Postgraduate Certificate
Implementation of Software and Hardware Security Policies

tech global university

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Postgraduate Certificate
Implementation of Software and Hardware Security Policies

- 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/implementation-software-hardware-security-policies

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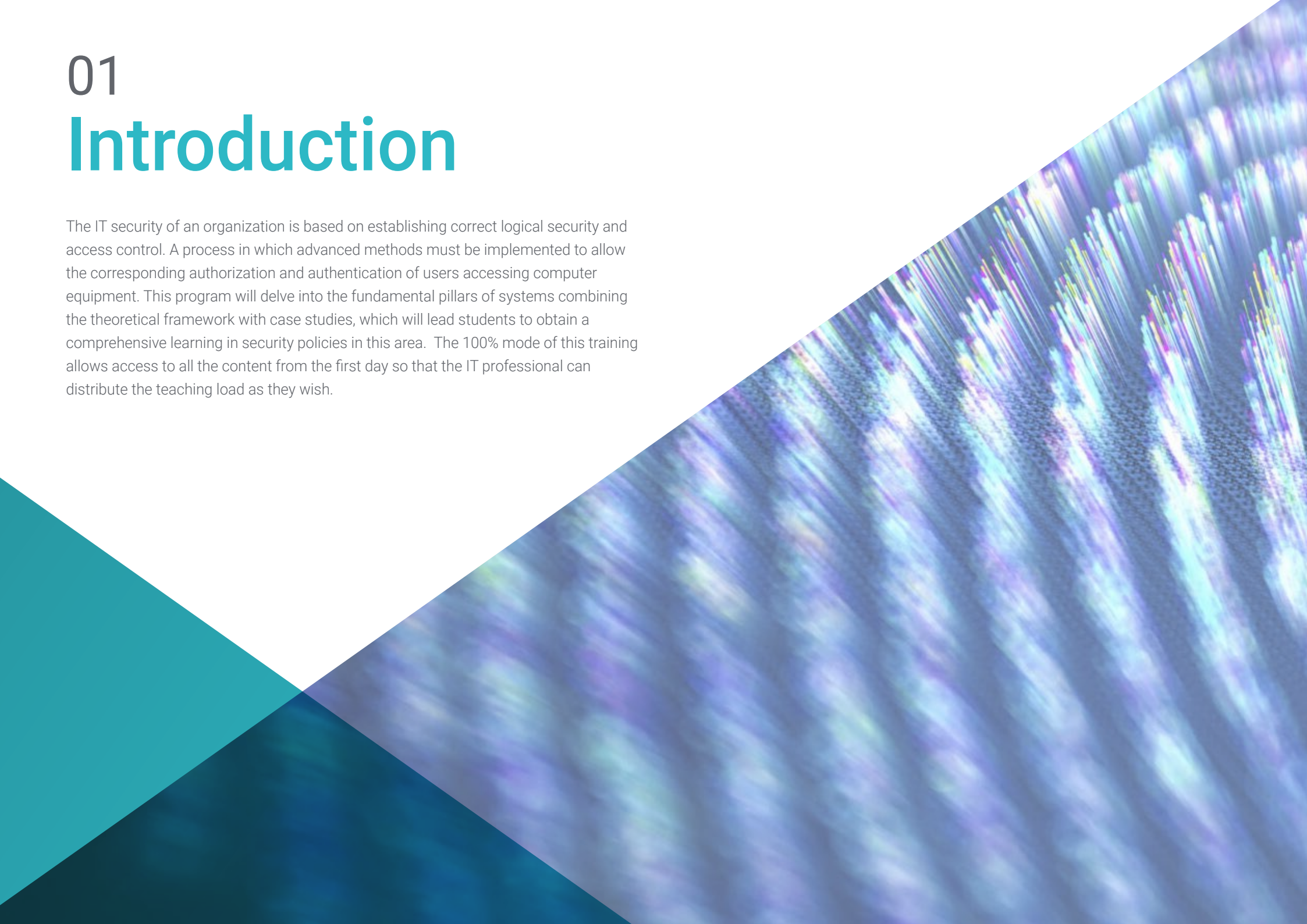
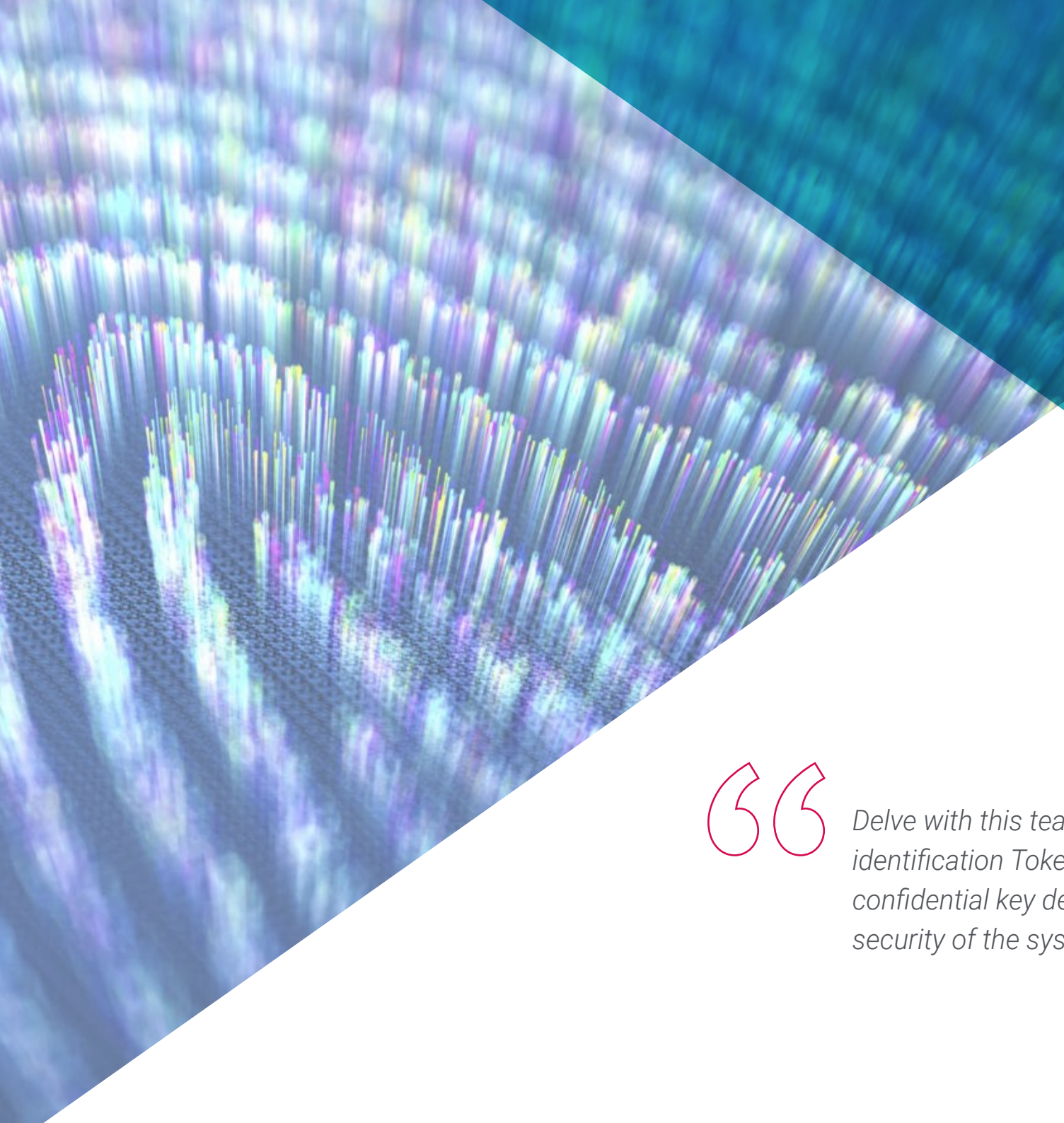
01

