

# Postgraduate Diploma Salesforce Security





## Postgraduate Diploma Salesforce Security

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

Website: [www.techtitute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-salesforce-security](http://www.techtitute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-salesforce-security)

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# 01

# Introduction

Salesforce Security provides robust protection for an organization's sensitive data and critical information. As such, through a comprehensive set of security controls, user authentication, granular authorization, and end-to-end encryption, Salesforce ensures the confidentiality, integrity, and availability of data across platforms. In addition, it offers advanced monitoring and threat detection tools, enabling companies to identify and mitigate any security risks. In this context, TECH has devised a fully online program, specifically designed to meet the unique needs of graduates. This is achieved through the universal accessibility of its content, available anytime, anywhere. In addition, the program is based on the revolutionary Relearning methodology.





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*Thanks to this 100% online Postgraduate Diploma, you will acquire advanced technical skills to implement and manage effective security measures, as well as to identify and mitigate potential vulnerabilities"*



Salesforce Security ensures comprehensive protection of confidential and sensitive information through robust encryption and access control measures. It also gives users peace of mind by providing proactive threat monitoring, suspicious activity detection and immediate response to security incidents. This not only strengthens customer confidence, but also ensures compliance with regulations and data security standards.

This is how this comprehensive Postgraduate Diploma was conceived, which will delve into APIs and integrations in Salesforce, addressing the configurations needed to enable secure integrations, along with detailed demonstration of how the different types of APIs available work. In addition, the computer scientists will develop practical cases of massive data export and import using the Bulk API, as well as how to subscribe to the event bus to capture relevant information.

In addition, various Trigger frameworks will be analyzed, designing effective error management mechanisms. SOLID principles will also be explored to ensure software efficiency and scalability, and specialized knowledge in Apex Enterprise Patterns will be generated to optimally organize Apex code.

Finally, professionals will be immersed in the best development practices to ensure the protection of applications in Apex, Visualforce, Aura and LWC environments. They will delve into Salesforce's inverted security pyramid and compile effective measures to protect solutions against possible external attacks. To this we must add the proper monitoring of access to the application by users and applications, ensuring a secure and reliable operation.

In this way, TECH has implemented this Postgraduate Diploma completely online, offering students the flexibility to access according to their needs, anytime and anywhere. They will only need a device with an Internet connection to progress securely in their academic and professional career. Likewise, this program takes advantage of the innovative Relearning methodology to enhance learning.

This **Postgraduate Diploma in Salesforce Security** contains the most complete and up-to-date program on the market. The most important features include:

- Development of practical cases presented by experts in Salesforce Security
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning.
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



*Specialize in Salesforce Security with TECH!  
With your help, organizations will be able to operate with peace of mind, focusing their efforts on innovating and growing, knowing that their data is protected"*

“

*Do you want to specialize in Salesforce Security? Now you can, with TECH! You will analyze in depth in SOLID principles to create a robust and scalable code. Enroll now!”*

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 academic year. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*You will be able to correctly monitor user and application access, ensuring secure and efficient operations at all times. What are you waiting for to enroll?*

*You will cover everything from the necessary configuration to enable inbound integrations, to the practical demonstration of different API types and use cases with the Bulk API.*



# 02 Objectives

The Postgraduate Diploma in Salesforce Security aims to train IT professionals in the design, implementation and management of effective security measures in the Salesforce environment. Therefore, it will focus on providing professionals with the necessary knowledge to identify and mitigate security risks, as well as to establish policies and procedures that safeguard the integrity, confidentiality and availability of data on the platform. In addition, an understanding of Salesforce-specific security principles and techniques will be delved into in order to safeguard sensitive information and maintain system integrity.





