



## Postgraduate Diploma Salesforce Platform

» 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-platform

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## tech 06 | Introduction

Faced with the unstoppable evolution of technology and the use of the Internet, institutions have transformed the way they contact the public. One of the most effective tools for this is Salesforce, since it allows them to maintain a relationship with customers and even monitor their data. In this way, companies use this platform to better understand the behavior of their consumers, connect with them at different levels and thus significantly drive business growth. On the other hand, Salesfore offers robust security to protect the data and privacy of individuals through granular access controls.

Within this framework, TECH is developing a pioneering Postgraduate Diploma in Salesforce Platform. Designed by experts in this field, the academic itinerary will analyze in detail the different programming models (including the RESTFul API). The syllabus will also delve into the Cloud Experience platform for graduates to create online communities to interact with customers. Related to this, the program will provide the keys to carry out integration processes in Salesforce to transfer data bidirectionally. In addition, the teaching materials will provide the most innovative Branch Strategies, allowing programmers to work on different functionalities or features in isolation.

This program is based on a 100% online methodology so that students can learn at their own pace. To do so, the only thing they will need to access the resources is a device with an Internet connection. The program is based on the innovative Relearning method. It is a teaching model supported by the repetition of the most important content, to make the knowledge stick in the students' minds. To enrich learning, the materials are complemented by a wide variety of multimedia resources (such as interactive summaries, supplementary readings or infographics) to reinforce knowledge and skills.

This **Postgraduate Diploma in Salesforce Platform** 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 Programming
- The graphic, schematic and practical contents of the program provide complete and practical information on those disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning.
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



You will gain skills to develop custom applications using Apex at the world's best digital university according to Forbes"



You will have at your disposal the most cutting-edge API Libraries to automate complex tasks such as record creation"

The program includes in its teaching staff professionals from the sector who bring to this program the experience of their work, as well as recognized 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.

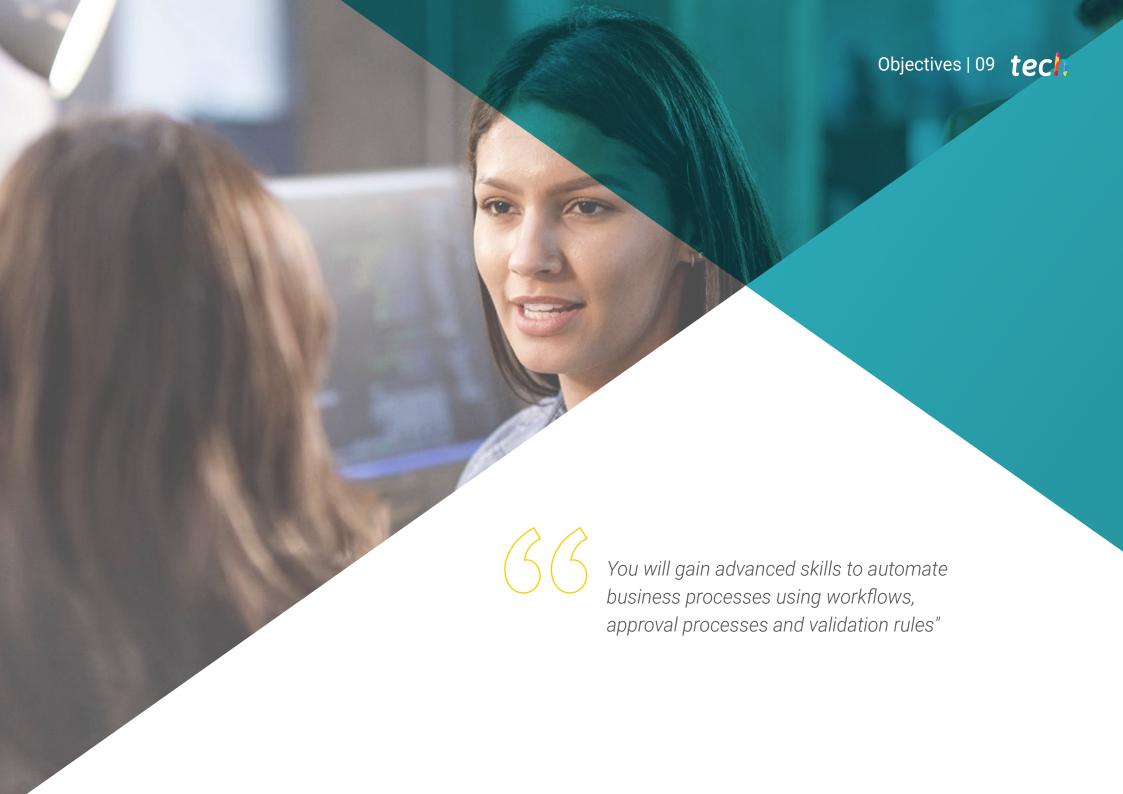
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced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

