

Postgraduate Diploma Cybersecurity Threat Detection and Analysis with Artificial Intelligence



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- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/artificial-intelligence/postgraduate-diploma/postgraduate-diploma-cybersecurity-threat-detection-analysis-artificial-intelligence

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01

Introduction to the Program

Early identification of cyber threats is crucial to prevent damage to organizations' digital infrastructures. However, threats continue to evolve at an unprecedented speed, making it difficult to use traditional tools to mitigate risks. In the face of this, Artificial Intelligence has revolutionized Cybersecurity analysis by enabling the automation of the threat identification process and improving the accuracy of detection systems. Therefore, experts need to handle the most innovative machine learning techniques to identify patterns of anomalous behavior and anticipate cyberattacks. In order to facilitate this work, TECH launches a revolutionary university program focused on the Analysis and Detection of Cybersecurity Threats with Artificial Intelligence.



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With this 100% online Postgraduate Diploma, you will use innovative Artificial Intelligence techniques to identify and mitigate digital attacks in real time”

According to a new report produced by the United Nations, the global costs of cyberattacks are estimated to reach \$10.5 trillion annually by next year. This growth is due in part to the sophistication of attack methods, which makes traditional detection techniques insufficient. In this context, Artificial Intelligence has become a key tool in threat prevention, enabling systems to identify anomalous patterns and respond to incidents in real time. Hence the importance for professionals to develop advanced skills to implement intelligent systems that improve the efficiency and accuracy of cyber threat detection.

In this scenario, TECH presents a pioneering Postgraduate Diploma in Analysis and Detection of Cybersecurity Threats with Artificial Intelligence. Designed by leading experts in this sector, the academic itinerary will delve into factors ranging from threat assessment assisted by intelligent systems or the application of generative models in the simulation of attacks to the creation of a predictive defense system supported by ChatGPT. In this way, graduates will gain advanced skills to design and implement cybersecurity solutions based on Artificial Intelligence, allowing them to anticipate and neutralize threats proactively.

On the other hand, this university program is based on a 100% online format, easily accessible from any device with an Internet connection and without predetermined schedules. At the same time, TECH uses its disruptive Relearning teaching method, so that experts can deepen their knowledge of the contents without resorting to techniques that involve extra effort, such as memorization. In this sense, the only thing professionals will need is an electronic device with Internet access (such as a cell phone, tablet or computer) to access the most complete teaching materials on the market and enjoy a first-class experience.

The **Postgraduate Diploma in Cybersecurity Threat Detection and Analysis with Artificial Intelligence** contains the most complete and up-to-date academic program on the market. Its most notable features are:

- ♦ The development of case studies presented by experts with deep knowledge in Cybersecurity and Artificial Intelligence, who apply these tools for the detection, prevention and mitigation of cyber threats in advanced technological environments
- ♦ The graphic, schematic and eminently practical contents with which it is conceived gather scientific and practical information on those disciplines that are indispensable 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 design intrusion detection systems based on Artificial Intelligence, optimizing the protection of critical infrastructures”

“

You will master Machine Learning algorithms to anticipate and neutralize computer crimes”

The program's teaching staff includes professionals from the field who contribute their work 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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned experts.

You will apply data analysis techniques to identify patterns and anomalous behavior in computer networks.

With the Relearning system you will not have to invest a great amount of study hours and you will focus on the most relevant concepts.



02

Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs, available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it has a huge faculty of more than 6,000 professors of the highest international prestige.



“

Study at the largest online university in the world and ensure your professional success. The future begins at TECH”

The world's best online university, according to FORBES

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

The best top international faculty

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

The world's largest online university

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



The most complete syllabuses on the university scene

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

A unique learning method

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

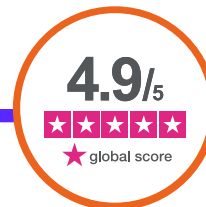
Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



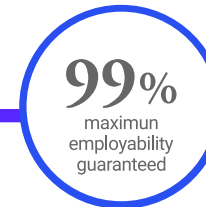
Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



03

Syllabus

The didactic contents that make up this Postgraduate Diploma have been developed by recognized experts in the use of Artificial Intelligence in Cybersecurity. In this way, the curriculum will delve into issues ranging from the use of ChatGPT for risk analysis or algorithm training to sophisticated predictive modeling techniques. Thanks to this, students will be able to apply advanced Artificial Intelligence solutions for real-time cyber threat detection and mitigation.



