

# Postgraduate Certificate Identity and Access Management in IT Security



## Postgraduate Certificate Identity and Access Management in IT Security

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

Website: [www.techtute.com/us/information-technology/postgraduate-certificate/identity-access-management-it-security](http://www.techtute.com/us/information-technology/postgraduate-certificate/identity-access-management-it-security)

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# 01

# Introduction

Today, a large number of digital services depend on optimal security. Millions of users use applications and tools on the Internet that require a personalized registration to guarantee access to them. In addition, most companies have identity managers for their employees and customers. Therefore, it is a critical area in the field of security, and the professional has to be up to date with the latest developments in this field. This program, therefore, provides them with the most advanced knowledge in this field, boosting their careers thanks to the enormous demand for this type of specialist.





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*With this program you will learn about the latest advances in logical access controls and biometric authentication, allowing you to specialize in a critical field of cybersecurity”*

Bank accounts, registrations in all types of websites, applications, social networks, users in the workplace. Digitization has spread to all areas, producing enormous improvements in numerous services and facilitating the performance of tasks and activities. But these advances have also led to an increase in the fragility of Internet security. Now, with billions of potential users of such services, the threats are almost unmanageable, and companies are looking for ways to counter them.

Thus, identity and access management is one of the most sensitive and problematic areas of cybersecurity. For this reason, the professional profile of the IT specialist in this field is in high demand and, for this reason, TECH has designed this program. This Postgraduate Certificate in Identity and Access Management in IT Security will bring the IT specialist closer to the latest developments in this field, taught by the best teaching staff made up of experts who are active in the field.

From a 100% online teaching methodology, the professional will be able to delve into aspects such as authentication management systems, MFA authentication, access to wireless networks or the different access control services.

All this, by means of the best multimedia didactic resources, which will be available to the student whenever they wish.

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

- ◆ Case studies presented by IT and cybersecurity experts.
- ◆ The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional development.
- ◆ 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
- ◆ Access to content from any fixed or portable device with an Internet connection.



*Access and identity management are two key elements in today's cybersecurity. This program will allow you to delve deeper into them, preparing you to respond to all the present and future challenges in this field"*

“*Study wherever and whenever you want thanks to TECH's learning methodology, specially designed for working professionals*”

The program's teaching staff includes professionals in the sector 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 training programmed to train in real situations.

