

Postgraduate Diploma Declarative Programming in Salesforce

```
to a user-space array */  
groups_touser(gid_t user *grouplist,  
groupinfo to a user space array */  
const struct group_info *group_info)  
int groups_touser(gid_t user *grouplist,  
const struct group_info *group_info)  
  
int i;  
{  
    unsigned int count = groupinfo->ngroups;  
    int i;
```



Postgraduate Diploma Declarative Programming in Salesforce

- » 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-declarative-programming-salesforce

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01

Introduction

Declarative Programming in Salesforce consists of customizing the platform using visual tools and functionalities, without the need to write code. This is a fundamental process for companies, as it allows greater accessibility in both the development and maintenance of solutions. Also, by limiting the amount of customized code, institutions reduce the risk of errors or security vulnerabilities. In this way, declarative tools are highly effective in ensuring secure environments for business information. For this reason, TECH is launching an innovative university program that will focus on declarative page design using state-of-the-art strategies. In addition, the program is taught in a convenient 100% online and flexible mode.



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From this Relearning-based Postgraduate Diploma, you will create the most effective validation rules to ensure both data integrity and consistency”

The OmniStudio Framework has established itself as a comprehensive Salesforce application development solution. Among its key benefits is that it enables consumers to easily create custom applications, workflows and user experiences. However, this tool presents several challenges for developers. For example, computer scientists may have trouble navigating the wide range of available components or implementing robust integrations that meet external system requirements. The only way for computer scientists to overcome these challenges is to expand their subject matter knowledge and develop new technical skills.

To help in this endeavor, TECH is creating a comprehensive Postgraduate Diploma in Declarative Programming in Salesforce. The curriculum, composed of 3 specialized modules, will provide effective strategies for processing large volumes of information. At the same time, the syllabus will delve into the relevance of implementing security measures that certify information privacy and data protection compliance. Along the same lines, the didactic materials will analyze the operation of the main declarative construction tools (such as Flows Builder, Validation Rules or Screen Flow). The program will also delve into Flexcards for designing customizable yet flexible user interface cards.

This is an intensive 450-hour course, where students will increase their knowledge of data modeling in Salesforce to optimize customer relationships. All this through a syllabus made up of multimedia resources that include interactive summaries, case studies and complementary readings. In addition, with the Relearning system, based on the reiteration of the most important concepts throughout this academic itinerary, computer scientists will not have to invest a large number of hours in studying and will obtain a much more effective update.

This **Postgraduate Diploma in Declarative Programming in Salesforce** 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 delve into Flow Orchestration to guide users through specific processes, providing detailed instructions for each step to reduce errors"

“

To help you reach your academic goals quickly, TECH offers a 100% online learning methodology. You will access content with freedom!"

The program's teaching staff includes professionals from the industry who contribute their work experience to this 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.

Looking to acquire the most advanced techniques to avoid Data Skew? Achieve it with this university program in only 450 hours.

A unique, key, and decisive educational experience to boost your professional development.



02 Objectives

Through this university program, IT professionals will effectively use Salesforce declarative tools to design dynamic user interfaces. In this sense, graduates will increase their ability to create automated processes such as task assignment. At the same time, programmers will configure security rules to ensure data confidentiality. In addition, experts will stand out in the IT sector for their ability to solve problems in declarative configuration, as well as to optimize existing work processes and considerably improve their productivity.





“

An academic path that will enhance their ability to design workflows to automate business processes”