You will delve into the main Salesforce DX tools and you will be able to design your own SFDX plugin.

Through the Relearning system that TECH uses, you will have a natural learning process and you will forget about long hours of study.





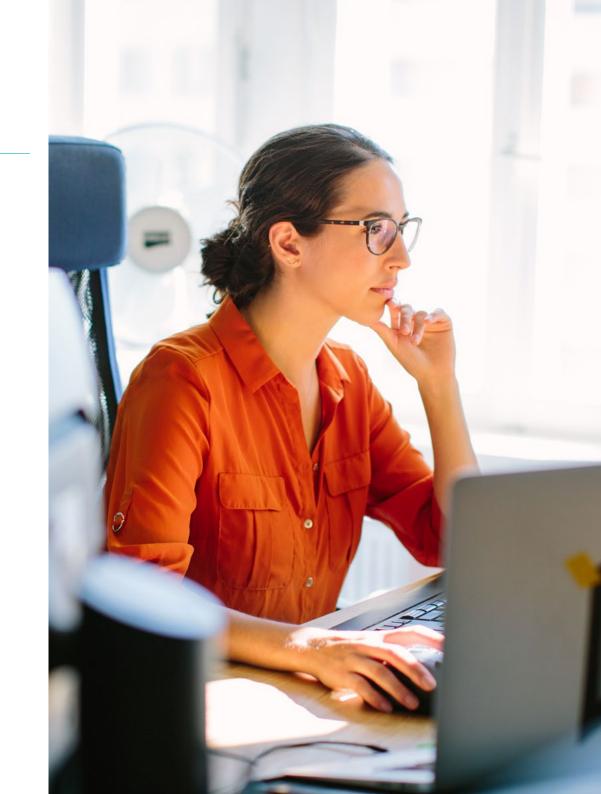


## tech 10 | Objectives



## **General Objectives**

- 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
- Identify options to avoid duplication and ensure data quality
- Delve into the best practices for data manipulation in Salesforce
- Generate specialized knowledge on formulas and custom functions on the platform
- Analyze the possibilities of accessing data from Apex
- Delve into the various user interface (UI) development frameworks available in Salesforce
- Specify the type of configuration we need to run in Salesforce to enable inbound integrations and to narrow down your security policies
- Examine the SOLID principles that enable the creation of efficient, robust and scalable software
- Determine the recommended environment roadmap for developing, testing, and deploying changes to live environments





#### **Module 1. Salesforce Programming**

- Compile the types of environments that can be used for development on the Salesforce platform
- Analyze how the database architecture on which Salesforce is based works in order to make developments within the platform more flexible
- Evaluate how the record visibility model and record sharing between application users works
- Establish the existing permissions model in the platform to grant the necessary accesses to the users that will use the developments that we make in Salesforce

#### Module 2. 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 3. Application Lifecycle Management (ALM) in Salesforce

- Determine the recommended environment roadmap for developing, testing, and deploying changes to live environments
- Evaluate the different source code repository branching strategies on which the team can rely to work in a collaborative environment
- Examine the tools available in Salesforce DX for exchanging metadata and executing operations against Salesforce environments
- Generate command-driven development environments based on the fundamentals of Scratch Orgs



You will effectively manage CI/CD tools to improve efficiency, quality and speed of software delivery"





## tech 14 | Course Management

## Management



## Mr. Tovar Barranco, Iosu Igor

- Chief Architect at NTT Data Group
- Software Architect at Beesion Technologies
- Systems Administrator at Arald
- .NET Developer at Gabinete de Gestiór
- 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