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

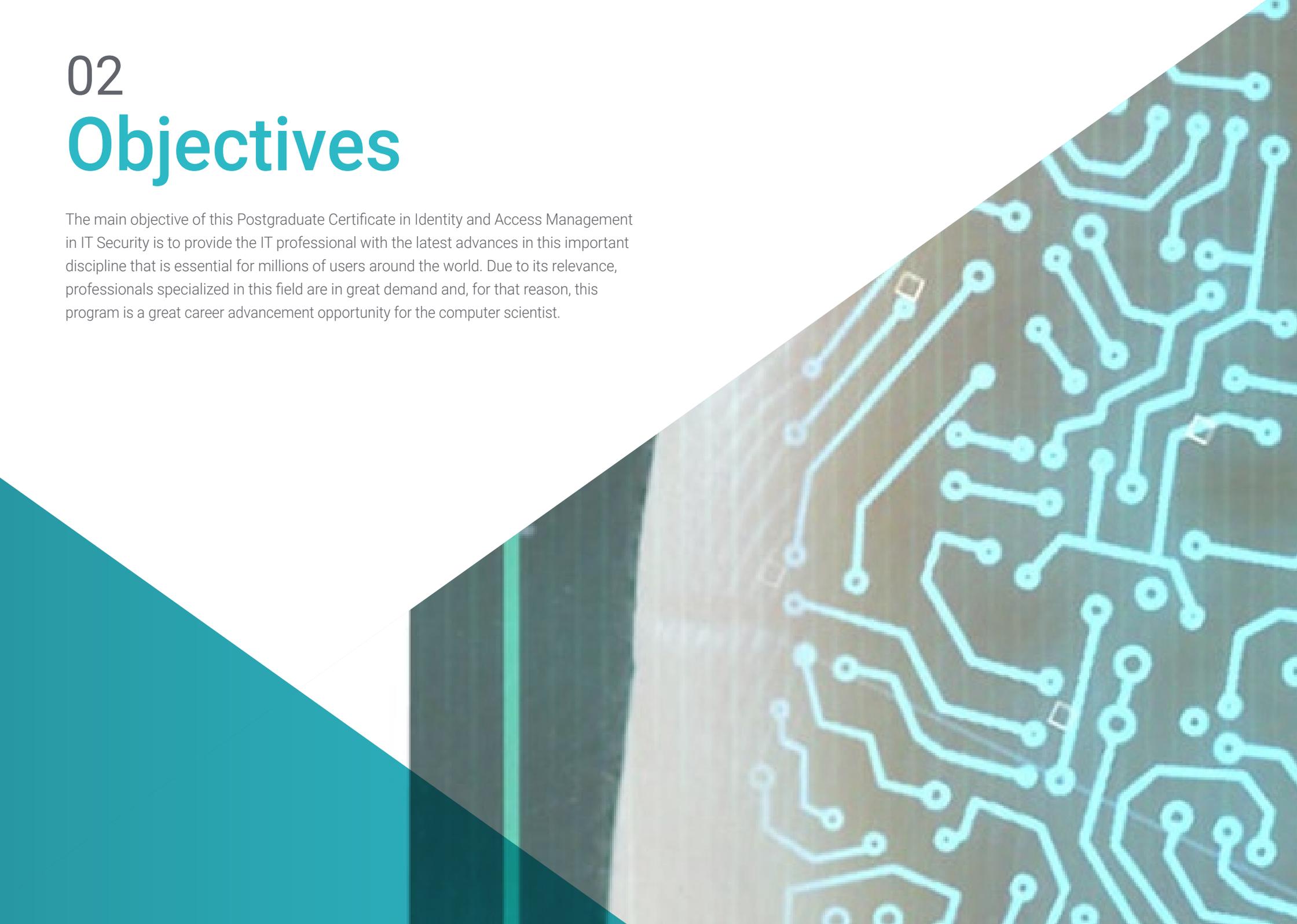
*The most advanced educational technology will be at your disposal so that you only have to worry about what is essential: studying and improving your professional prospects.*

*This Postgraduate Certificate explores relevant aspects of cybersecurity such as firewalls, VPNs or attacks on wireless networks.*



# 02 Objectives

The main objective of this Postgraduate Certificate in Identity and Access Management in IT Security is to provide the IT professional with the latest advances in this important discipline that is essential for millions of users around the world. Due to its relevance, professionals specialized in this field are in great demand and, for that reason, this program is a great career advancement opportunity for the computer scientist.



“

*All your objectives will be met once you complete this program. Don't think twice, the future awaits you"*



## General Objectives

- ◆ Develop the concept of identity management
- ◆ Identify authentication methods
- ◆ Assessing a company's information security
- ◆ Analyze information access systems



*This is one of the most important fields in cybersecurity. With this Postgraduate Certificate you will guarantee your professional progress in a simple and comfortable way"*





## Specific Objectives

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- ◆ Develop the concept of digital identity
- ◆ Assessing physical access control to information
- ◆ Foundation of biometric authentication and MFA authentication
- ◆ Assess attacks related to information confidentiality
- ◆ Analyze the federation of identities
- ◆ Establish network access control

# 03

# Course Management

The teaching staff selected for this Postgraduate Certificate in Identity and Access Management in IT Security is composed of working professionals who know all the keys to become an expert. Thus, throughout 6 weeks of learning, the student will receive the guidance of this faculty, which has been responsible for developing a perfect itinerary to learn the best solutions in access and identity in cybersecurity.