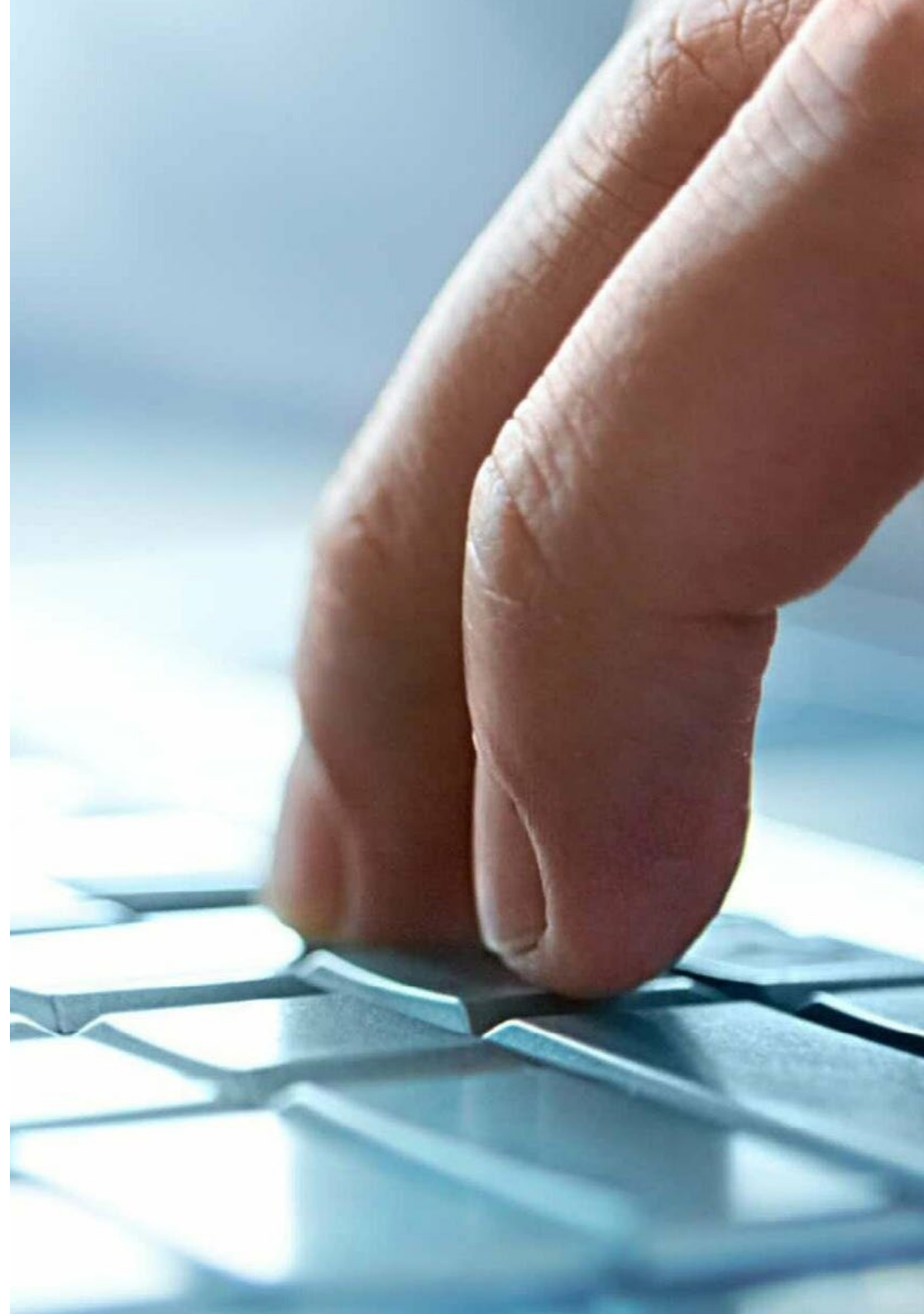


General Objectives

- ♦ 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
- ♦ Ensure secure, scalable designs in the Salesforce data model
- ♦ Analyze the fundamental principles of declarative programming
- ♦ Compile the available declarative construction tools
- ♦ Evaluate the possibilities offered by declarative programming within the platform
- ♦ Develop specialized knowledge on the components included in Omnistudio
- ♦ Analyze and specify the use of each of Omnistudio's components
- ♦ Establish good practices for the use of these components.



