Postgraduate Certificate

IT Security Risks and Environment

tec **h** global university

tech. global university

Postgraduate Certificate
IT Security Risks and Environment

- » 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/it-security-risks-environment**

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01
Introduction

The number of threats to which companies, institutions or common users are subjected in the digital environment is increasing. There are more and more attempts to exploit vulnerabilities in computer systems and networks of all types of companies and individuals. For this reason, the services of specialists who can find these vulnerabilities and assess the existing risks in the services and tools used in the organization are frequently requested. This has led to the emergence of new professional profiles focused on this area, which is why this program has been designed to provide IT professionals with the most cutting-edge content on issues such as cyber risk transfer, preparing them for immediate career advancement.

Proper IT security risk assessment is critical to the success of a company or institution, and with this program you can become a highly sought-after specialist in this area thanks to the innovative knowledge you will incorporate into your professional practice"

To know the exact position of a company in terms of cybersecurity, you need specialists who have a thorough understanding of the risks and vulnerabilities of all types of IT, digital and information systems. This is not an easy task, as digitization and the continuous emergence of new tools, applications and services over the Internet means that there is greater exposure to attacks.

For this reason, the figure of a professional specialized in risk assessment and IT security environment is becoming increasingly necessary. Companies are aware of their fragility in this regard, and look for the best specialists who can audit their security systems, proposing the best solutions.

Thus, based on a 100% online teaching methodology, the computer scientist will be able to get up to date on issues such as risk management standards, the current state of threats and digital technologies, the methodology of analysis and risk management of information systems or artificial intelligence applied to risk management.

In addition, the professional will have a prestigious teaching staff composed of active specialists who are up to date with the latest developments in this field. And you will have at your disposal the best multimedia materials: videos, practical exercises, all kinds of reading material, interactive summaries, master classes, among others.

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

- The development of case studies presented by IT and cybersecurity experts
- 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

In this Postgraduate Certificate, you will learn more about cryptography applied to blockchain and methods of value preservation in the blockchain environment"

"One of the most sought-after professional profiles today is that of the IT security risk analyst. With this program you will improve your future prospects immediately"
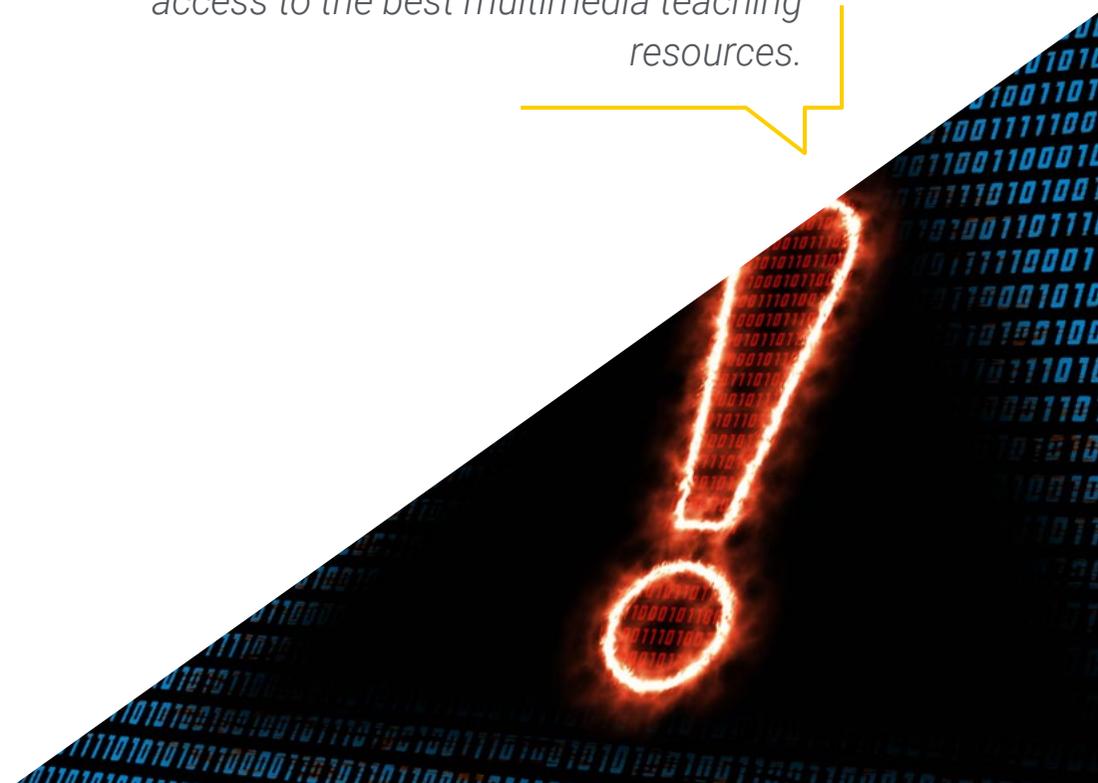
TECH's online learning system adapts completely to your personal and professional circumstances, allowing you to study when and where you want.