Introduction

The IT security of an organization is based on establishing correct logical security and access control. A process in which advanced methods must be implemented to allow the corresponding authorization and authentication of users accessing computer equipment. This program will delve into the fundamental pillars of systems combining the theoretical framework with case studies, which will lead students to obtain a comprehensive learning in security policies in this area. The 100% mode of this training allows access to all the content from the first day so that the IT professional can distribute the teaching load as they wish.





Delve with this teaching into the methods of identification Token USB, Active RFID and the confidential key defense and guarantee the security of the system of the organizations"

The personnel that make up an organization have basic notions about cyber security, however, it is quite frequent that a recklessness of some member affects the equipment, networks or systems. It is in this scenario where the intervention of an IT professional is increasingly necessary, given the progression and daily use of technology in companies.

In this Postgraduate Certificate, the teaching team specialized in the area of computer systems security will focus on the concepts associated with access control, identification and authorization technologies, as well as the practical phases of their implementation in any public or private entity. The teaching will be of great use to the IT professional thanks to the wide variety of real cases provided by the teaching staff, which will allow them to obtain a specialization in IT security.

The multimedia, innovative and updated content in this technological area is a great opportunity for the IT professional who wishes to progress in a sector that demands more and more qualified and expert personnel. The Relearning system, based on the reiteration of contents, will facilitate the acquisition of knowledge. The student will only need a device with an Internet connection to access the entire syllabus of the virtual platform at any time of the day.

This **Postgraduate Certificate in Implementation of Software and Hardware Security Policies** contains the most complete and up-to-date scientific program on the market. The most important features of the program include:

- The development of case studies presented by experts in IT security policies
- The graphic, schematic and practical contents of the book provide technical and practical information on those disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out 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

Master with this Postgraduate Certificate the CIS controls for systems hardening. Enroll now”

The 100% online mode of this course will allow you to access the content from anywhere with a device with an Internet connection. Click and enroll now"

This program will allow you to correctly select between the technologies of identification systems: Kerberos, Diameter and NTLM.

In this Postgraduate Certificate you will learn how to implement security policies in software and hardware in your work environment. Enroll now.

The program includes in its teaching staff, professionals from the sector who bring to this program their work experience, in addition to recognized specialists from prestigious reference societies and universities.

