

Postgraduate Certificate

Online Application Security



Postgraduate Certificate Online Application Security

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/pk/information-technology/postgraduate-certificate/online-application-security

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01

Introduction

With this highly rigorous educational program, our students will acquire knowledge they need to assess and detect vulnerabilities in online applications, guided by experts in the field. A unique program that will allow them to achieve academic excellence and stand out in a field with a high demand for professionals.



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*Specialize in computer systems
guided by professionals with
extensive experience in the sector”*

This program specializes students in Software and Computer Systems Engineering to provide the knowledge and tools required to manage online application security to respond to potential problems.

They will learn the security policies and standards to be applied in online applications, as well as the concepts, functions and technologies to be applied in the security of web services, security tests and protective measures. Likewise, throughout the program, our students will assimilate the procedures for ethical hacking, malware and forensic analysis.

They will have the most advanced educational resources and will have the opportunity to take an academic program that compiles the most in-depth knowledge in the field, where a group of highly educated professors with extensive international experience will provide them with the most complete and up-to-date information on the latest advances and techniques in software engineering and information systems.

The syllabus covers the main current topics in Software and Computer Systems Engineering in such a way that whoever masters them will be prepared to work in this field. Therefore, it is not just another diploma in your backpack, but a real learning tool to approach the topics of the specialty in a modern, objective way and with the ability to make a judgment based on today's most cutting-edge information.

It should be noted that since this is a 100% online Postgraduate Certificate, the student is not conditioned by fixed schedules or the need to move to another physical location, but can access the contents at any time of the day, balancing their work or personal life with their academic life.

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

- ♦ Case studies presented by experts in online application security
- ♦ The graphic, schematic, and practical contents with which they are created, provide educational and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out to improve learning
- ♦ Special emphasis on innovative methodologies in online application security
- ♦ 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



This program includes exceptional teaching material, providing you with a contextual approach that will facilitate your learning"



*This 100% online
Postgraduate Certificate
will allow you to balance
your studies with your
professional life"*

*This Postgraduate Certificate is
the best investment you can make
when selecting a refresher program
in auditing security. We offer you
quality and free access to content.*

The program includes in its teaching staff professionals in online application security, who contribute the experience of their work to this 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 students must try to solve the different professional practice situations that arise during the academic year. To that end, they will be assisted by an innovative interactive video system developed by renowned and extensively experienced experts in online application security.



02 Objectives

This program in Online Application Security is designed to facilitate professional performance so students acquire and learn the main novelties in the field, which will enable them to practice their profession with the highest quality and professionalism.



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Our goal is for you to become the best professional in your sector and for this we have the best methodology and content"