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You will delve into the creation of automated response protocols that enable efficient recovery of systems affected by a cyber attack”

Module 1. Cybersecurity and Modern Threat Analysis with ChatGPT

- 1.1. Introduction to Cybersecurity: Current Threats and the Role of Artificial Intelligence
 - 1.1.1. Definition and Basic Concepts of Cybersecurity
 - 1.1.2. Types of Modern Cybersecurity Threats
 - 1.1.3. Role of Artificial Intelligence in the Evolution of Cybersecurity
- 1.2. Confidentiality, Integrity and Availability (CIA) in the Age of Artificial Intelligence
 - 1.2.1. Fundamentals of the CIA Model in Cybersecurity
 - 1.2.2. Security Principles Applied in the Artificial Intelligence Context
 - 1.2.3. CIA Challenges and Considerations in Artificial Intelligence-Driven Systems
- 1.3. Use of ChatGPT for Risk Analysis and Threat Scenarios
 - 1.3.1. Fundamentals of Risk Analysis in Cybersecurity
 - 1.3.2. ChatGPT's Ability to Identify and Evaluate Threat Scenarios
 - 1.3.3. Benefits and Limitations of Risk Analysis with Artificial Intelligence
- 1.4. ChatGPT in the Detection of Critical Vulnerabilities
 - 1.4.1. Principles of Vulnerability Detection in Information Systems
 - 1.4.2. ChatGPT Functionalities to Support Vulnerability Detection
 - 1.4.3. Ethical and Security Considerations When Using Artificial Intelligence in Fault Detection
- 1.5. AI-Assisted Analysis of Malware and Ransomware
 - 1.5.1. Basic Principles of Malware and Ransomware Analysis
 - 1.5.2. Artificial Intelligence Techniques Applied in the Identification of Malicious Code
 - 1.5.3. Technical and Operational Challenges in AI-Assisted Malware Analysis
- 1.6. Identification of Common Attacks with Artificial Intelligence: Phishing, Social Engineering, and Exploitation
 - 1.6.1. Classification of Attacks: Phishing, Social Engineering, and Exploitation
 - 1.6.2. Artificial Intelligence Techniques for Identification and Analysis of Common Attacks
 - 1.6.3. Difficulties and Limitations of Artificial Intelligence Models for Attack Detection

- 1.7. ChatGPT in Cyberthreat Training and Simulation
 - 1.7.1. Fundamentals of Threat Simulation for Cybersecurity Training
 - 1.7.2. ChatGPT Capabilities for Designing Simulation Scenarios
 - 1.7.3. Benefits of Threat Simulation as a Training Tool
- 1.8. Cyber Security Policies with Artificial Intelligence Recommendations
 - 1.8.1. Principles for Cyber Security Policy Formulation
 - 1.8.2. Role of Artificial Intelligence in Generating Security Recommendations
 - 1.8.3. Key Components in Artificial Intelligence Oriented Security Policies
- 1.9. Security in IoT Devices and the Role of Artificial Intelligence
 - 1.9.1. Fundamentals of Internet of Things (IoT) Security
 - 1.9.2. Artificial Intelligence Capabilities to Mitigate Vulnerabilities in IoT Devices
 - 1.9.3. Specific Artificial Intelligence Challenges and Considerations for IoT Security
- 1.10. Threat Assessment and Responses Assisted by Artificial Intelligence Tools
 - 1.10.1. Cybersecurity Threat Assessment Principles
 - 1.10.2. Characteristics of Automated Artificial Intelligence Responses
 - 1.10.3. Critical Factors in the Effectiveness of Cyber Responses with Artificial Intelligence

Module 2. Intrusion Detection and Prevention Using Generative Artificial Intelligence Models

- 2.1. Fundamentals of IDS/IPS Systems and the Role of Artificial Intelligence
 - 2.1.1. Definition and Basic Principles of IDS and IPS Systems
 - 2.1.2. Main Types and Configurations of IDS/IPS
 - 2.1.3. Contribution of Artificial Intelligence in the Evolution of Detection and Prevention Systems
- 2.2. Use of Gemini for Network Anomaly Detection
 - 2.2.1. Concepts and Types of Anomalies in Network Traffic
 - 2.2.2. Gemini's Features for Network Data Analysis
 - 2.2.3. Benefits of Anomaly Detection in Intrusion Prevention

