

# Postgraduate Diploma

## Advanced Pentesting Management and Technical Reporting



## Postgraduate Diploma Advanced Pentesting Management and Technical Reporting

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

Website: [www.techtute.com/pk/information-technology/postgraduate-diploma/postgraduate-diploma-advanced-pentesting-management-technical-reporting](http://www.techtute.com/pk/information-technology/postgraduate-diploma/postgraduate-diploma-advanced-pentesting-management-technical-reporting)

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# 01

# Introduction

In the information age, cybercrime is a crime that affects the entire population. In particular, companies must rely on the services of *Pentesters*, capable of assessing and improving their security. For this reason, experts in this procedure need to be at the forefront, to prepare the most detailed technical reports. They must also offer innovative solutions and take into account specific aspects such as budgeting and associated costs. In this context, TECH launches this program for professionals to lead *Red Team* projects in the most efficient way. It should be noted that the resources, provided 100% online, will allow the students to complete it with total comfort, requiring only an electronic device with Internet access.





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*You will perform the most exhaustive and realistic measurements thanks to the OSSTMM standard. And in just 6 months!”*



More and more companies are falling victim to hackers. These criminals breach your data and perform unauthorized transactions, causing financial losses. Aware of the dangers of having a presence on the Internet, the most prestigious companies regularly demand the incorporation of cybersecurity experts.

This is why specialists require competitive advantages to differentiate themselves from other candidates. A key aspect is to offer the most creative and long-lasting solutions. For this reason, TECH has developed the most updated Postgraduate Diploma in this area.

Its main objective is for students to anticipate crisis situations and thus reduce their impact on business activity. To achieve this, a series of techniques to lead teams in an ethical and motivating way will be addressed. In addition, the application of specific procedures in the field of offensive cybersecurity will be discussed in depth.

Likewise, specialists will analyze how to give reports an executive approach, so that they stand out by using the most appropriate terminology. In this regard, effective measurement tools will be provided, including the LINCE assessment. Finally, the most frequent errors in reporting vulnerabilities and evidence will be explored.

This academic program has a 100% online methodology, so that graduates will be able to complete it with total convenience and flexibility. To access its contents, they will only need an electronic device with Internet access, since the schedules and evaluation chronograms can be planned individually. Likewise, the syllabus will be supported by the innovative Relearning teaching system, which consists of the reiteration of key concepts to guarantee optimal learning.

This **Postgraduate Diploma in Advanced Pentesting Management and Technical Reporting** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Advanced Pentesting Management and Technical Reporting
- ♦ The graphic, schematic and practical contents with which it is conceived provide cutting- Therapeutics and practical 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



*You will learn more about international legislation and regulations that will contribute to the success of your audits"*

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*Your activities will be ethical, legal and safe, all thanks to Pentester's boundary analysis"*

*You will evaluate strategic planning and detect opportunities to differentiate your company from the rest.*

*Forget about memorizing! With the Relearning system you will integrate the concepts in a natural and progressive way.*

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 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 students will be assisted by an innovative interactive video system created by renowned and experienced experts.

