Postgraduate Diploma Website Engineering

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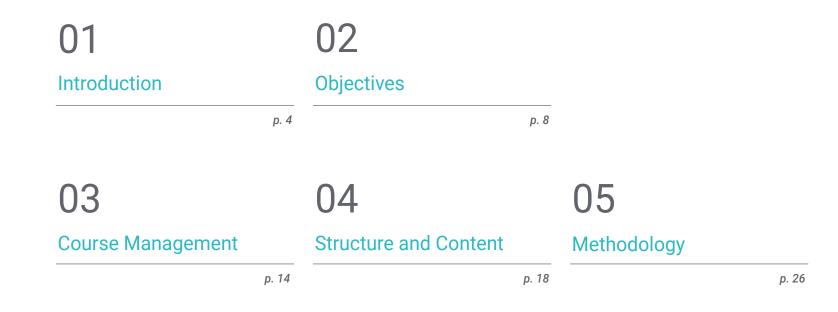


# **Postgraduate Diploma** Website Engineering

- » Modality: online
- » Duration: 6 months
- » Certificate: TECH Global University
- » Credits: 24 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitute.com/us/information-technology/postgraduate-diploma/postgraduate-diploma-website-engineering

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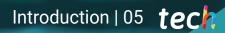
# 01 Introduction

Having a presence on the internet through a website that generates a positive image and marks a difference has become an essential and growing need in the world, especially for businesses. Nowadays, most companies have their own internet space, where they offer corporate data, contact forms and, in some cases, sales options. This way, the web allows them to reach a larger number of customers and improve their relationship with them. This trend has led to considerable growth in the demand for web design, development and programming professionals. For this reason, TECH has designed this high-level program for the professional to update their knowledge of Website Engineering.

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A comprehensive and cutting-edge program that will allow you to progressively and completely acquire the knowledge you need to work in this sector"

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This high-level program offers specialized knowledge to help professionals create, manage, evaluate and monetize a large-scale website from a global perspective and manage the stages involved in website management.

The program provides a comprehensive review of agile methodologies, highlighting the key differences between these innovative frameworks versus traditional standards for project management. It also builds expertise on web page creation, from the programmer's point of view. In terms of the customer environment, it delves into design and layout (HTML and CSS), including the creation of dynamic pages (JavaScript).

Additionally, this intensive specialization program covers the different types of web architecture, their uses and applications. It determines the pillars of web architecture and the importance of each one in the final product, the different stages that make up the web architecture and how to deal with them in order to obtain the desired result. In turn, it explores the design of interfaces and information architectures, addressing the concept of usability (to make them understandable, concise and quick to learn), as well as accessibility (so that they can be used by the maximum number of users possible, paying special attention to people with disabilities).

This course differs from other specialization programs in three fundamental respects: its comprehensibility, given the complexity of the topics addressed, the authors' experience and the in-depth coverage of the topics.

This Postgraduate Diploma has been created by a team of expert teachers with multi-faceted skillsets and a wealth of experience and specialized knowledge in their respective fields. As it is a 100% online program, the student will not have to neglect their personal or professional commitments. Upon completion of the program, students will have updated their knowledge and will be in possession of a highly prestigious Postgraduate Diploma that will allow them to advance both personally and professionally.

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

- The development of case studies presented by experts in Website Engineering
- The graphic, schematic, and practical contents which they contain, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be undertaken to improve learning
- A 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



Deepen your knowledge in the field of computer technologies by incorporating the most advanced aspects of this area of work"

## Introduction | 0 tech

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All the subjects and areas of knowledge have been compiled in a complete and up-to-date syllabus, in order to bring the student to the highest theoretical and practical level"

The program's teaching staff includes professionals from the sector 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 learning designed for real situations.

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

Succeed with the best and acquire the knowledge and skills you need to embark on Website Engineering.

An intensive professional development program that will allow you to operate in a sector with growing demand for professionals.

# 02 **Objectives**

Through a work approach totally adaptable to the student, this Postgraduate Diploma will progressively help them to acquire the necessary knowledge and skills to carry out their work, using the most advanced protocols and techniques in existence, propelling them to a higher professional level. A unique program designed by professionals with extensive experience in the sector.