- 2.3. Gemini and the Identification of Intrusion Patterns
 - 2.3.1. Principles of Intrusion Pattern Identification and Classification
 - 2.3.2. Artificial Intelligence Techniques Applied in the Detection of Threat Patterns
 - 2.3.3. Types of Patterns and Anomalous Behavior in Network Security
- 2.4. Application of Generative Models in Attack Simulation
 - 2.4.1. Fundamentals of Generative Models in Artificial Intelligence
 - 2.4.2. Use of Generative Models to Recreate Attack Scenarios
 - 2.4.3. Advantages and Limitations of Attack Simulation Using Generative Artificial Intelligence
- 2.5. Clustering and Event Classification Using Artificial Intelligence
 - 2.5.1. Fundamentals of Clustering and Classification in Intrusion Detection
 - 2.5.2. Common Clustering Algorithms Applied in Cybersecurity
 - 2.5.3. Role of Artificial Intelligence in Improving Event Classification Methods
- 2.6. Gemini in the Generation of Behavioral Profiles
 - 2.6.1. User and Device Profiling Concepts
 - 2.6.2. Application of Generative Models in the Creation of Profiles
 - 2.6.3. Benefits of Behavioral Profiling in Threat Detection
- 2.7. Big Data Analysis for Intrusion Prevention
 - 2.7.1. Importance of Big Data to in Detecting Security Patterns
 - 2.7.2. Methods for Processing Large Volumes of Data in Cybersecurity
 - 2.7.3. Artificial Intelligence Applications in Analysis and Prevention Based on Big Data
- 2.8. Data Reduction and Selection of Relevant Features with Artificial Intelligence
 - 2.8.1. Principles of Dimensionality Reduction in Large Data Volumes
 - 2.8.2. Feature Selection to Improve the Efficiency of Artificial Intelligence Analysis
 - 2.8.3. Data Reduction Techniques Applied in Cybersecurity

- 2.9. Evaluation of Artificial Intelligence Models in Intrusion Detection
 - 2.9.1. Evaluation Criteria of Artificial Intelligence Models in Cybersecurity
 - 2.9.2. Performance and Accuracy Indicators of the Models
 - 2.9.3. Importance of Constant Validation and Evaluation in Artificial Intelligence
- 2.10. Implementation of an Intrusion Detection System Powered by Generative Artificial Intelligence
 - 2.10.1. Basic Concepts of Intrusion Detection System Implementation
 - 2.10.2. Integration of Generative Artificial Intelligence in IDS/IPS Systems
 - 2.10.3. Key Aspects for the Configuration and Maintenance of Artificial Intelligence-Based Systems

Module 3. Predictive Models for Proactive Defense in Cybersecurity Using ChatGPT

- 3.1. Predictive Analytics in Cybersecurity: Techniques and Applications with Artificial Intelligence
 - 3.1.1. Basic Concepts of Predictive Analytics in Security
 - 3.1.2. Predictive Techniques in the Field of Cybersecurity
 - 3.1.3. Application of Artificial Intelligence in the Anticipation of Cyber Threats
- 3.2. Regression and Classification Models with ChatGPT Support
 - 3.2.1. Principles of Regression and Classification in Threat Prediction
 - 3.2.2. Types of Classification Models in Cybersecurity
 - 3.2.3. ChatGPT Assistance in the Interpretation of Predictive Models
- 3.3. Identifying Emerging Threats with ChatGPT Predictions
 - 3.3.1. Emerging Threat Detection Concepts
 - 3.3.2. Techniques for Identifying New Attack Patterns
 - 3.3.3. Limitations and Precautions in the Prediction of New Threats

- 3.4. Neural Networks for Anticipation of Cyberattacks
 - 3.4.1. Fundamentals of Neural Networks Applied in Cybersecurity
 - 3.4.2. Common Architectures for Detection and Prediction of Attacks
 - 3.4.3. Challenges in Implementing Neural Networks in Cyber Defense
- 3.5. Use of ChatGPT for Threat Scenario Simulations
 - 3.5.1. Basic Concepts of Threat Simulation in Cybersecurity
 - 3.5.2. ChatGPT Capabilities for Developing Predictive Simulations
 - 3.5.3. Factors to Consider in the Design of Simulated Scenarios
- 3.6. Reinforcement Learning Algorithms for Optimization of Defenses
 - 3.6.1. Introduction to Reinforcement Learning in Cybersecurity
 - 3.6.2. Reinforcement Algorithms Applied to Defense Strategies
 - 3.6.3. Benefits and Challenges of Reinforcement Learning in Cybersecurity Environments
- 3.7. Threat Simulation and Response with ChatGPT
 - 3.7.1. Threat Simulation Principles and Their Relevance in Cyber Defense
 - 3.7.2. Automated and Optimized Responses to Simulated Attacks
 - 3.7.3. Benefits of Simulation for Improving Cyber Preparedness
- 3.8. Accuracy and Effectiveness Assessment in Predictive Artificial Intelligence Models
 - 3.8.1. Key Indicators for the Evaluation of Predictive Models
 - 3.8.2. Accuracy Assessment Methodologies in Cybersecurity Models
 - 3.8.3. Critical Factors in the Effectiveness of Artificial Intelligence Models in Cybersecurity
- 3.9. Artificial Intelligence in Incident Management and Automated Response
 - 3.9.1. Fundamentals of Incident Management in Cybersecurity
 - 3.9.2. Role of Artificial Intelligence in Real-Time Decision Making
 - 3.9.3. Challenges and Opportunities in Response Automation
- 3.10. Creation of a Predictive Defense System with ChatGPT Support
 - 3.10.1. Proactive Defense System Design Principles
 - 3.10.2. Integration of Predictive Models in Cybersecurity Environments
 - 3.10.3. Key Components for an AI-Based Predictive Defense System