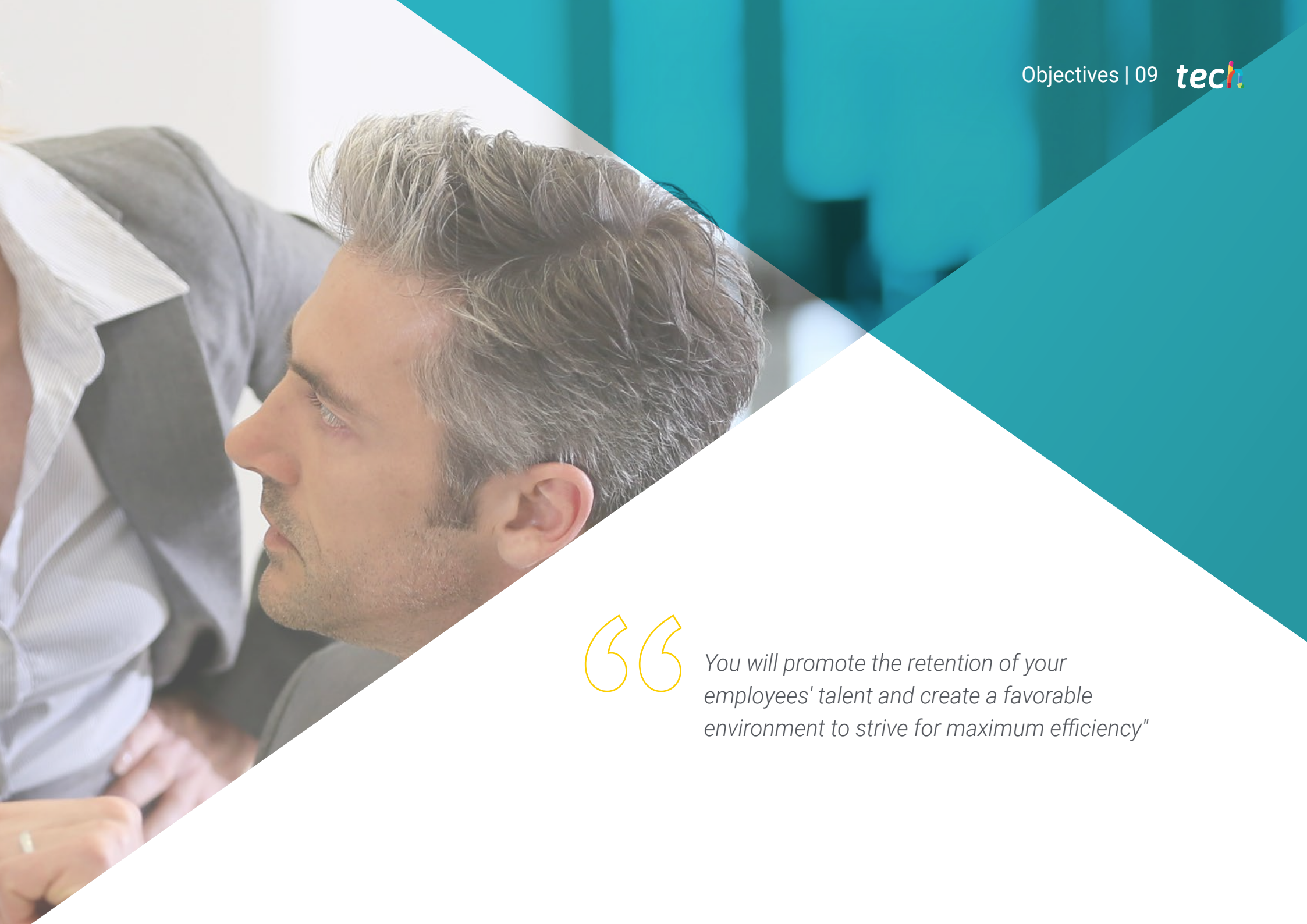


# 02 Objectives

The design of this Postgraduate Diploma will focus on the leadership and coordination of specialized cybersecurity teams. In order to lead projects aimed at reducing threats, key terms such as budgeting, resource allocation and time management will be addressed. In addition, through practical writing exercises and simulations, graduates will hone their communication skills. In this way, they will convey information in an impactful way and facilitate decision-making in business environments.







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*You will promote the retention of your employees' talent and create a favorable environment to strive for maximum efficiency"*



## General Objectives

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- ◆ Acquire advanced skills in penetration testing and Red Team simulations, addressing the identification and exploitation of vulnerabilities in systems and networks
- ◆ Develop leadership skills to coordinate teams specialized in offensive cybersecurity, optimizing the execution of Pentesting and Red Team projects
- ◆ Develop skills in the analysis and development of malware, understanding its functionality and applying defensive and educational strategies
- ◆ Refine communication skills by preparing detailed technical and executive reports, presenting findings effectively to technical and executive audiences
- ◆ Promote an ethical and responsible practice in the field of cybersecurity, considering ethical and legal principles in all activities
- ◆ Keep students up-to-date with emerging trends and technologies in cybersecurity





## Specific Objectives

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### Module 1. Cybersecurity Team Management