You will proficiently handle the main declarative tools for users to configure platforms without the need to write code"





Specific Objectives

Module 1. Data Modeling in Salesforce

- ♦ Analyze, in an advanced way, all the Salesforce tools for the creation of objects and attributes in Salesforce
- ♦ Delve into the best practices for data manipulation in Salesforce
- ♦ Examine, at a specialized level, best techniques in the use of SOQL and SOSL query languages
- ♦ Solve performance issues when working with large volumes of data

Module 2. Declarative Programming in Salesforce

- ♦ Generate specialized knowledge on formulas and custom functions on the platform
- ♦ Propose page layout solutions using declarative tools
- ♦ Develop and evaluate workflows taking into account limits and best practices
- ♦ Generate automated configurations to track approval processes

Module 3. OmniStudioFramework

- ♦ Develop specialized knowledge on the components included in Omnistudio
- ♦ Analyze and specify the use of each of Omnistudio's components
- ♦ Establish good practices for the use of these components
- ♦ Delve into the connection between the different Omnistudio components to develop the solution in the most effective and scalable way

03

Course Management

In order to maintain intact the high quality that characterizes its university programs, TECH has a rigorous selection process to choose its teaching staff. For this Postgraduate Diploma, it has brought together true references in the field of Declarative Programming in Salesforce. These professionals are characterized by an extensive working career, where they have developed highly customized applications to meet the expectations of their customers. In this way, students have the guarantees they demand to access a specialization program that will raise both their knowledge and skills.





“

The teaching team will guide you throughout your learning process, being available to resolve any doubts you may have"

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

Mr. Lobato Velázquez, Juan Manuel

- ♦ Expert Engineer Salesforce at NTT DATA
- ♦ Advanced Engineer at Serces Sistemas
- ♦ Senior Solutions Analyst
- ♦ Senior Programmer at Cibernos OutSourcing
- ♦ Engineer at Indra Software
- ♦ JAVA Programmer and J2EE Application Developer
- ♦ Certification in: Energy and Utilities Cloud, Platform App Builder, Vlocity CPQ Developer, Vlocity Omnistudio Developer

Ms. Latino Guido, Katherine Elisa

- ♦ Systems Administrator
- ♦ Troubleshooting with Computer Systems in Online Teaching Company
- ♦ Higher Degree Development of Multiplatform Applications by CPIFP Los Enlaces
- ♦ Medium Degree in Microcomputer Systems and Networks