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You will handle cutting-edge software such as TensorFlow to train machine learning models that strengthen Cybersecurity solutions in different organizational environments”

04

Teaching Objectives

Through this university program, professionals will acquire advanced skills to successfully lead Cybersecurity strategies in advanced technological environments. Through a hands-on approach, they will develop fundamental skills to implement detection systems, assess risks and create proactive defenses supported by Artificial Intelligence, strengthening their ability to protect digital infrastructures and respond efficiently to emerging cyber threats.

A hand is shown interacting with a digital interface. The interface features a grid of blue and red lines, with various numbers (1, 2, 3, 5, 6, 8, 9) and symbols (circles, squares, diamonds) scattered across it. A blue rounded rectangle with the word 'NODE' in white capital letters is positioned in the bottom right corner. The background is a mix of white and blue geometric shapes.

NODE

NODE

NODE

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You will gain advanced skills in intrusion detection and predictive analytics to lead proactive defense strategies in digital environments”



General Objectives

- ♦ Analyze the main modern cyber threats and their evolution in the context of Artificial Intelligence
- ♦ Identify anomalous patterns in digital systems using advanced Artificial Intelligence tools
- ♦ Develop intrusion detection and prevention strategies using generative and predictive models
- ♦ Implement proactive defense systems based on predictive analytics and machine learning techniques
- ♦ Design cyber-attack simulations to assess vulnerabilities and optimize defenses
- ♦ Apply Artificial Intelligence algorithms in incident management and automated responses
- ♦ Optimize security in connected devices by mitigating specific Internet of Things risks
- ♦ Evaluate the effectiveness and accuracy of Artificial Intelligence models applied to Cybersecurity
- ♦ Develop cybersecurity policies based on Artificial Intelligence-based recommendations
- ♦ Promote the ethical and responsible use of Artificial Intelligence in the protection of systems and data





Specific Objectives

Module 1. Cybersecurity and Modern Threat Analysis with ChatGPT

- ♦ Understand the fundamental concepts of Cybersecurity, including modern threats and the CIA model
- ♦ Use ChatGPT for risk analysis, vulnerability detection and simulation of threat scenarios
- ♦ Develop skills to design effective cybersecurity policies and protect IoT devices using Artificial Intelligence
- ♦ Implement advanced threat management strategies using generative Artificial Intelligence to anticipate potential attacks
- ♦ Assess the impact of modern threats on critical infrastructures using AI-assisted simulation techniques
- ♦ Design customized solutions for the protection of corporate networks, based on advanced Artificial Intelligence tools

Module 2. Intrusion Detection and Prevention Using Generative Artificial Intelligence Models

- ♦ Master anomaly and intrusion pattern detection techniques with tools such as Gemini
- ♦ Apply generative models to simulate cyber-attacks and improve intrusion prevention
- ♦ Implement advanced IDS/IPS systems optimized with Artificial Intelligence, developing behavioral profiles and analyzing Big Data in real-time

- ♦ Design integrated security architectures with Artificial Intelligence for the protection of multi-user environments and distributed systems
- ♦ Use generative models to anticipate targeted attacks and elaborate countermeasures in real time
- ♦ Integrate predictive analytics into detection systems for dynamic management of emerging threats