- ♦ Develop leadership skills specific to cybersecurity teams, including the ability to motivate, inspire, and coordinate efforts to achieve common goals
- ♦ Learn how to efficiently allocate resources within a cybersecurity team, considering individual skills and maximizing productivity on projects
- ♦ Improve communication skills specific to technical environments, facilitating understanding and coordination among team members
- ♦ Learn strategies to identify and manage conflicts within the cybersecurity team, promoting a collaborative and efficient work environment
- ♦ Learn how to establish metrics and evaluation systems to measure cybersecurity team performance and make adjustments as needed
- ♦ Promote the integration of ethical practices in the management of cybersecurity teams, ensuring that all activities are conducted in an ethical and legal manner
- ♦ Develop competencies for the preparation and efficient management of cybersecurity incidents, ensuring a rapid and effective response to threats

### Module 2. Security Project Management

- ♦ Develop skills to plan cyber security projects, defining objectives, scope, resources and execution deadlines
- ♦ Learn strategies for the effective execution of security projects, ensuring the successful implementation of planned measures
- ♦ Develop skills for efficient budget management and resource allocation in security projects, maximizing efficiency and minimizing costs

- ♦ Improve effective communication with stakeholders, presenting reports and updates in a clear and understandable manner
- ♦ Learn project monitoring and control techniques, identifying deviations and taking corrective actions as necessary
- ♦ Familiarize students with Agile Pentesting methodologies
- ♦ Develop skills in detailed documentation and reporting, providing a clear view of project progress and results obtained
- ♦ Promote effective collaboration between different teams and disciplines within security projects, ensuring a comprehensive and coordinated vision
- ♦ Learn strategies to evaluate and measure the effectiveness of implemented measures, ensuring continuous improvement of the organization's security posture

### Module 3. Technical and Executive Report

- ♦ Develop skills to prepare detailed technical reports, presenting clearly and completely the findings, methodologies used and recommendations
- ♦ Learn to communicate effectively with technical audiences, using precise and appropriate language to convey complex technical information
- ♦ Develop skills to formulate actionable and practical recommendations aimed at mitigating vulnerabilities and improving security posture
- ♦ Learn to assess the potential impact of identified vulnerabilities, considering technical, operational and strategic aspects



- ♦ Familiarize the learner with best practices for executive reporting, adapting technical information for non-technical audiences
- ♦ Develop competencies to align findings and recommendations with the strategic and operational objectives of the organization
- ♦ Learn how to use data visualization tools to graphically represent the information contained in the reports, facilitating comprehension
- ♦ Promote the inclusion of relevant information on compliance with regulations and standards in reports, ensuring adherence to legal requirements
- ♦ Foster effective collaboration between technical and executive teams, ensuring understanding and support for the improvement actions proposed in the report





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*You will achieve your objectives thanks to TECH's didactic tools, among which the explanatory videos and interactive summaries stand out"*



03

# Course Management

In line with its philosophy of providing the highest quality education, TECH offers students a first class teaching staff. These experts have a solid knowledge of the most innovative Pentesting and Technical Reporting techniques. For this reason, the syllabus that makes up this program will offer the graduates the most effective tools for conflict resolution in cybersecurity projects. In this way, the graduates will have the guarantees required to specialize at an international level in a professional field that offers numerous opportunities.



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*The teaching staff of this training has extensive knowledge in cybersecurity and have worked in the most recognized companies in the sector"*

## Management



### Mr. Gómez Pintado, Carlos

- ♦ Manager of Cybersecurity and Network Team Cipherbit in Oesía Group
- ♦ Manager Advisor & Investor at Wesson App
- ♦ Graduate in Software Engineering and Information Society Technologies, Polytechnic University of Madrid
- ♦ Collaboration with educational institutions for the development of Higher Level Training Cycles in cybersecurity

## Professors

### Mr. Mora Navas, Sergio

- ♦ Cybersecurity Consultant in Oesía Group
- ♦ Cybersecurity Engineer, Rey Juan Carlos University Computer Science Engineer, University of Burgos

### Mr. González Sanz, Marcos

- ♦ Cybersecurity Consultant-Network Teamer Cipherbit in Oesía Group
- ♦ Software Engineer, Polytechnic University of Madrid
- ♦ Cybersecurity Tutor and Core Dumped Specialist





# 04

## Structure and Content

The structure of this program comprises 3 modules: Cybersecurity Team Management; Security Project Management; and Technical and Executive Reporting. Under the supervision of a distinguished faculty, the syllabus will analyze effective strategies for managing resources, assigning tasks and optimizing collaboration in Pentesting projects. In addition, it will address key concepts in the estimation of economic resources in order to adequate budgeting. It will also include optimal tools for monitoring projects, among which the LINCE and OSSTMM methods stand out.