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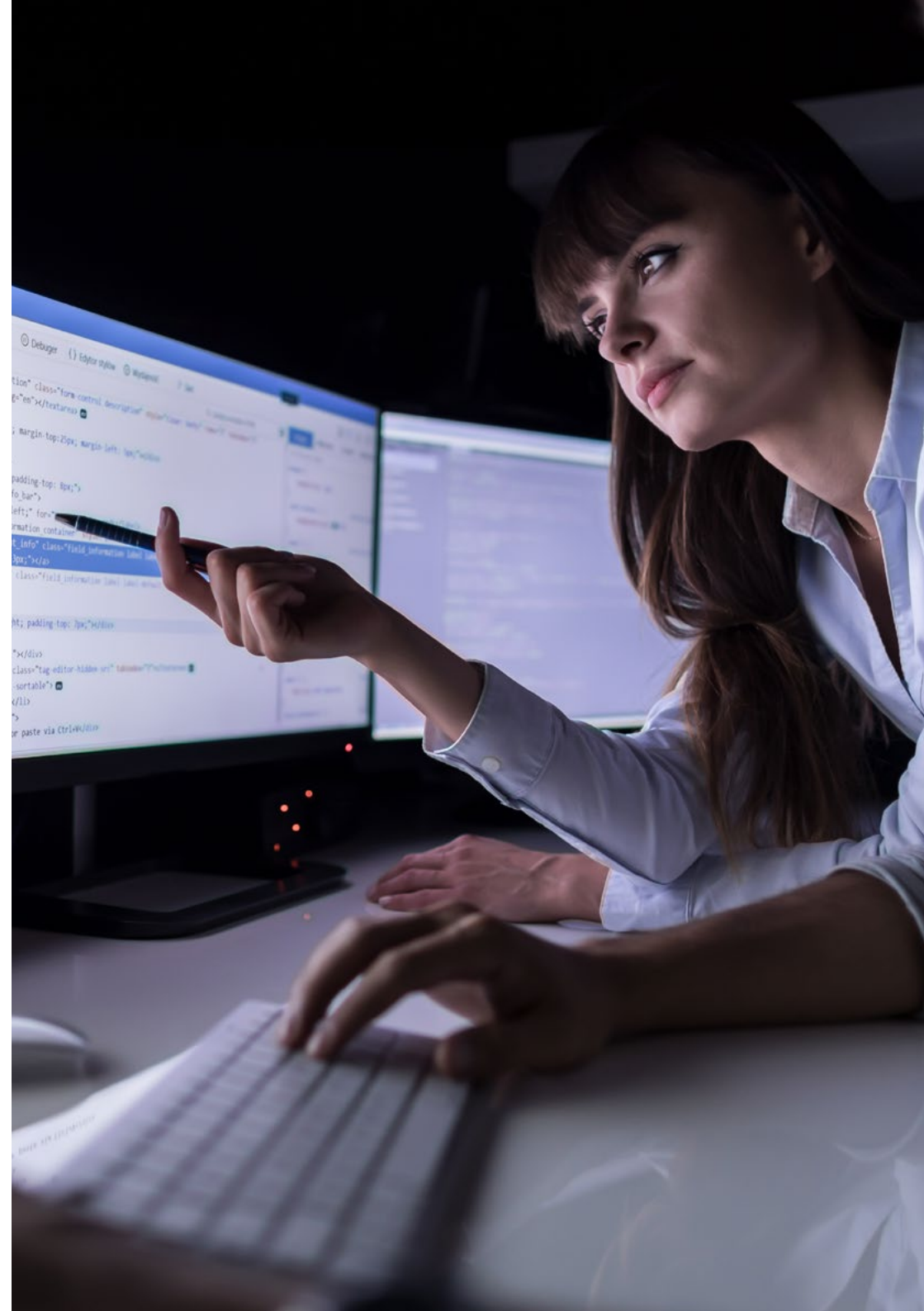
*The goal of this academic program is to train professionals capable of applying security best practices in application development, system integration and event monitoring”*



## General Objectives

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- ◆ Lay the foundation for the most advanced concepts focused on programming on the Salesforce platform
- ◆ Establish the Salesforce ecosystem as a development platform and determine the relevant boundaries
- ◆ Generate specialized knowledge of how the metadata-driven development model used on the Salesforce platform works
- ◆ Analyze how Salesforce works with data and multitenant architecture
- ◆ Develop Salesforce database fundamentals
- ◆ Analyze all the tools and advanced options for creating objects in Salesforce
- ◆ Promote the correct use of APIs and data manipulation tools
- ◆ Identify the key tools and resources for programming in Apex
- ◆ Introduce testing tools to ensure the proper functioning of developed components
- ◆ Promote the use of good development practices aligned with the standards defined by Salesforce





## Specific Objectives

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### Module 1. API and Integrations in Salesforce