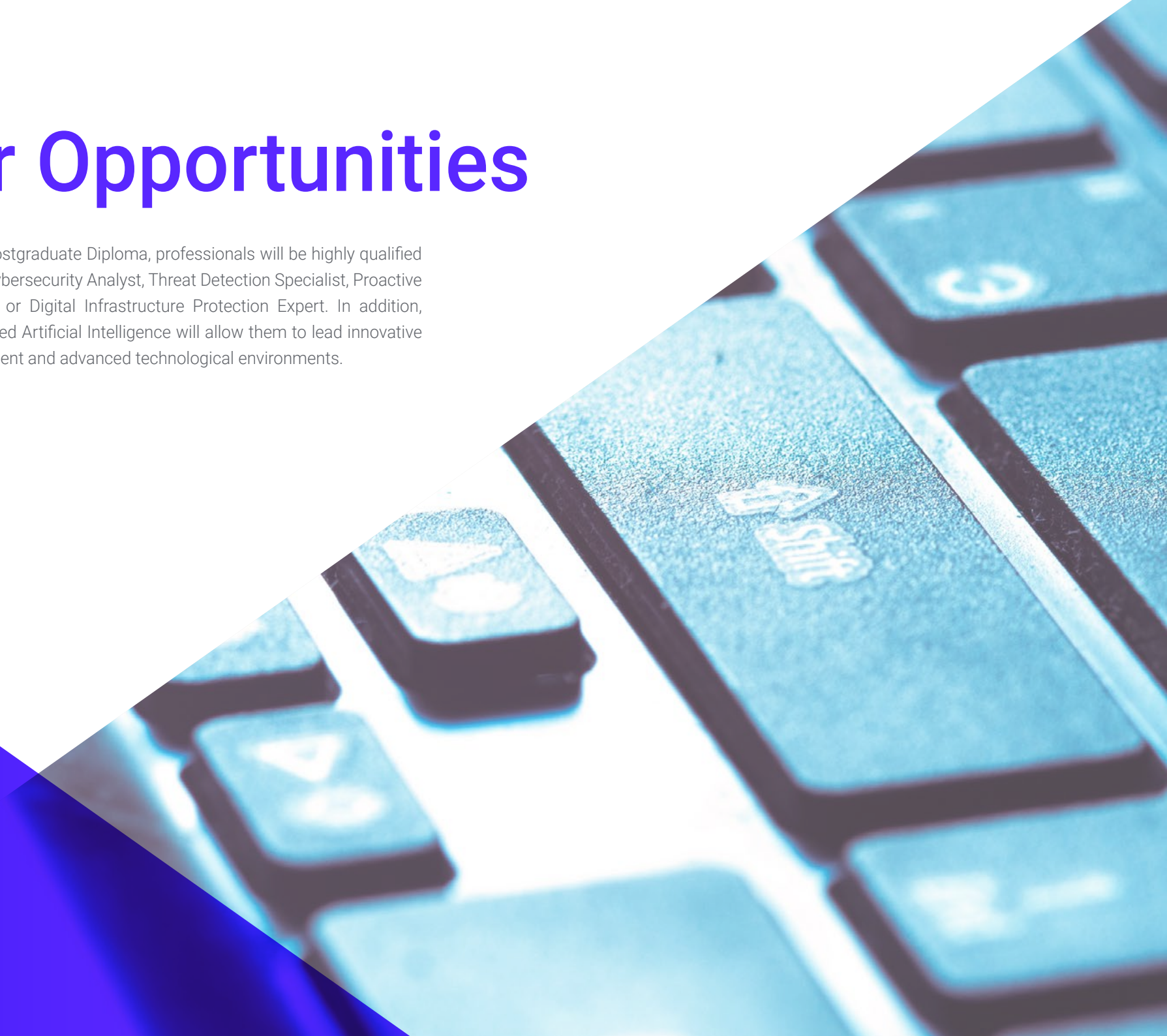
Module 3. Predictive Models for Proactive Defense in Cybersecurity Using ChatGPT

- ♦ Design advanced predictive models based on neural networks and reinforcement learning
- ♦ Implement simulations of threat scenarios to train teams and improve incident preparedness
- ♦ Evaluate and optimize proactive defense systems, integrating generative Artificial Intelligence for decision making and response automation
- ♦ Develop predictive defense frameworks adaptable to critical infrastructure and enterprise systems
- ♦ Use predictive analytics to identify emerging vulnerabilities before they are exploited
- ♦ Integrate generative Artificial Intelligence into strategic decision making processes for continuous improvement of defensive systems

05

Career Opportunities

After completing this TECH Postgraduate Diploma, professionals will be highly qualified to take on key roles such as Cybersecurity Analyst, Threat Detection Specialist, Proactive Defense Systems Consultant or Digital Infrastructure Protection Expert. In addition, their focus on the use of applied Artificial Intelligence will allow them to lead innovative projects in corporate, government and advanced technological environments.