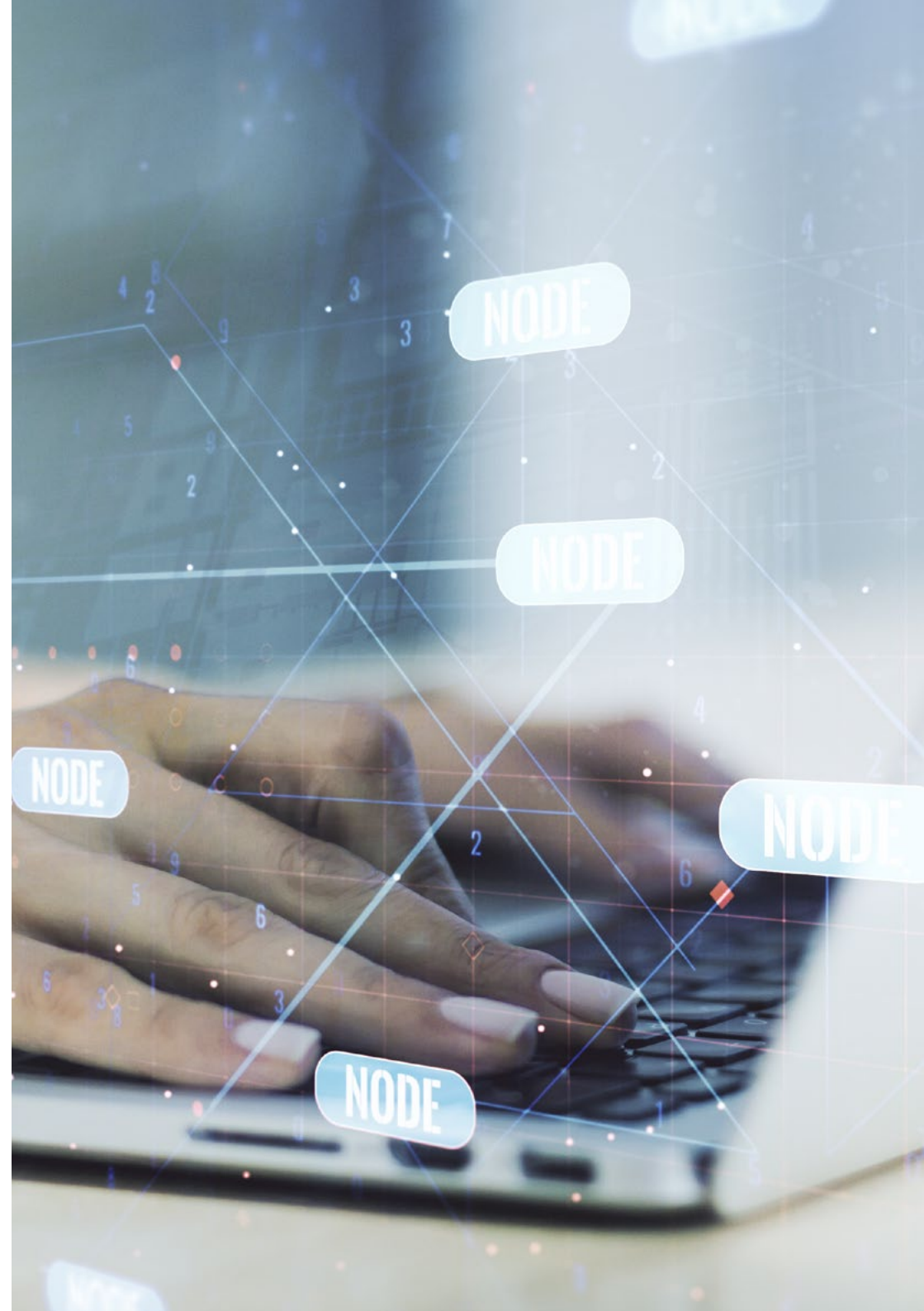


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*You will analyze the most effective strategies to manage resources and optimize collaboration in Red Team projects”*