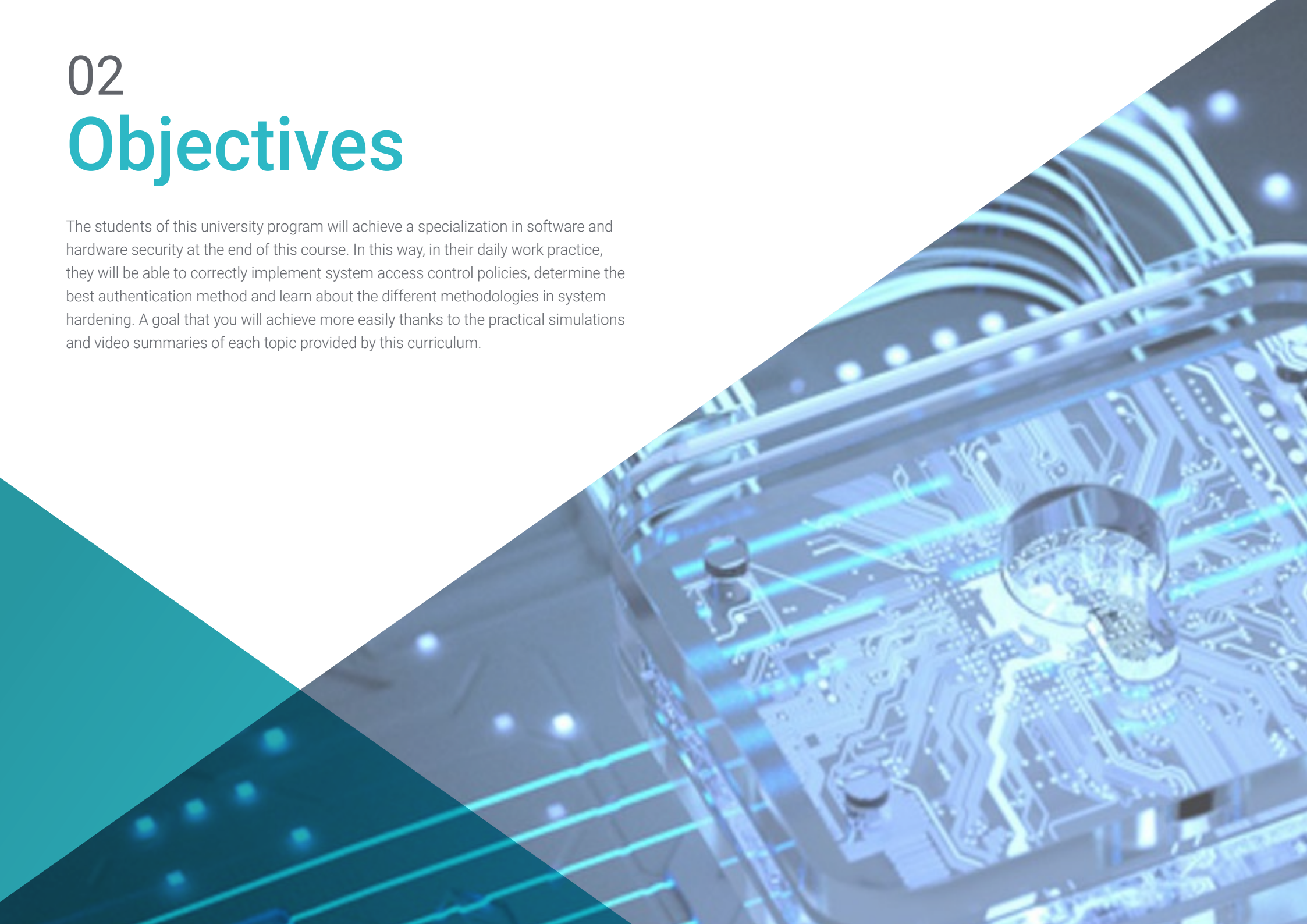
The multimedia content, developed with the latest educational technology, will provide professionals with situated and contextual learning, i.e., a simulated environment that will provide immersive specialization, designed for specializing oneself in real situations.

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

02

Objectives

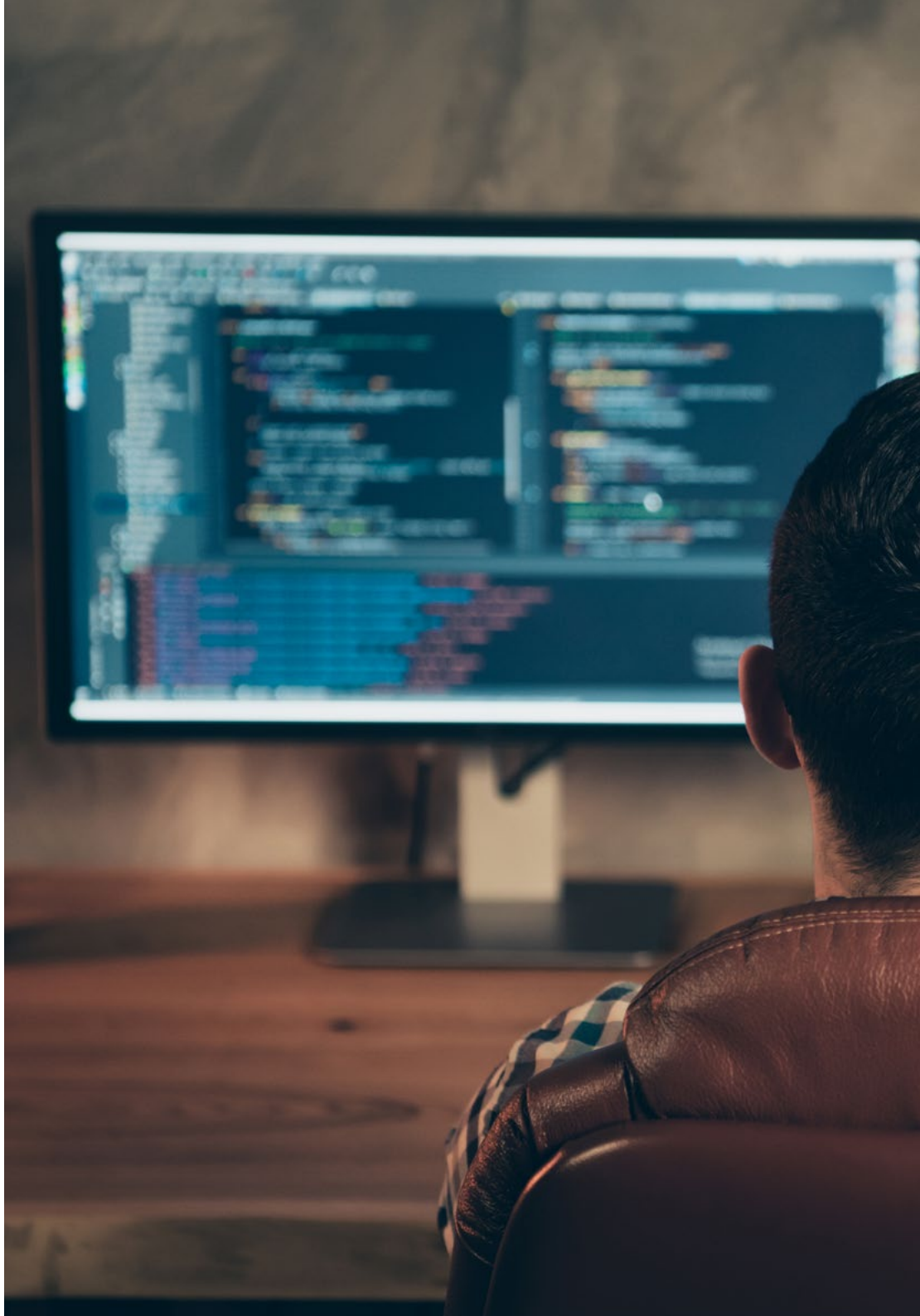
The students of this university program will achieve a specialization in software and hardware security at the end of this course. In this way, in their daily work practice, they will be able to correctly implement system access control policies, determine the best authentication method and learn about the different methodologies in system hardening. A goal that you will achieve more easily thanks to the practical simulations and video summaries of each topic provided by this curriculum.