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

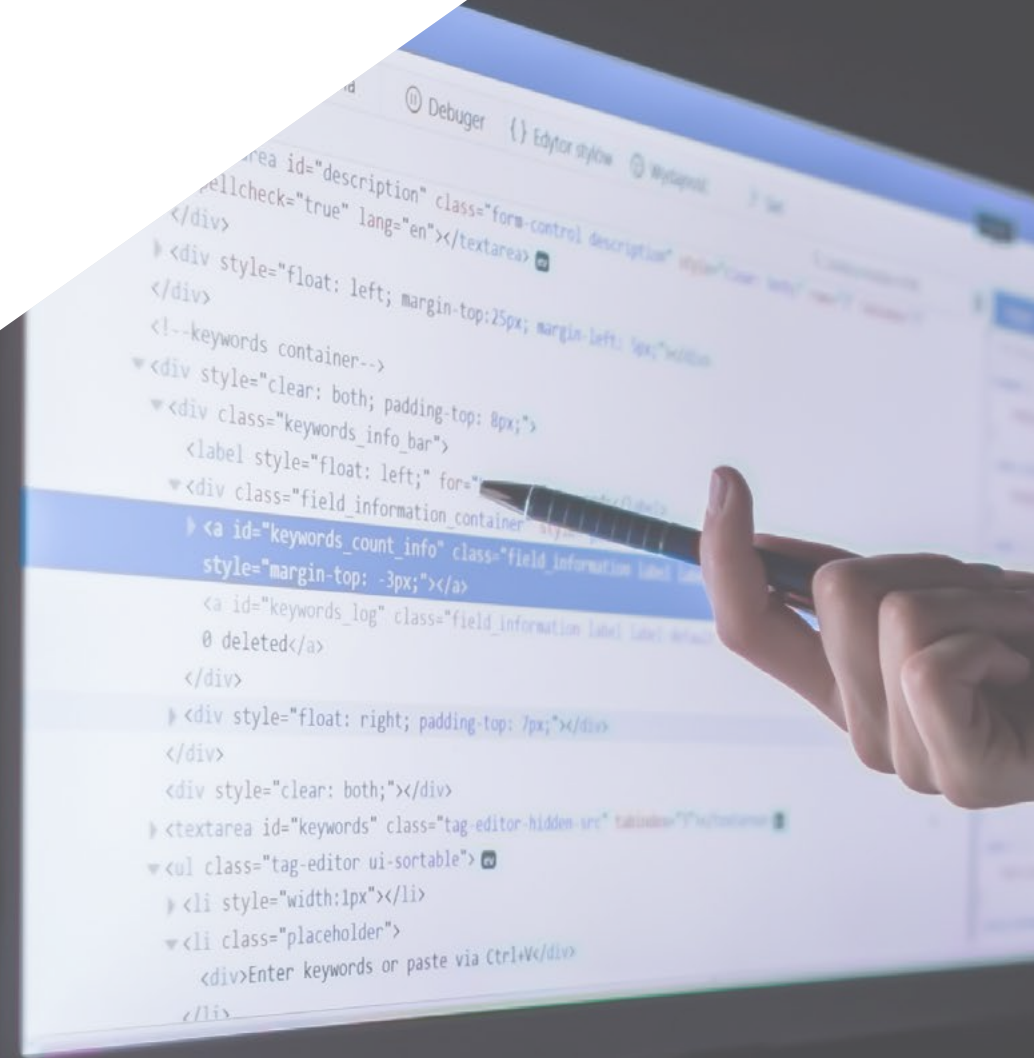
Mr. Latino Maradiaga, Mario Alfonso

- ◆ Expert Architect in the Infrastructure Sector
- ◆ Salesforce Expert Architect in Private Security Company
- ◆ Salesforce Lead Architect in the Brewing Industry
- ◆ Salesforce Architect in the Mining and Energy Sector
- ◆ Salesforce Engineer in the Agrochemical Industry
- ◆ Salesforce Engineer in the Healthcare and Pharmaceutical Distribution Sector
- ◆ Certification in: Java SE 7 Fundamentals, Oracle Database: Program with PL/SQL, Salesforce Service Cloud Consultant, Salesforce App Builder,, Salesforce Advanced Administrator

04

Structure and Content

This Postgraduate Diploma will provide students with a comprehensive approach to Declarative Programming in Salesforce. The course will delve into data modeling, providing best practices in the design and management of information. Likewise, the syllabus will provide graduates with the keys to create pages in a declarative way, taking into account the configuration of buttons, links or actions. In line with this, the academic contents will provide experts with the most avant-garde declarative automation tools. In this way, computer scientists will be able to automate business processes such as sending alerts or updating records.



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Top-level teaching material that will ensure that your professional career as a computer scientist will be successful"