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In this Postgraduate Diploma, you will be able to balance the efficiency of the most advanced learning methods with the flexibility of a program that is designed to be adapted to your schedule, without sacrificing quality"

# tech 10 | Objectives



## **General Objectives**

- Examine the characteristics of agile project management and determine the differences with predictive or traditional approaches
- Assimilate the key principles of agile mindset and practice
- Analyze the different agile methodologies and determine the best framework to adopt according to project characteristics
- Initiate, plan, execute, monitor, and close an agile project
- Lead and differentiate the roles of an agile team and recommend strategies for overcoming the challenges faced by dispersed or offshore agile teams
- Examine the process of creating web content using HTML markup language
- Determine the style and improve the appearance of a web page using CSS rules
- Develop applications with complex structures by using the different procedures, functions and objects that integrate JavaScript
- Generate specialized knowledge about PHP for the implementation of server-side applications
- Examine logical data model construction
- Examine web architecture, fitting it into the context of web and application development
- Generate specialized knowledge on the creation of web architecture and its implication in the success of the project
- Analyze the types and phases of web architecture, their advantages and applications
- Establish the relationship between web architecture and other web development phases and SEO processes

- Analyze the importance of user experience as an area that successfully encompasses technology, design and interaction
- Implement user experience design phases
- Apply the main research tools, methods and techniques to design user-centered digital experiences
- Create attractive, usable and accessible digital environments to offer satisfactory user experience





## Specific Objectives

#### Module 1. Web Programming Languages

- Integrate applications developed in PHP with MySQL databases
- Master customer interaction process using forms, cookies and sessions
- Gain specialized knowledge of web application and web page development, both on the client and server side
- Examine web programming languages and their implementation in development environments
- Analyze the different frameworks and libraries for the main web programming languages
- Determine the different optimization techniques to be considered during the development of any web project

#### Module 2. Website Engineering and Architecture

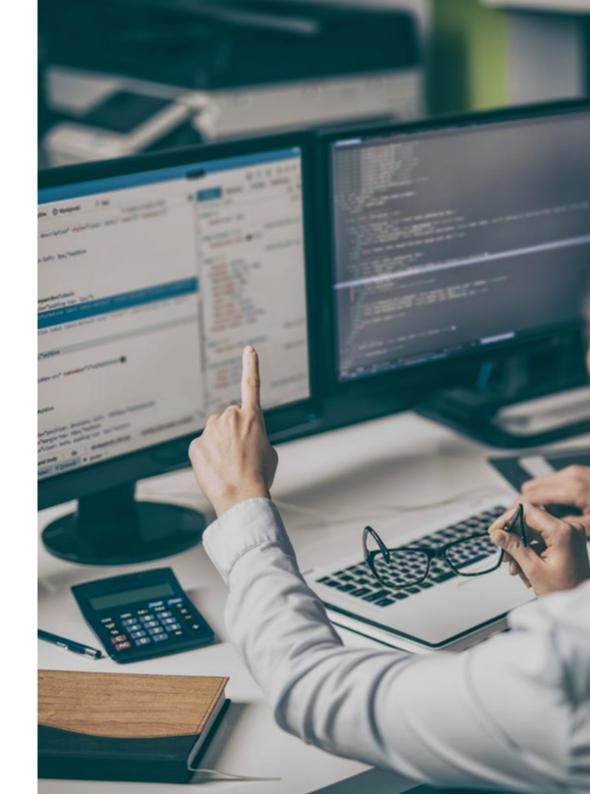
- Assess the origin of web architecture and its role in web site development
- Examine the three pillars of web architecture to recognize the importance of each when designing and building web projects
- Develop the different types of web architecture, their advantages and suitability
- Evaluate the stages that make up the web architecture, the correlation between them and their development
- Optimize the relationship between web architecture and user experience and the relationship between web architecture and SEO
- Analyze browsing and content organization prior to the modeling phase