“

*It is not every day that you have the opportunity to have access to a faculty of this level. Enroll now and get access to the best contents taught by the best teaching staff"*

## Management



### Mr. Olalla Bonal, Martín

- ◆ Director de Información en ePETID - Global Animal Health
- ◆ Blockchain Technical Specialist at IBM SPGI
- ◆ Blockchain Architect
- ◆ Infrastructure Architect in Banking
- ◆ Project management and implementation of solutions
- ◆ Digital Electronics Technician
- ◆ Teacher Hyperledger Fabric Training for companies
- ◆ Teacher Business-oriented Blockchain Training

## Professors

### Mr. Entrenas, Alejandro

- ◆ Entelgy Innotec
- ◆ Degree in Technical Engineering in Computer Systems from the University of Cordoba
- ◆ Master's Degree in Information Security Management at the Polytechnic University of Madrid



# 04

# Structure and Content

This program has been structured into 1 specialized module that will allow the student to learn about the latest developments in issues such as authentication protocols, network access control systems, protection against attacks in wireless networks or identity federation. With this, the professional will be prepared to respond to all existing threats in this field, thus obtaining a necessary update in a field that is constantly evolving.



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*Identity management and digital access affect billions of people, which is why they are so important. This program provides you with the best content in this field so that you can specialize and improve your professional profile"*

## Module 1. Identity and Access Management in IT Security

- 1.1. Identity and Access Management (IAM)
  - 1.1.1. Digital Identity
  - 1.1.2. Identity Management
  - 1.1.3. Identity Federation
- 1.2. Physical Access Control
  - 1.2.1. Protection Systems
  - 1.2.2. Security of the Areas
  - 1.2.3. Recovery Facilities
- 1.3. Logical Access Control
  - 1.3.1. Authentication: Types
  - 1.3.2. Authentication Protocols
  - 1.3.3. Authentication Attacks
- 1.4. Logical Access Control. MFA Authentication
  - 1.4.1. Logical Access Control. MFA Authentication
  - 1.4.2. Passwords Importance
  - 1.4.3. Authentication Attacks
- 1.5. Logical Access Control. Biometric Authentication
  - 1.5.1. Logical Access Control. Biometric Authentication
    - 1.5.1.1. Biometric Authentication Requirements
  - 1.5.2. Operation
  - 1.5.3. Models and Techniques
- 1.6. Authentication Management Systems
  - 1.6.1. Single Sign On
  - 1.6.2. Kerberos
  - 1.6.3. AAA Systems



- 1.7. Authentication Management Systems: AAA Systems
  - 1.7.1. TACACS
  - 1.7.2. RADIUS
  - 1.7.3. DIAMETER
- 1.8. Access Control Services
  - 1.8.1. FW- Firewalls
  - 1.8.2. VPN - Virtual Private Networks
  - 1.8.3. IDS - Intrusion Detection System
- 1.9. Network Access Control Systems
  - 1.9.1. NAC
  - 1.9.2. Architecture and Elements
  - 1.9.3. Operation and Standardization
- 1.10. Access to Wireless Networks
  - 1.10.1. Types of Wireless Networks
  - 1.10.2. Wireless Network Security
  - 1.10.3. Wireless Network Attacks



*You will deepen, thanks to this Postgraduate Certificate, in authentication management systems such as TACACS or RADIUS"*

05

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

“

*At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world”*



*You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.*



*The student will learn to solve complex situations in real business environments through collaborative activities and real cases.*

### A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

“*Our program prepares you to face new challenges in uncertain environments and achieve success in your career”*

The case method has been the most widely used learning system among the world's leading Information Technology schools for as long as they have existed. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the course, students will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*In 2019, we obtained the best learning results of all online universities in the world.*

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



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.

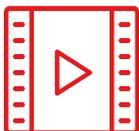
*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

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.



