johns Hopkins University

Professors

Dr. López Rodríguez, Armando

- Technical Consultancy Area Head in the Office of the President of Puertos del Estado
- Head of Strategic Planning Area in Puertos del Estado
- Project Manager at Puertos del Estado
- Head of the Resources and Information and Communications Technology Area at Puertos del Estado
- Head of the Development Area in Puertos del Estado
- Head of Corporate Relations Area in Puertos del Estado
- Head of Strategic Planning Area in Puertos del Estado
- Associate Professor at the School of Industrial Organization
- AENOR Associate Professor
- Associate Professor at UBT Lab
- Telecommunications Engineer from Universidad Politécnica de Madrid
- Degree in History from the National University of Distance Education (UNED)
- PhD in History from the National University of Distance Education (UNED)
- Master's Degree in Advanced Methods and Techniques of Historical, Artistic and Geographical Research from the National University of Distance Education (UNED)
- Postgraduate Certificate in Management Development Program (PDD) from the IESE of the University of Navarra

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Structure and Content

This Postgraduate Certificate includes one module, which is developed over 180 teaching hours. During this time, the student dynamically delves into Application Security, the generation and storage of web certificates or the different types of attacks. To achieve this learning in a complete way, TECH provides a wide variety of pedagogical resources, such as videos, specialized readings and case studies, which allow the student to put into practice what they have learned in an effective way.

Numerous educational materials are available, accessible 24 hours a day, 7 days a week"

Module 1. Application Security

1.1. Web architecture design Insurance
- 1.1.1. Customer security
- 1.1.2. Network security
- 1.1.3. Software Security

1.2. Encryption
- 1.2.1. Encryption techniques
- 1.2.2. Encryption in transit
- 1.2.3. Encryption at rest

1.3. Web certificates
- 1.3.1. Types of web certificates
- 1.3.2. Generation and storage of web certificates
- 1.3.3. Certification Authorities

1.4. Major Cyber Web Attacks
- 1.4.1. Open Worldwide Application Security Project (OWASP) Top
- 1.4.2. Injection attacks
- 1.4.3. Denial of Service Attacks

1.5. Other types of Attack
- 1.5.1. Software attacks: malware, ransomware
- 1.5.2. Impersonation and social engineering attacks: phishing, spoofing
- 1.5.3. Exploitation of vulnerabilities: supply chain, zero-day exploit

1.6. Protection against bots
- 1.6.1. Types of bots
- 1.6.2. Detection Algorithms
- 1.6.3. Challenges for bots: CAPTCHA, image recognition.

1.7. Web security tools and services
- 1.7.1. Prevention
- 1.7.2. Detection
- 1.7.3 Mitigation

1.8. International Safety Recommendations and Regulations in the Web Industry
- 1.8.1 ISO 27001
- 1.8.2 Regional regulations: NIS2, NIST
- 1.8.3 Industry regulations: PCI, HIPAA

1.9. Security Policies
- 1.9.1 Roles of security in Development Team
- 1.9.2 Secure Developers Practices
- 1.9.3. Incident response: training and automation

1.10. Safety Testing
- 1.10.1. Vulnerability Analysis
- 1.10.2. Penetration Test
- 1.10.3. Security Audits

Thanks to this Postgraduate Certificate you will be up to date with the recommendations and International Security Regulations in the Web Industry"