The prestigious faculty of this program is joined by the best educational technology, providing you with 24-hour access to the best multimedia teaching resources.

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.

02
Objectives

The rapid development of numerous digital tools and services has led to the rise of new professional profiles in the IT field. For this reason, TECH has set itself the goal of responding to the challenge of providing companies and users with the best security and risk assessment methods. And with that goal in mind, it has designed this program, with which the student can become an expert in IT security risks and environment, improving their prospects for advancement in their career as a computer scientist.

This Postgraduate Certificate will provide you with everything you need to achieve your short- and long-term professional goals. Enroll and experience the progress you are looking for"

General Objectives

- Analyze and develop the concept of risk and uncertainty within the environment in which we live
- Examine the risk management model based on ISO 31.000
- Apply the MAGERIT methodology to evolve the model and take it a step further
- Design new risk management methodologies based on the *agile* risk management concept
- Identify, analyze, assess and treat the risks faced by the professional from a new business perspective based on a *risk-driven* model that allows not only to survive in its own environment, but also to boost the contribution of its own value
- Maximize the opportunities presented and eliminate exposure to all potential risks from the design itself

IT security risk assessment is one of the disciplines of the future: this program will prepare you to face the new IT challenges with all the guarantees"

Specific Objectives

- Examine, with a holistic vision, the environment in which we move
- Identify the main risks and opportunities that may affect the achievement of our objectives
- Analyze risks based on the best practices available to us
- Assess the potential impact of these risks and opportunities
- Develop techniques to deal with risks and opportunities in a way that maximizes value contribution
- Examine in depth the different risk and value transfer techniques
- Generate value from the design of proprietary models for agile risk management
- Examine results to propose continuous improvements in project and process management based on *risk-driven* management models
- Innovate and transform general data into relevant information for risk-based decision-making

03

Course Management

This Postgraduate Certificate in IT Security Risks and Environment has a high-level faculty in the field of cybersecurity. This area is becoming increasingly complex, as more and more digital technologies and tools emerge and their operation implies the existence of potential vulnerabilities. Thus, these new technologies require a detailed examination to properly assess their security, and that is why it is necessary that a teaching staff of excellence such as the one that teaches this program is the one that transfers to the student the keys to this important IT sector.

The faculty of this program will make sure that when you finish the qualification you will be a great specialist in this area"

Management

Mr. Olalla Bonal, Martín
- 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. Gonzalo Alonso, Félix
- CEO and Founder of Smart REM Solutions
- Founding Partner and Head of Risk Engineering and Innovation Dynargy
- Manager and Founding Partner Risknova (Specialized Expert Technology Office)
- Degree in Industrial Organization Engineering from Comillas Pontifical University ICAI
- Graduate in Industrial Technical Engineering, specializing in Industrial Electronics, Comillas Pontifical University ICAI
- Master's Degree in Insurance Management from ICEA (Institute for the Collaboration between Insurance Companies)