## tech 18 | Structure and Content

### Module 1. Salesforce Programming

- 1.1 Salesforce Software-as-a-Service Model
  - 1.1.1. Salesforce Licensing Model
  - 1.1.2. Governor Limits
  - 1.1.3. Types of Existing Environments
- 1.2 Salesforce Programming Model
  - 1.2.1. Metadata-based Model
  - 1.2.2. Execution Contexts
  - 1.2.3. Salesforce RESTFul API Model
- 1.3. Multilanguage and Localization in Salesforce
  - 1.3.1. Localization
  - 1.3.2. Multilanguage Management in Salesforce
  - 1.3.3. Using Custom Labels in Salesforce
  - 134 Translation Workbench
- 1.4. Access and Permission Management in Salesforce
  - 1.4.1. Profile Management in Salesforce
  - 1.4.2. Permission Sets Management in Salesforce
  - 1.4.3. Permission Sets Group Management in Salesforce
- 1.5. Record Visibility Model in Salesforce
  - 1.5.1. Data Access Types
  - 1.5.2. Salesforce Visibility Model
  - 1.5.3. Record Sharing in the Visibility Model
- 1.6 Multitenant Architecture
  - 1.6.1. Multitenant Architecture in Salesforce
  - 1.6.2. Application Development on Multitenant Architecture
  - 1.6.3. Internal Request Processing
- 1.7. Database Architecture in Salesforce
  - 1.7.1. Platform Data Layer
  - 1.7.2. Database Partitioning by Tenant
  - 1.7.3. Structure of Databases
  - 1.7.4. Management of Indexes and Relations in Databases

- 1.8. Experience Cloud and Communities for External Users
  - 1.8.1. Experience Cloud Site Administration
  - 1.8.2. Permissions and Visibility Management for External Users
  - 1.8.3. Digital Experience Platform (DXP)
  - 1.8.4. Lightning Web Runtime (LWR)
- 1.9. AppExchange
  - 1.9.1. Salesforce Partner Ecosystem
  - 1.9.2. Types of Packages
  - 1.9.3. Independent Software Vendor (ISV)
- 1.10. Salesforce Infrastructure
  - 1.10.1. Domain Management in Salesforce
  - 1.10.2. Hyperforce Model
  - 1.10.3. Edge Network Model

## Module 2. API and Integrations in Salesforce

- 2.1. Salesforce Integration
  - 2.1.1. Outbound Integrations from Salesforce
  - 2.1.2. Inbound Integrations to Salesforce
  - 2.1.3. Salesforce to Salesforce Integrations
  - 2.1.4. Salesforce API Libraries
- 2.2. External Services
  - 2.2.1. Open API Standard Specification
  - 2.2.2. External Credentials
  - 2.2.3. Named Credentials
- 2.3. Connected Apps
  - 2.3.1. Connected App
  - 2.3.2. Integration Scopes
  - 2.3.3. Integration Authorization and Identity Management
  - 2.3.4. Connected Apps Security Policies
- 2.4. SOAP API
  - 2.4.1. Enterprise WSDL
  - 2.4.2. WSDL Partner
  - 2.4.3. Apex WSDL
  - 2.4.4. WSDL Metadata

- 2.5. Synchronous REST Integrations
  - 2.5.1. REST API in Salesforce
  - 2.5.2. Connect REST API in Salesforce
  - 2.5.3. Document Management in Salesforce via API
- 2.6. API for Data Migration
  - 2.6.1. Bulk API
  - 2.6.2. Configuration and Execution of Bulk Data Migration by Bulk API
  - 2.6.3. Data Processing in Bulk Loads
  - 2.6.4. Bulk API 1.0 vs. Bulk API 2.0
- 2.7. Event-driven Integration
  - 2.7.1. Platform Event Bus
  - 2.7.2. Streaming API in Salesforce
  - 2.7.3. Pub/Sub API in Salesforce
  - 2.7.4. Change Data Capture
  - 2.7.5. Event Subscription from External Systems with the cometD Framework
- 2.8. Integration for Configuration and Development
  - 2.8.1. Tooling API
  - 2.8.2. API Metadata
  - 2.8.3. Dynamic Org Management Based on Tooling API
- 2.9. Data Synchronization between Orgs
  - 2.9.1. Data Synchronization Patterns Between Orgs
  - 2.9.2. Salesforce Connect with Cross-Org Adapter
  - 2.9.3. Open Data Protocol (oData)
  - 2.9.4. GraphQL with oData
- 2.10. Integration Patterns
  - 2.10.1. Remote Process Invocation-Request and Reply
  - 2.10.2. Remote Process Invocation-Fire and Forget
  - 2.10.3. Batch Data Synchronization
  - 2.10.4. Remote Call-In
  - 2.10.5. UI Update Based on Data Changes
  - 2.10.6. Data Virtualization