Module 1. Data Modeling in Salesforce

- 1.1. Data Models
 - 1.1.1. Data Modeling
 - 1.1.2. Object-entity-relationship Model
 - 1.1.3. Good Practices in Information Design and Modeling: Logical and Physical Levels
- 1.2. Object Typology
 - 1.2.1. Objects-Standard, Custom and Record Types
 - 1.2.2. Event Modeling in Salesforce Using Platform Events
 - 1.2.3. Salesforce Configuration and Parameterization Objects
 - 1.2.4. Other Special Objects
- 1.3. Document Management in Salesforce
 - 1.3.1. DMS and ECM
 - 1.3.2. Types of Documents in Salesforce
 - 1.3.3. Advanced Knowledge Management with Knowledge Base
 - 1.3.4. Best Practices in Document Management Modeling
- 1.4. Creating Objects in Salesforce
 - 1.4.1. Best Practices for Generation from UI
 - 1.4.2. Advanced Use of Schema Builder
 - 1.4.3. API for Object Creation
- 1.5. Data Quality
 - 1.5.1. Best Practices for Attribute Configuration and Validation Rules
 - 1.5.2. Control of Duplicate Records
 - 1.5.3. Reports and Other Tools for Measuring and Monitoring Quality
- 1.6. Data Query
 - 1.6.1. Best Practices for Data Querying with SOQL
 - 1.6.2. Best Practices for Data Searching with SOSL
 - 1.6.3. Dynamic SOQL & SOSL Configuration
- 1.7. Database Change Management Using DML Operations
 - 1.7.1. Data Manipulation Language
 - 1.7.2. Dynamic DML
 - 1.7.3. Best Practices for Bulk DML
 - 1.7.4. DML Exception Handling
 - 1.7.5. APIs Available for Data Management



- 1.8. Processing of Large Data Volumes (LDV)
 - 1.8.1. Table Index Management: Standard and Customized
 - 1.8.2. Skinny Tables
 - 1.8.3. How to Avoid Data Skew
 - 1.8.4. Advanced Optimization Using Data Archiving and the Query Plan Tool
- 1.9. Information Privacy
 - 1.9.1. Information Privacy
 - 1.9.2. Information Privacy Management
 - 1.9.3. Best Practices to Ensure Data Protection Regulations Compliance
- 1.10. Security Copy Management
 - 1.10.1. Security Copy Management
 - 1.10.2. Information Backup
 - 1.10.3. Best Practices in Data Backup Solution Design


Module 2. Declarative Programming in Salesforce

- 2.1. Declarative Programming
 - 2.1.1. Declarative Construction Tools
 - 2.1.2. Formulas and Functions
 - 2.1.3. Functionalities for Mail Templates
- 2.2. Declarative Page Design
 - 2.2.1. Page Layout, Lightning App Builder and List Views
 - 2.2.2. Buttons, Links and Actions Configuration
 - 2.2.3. In-App Guidance
- 2.3. Flow Builder
 - 2.3.1. Flow Management
 - 2.3.2. Flow Life Cycle
 - 2.3.3. Reuse with Subflows
 - 2.3.4. Flow Interview: Paused Flows
 - 2.3.5. Flow Bulkification in Transactions
- 2.4. Screen Flow
 - 2.4.1. Fields in Screen Flow
 - 2.4.2. Flow with Stages
 - 2.4.3. Reactive Screen Flows
- 2.5. Declarative Automation Tools
 - 2.5.1. Autolaunched Flows-No Triggered
 - 2.5.2. Record Triggered Flows
 - 2.5.3. Platform Event Triggered Flows
- 2.6. Orchestration of Flows
 - 2.6.1. Orchestration of Flows
 - 2.6.2. Autolaunched Orchestration-No Triggered
 - 2.6.3. Record-Triggered Orchestration
- 2.7. Exception Handling in Flows
 - 2.7.1. Testing with Flow Builder
 - 2.7.2. Debugging Errors
 - 2.7.3. Monitoring Capabilities
 - 2.7.4. Exception Handling Framework
- 2.8. Approval Processes
 - 2.8.1. Approval Process Wizard and Required Configuration
 - 2.8.2. Configuration of the Approval Phases
 - 2.8.3. Limits and Considerations
- 2.9. External Services and Outbound Message
 - 2.9.1. External Service & Flow Action Configuration
 - 2.9.2. Outbound Message: Configuration, Notification & Monitoring
 - 2.9.3. External Services and Outbound Message
- 2.10. Declarative Analytical Tools
 - 2.10.1. Custom Record Types
 - 2.10.2. Report Construction
 - 2.10.3. Dashboard Construction
 - 2.10.4. Limitations of Reports and Dashboard