“

Are you looking to become a Chief Information Security Officer? Achieve it through this university program in just a few months”

Graduate Profile

Graduates of this university program will be highly qualified professionals to address the challenges of today's digital security. With advanced knowledge in Artificial Intelligence, they will be prepared to create protection strategies, implement threat detection systems and manage incidents in real time. Your mastery of innovative tools and your ethical approach will make you an expert capable of safeguarding critical infrastructures and leading projects in sophisticated technological environments.

You will provide comprehensive advice to organizations on the integration of intelligent systems to strengthen their digital infrastructures.

- ♦ **Technological Adaptability:** Ability to efficiently incorporate new tools, techniques and methodologies based on Artificial Intelligence, adapting quickly to technological advances and applying them in diverse work environments with high standards of demand
- ♦ **Effective Communication:** Competence to express ideas, results and strategies in a clear and structured manner, adapting technical language to be understandable by both multidisciplinary teams and audiences not specialized in the technological field
- ♦ **Project Management:** Ability to plan, organize and coordinate cybersecurity projects, overseeing the implementation of solutions and ensuring that deadlines, resources and strategic objectives are met in dynamic and changing contexts
- ♦ **Interdisciplinary Collaboration:** Ability to work effectively with diverse teams, integrating knowledge and perspectives from areas such as Cybersecurity, Artificial Intelligence, technology and business management, in order to achieve common goals and generate comprehensive solutions





After completing the program, you will be able to use your knowledge and skills in the following positions:

- 1. Cybersecurity Analyst specialized in Artificial Intelligence:** Responsible for identifying vulnerabilities and threats in digital systems by using advanced Artificial Intelligence tools to protect critical networks and data.
- 2. Systems Intrusion Detection Specialist:** Responsible for implementing and managing AI-powered intrusion detection systems to prevent unauthorized access to digital infrastructures.
- 3. Connected Devices Security Consultant:** In charge of mitigating risks associated with Internet of Things devices, guaranteeing their security in business and home environments.
- 4. Specialist in Predictive Cyber Threat Analysis:** Focuses on anticipating possible attacks by applying predictive models and machine learning techniques.
- 5. Incident Response with Artificial Intelligence Analyst:** Responsible for managing and automating cyber incident response using Artificial Intelligence tools.
- 6. Artificial Intelligence-Assisted Vulnerability Auditor:** Responsible for evaluating digital systems to detect security flaws and propose effective solutions with the support of Artificial Intelligence tools.

“

You will design advanced Artificial Intelligence-based Cybersecurity solutions to detect and prevent cyber threats”

06

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



“

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

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TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule"