- ◆ Specify the type of configuration we need to run in Salesforce to enable inbound integrations and to narrow down your security policies
- ◆ Demonstrate how each of the API types in the Salesforce platform works
- ◆ Develop different practical cases of exporting and importing data in bulk using the Bulk API
- ◆ Present the different types of existing events and identify the type of information that is sent in each of them. In turn, define how we can subscribe to the Salesforce platform event bus to capture the events published in the channel we are interested in

### Module 2. Advanced Programming in Salesforce

- ◆ Evaluate different Trigger Frameworks with emphasis on the characteristics of each one and the benefits they provide
- ◆ Design an error handling mechanism, in which any uncontrolled error that occurs during the execution of the application's custom code is recorded in detail
- ◆ Examine the SOLID principles that enable the creation of efficient, robust and scalable software
- ◆ Generate expertise in *Apex Enterprise Patterns* that define how to organize Apex code to ensure maintainability, scalability and robustness

### Module 3. Salesforce Security

- ◆ Delve into the best practices of the most popular Salesforce development frameworks (Apex, Visualforce, Aura, LWC)
- ◆ Analyze the inverted security pyramid on which the Salesforce security model is based
- ◆ Compile all available measures to protect the solution against external attacks
- ◆ Correctly monitor application access operations for both users and applications



*You will ensure a secure and reliable environment for business operations in Salesforce, all through the best training materials, at the forefront of technology and education"*



# 03

## Course Management

The Salesforce Security Postgraduate Diploma teachers are highly qualified experts with extensive experience in the field of information security and development on this platform. In fact, these professionals have a deep theoretical knowledge of security principles and best practices in Salesforce, as well as a solid track record of applying this knowledge in real business environments. In addition, they are committed to the effective teaching and professional development of graduates, offering theories and case studies to ensure a thorough and applicable understanding of Salesforce security concepts.



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*With their dedication and expertise, the faculty in this program will play a key role in your training, so that you will be able to address security challenges in today's business environment"*



## Management



### Mr. Tovar Barranco, Iosu Igor

- ♦ Chief Architect at NTT Data Group
- ♦ Software Architect at Beesion Technologies
- ♦ Systems Administrator at Araldi
- ♦ .NET Developer at Gabinete de Gestión
- ♦ JAVA Programmer and J2EE Application Developer
- ♦ Senior Technician in Computer Applications Development at Centro de Estudios AEG
- ♦ Specialized in SOA Architectures
- ♦ Various Salesforce certifications

## Professors

### Ms. Nebra García, Sandra

- ♦ Salesforce Expert Engineer at NTT Data
- ♦ Salesforce Lead Engineer at a Private Security Company
- ♦ Salesforce Engineer in Brewing Industry
- ♦ Salesforce Engineer in Construction Industry
- ♦ Salesforce Engineer in Food Industry
- ♦ Front-End Developer and Full-Stack Developer at Hiberus Tecnología
- ♦ Salesforce Certified Administrator
- ♦ Salesforce Certified Associate
- ♦ Graduated in Industrial Technical Engineering, specialization in Industrial Electronics from the University of Zaragoza (E.I.N.A.)

### Ms. Grao Fernández, Ester

- ♦ IT Specialist for the Government of Aragon
- ♦ SOA/BPM Consultant at Avanttic
- ♦ J2EE Programmer at Grupo Acotelsa
- ♦ Master's Degree in Teaching Staff at Universitat Jaume I
- ♦ Computer Engineer from the Universitat Jaume I
- ♦ Technical Engineer in Computer Science Management at the University of Zaragoza

**Mr. Santos Arias, Millán**

- ♦ Chief Technical Architect - COE Salesforce at NTT Data
- ♦ Chief Salesforce Architect - COE Salesforce at Everis Spain, S.L.U.
- ♦ Senior Analyst at Everis Spain, S.L.U.
- ♦ Salesforce Certified Administrator
- ♦ Salesforce Certified Platform App Builder
- ♦ Salesforce Certified Platform Developer I
- ♦ Salesforce Certified Sharing and Visibility Architect
- ♦ Salesforce Certified Data Architecture and Management Designer
- ♦ Salesforce Certified Development Lifecycle and Deployment Architect
- ♦ Salesforce Certified Identity and Access Management Architect
- ♦ Salesforce Certified Integration Architect
- ♦ Salesforce Certified System Architect
- ♦ Salesforce Certified Application Architect
- ♦ Salesforce Certified Experience Cloud Consultant
- ♦ Graduate in Computer Engineering from the University of Granada