Module 3. OmniStudio Framework

- 3.1. Omnistudio Architecture
 - 3.1.1. Omnistudio Architecture
 - 3.1.2. Omnistudio Component Layers
 - 3.1.3. Omnistudio Version Types
- 3.2. System Administration and Configuration
 - 3.2.1. Installing and Upgrading Omnistudio
 - 3.2.2. OmniStudio Licenses and Permissions
 - 3.2.3. Configuring Interfaces and Deployments
- 3.3. Dataraptors
 - 3.3.1. DataRaptor
 - 3.3.2. Types of Dataraptors
 - 3.3.3. Types of Data Returned by Dataraptors
 - 3.3.4. Caching and Security in Dataraptors
 - 3.3.5. Dataraptors Invocation Methods
 - 3.3.6. Best Practices for Dataraptors
- 3.4. Integration Procedures
 - 3.4.1. Integration Procedures
 - 3.4.2. Types of Actions in Integration Procedures
 - 3.4.3. Caching and Security in Integration Procedures
 - 3.4.4. Integration Procedures Invocation Methods
 - 3.4.5. Error Handling in Integration Procedures
 - 3.4.6. Best Practices for Integration Procedures
- 3.5. Flexcards
 - 3.5.1. Flexcards
 - 3.5.2. Elements for Flexcards
 - 3.5.3. Flexcard Management
 - 3.5.4. Flexcard Designer
 - 3.5.5. Debugging and Testing in Flexcards
 - 3.5.6. Best Practices for Flexcards



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- 3.6. Omniscripts
 - 3.6.1. Omniscripts
 - 3.6.2. Omniscript Elements
 - 3.6.3. Omniscripts Management
 - 3.6.4. Omniscripts Designer
 - 3.6.5. Debugging and Testing in Omniscripts
 - 3.6.6. Best Practices for Omniscripts
 - 3.7. Business Rules Engine
 - 3.7.1. Business Rules Engine
 - 3.7.2. Decision Matrix
 - 3.7.3. Decision Tables
 - 3.7.4. Expression Sets
 - 3.7.5. Business Rules Integrations
 - 3.7.6. Migration of Calculation Matrix and Calculation Procedures
 - 3.8. Tracking Service
 - 3.8.1. Tracking Service
 - 3.8.2. Configuration of Tracking Service Usage
 - 3.8.3. Elements for Using Tracking Service
 - 3.9. OmniAnalytics Overview
 - 3.9.1. OmniAnalytics
 - 3.9.2. Usage Settings for OmniAnalytics
 - 3.9.3. OmniAnalytics Results for Google Analytics
 - 3.10. IDX Workbench (Deployment Tool)
 - 3.10.1 Installing IDX Workbench
 - 3.10.2 Metadata Configuration and Migration
 - 3.10.3 Metadata Migration Validation

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.



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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.

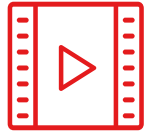
Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

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.