## Module 1. Cybersecurity Team Management

- 1.1. Team Management
  - 1.1.1. Who is Who
  - 1.1.2. The Director
  - 1.1.3. Conclusions
- 1.2. Roles and Responsibilities
  - 1.2.1. Role Identification
  - 1.2.2. Effective Delegation
  - 1.2.3. Expectation Management
- 1.3. Team Training and Development
  - 1.3.1. Stages of Team Building
  - 1.3.2. Group Dynamics
  - 1.3.3. Evaluation and Feedback
- 1.4. Talent Management
  - 1.4.1. Talent Identification
  - 1.4.2. Capacity Building
  - 1.4.3. Talent Retention
- 1.5. Team Leadership and Motivation
  - 1.5.1. Leadership Styles
  - 1.5.2. Theories of Motivation
  - 1.5.3. Recognition of Achievements
- 1.6. Communication and Coordination
  - 1.6.1. Communication Tools
  - 1.6.2. Communication Barriers
  - 1.6.3. Coordination Strategies
- 1.7. Strategic Staff Professional Development Planning
  - 1.7.1. Identification of Training Needs
  - 1.7.2. Individual Development Plans
  - 1.7.3. Supervision and evaluation



- 1.8. Conflict Resolution
  - 1.8.1. Conflict Identification
  - 1.8.2. Measurement Methods
  - 1.8.3. Conflict Prevention
- 1.9. Quality Management and Continuous Improvement
  - 1.9.1. Quality Principles
  - 1.9.2. Techniques for Continuous Improvement
  - 1.9.3. *Feedback*
- 1.10. Tools and Technologies
  - 1.10.1. Collaboration Platforms
  - 1.10.2. Project Management
  - 1.10.3. Conclusions

## Module 2. Security Project Management

- 2.1. Security Project Management
  - 2.1.1. Definition and Purpose of Cybersecurity Project Management
  - 2.1.2. Main Challenges
  - 2.1.3. Considerations
- 2.2. Life Cycle of a Security Project
  - 2.2.1. Initial Stages and Definition of Objectives
  - 2.2.2. Implementation and Execution
  - 2.2.3. Evaluation and Review
- 2.3. Resource Planning and Estimation
  - 2.3.1. Basic Concepts of Economic Management
  - 2.3.2. Determination of Human and Technical Resources
  - 2.3.3. Budgeting and Associated Costs
- 2.4. Project Implementation and Control
  - 2.4.1. Monitoring and Follow-Up
  - 2.4.2. Adaptation and Changes in the Project
  - 2.4.3. Mid-Term Evaluation and Reviews
- 2.5. Project Communication and Reporting
  - 2.5.1. Effective Communication Strategies
  - 2.5.2. Preparation of Reports and Presentations
  - 2.5.3. Communication with the Customer and Management
- 2.6. Tools and Technologies
  - 2.6.1. Planning and Organization Tools
  - 2.6.2. Collaboration and Communication Tools
  - 2.6.3. Documentation and Storage Tools
- 2.7. Documentation and Protocols
  - 2.7.1. Structuring and Creation of Documentation
  - 2.7.2. Action Protocols
  - 2.7.3. Guidelines
- 2.8. Regulations and Compliance in Cybersecurity Projects
  - 2.8.1. International Laws and Regulations
  - 2.8.2. Compliance
  - 2.8.3. Audits
- 2.9. Risk Management in Security Projects
  - 2.9.1. Risk Identification and Analysis
  - 2.9.2. Mitigation Strategies
  - 2.9.3. Risk Monitoring and Review
- 2.10. Project Closing
  - 2.10.1. Review and Assessment
  - 2.10.2. Final Documentation
  - 2.10.3. *Feedback*