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



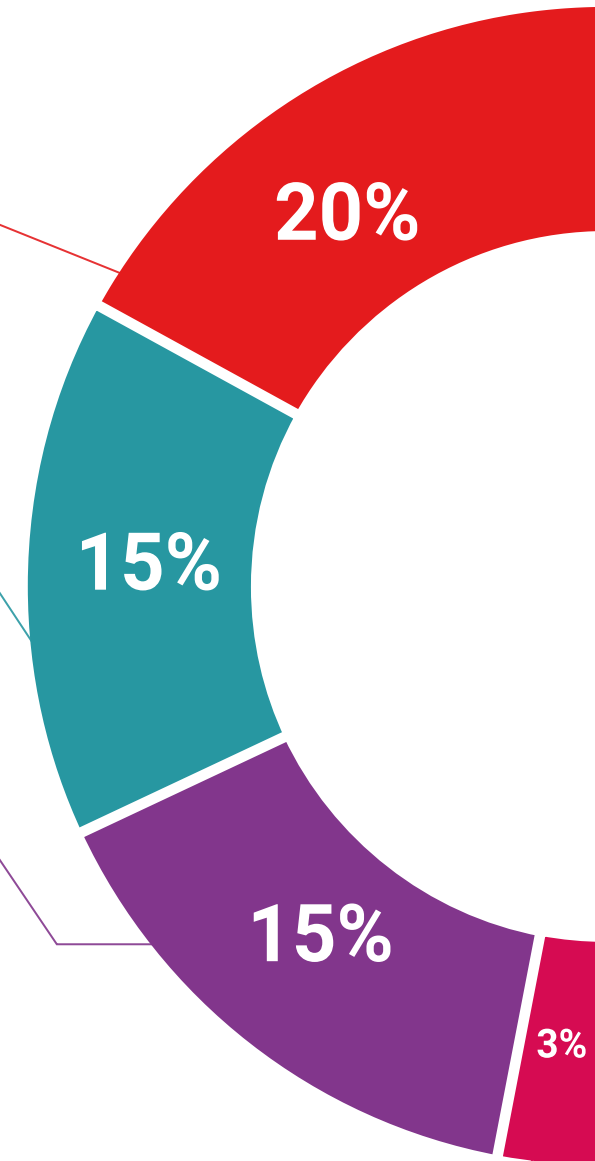
Interactive Summaries

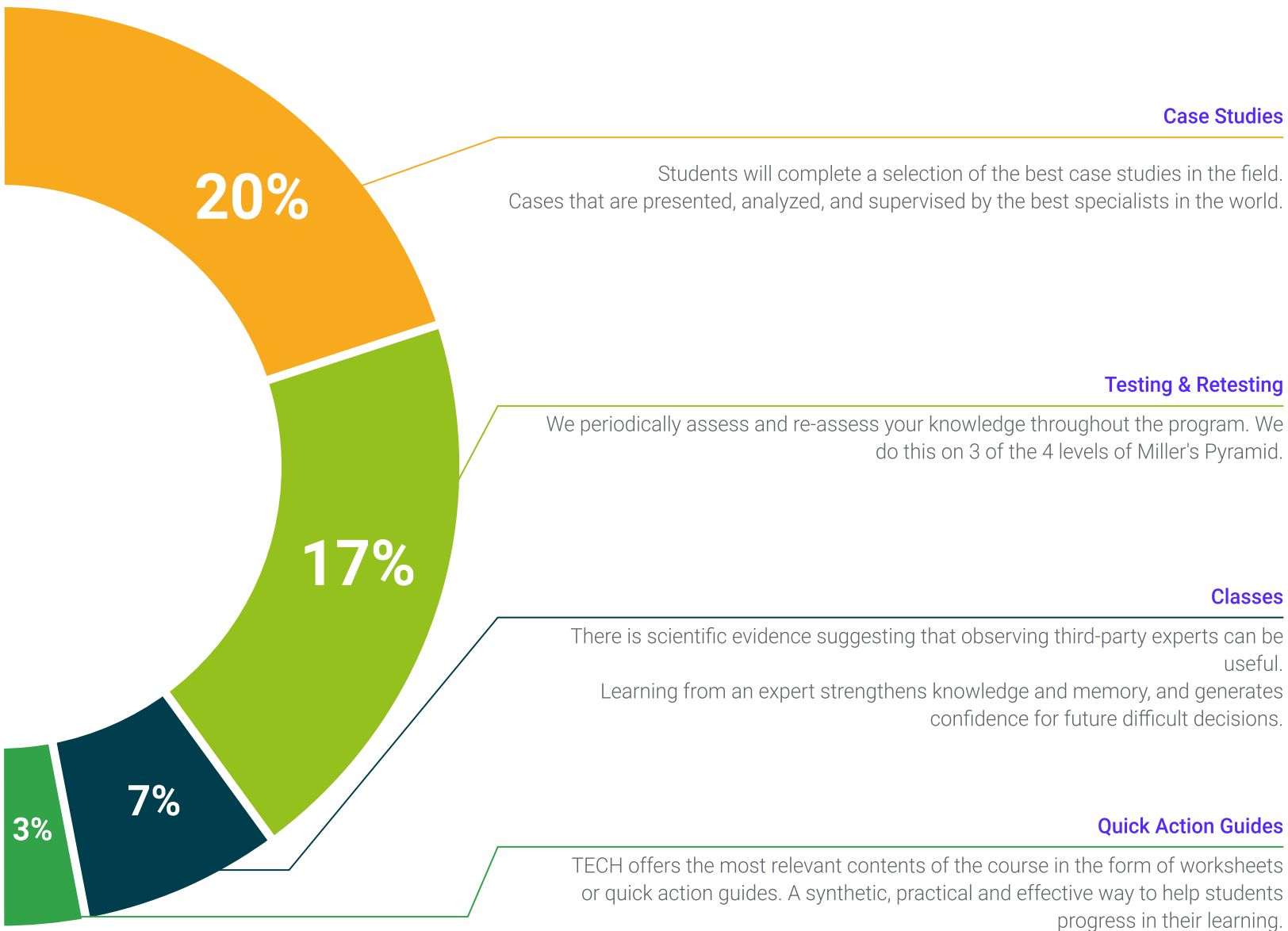
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge. This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





07

Teaching Staff

TECH's fundamental premise is to provide the most complete and renewed university programs in the academic panorama, which is why it rigorously selects its teaching staff. For the design and delivery of this Postgraduate Diploma, TECH has brought together leading specialists in the field of Analysis and Detection of Cybersecurity Threats with Artificial Intelligence. As a result, they have elaborated diverse didactic contents that stand out for their excellent quality and for being in line with the requirements of the labor market. In this way, students will enter into a highly intense experience that will broaden their professional horizons considerably.