**Mr. Sacie Alcázar, David**

- ♦ Technical Architect and Expert Consultant at NTT Data
- ♦ Senior Programmer at Telefónica
- ♦ Senior Developer at Universidad de Navarra
- ♦ Technology Analyst at SN Arquitectura
- ♦ Technical Leader at BBVA Compass
- ♦ Master's Degree in Telecommunications at the Open University of Catalonia
- ♦ Salesforce Marketing Cloud Certification
- ♦ Certification in Heroku Architect Designer



*Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"*

# 04

# Structure and Content

This comprehensive program has been designed to address current challenges in data protection and security on the Salesforce platform. As such, the content will cover a wide range of topics, from API configuration and integrations to ensure effective security policies, to advanced Salesforce programming, exploring Triggers frameworks, SOLID principles and Apex Enterprise Patterns. In addition, you will delve into the understanding of security on this platform, analyzing development best practices, the inverted security pyramid and measures to protect solutions against external attacks.





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*From detailed understanding of Salesforce integrations and APIs, to the practical application of Triggers frameworks, you will equip yourself with the skills needed to develop secure and robust solutions”*



## Module 1. API and Integrations in Salesforce

- 1.1. Salesforce Integration
  - 1.1.1. Outbound Integrations from Salesforce
  - 1.1.2. Inbound Integrations to Salesforce
  - 1.1.3. Salesforce to Salesforce Integrations
  - 1.1.4. Salesforce API Libraries
- 1.2. External Services
  - 1.2.1. Open API Standard Specification
  - 1.2.2. External Credentials
  - 1.2.3. Named Credentials
- 1.3. Connected Apps
  - 1.3.1. Connected App
  - 1.3.2. Integration Scopes
  - 1.3.3. Integration Authorization and Identity Management
  - 1.3.4. Connected Apps Security Policies
- 1.4. SOAP API
  - 1.4.1. Enterprise WSDL
  - 1.4.2. WSDL Partner
  - 1.4.3. Apex WSDL
  - 1.4.4. WSDL Metadata
- 1.5. Synchronous REST Integrations
  - 1.5.1. REST API in Salesforce
  - 1.5.2. Connect REST API in Salesforce
  - 1.5.3. Document Management in Salesforce via API
- 1.6. API for Data Migration
  - 1.6.1. Bulk API
  - 1.6.2. Configuration and Execution of Bulk Data Migration by Bulk API
  - 1.6.3. Data Processing in Bulk Loads
  - 1.6.4. Bulk API 1.0 vs. Bulk API 2.0





- 1.7. Event-driven Integration
  - 1.7.1. Platform Event Bus
  - 1.7.2. Streaming API in Salesforce
  - 1.7.3. Pub/Sub API in Salesforce
  - 1.7.4. Change Data CaptureEvent Subscription from External Systems with the cometD Framework
- 1.8. Integration for Configuration and Development
  - 1.8.1. Tooling API
  - 1.8.2. API Metadata
  - 1.8.3. Dynamic Org Management Based on Tooling API
- 1.9. Data Synchronization between Orgs
  - 1.9.1. Data Synchronization Patterns Between Orgs
  - 1.9.2. Salesforce Connect with Cross-Org Adapter
  - 1.9.3. Open Data Protocol (oData)
  - 1.9.4. GraphQL with oData
- 1.10. Integration Patterns
  - 1.10.1. Remote Process Invocation-Request and Reply
  - 1.10.2. Remote Process Invocation-Fire and Forget
  - 1.10.3. Batch Data Synchronization
  - 1.10.4. Remote Call-In
  - 1.10.5. UI Update Based on Data Changes
  - 1.10.6. Data Virtualization