### Module 3. Technical and Executive Report

- 3.1. Report Process
  - 3.1.1. Report Structure
  - 3.1.2. Report Process
  - 3.1.3. Key Concepts
  - 3.1.4. Executive vs Technical
- 3.2. Guidelines
  - 3.2.1. Introduction
  - 3.2.2. Guide Types
  - 3.2.3. National Guides
  - 3.2.4. Case Uses
- 3.3. Methods
  - 3.3.1. Assessment
  - 3.3.2. *Pentesting*
  - 3.3.3. Common Methodologies Review
  - 3.3.4. Introduction to National Methodologies
- 3.4. Technical Approach to the Reporting Phase
  - 3.4.1. Understanding the Limits of Pentester
  - 3.4.2. Language Usage and Clues
  - 3.4.3. Information Presentation
  - 3.4.4. Common Errors
- 3.5. Executive Approach to the Reporting Phase
  - 3.5.1. Adjusting the Report to the Context
  - 3.5.2. Language Usage and Clues
  - 3.5.3. Standardization
  - 3.5.4. Common Errors
- 3.6. OSSTMM
  - 3.6.1. Understanding the Methodology
  - 3.6.2. Assessment
  - 3.6.3. Documentation
  - 3.6.4. Creating a Report





- 3.7. LINCE
  - 3.7.1. Understanding the Methodology
  - 3.7.2. Assessment
  - 3.7.3. Documentation
  - 3.7.4. Creating a Report
- 3.8. Reporting Vulnerabilities
  - 3.8.1. Key Concepts
  - 3.8.2. Scope Quantification
  - 3.8.3. Vulnerabilities and Evidence
  - 3.8.4. Common Errors
- 3.9. Focusing the Report on the Customer
  - 3.9.1. Importance of Job Testing
  - 3.9.2. Solutions and Mitigations
  - 3.9.3. Sensitive and Relevant Data
  - 3.9.4. Practical Examples and Cases
- 3.10. Reporting Retakes
  - 3.10.1. Key Concepts
  - 3.10.2. Understanding Legacy Information
  - 3.10.3. Error Checking
  - 3.10.4. Adding Information



*No preset evaluation schedules or timetables. That's what this TECH program is like!"*



# 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.





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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.





# 06

# Certificate

The Postgraduate Diploma in Advanced Pentesting Management and Technical Reporting guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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”*

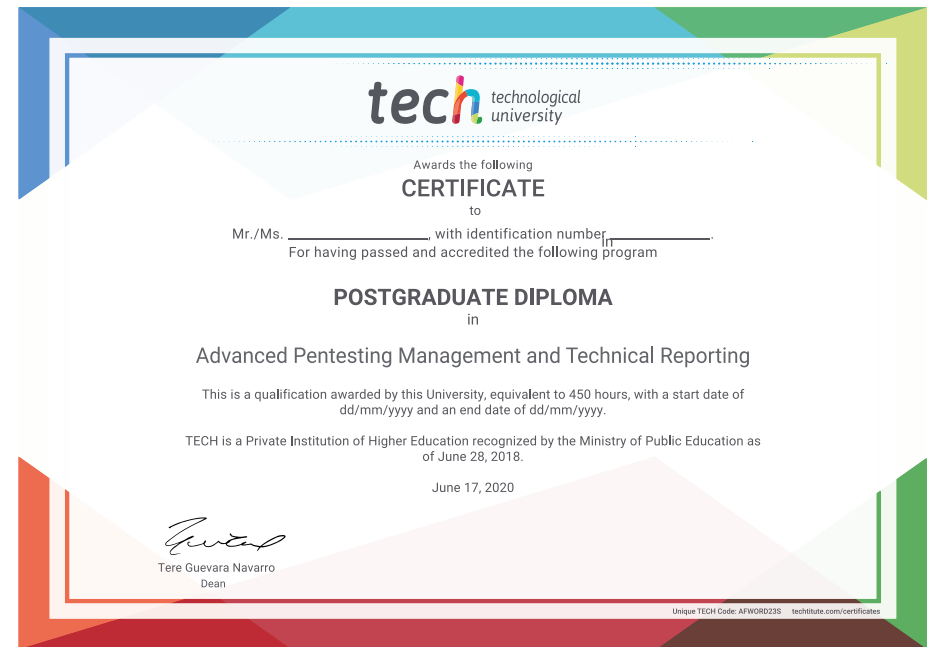
This **Postgraduate Diploma in Advanced Pentesting Management and Technical Reporting** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Diploma** issued by **TECH Technological University** via tracked delivery\*.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Advanced Pentesting Management and Technical Reporting**

Official N° of Hours: **450 h.**



\*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.



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