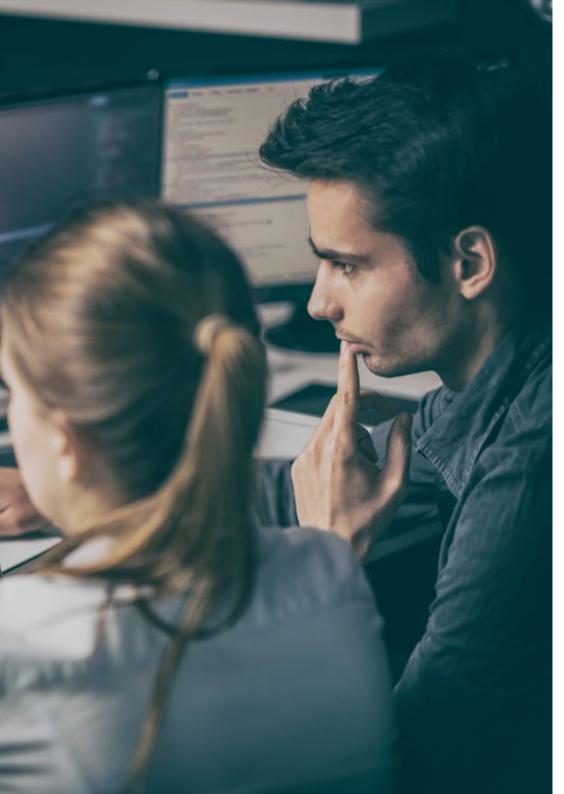
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# tech 12 | Objectives

#### Module 3. User Interface Design and Programming

- Detect user needs and behavioral patterns on the web
- Interpret analytical data to make business decisions
- Apply different user-centric marketing methodologies and tools
- Identify and implement usability principles to design effective and efficient applications
- Consider potential user disabilities to provide an accessible environment
- Develop the different theories, principles and types of web design
- Detail the different prototyping methods
- Anticipate interface errors and learn how to react when they occur
- Organize and prioritize information on the web
- Offer an intuitive browsing experience to users
- Gain a vision of UX Writing beyond writing
- Establish the relationship between user experience and organic positioning (SEO)
- Determine the objectives and the process to develop style guides





# 13 **tech**

#### Module 4. Agile Methodologies for Web Application Development

- Determine key elements in business cases, product vision and user stories
- Plan iterations based on team speed and iteration length
- Gather and prioritize requirements for agile projects
- Recognize guidelines for decomposing, estimating, and assigning user stories
- Develop agile practices to manage project quality and risk
- Calculate cost and schedule performance indicators for agile projects
- Analyze the keys to contracting for agile projects
- You will use tools and strategies to actively engage stakeholders throughout the life of a project
- Examine the leadership strategies of high-performing self-managed teams



Comprehensive yet focused; this program will provide you with the specific knowledge IT professionals need to compete among the best in the sector"

# 03 Course Management

In line with its maxim of offering an elite education for all, TECH counts on renowned professionals so that the student acquires a solid base of knowledge in Website Engineering. This Postgraduate Diploma has a highly qualified team with extensive experience in the sector, who will provide the best tools for students to develop their skills during the course. In this way, students have the guarantees they need to specialise at an international level in a booming sector that will catapult them to professional success.

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A comprehensive and highly relevant course for the IT professional, which will allow you to compete among the best in the industry"

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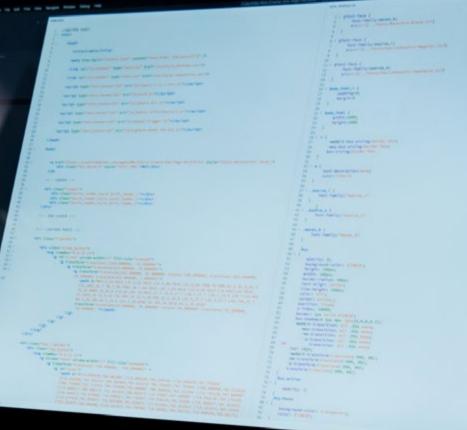
#### Management



#### Mr. Gris Ramos, Alejandro

- Director of Persatrace, web development and digital marketing agency
- Director of Club de Talentos
- Computer Engineer UNED
- Master's Degree in Digital Teaching and Learning Tech Education
- · Master's Degree in High Abilities and Inclusive Education
- Business Development Director at Alenda Golf
- Director of Web Applications Engineering Department at Brilogic
- · Web programmer at Grupo Ibergest
- Software/web programmer at Reebok Spain

# Course Management | 17 tech





#### Professors

#### Mr. Méndez Martínez, Brandon

- Web design and development HIADIS Graduated in Multimedia Engineering, University of Alicante
- Natural Language Processing (NLP) GPLSI (University of Alicante)
- Master's Degree in Web Services and Applications Development from the University of Alicante
- "Analysis of gamification techniques to learn complex subjects through collaborative applications" Technical Committee on Learning Technology Bulletin
- "Grama: a web application for learning and generating creative language" INTED2017 Proceedings
- Research in Human Language Technologies (TLH) GPLSI (University of Alicante)