## Module 2. Advanced Programming in Salesforce


- 2.1. Dynamic Apex
  - 2.1.1. Dynamic Access to Object and Field Definitions
  - 2.1.2. Dynamic SOQL
  - 2.1.3. Dynamic DML
- 2.2. Platform Cache
  - 2.2.1. Platform Cache. Uses
  - 2.2.2. Org Cache
  - 2.2.3. Session Cache
  - 2.2.4. Best Practices
- 2.3. Platform Event Bus
  - 2.3.1. Platform Event Bus. Uses
  - 2.3.2. Publication of an Event
  - 2.3.3. Subscription to an Event
- 2.4. SOLID Principles
  - 2.4.1. Single Responsibility
  - 2.4.2. Open-closed
  - 2.4.3. Liskov Substitution
  - 2.4.4. Interface Segregation
  - 2.4.5. Dependency Inversion
- 2.5. Apex Enterprise Pattern
  - 2.5.1. Separation of Concerns (SOC)
  - 2.5.2. Selector Layer
  - 2.5.3. Domain Layer
  - 2.5.4. Service Layer
- 2.6. Trigger Framework
  - 2.6.1. Trigger Framework
  - 2.6.2. O'Hara
  - 2.6.3. Dan Appleman
  - 2.6.4. Hari Krishnan
  - 2.6.5. Scot Wells

- 2.7. Error Framework
  - 2.7.1. Error Framework
  - 2.7.2. Error Capture
  - 2.7.3. Platform Event to Register the Error
- 2.8. Framework Automations
  - 2.8.1. Automation Tools
  - 2.8.2. Design of Automation Framework
  - 2.8.3. Technical Aspects
- 2.9. Development Tools
  - 2.9.1. Code Analyzer
  - 2.9.2. Apex Replay
  - 2.9.3. Apex Log Analyzer
  - 2.9.4. Explain Plan
- 2.10. Troubleshooting Limits in Apex
  - 2.10.1. CPU Time
  - 2.10.2. Too Many SOQL
  - 2.10.3. Heap Size

### Module 3. Salesforce Security

- 3.1. Apex Security
  - 3.1.1. Apex Security
  - 3.1.2. Best Practices for Secure and Attack Protected Code
  - 3.1.3. Encryption of Data in Transit and at Rest
- 3.2. Visualforce Security
  - 3.2.1. Visualforce Security
  - 3.2.2. Security in Visualforce Framework
  - 3.2.3. Best Practices for Secure Visualforce Code
- 3.3. Security in Aura
  - 3.3.1. Security in Aura Framework
  - 3.3.2. Practical Examples of Protection and Security Evidences in Aura
  - 3.3.3. Best Practices for Secure Code in Aura



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- 3.4. Security in Lightning Web Components
    - 3.4.1. Security in LWC Framework
    - 3.4.2. Practical Examples of Protection and Security Evidences in LWC
    - 3.4.3. Best Practices for Secure Code in LWC
  - 3.5. User Access Management
    - 3.5.1. User Profiling and Licensing (Profiles & Custom Permission)
    - 3.5.2. Role Hierarchy and Territory Model
    - 3.5.3. Team Management (Case, Account and Opportunity)
    - 3.5.4. Queues and User Groups
    - 3.5.5. Best Practices for External User Access
  - 3.6. Security at the Registry Level
    - 3.6.1. OWD, Sharing Rules, ARSDR and Manual Sharing. Best Practices
    - 3.6.2. Registry Locking
    - 3.6.3. Implicit Sharing and Apex Sharing Reasons
    - 3.6.4. Data Masking
  - 3.7. Security at the Field Level
    - 3.7.1. Advanced Profiling Model
    - 3.7.2. Best Practices for Dynamic Forms
    - 3.7.3. FLS Control and Record Visibility in Apex and SOQL
  - 3.8. User Authentication and Salesforce Access Authorization
    - 3.8.1. Authentication Methods (U/P, SSO and Delegated Authentication)
    - 3.8.2. Best Practices in Login Flows
    - 3.8.3. Best Practices for Internal and External Access Best Practices (Experience Cloud)
    - 3.8.4. Configuring Secure Access for External Salesforce Applications
    - 3.8.5. Best Practices in OAuth Flows for Access Authorization
  - 3.9. Monitoring and Security Policies
    - 3.9.1. Salesforce Shield-Advanced Use Cases
    - 3.9.2. Salesforce Shield-Field Audit Trail
    - 3.9.3. Salesforce Shield-Transaction Security Policies
  - 3.10. Security at the Network Level
    - 3.10.1. HTTPS & TLS - Advanced Configuration in Salesforce
    - 3.10.2. 1-way & 2-way SSL Flow. Configuration and Applicability
    - 3.10.3. Network Configuration Best Practices



# 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.

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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.*



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

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.