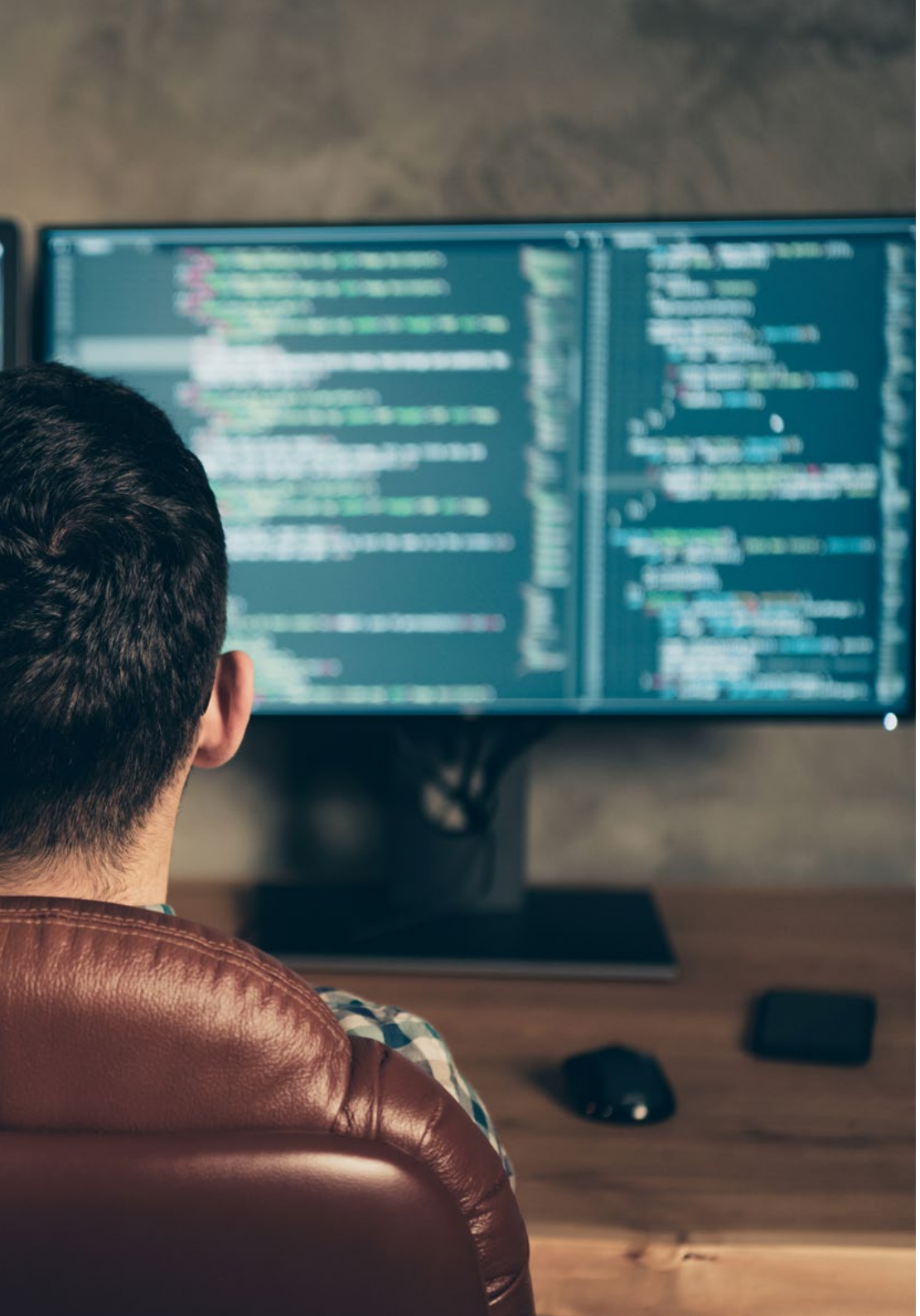


You are closer to progress in the professional area of cyber security thanks to this Postgraduate Certificate. Sign up"