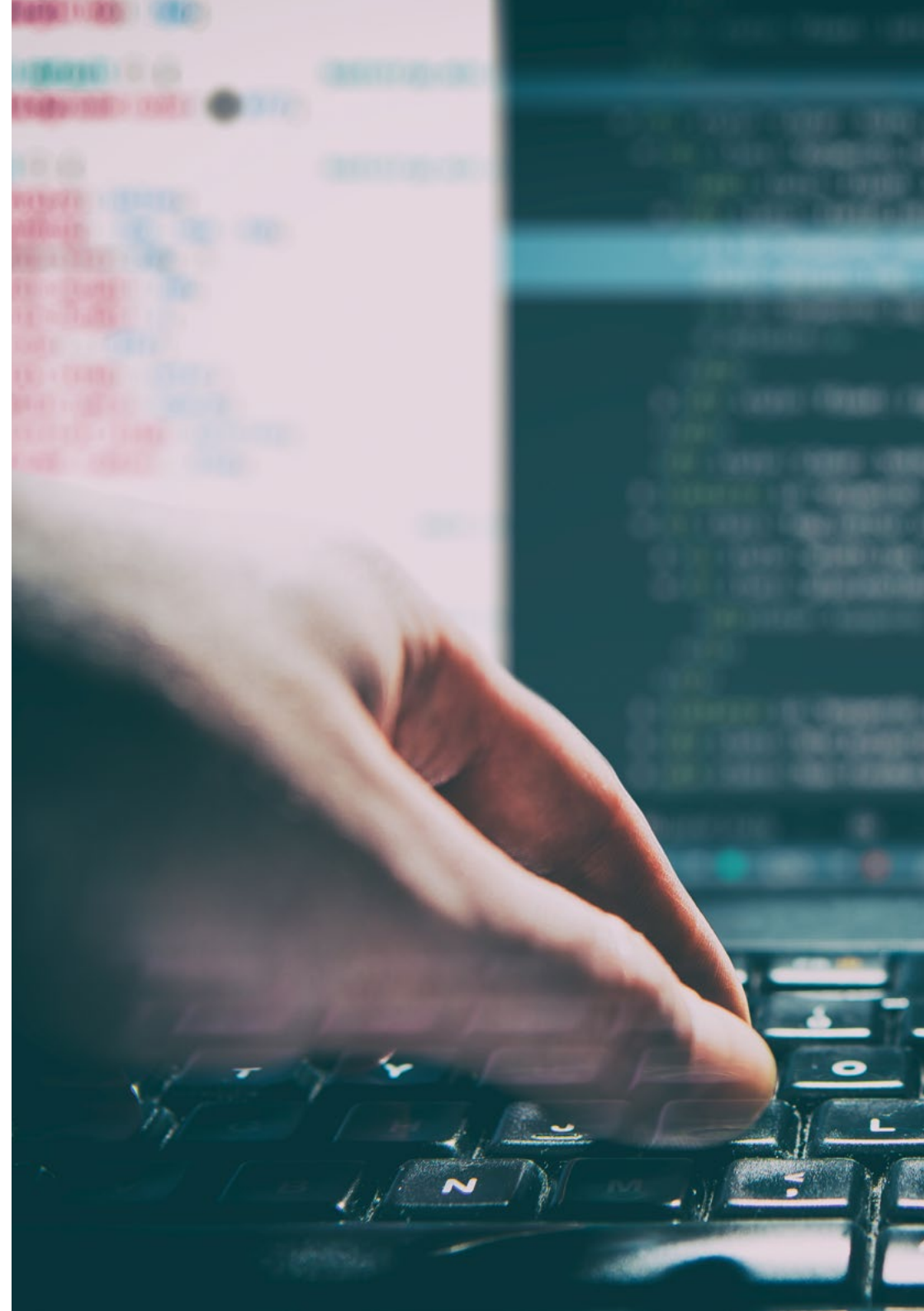


General Objectives

- ♦ Acquire new knowledge in software and computer systems engineering
- ♦ Acquire new skills in terms of new technologies and the latest software developments
- ♦ Process the data generated in software and computer systems engineering activities

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Improving your skills in the field of online application security will make you more competitive. Continue your training and give your career a boost”