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

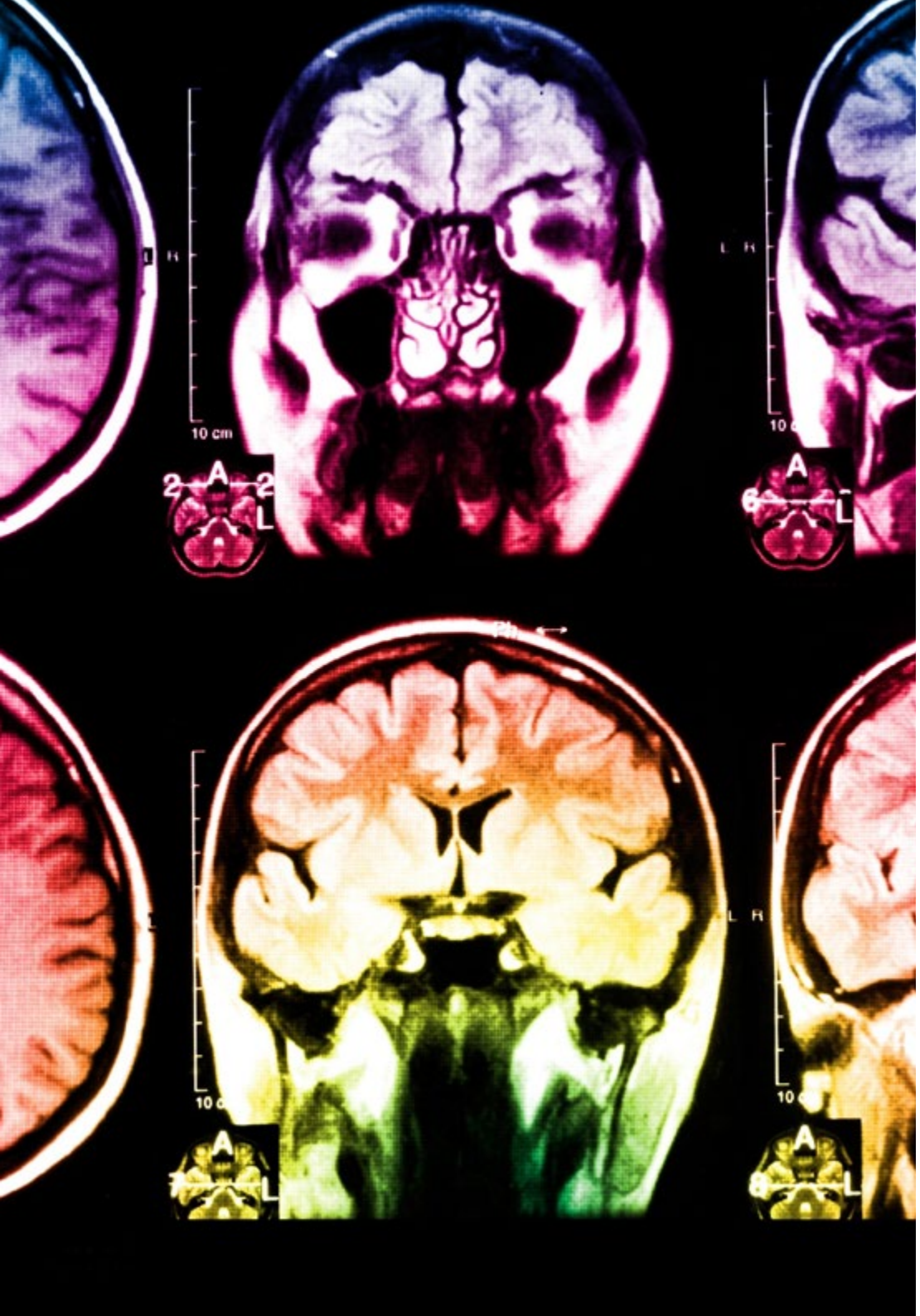
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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.



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.