General Objectives

- Study the key concepts of information security in depth
- Develop the necessary measures to ensure good information security practices
- Develop the different methodologies for conducting a comprehensive threat analysis
- Install and learn about the different tools used in the treatment and prevention of incidents





Specific Objectives

- Determine what authentication and identification are
- Analyze the different authentication methods available and their practical implementation
- Implement the correct access control policy to software and systems
- Establish the main current identification technologies
- Generate specialized knowledge on the different methodologies that exist for system hardening

With this specialized knowledge you will be able to apply the different existing methodologies in systems hardening"

03

Course Management

The teaching staff of this Postgraduate Certificate has academic degrees in Computer Engineering, DevOps, networking and telecommunications. They also have extensive experience in the IT security sector. In choosing the teaching staff, TECH has taken into account their high qualifications and professional experience to offer students an expert team in a field that requires updated knowledge given the continuous advancement of technology. In this way, the computer professional will obtain a quality study plan at the academic forefront.

TECH selects for you the best teaching team specialized in the field of computer security, so that you acquire a quality education"

Management

Ms. Fernández Sapena, Sonia

- Trainer in Computer Security and Ethical Hacking at the National Reference Center of Getafe in Computer Science and Telecommunications of Madrid
- Certified E-Council instructor
- Trainer in the following certifications: EXIN Ethical Hacking Foundation and EXIN Cyber & IT Security Foundation. Madrid
- Accredited expert trainer by the CAM of the following certificates of professionalism: Computer Security (IFCT0190), Voice and Data Network Management (IFCM0310), Departmental Network Administration (IFCT0410), Alarm Management in Telecommunications Networks (IFCM0410), Voice and Data Network Operator (IFCM0110), and Internet Services Administration (IFCT0509).
- External Collaborator CSO/SSA (Chief Security Officer/Senior Security Architect) at the University of the Balearic Islands
- Master's Degree in DevOps: Docker and Kubernetes. Cas-Training
- Microsoft Azure Security Techonologies. E-Council