### Module 3. Application Lifecycle Management (ALM) in Salesforce

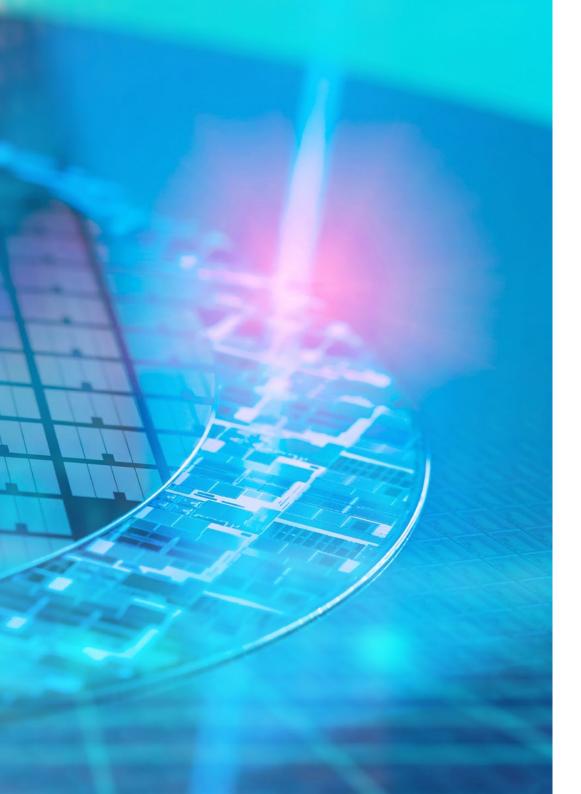
- 3.1. Salesforce Development Models
  - 3.1.1. Declarative Development Model
  - 3.1.2. Org-based Development Model
  - 3.1.3. Source Code Based Development Model
  - 3.1.4. Package-based Development Model
- 3.2. Branching Strategy
  - 3.2.1. GitFlow and Its Evolution Adapted to Salesforce
  - 3.2.2. Branching Strategy Limited to User Stories
  - 3.2.3. Branch Strategy Based on Releases and Major Releases
  - 3.2.4. Coded Approach
- 3.3. Version Control Systems (VCS)
  - 3.3.1. Version Control Systems (VCS)
  - 3.3.2. Roles and Responsibilities
  - 3.3.3. Git Configuration and Command Execution
- 3.4. Salesforce DX
  - 3.4.1. Command Console
  - 3.4.2. Orgs Connection and Configuration
  - 3.4.3. Plugins Configuration and Management
  - 3.4.4. Creating Your Own SFDX Plugin
- 3.5. Programming Based on Metadata
  - 3.5.1. Salesforce Metadata
  - 3.5.2. Metadata Coverage in Salesforce
  - 3.5.3. Deployments Based on Manifest File
- 3.6. Scratch Orgs
  - 3.6.1. Scratch Orgs
  - 3.6.2. Scratch Orgs Configuration
  - 3.6.3. Org Shapes Generation
  - 3.6.4. Programming Based on Scratch Orgs

## tech 20 | Structure and Content

- 3.7. Package Generation and Distribution
  - 3.7.1. Package Structure in Salesforce
  - 3.7.2. Package Distribution
  - 3.7.3. First and Second Generation Packages
- 3.8. CI/CD Tools
  - 3.8.1. Continuous Integration in Salesforce
  - 3.8.2. Phases of a Continuous Integration Process in Salesforce
  - 3.8.3. Static Code Analysis Tools
  - 3.8.4. Automation Tools
- 3.9. DevOps Center
  - 3.9.1. DevOps Center in Salesforce
  - 3.9.2. Salesforce DevOps Center Deployment Methodology
  - 3.9.3. Configuring and Executing Deployments with Salesforce DevOps Center
- 3.10. Publishing Packages on the AppExchange
  - 3.10.1. Managing Namespaces in Salesforce
  - 3.10.2. Package Publishing Process on the AppExchange
  - 3.10.3. Salesforce Security Review