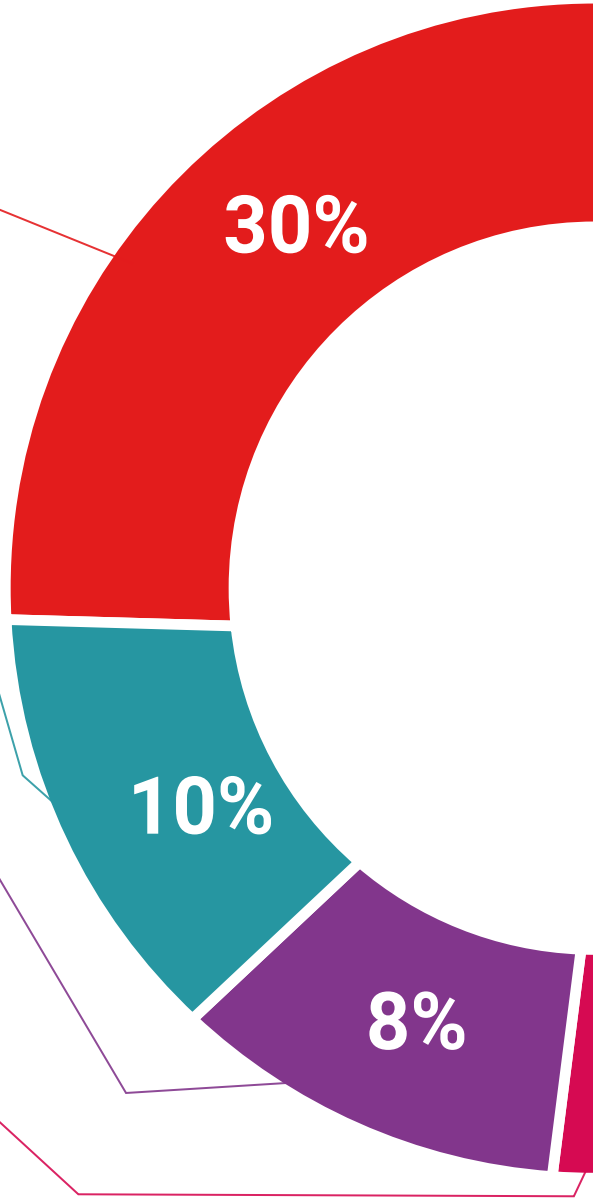
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

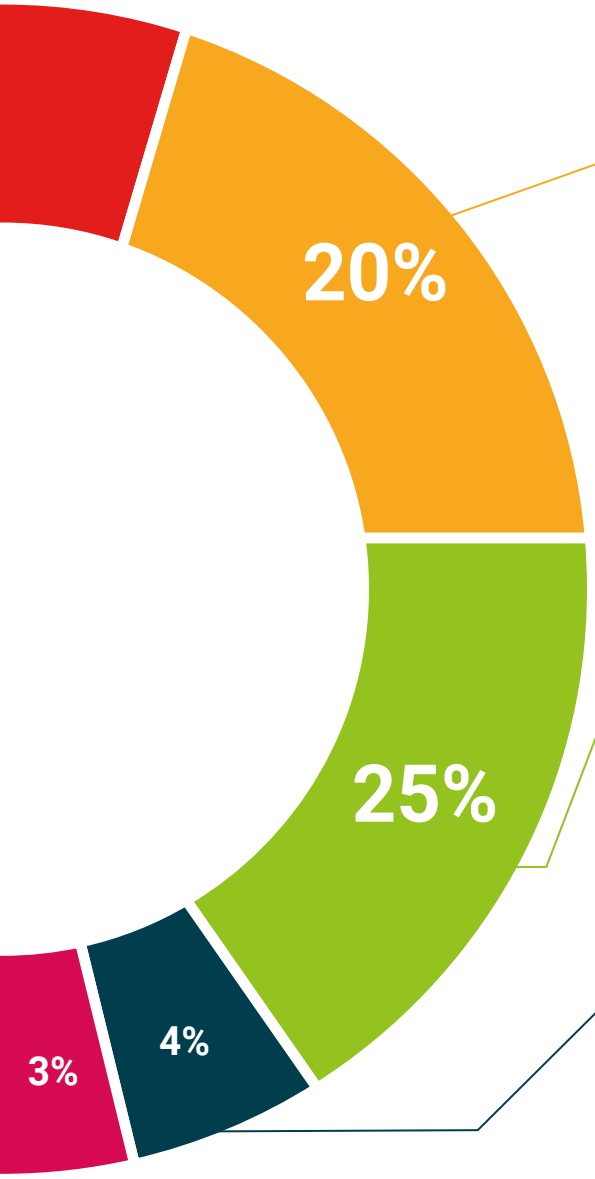
Practising Skills and Abilities

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.





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 Web Application Security guarantees, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Global University.

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

This program will allow you to obtain your **Postgraduate Certificate in Web Applications Security** 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** title 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 Web Applications Security**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Web Applications Security

This is a program 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

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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