Professors

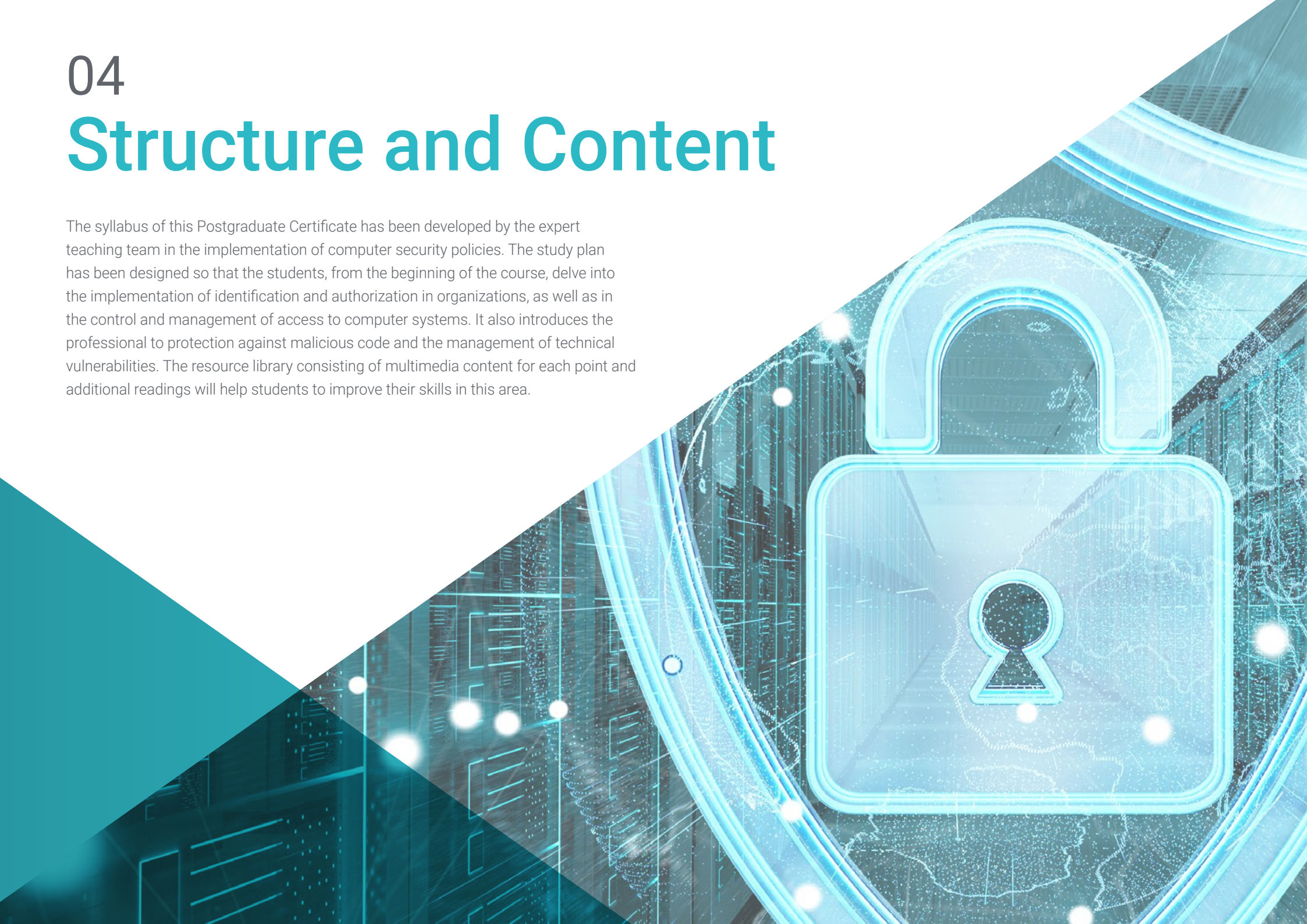
Ms. López García, Rosa María

- Management Information Specialist
- Teacher at Linux Professional Institute
- Collaborator at Incibe Hacker Academy
- Cybersecurity Talent Captain at Teamciberhack
- Administrative and Accounting and Financial Manager at Integra2Transportes
- Administrative Assistant in Purchasing Resources at the Cardenal Marcelo Espínola Education Center
- Senior Technician in Cybersecurity and Ethical Hacking
- Member of: Cyber Patrol

04

Structure and Content

The syllabus of this Postgraduate Certificate has been developed by the expert teaching team in the implementation of computer security policies. The study plan has been designed so that the students, from the beginning of the course, delve into the implementation of identification and authorization in organizations, as well as in the control and management of access to computer systems. It also introduces the professional to protection against malicious code and the management of technical vulnerabilities. The resource library consisting of multimedia content for each point and additional readings will help students to improve their skills in this area.



The case studies will help you to apply everything you have learned in this Postgraduate Certificate in your work environment"

Module 1. Practical Implementation of Software and Hardware Security Policies

1.1. Practical Implementation of Software and Hardware Security Policies
- 1.1.1. Implementation of Identification and Authorization
- 1.1.2. Implementation of Identification Techniques
- 1.1.3. Technical Authorization Measures

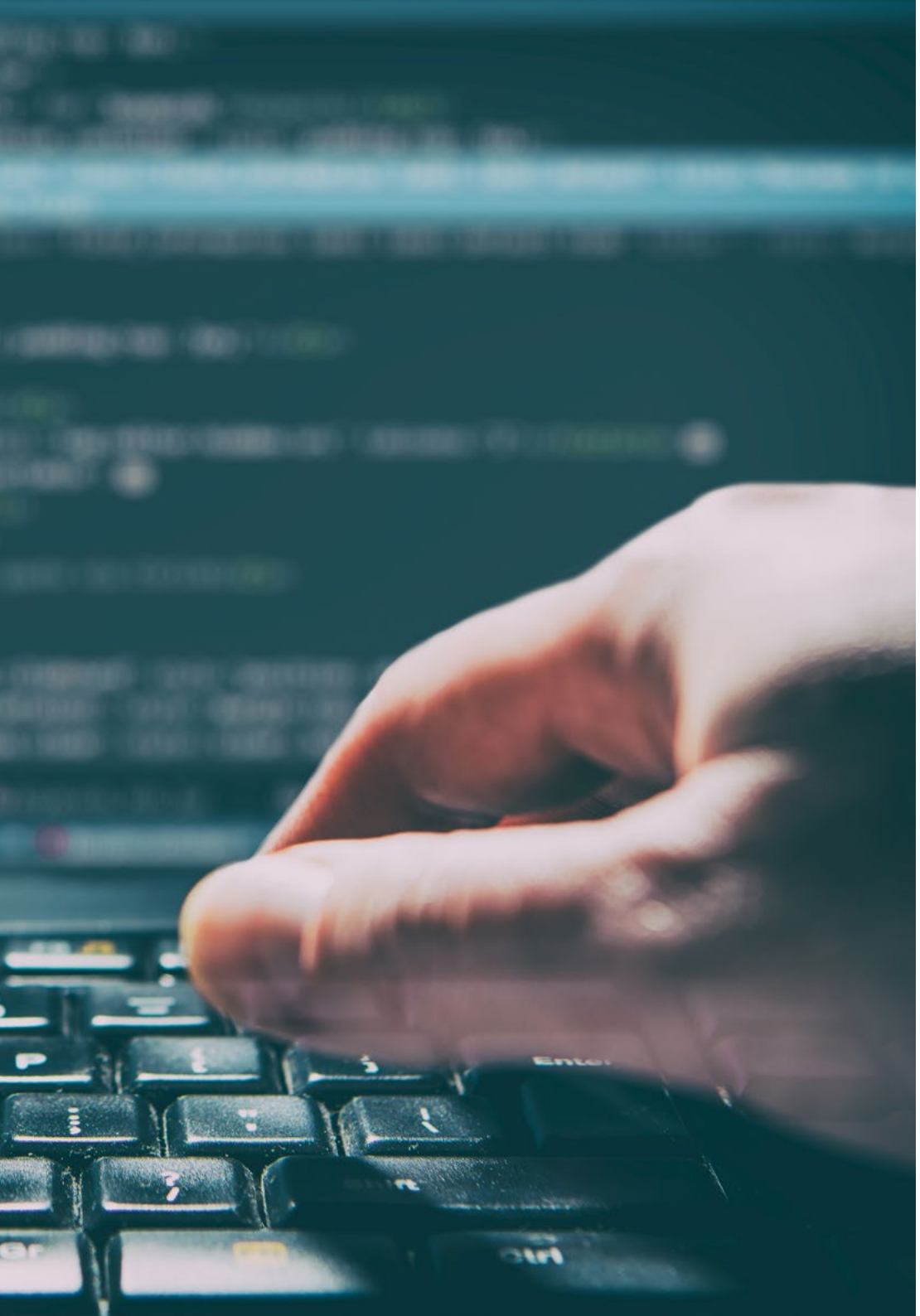
1.2. Identification and Authorization Technologies
- 1.2.1. Identifier and OTP
- 1.2.2. USB Token or PKI Smart Card
- 1.2.3. The "Confidential Defense" Key
- 1.2.4. Active RFID