“

An experienced teaching group, highly specialized in the use of Artificial Intelligence in Cybersecurity, will guide you throughout the learning process and resolve any doubts that may arise”

Management



Dr. Peralta Martín-Palomino, Arturo

- CEO and CTO at Prometheus Global Solutions
- CTO at Korporate Technologies
- CTO at AI Shepherds GmbH
- Consultant and Strategic Business Advisor at Alliance Medical
- Director of Design and Development at DocPath
- Doctorate in Psychology from the University of Castilla La Mancha
- Doctorate in Economics, Business and Finance from the Camilo José Cela University
- Doctorate in Psychology from University of Castilla La Mancha
- Master's Degree in Executive MBA from the Isabel I University
- Master's Degree in Sales and Marketing Management from the Isabel I University
- Expert Master's Degree in Big Data by Hadoop Training
- Master's Degree in Advanced Information Technologies from the University of Castilla La Mancha
- Member of: SMILE Research Group

Professors

Mr. Del Rey Sánchez, Alejandro

- ◆ In Charge of Implementing Programs to Improve Tactical Emergency Care
- ◆ Degree in Industrial Organization Engineering
- ◆ Certification in Big Data and Business Analytics
- ◆ Certification in Microsoft Excel Advanced, VBA, KPI and DAX
- ◆ Certification in CIS Telecommunication and Information Systems

“

A unique, crucial and decisive learning experience to boost your professional development"

08

Certificate

The Postgraduate Diploma in Cybersecurity Threat Detection and Analysis with Artificial Intelligence 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 a **Postgraduate Diploma in Cybersecurity Threat Detection and Analysis with Artificial Intelligence** 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.

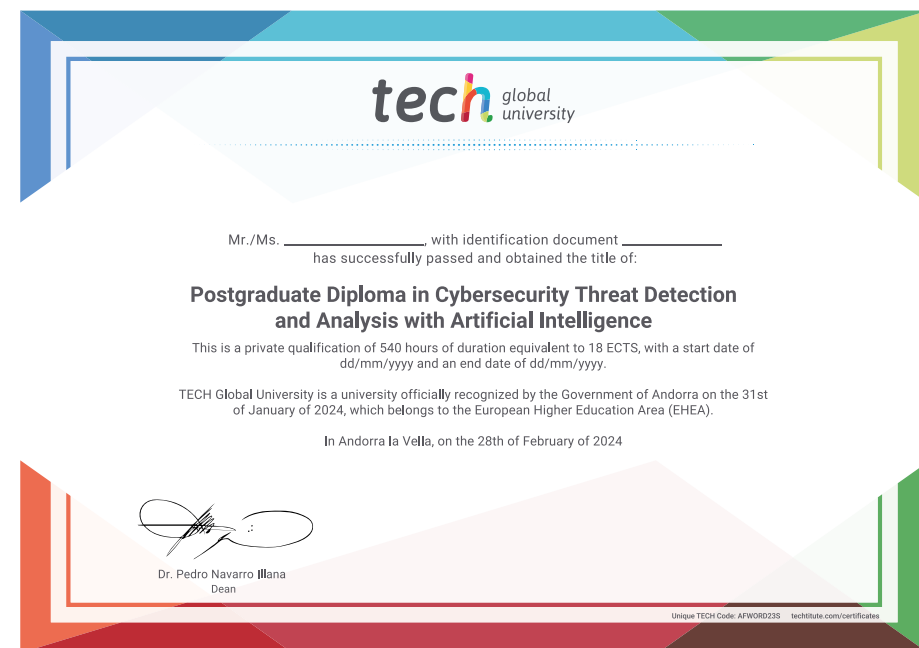
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Diploma in Cybersecurity Threat Detection and Analysis with Artificial Intelligence**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**





Postgraduate Diploma Cybersecurity Threat Detection and Analysis with Artificial Intelligence

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Accreditation: 18 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Diploma

Cybersecurity Threat Detection and Analysis with Artificial Intelligence