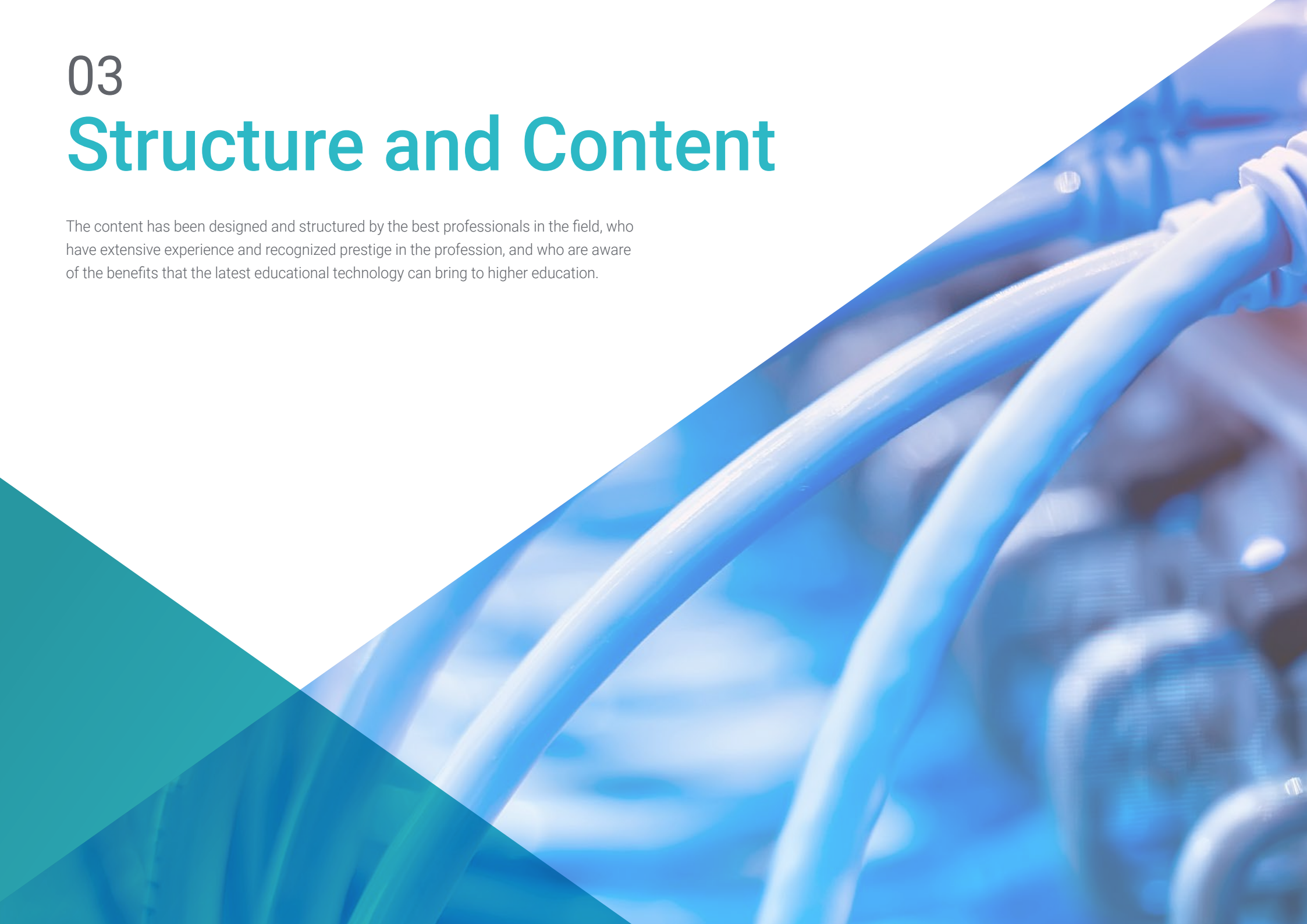
Specific Objectives

- ◆ Acquire the knowledge required to evaluate and detect the vulnerabilities of online applications
- ◆ Understand the security policies and standards to be applied to online applications
- ◆ Know the procedures to use during the development of web applications and their subsequent evaluation through analysis and security tests
- ◆ Learn the security measures for the deployment and production of web applications
- ◆ Understand the concepts, functions and technologies to be applied in the security of web services, as well as security tests and protective measures
- ◆ Assimilate the procedures for ethical hacking, malware analysis and forensics
- ◆ Know the mitigation and containment measures for incidents on web services
- ◆ Incorporate best practice techniques for the development and implementation of online applications

03

Structure and Content

The content has been designed and structured by the best professionals in the field, who have extensive experience and recognized prestige in the profession, and who are aware of the benefits that the latest educational technology can bring to higher education.



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*We have the most complete
and up-to-date program on the
market. We strive for excellence
and for you to achieve it too"*

Module 1. Online Applications Security

- 1.1. Vulnerabilities and Security Issues in Online Applications
 - 1.1.1. Introduction to Online Application Security
 - 1.1.2. Security Vulnerabilities in the Design of Web Applications
 - 1.1.3. Security Vulnerabilities in the Implementation of Web Applications
 - 1.1.4. Security Vulnerabilities in the Deployment of Web Applications
 - 1.1.5. Official Lists of Security Vulnerabilities
- 1.2. Policies and Standards for Online Application Security
 - 1.2.1. Pillars for the Security of Online Applications
 - 1.2.2. Security Policy
 - 1.2.3. Information Security Management System
 - 1.2.4. Secure Software Development Life Cycle
 - 1.2.5. Standards for Application Security
- 1.3. Security in the Design of Web Applications
 - 1.3.1. Introduction to Web Application Security
 - 1.3.2. Security in the Design of Web Applications
- 1.4. Testing the Security and Online Protection of Web Applications
 - 1.4.1. Web Application Security Testing and Analysis
 - 1.4.2. Web Application Deployment and Production Security
- 1.5. Web Services Security
 - 1.5.1. Introduction to Web Services Security
 - 1.5.2. Web Services Security Functions and Technologies
- 1.6. Testing the Security and Online Protection of Web Services
 - 1.6.1. Evaluation of Web Services Security
 - 1.6.2. Online Protection. XML Firewalls and Gateways
- 1.7. Ethical Hacking, Malware and Forensics
 - 1.7.1. Ethical Hacking
 - 1.7.2. Malware Analysis
 - 1.7.3. Forensic Analysis



- 1.8. Incident Resolution on Web Services
 - 1.8.1. Monitoring
 - 1.8.2. Performance Measurement Tools
 - 1.8.3. Containment Measures
 - 1.8.4. Root Cause Analysis
 - 1.8.5. Proactive Problem Management
- 1.9. Best Practices to ensure Application Security
 - 1.9.1. Handbook of Best Practices in the Development of Online Applications
 - 1.9.2. Handbook of Good Practices in the Implementation of Online Applications
- 1.10. Common Errors that Undermine Application Security
 - 1.10.1. Common Errors in Development
 - 1.10.2. Common Errors in Hosting
 - 1.10.3. Common Production Errors

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A comprehensive and multidisciplinary educational program that will allow you to excel in your career by following the latest advances in the field of online application security”

04 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.



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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.

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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.