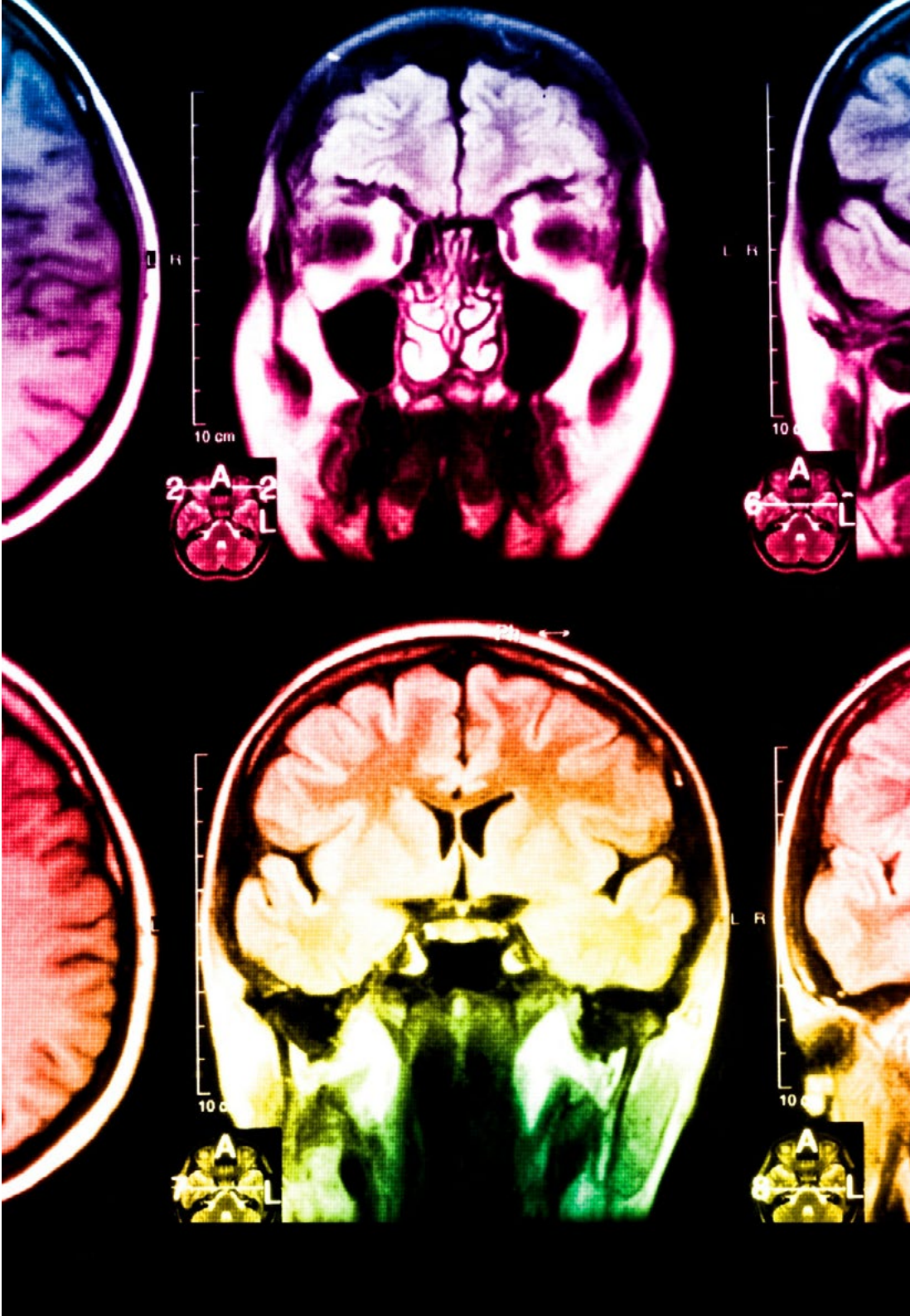
In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

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.