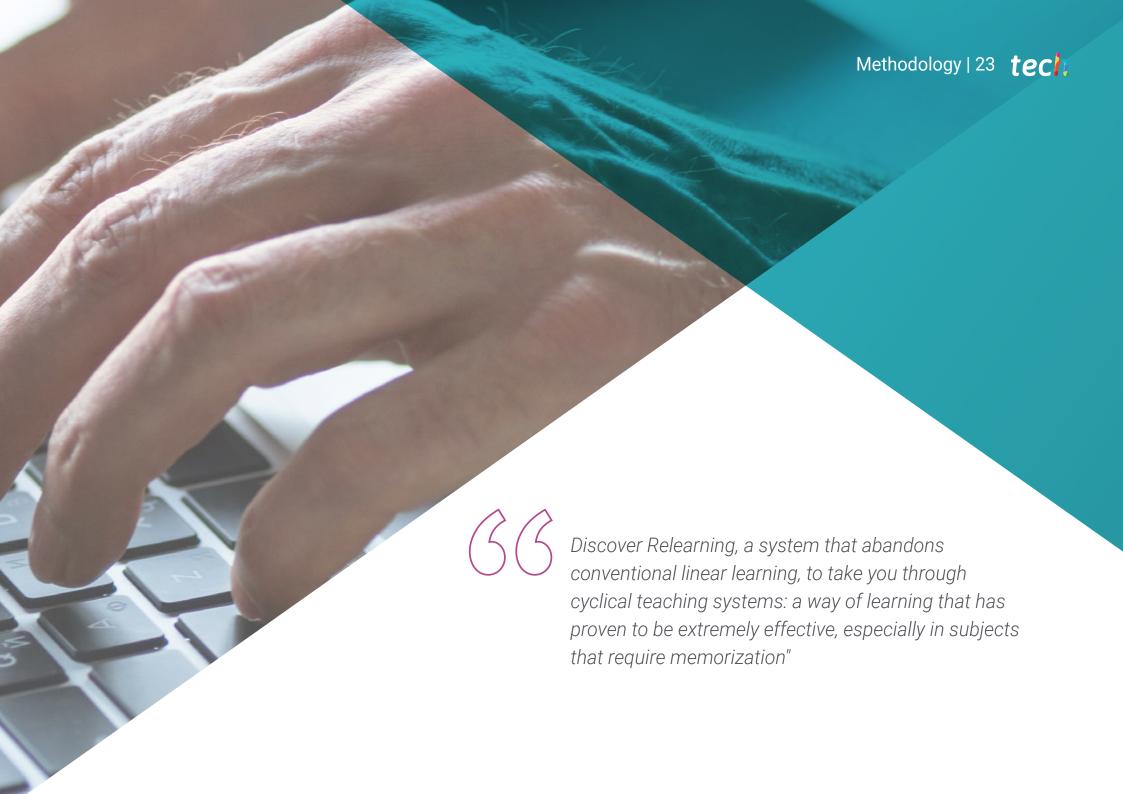






Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"





## tech 24 | Methodology

## 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.



## Methodology | 27 tech

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.





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.

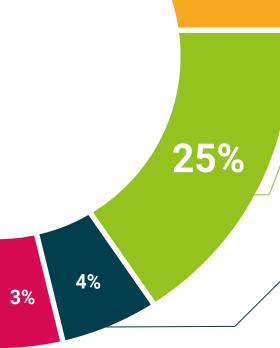


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

## **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.





20%





## tech 32 | Certificate

**Platform** 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

This program will allow you to obtain your Postgraduate Certificate in Salesforce

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 Platform

Modality: **online** 

Duration: 6 months

Accreditation: 18 ECTS



## has successfully passed and obtained the title of: Postgraduate Diploma in Salesforce Platform

This is a program of 450 hours of duration equivalent to 18 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



health confidence people
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment



## Postgraduate Diploma Salesforce Platform

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