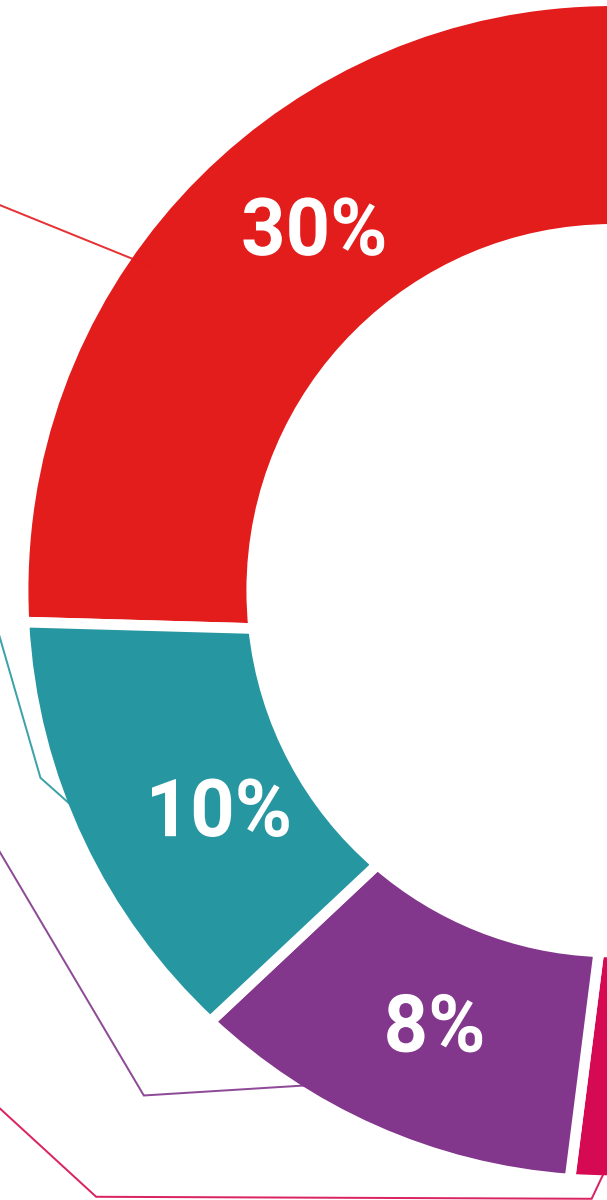
Practising Skills and Abilities

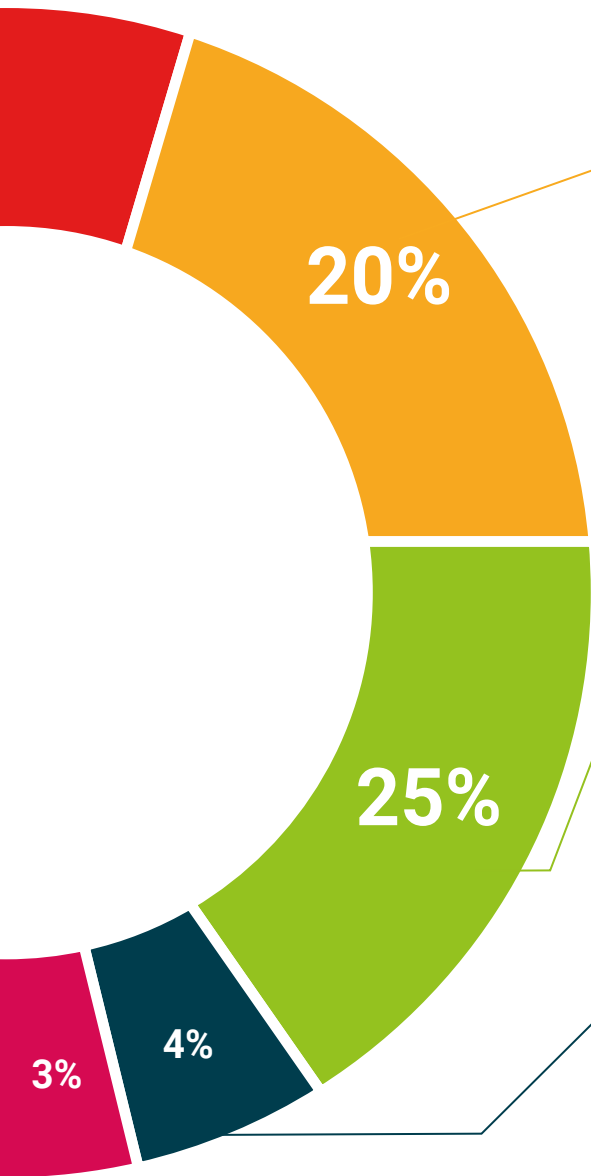
They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.



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 Diploma in Declarative Programming in Salesforce 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 a **Postgraduate Diploma in Take the opportunity and take the plunge, to get up to speed on the latest trends in Declarative Programming in Salesforce.** 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 Declarative Programming in Salesforce**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**



*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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Postgraduate Diploma Declarative Programming in Salesforce