#### Mr. Herrero Garcia, Diego

- Computer Applications Analyst, Manager and Developer
- Industrial Technical Engineer, University of La Rioja
- Industrial Engineer, University of La Rioja
- Expert Diploma in Innovation Management, University of La Rioja

# 04 Structure and Content

The syllabus has been designed based on educational efficiency, carefully selecting the contents to offer a comprehensive course, which includes all the fields of study that are essential to achieve real knowledge of the subject. Including the latest updates and aspects of the field. Therefore, a program has been established with modules that offer a broad overview of Website Engineering. From the first module students will see their knowledge expanding, which will enable them to develop professionally, knowing that they can count on the support of a team of experts.

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A high-quality Postgraduate Diploma that will allow the student to advance quickly and steadily in the acquisition of knowledge, with the scientific rigor world class education"

# tech 20 | Structure and Content

#### Module 1. Web Programming Languages

- 1.1. Web Programming
  - 1.1.1. The Web
  - 1.1.2. Web Design
  - 1.1.3. Web Development
    - 1.1.3.1. Front-End
      - 1.1.3.2. Back-End
      - 1.1.3.3. Full-Stack
  - 1.1.4. Types of Languages
    - 1.1.4.1. Programming Languages
    - 1.1.4.2. Markup Languages
    - 1.1.4.3. Scripting Languages
  - 1.1.5. Framework vs. Library
  - 1.1.6. Development Environments (IDE Integrated Development Environment)
  - 1.1.7. Browsers
- 1.2. HTML
  - 1.2.1. HTML
  - 1.2.2. Labels
    - 1.2.2.1. Nesting
    - 1.2.2.2. Attributes
  - 1.2.3. Documents Structure 1.2.3.1. Headings
    - 1.2.3.2. Body
  - 1.2.4. Semantic Components
    - 1.2.4.1. Root Elements
    - 1.2.4.2. Metadata
    - 1.2.4.3. Scripting
    - 1.2.4.4. Sections
    - 1.2.4.5. Comments

- 1.2.5. Text Content
  - 1.2.5.1. Headings
  - 1.2.5.2. Paragraphs
  - 1.2.5.3. Lists
  - 1.2.5.4. Text Formats
  - 1.2.5.5. Special Characters
- 1.2.6. Blocks
- 1.2.7. Hyperlinks
- 1.2.8. Embedded Content
- 1.2.9. Tables
- 1.2.10. Forms
- 1.3. CSS
  - 1.3.1. CSS
  - 1.3.2. Style Applications
  - 1.3.3. Rules
    - 1.3.3.1. Selectors
    - 1.3.3.2. Properties and Values
    - 1.3.3.3. Comments
  - 1.3.4. Style Collisions
    - 1.3.4.1. Heritage
    - 1.3.4.2. Cascade
  - 1.3.5. Selectors
  - 1.3.6. Combiners
  - 1.3.7. Pseudo Classes
  - 1.3.8. Pseudo Components
  - 1.3.9. Box Models
  - 1.3.10. Attributes
  - 1.3.11. Measuring Units 1.3.11.1. Absolute Units
    - 1.3.11.2. Relative Units
  - 1.3.12. Positioning
  - 1.3.13. Color
  - 1.3.14. Variables
  - 1.3.15. Animations

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#### 1.4. JavaScript

- 1.4.1. JavaScript
- 1.4.2. Code Inclusion in HTML
- 1.4.3. Syntax
  - 1.4.3.1. Statements
  - 1.4.3.2. Comments
- 1.4.4. Types of Data
- 1.4.5. Variables and Areas
- 1.4.6. Operators
- 1.4.7. Flow Control Structures
- 1.4.8. Functions
- 1.4.9. Document Object Model (DOM) Manipulation
- 1.4.10. Events
- 1.4.11. Object-Oriented Programming
  - 1.4.11.1. Classes
  - 1.4.11.2. Objects
    - 1.4.11.2.1. Properties
    - 1.4.11.2.2. Methods
- 1.4.12. AJAX

#### 1.5. PHP

- 1.5.1. PHP
- 1.5.2. Documents Structure
- 1.5.3. Generating HTML Content
- 1.5.4. Constants and Variables
- 1.5.5. Operators
- 1.5.6. Types of Data
- 1.5.7. Flow Control Structures
- 1.5.8. Functions
- 1.5.9. Forms, Cookies and Sessions