1.3. Software and Systems Access Security Policies
- 1.3.1. Implementation of Access Control Policies
- 1.3.2. Implementation of Communications Access Policies
- 1.3.3. Types of Security Tools for Access Control

1.4. User Access Management
- 1.4.1. Access Rights Management
- 1.4.2. Segregation of Roles and Access Functions
- 1.4.3. Implementation of Access Rights in Systems

1.5. Access Control to Systems and Applications
- 1.5.1. Minimum Access Rule
- 1.5.2. Secure Log-On Technologies
- 1.5.3. Password Security Policies

1.6. Identification Systems Technologies
- 1.6.1. Active Directory
- 1.6.2. OTP
- 1.6.3. PAP, CHAP
- 1.6.4. KERBEROS, DIAMETER, NTLM



1.7. CIS Controls for Systems Hardening
  1.7.1. Basic CIS Controls
  1.7.2. Fundamental CIS Controls
  1.7.3. Organizational CIS Controls
1.8. Operational Safety
  1.8.1. Protection Against Malicious Code
  1.8.2. Backup Copies
  1.8.3. Activity Log and Supervision
1.9. Management of Technical Vulnerabilities
  1.9.1. Technical Vulnerabilities
  1.9.2. Technical Vulnerability Management
  1.9.3. Restrictions on Software Installation
1.10. Implementation of Security Policy Practices
  1.10.1. Logical Vulnerabilities
  1.10.2. Implementation of Defense Policies

From the first day you have the syllabus so you can download it and view it whenever you can. Specialize at your own pace. Enroll now"

05

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.

"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.

"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.

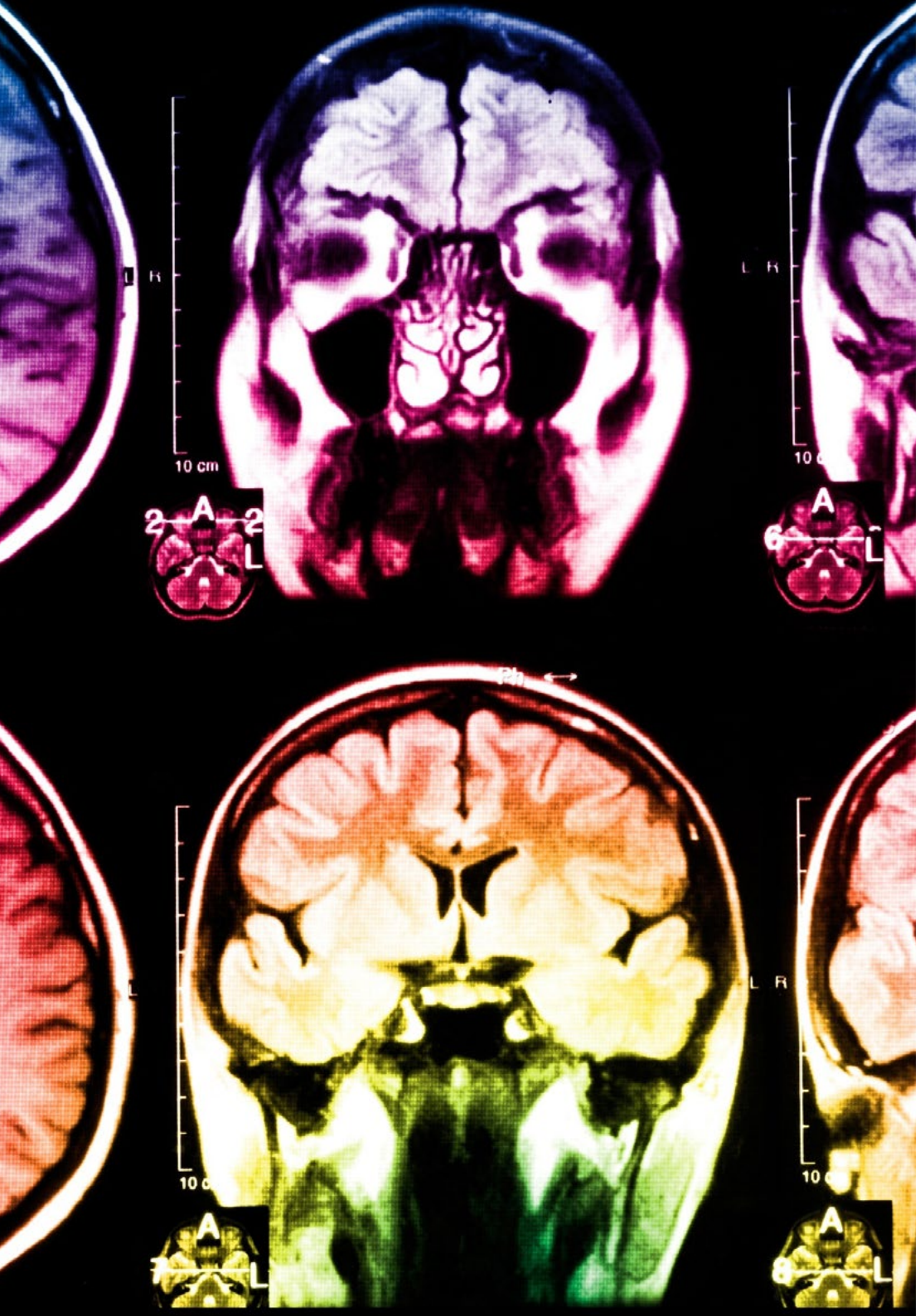
In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

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 quality of teaching, quality of materials, course structure and objectives is excellent. Not surprisingly, the institution became the best rated university by its students on the Trustpilot review platform, 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.