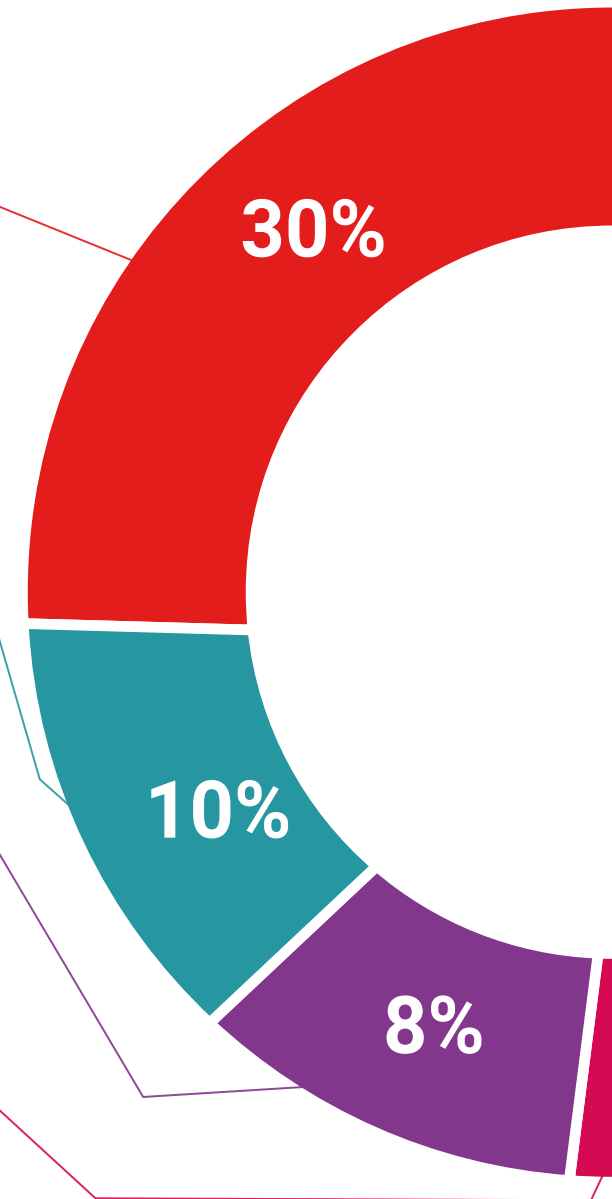
Practising Skills and Abilities

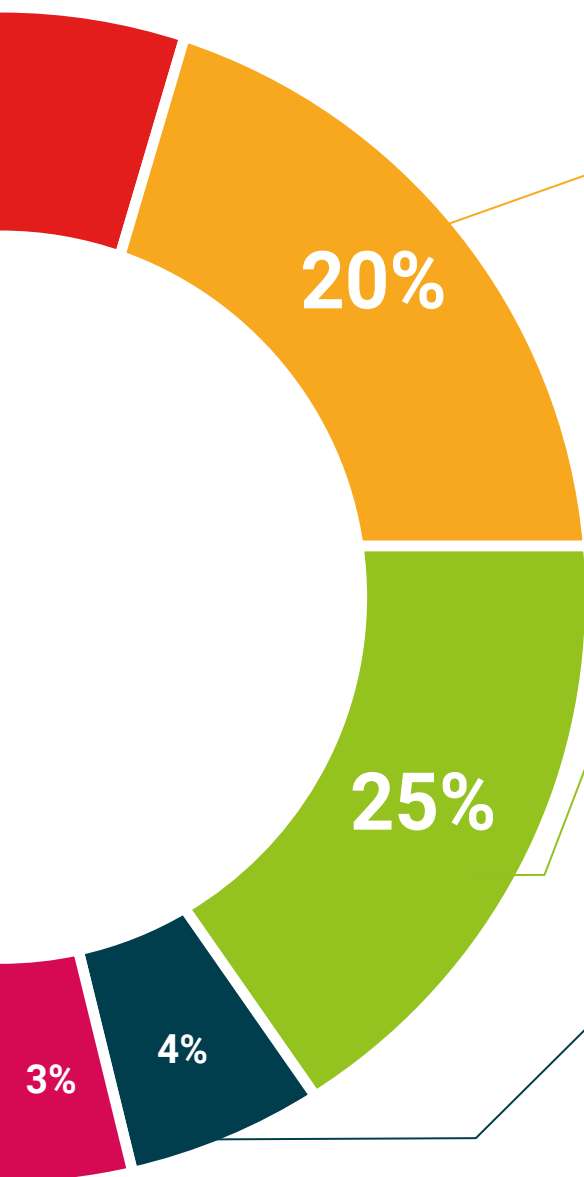
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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.



05 Certificate

The Postgraduate Certificate in Online Application Security guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Online Application Security** 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 Online Application Security**

Official N° of Hours: **150 h.**





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