04
Structure and Content

The contents of this Postgraduate Certificate in IT Security Risks and Environment have been designed by leading international experts in this field of cybersecurity. Thus, they have developed a program structured in 1 specialized module that will allow the professional to learn about the latest developments in issues such as VUCA and BANI environments, the analysis of the general environment, quantum computing and its relationship with the protection and computer risk or technologies and tools for risk management.
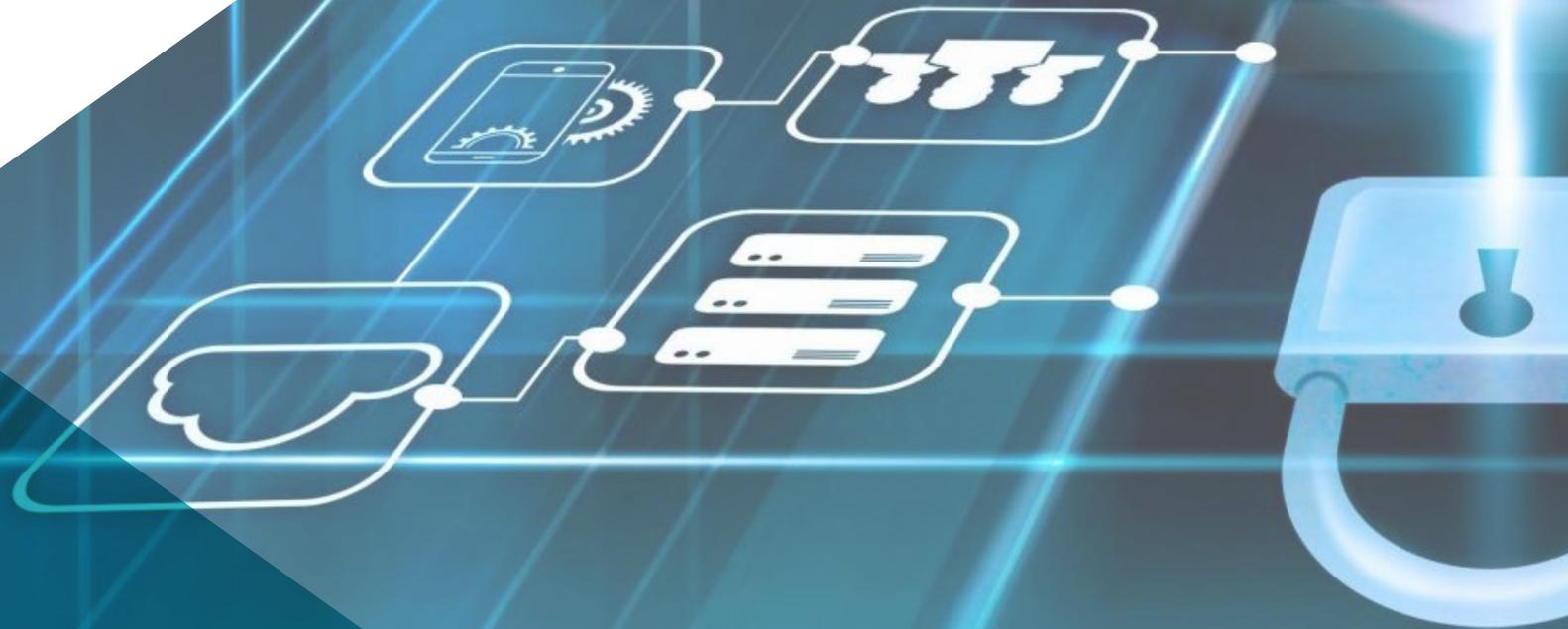
The most complete and up-to-date syllabus, taught by a teaching staff of great international prestige: you will not find a better opportunity than this to progress professionally"

Module 1. Risk Analysis and IT Security Environment

1.1. Analysis of the environment
    1.1.1. Analysis of the Economic Situation
        1.1.1.1. VUCA Environment
            1.1.1.1.1. Volatile
            1.1.1.1.2. Unsure
            1.1.1.1.3. Complex
            1.1.1.1.4. Ambiguous
        1.1.1.2. BANI Environment
            1.1.1.2.1. Broken
            1.1.1.2.2. Anxious
            1.1.1.2.3. Non-Linear
            1.1.1.2.4. Incomprehensible
    1.1.2. General Environment Analysis PESTLE
        1.1.2.1. Politics
        1.1.2.2. Economics
        1.1.2.3. Social
        1.1.2.4. Technological
        1.1.2.5. Ecological/Environmental
        1.1.2.6. Legal
    1.1.3. Analysis of the Internal Situation SWOT Analysis
        1.1.3.1. Objectives
        1.1.3.2. Threats
        1.1.3.3. Opportunities
        1.1.3.4. Strengths
1.2. Risk and Uncertainty
    1.2.1. Risk
    1.2.2. Risk Management
    1.2.3. Risk Management Standards

1.3. ISO 31.000:2018 Risk Management Guidelines
    1.3.1. Object
    1.3.2. Principles
    1.3.3. Frame of Reference
    1.3.4. Process
1.4. Methodology for Analysis and Management of Information Systems Risks (MAGERIT)
    1.4.1. MAGERIT Methodology
        1.4.1.1. Objectives
        1.4.1.2. Method
        1.4.1.3. Components
        1.4.1.4. Techniques
        1.4.1.5. Available Tools (PILAR)
1.5. Cyber Risk Transfer
    1.5.1. Risk Transfer
    1.5.2. Cyber Risks Types
    1.5.3. Cyber Risk Insurance
1.6. Agile Methodologies for Risk Management
    1.6.1. Agile Methodologies
    1.6.2. Scrum for Risk Management
    1.6.3. *Agile Risk Management*
1.7. Technologies for Risk Management
    1.7.1. Artificial Intelligence Applied to Risk Management
    1.7.2. *Blockchain* and Cryptography Value Preservation Methods
    1.7.3. Quantum Computing Opportunity or Risk
1.8. IT Risk Mapping Based on Agile Methodologies
    1.8.1. Representation of Probability and Impact in Agile Environments
    1.8.2. Risk as a Threat to Value
    1.8.3. Re-Evolution in Project Management and Agile Processes Based on KRIs

This program also contains a business acumen that will bring a more global perspective to your work, and teach you how to develop risk-driven business management models"

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.

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.

06
Certificate

The Postgraduate Certificate in IT Security Risks and Environment guarantees students, in addition to the most rigorous and up-to-date education, 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 private qualification will allow you to obtain an **Postgraduate Certificate in IT Security Risks and Environment** 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 IT Security Risks and Environment**

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 IT Security Risks and Environment

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

Dr. Pedro Navarro Illana
Dean

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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