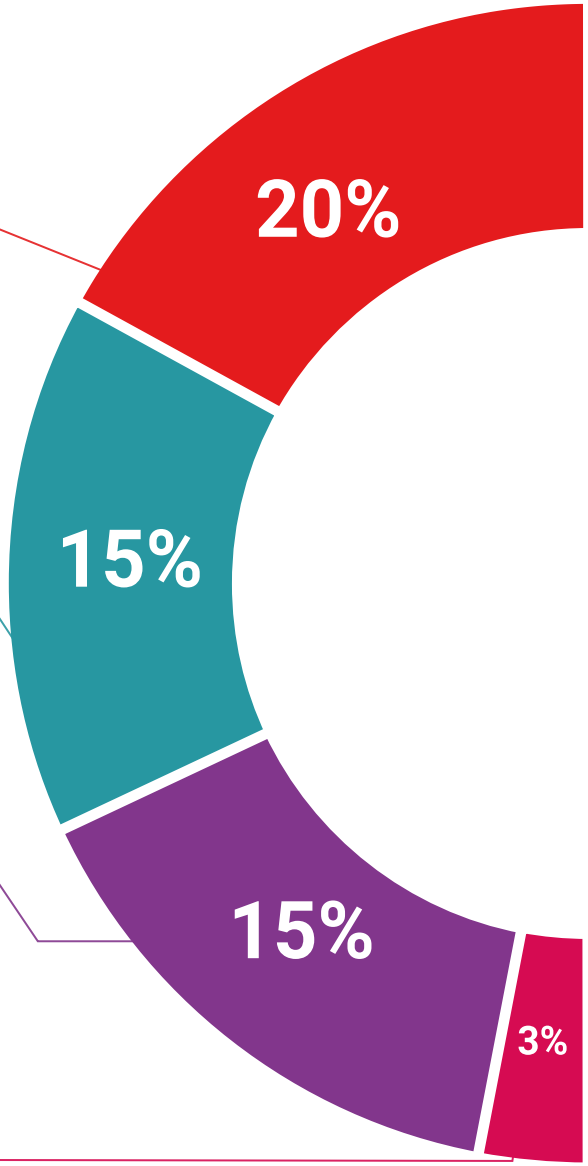
Interactive Summaries

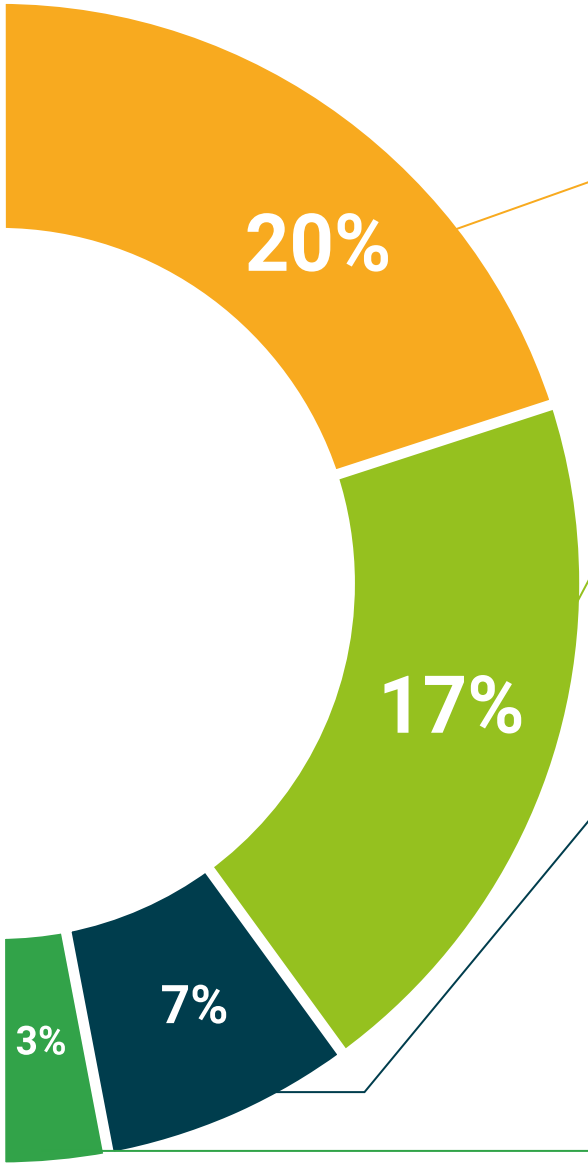
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.

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 for future difficult decisions.

Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.

06

Certificate

The Postgraduate Certificate in Implementation of Software and Hardware Security Policies 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 Certificate in Implementation of Software and Hardware Security Policies** 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 Implementation of Software and Hardware Security Policies**

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 Implementation of Software and Hardware Security Policies

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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