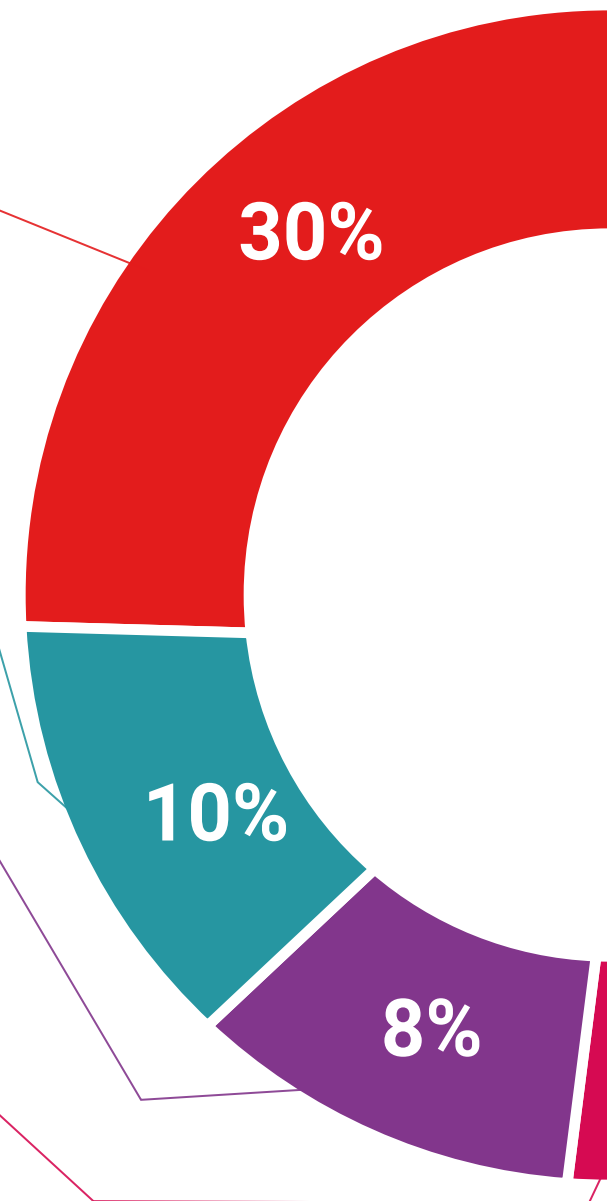
### Practising Skills and Abilities

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.

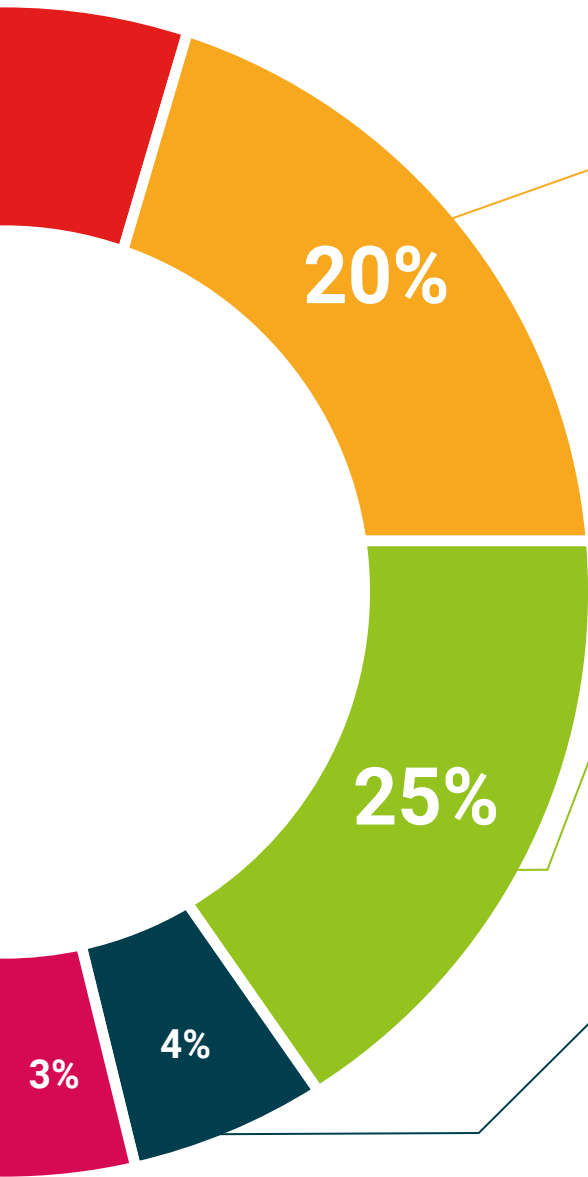


### Additional Reading

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 Salesforce Security guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma issued by TECH Global University.



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



This program will allow you to obtain an **Postgraduate Diploma in Salesforce Security** 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** title 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 Salesforce Security**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**





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

**tech** global  
university

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