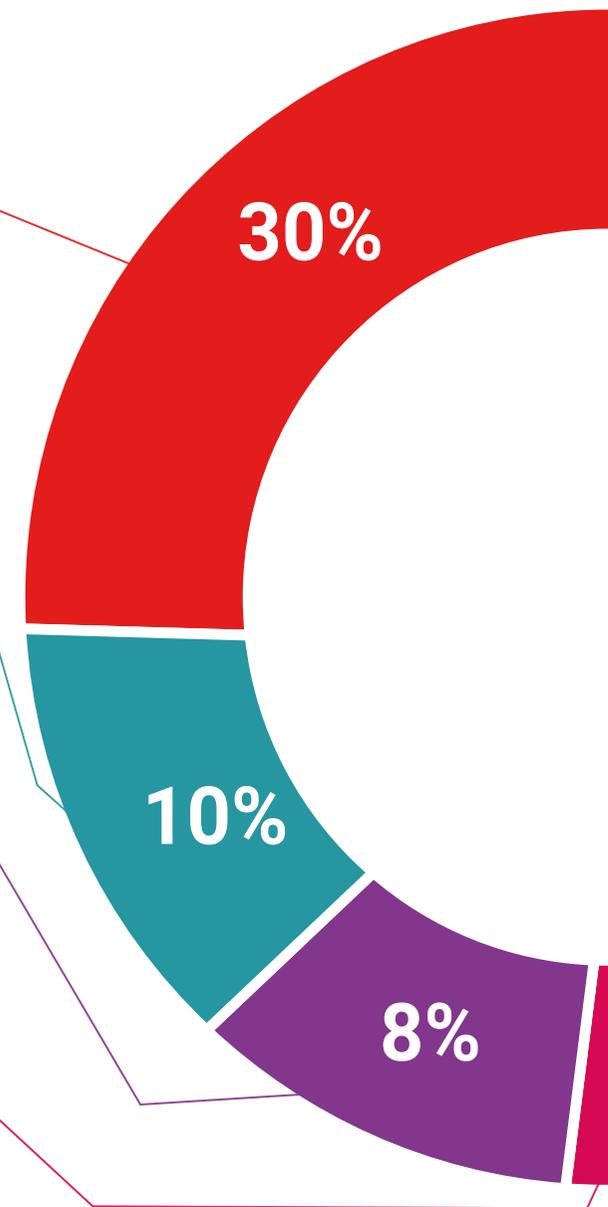
### Practising Skills and Abilities

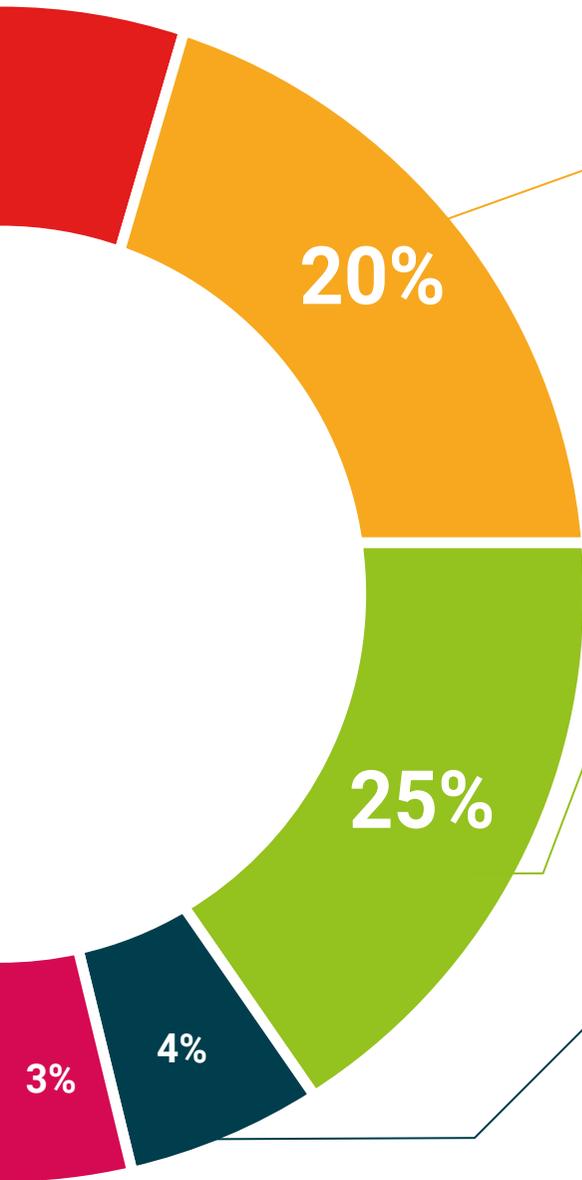
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



### 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 Certificate in Identity and Access Management in IT Security guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Identity and Access Management in IT Security** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Certificate in Identity and Access Management in IT Security**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development languages  
virtual classroom



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