#### 1.6. MySQL

- 1.6.1. MySQL
- 1.6.2. Databases
- 1.6.3. Characters Codification
- 1.6.4. Types of Data
- 1.6.5. Users and Privileges
- 1.6.6. Accessing Databases
- 1.6.7. Creating and Manipulating Databases
- 1.6.8. Clauses
- 1.6.9. Queries
- 1.7. HTML and CSS Libraries and Frameworks
  - 1.7.1. Bootstrap
  - 1.7.2. Foundation
  - 1.7.3. Skeleton
  - 1.7.4. Bulma
  - 1.7.5. Materialize
  - 1.7.6. PureCSS
  - 1.7.7. TailwindCSS
  - 1.7.8. Susy
  - 1.7.9. Ulkit
- 1.8. JavaScript Frameworks and Libraries
  - 1.8.1. Angular
  - 1.8.2. jQuery
  - 1.8.3. React
  - 1.8.4. Meteor
  - 1.8.5. Polymer
  - 1.8.6. Mithril
  - 1.8.7. Aurelia
  - 1.8.8. Vue.js
  - 1.8.9. Ember.js
  - 1.8.10. Node.js
  - 1.8.11. Backbone.js

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- 1.9. PHP Libraries and Frameworks
  - 1.9.1. Laravel
  - 1.9.2. Symfony
  - 1.9.3. Zend
  - 1.9.4. Codelgniter
  - 1.9.5. FuelPHP
  - 1.9.6. CakePHP
  - 1.9.7. Phalcon
  - 1.9.8. Yii
  - 1.9.9. Slim
- 1.10. Web Programming Techniques
  - 1.10.1. Beautify
  - 1.10.2. Minimizing Code
  - 1.10.3. Image Optimization
    - 1.10.3.1. File Formats
    - 1.10.3.2. Compression Quality vs. Size
  - 1.10.4. Code Normalization and Compatibility between Browsers
  - 1.10.5. Code Debugging and Validation
  - 1.10.6. Bundling
  - 1.10.7. Repository and Version Control

#### Module 2. Website Engineering and Architecture

- 2.1. Website Engineering and Architecture
  - 2.1.1. Website Architecture
  - 2.1.2. Uses and Applications
- 2.2. The Pillars of Web Architecture
  - 2.2.1. Public
  - 2.2.2. Contents
  - 2.2.3. Context
- 2.3. Horizontal Web Architecture
  - 2.3.1. Advantages
  - 2.3.2. Examples:

- 2.4. Vertical Web Architecture
  - 2.4.1. Advantages
  - 2.4.2. Examples:
- 2.5. Web Architecture Phases
  - 2.5.1. Taxonomy
  - 2.5.2. Labelling
  - 2.5.3. Site Map
- 2.6. Web Architecture and Web Design
  - 2.6.1. Types of Pages
  - 2.6.2. Component Presence
  - 2.6.3. Linking Needs
- 2.7. Web Architecture and Web Browsing
  - 2.7.1. Structure
  - 2.7.2. Categorization
  - 2.7.3. Marking
  - 2.7.4. Usability
- 2.8. Web Architecture and SEO
  - 2.8.1. Benchmark
  - 2.8.2. Keyword Research
  - 2.8.3. URLs
  - 2.8.4. Internal Links
  - 2.8.5. Cannibalization
- 2.9. Web Architecture Tools
  - 2.9.1. Mindmeister Mind Maps
  - 2.9.2. Analyzing URLs Screaming Frog SEO Spider
  - 2.9.3. Analyzing Web Traffic Using Google Analytics
- 2.10. Google Search Console
  - 2.10.1. Keyword Analysis
  - 2.10.2. Opportunity Keywords
  - 2.10.3. Website Performance

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#### Module 3. User Interface Design and Programming

- 3.1. User Experience
  - 3.1.1. User Experience (UX)
  - 3.1.2. Interface Design (UI)
  - 3.1.3. Interaction Design (IxD)
  - 3.1.4. Context and New Paradigms
- 3.2. User Interface Design
  - 3.2.1. Design and UX
  - 3.2.2. Web Design Psychology
  - 3.2.3. Design Thinking
  - 3.2.4. Types of Web Design
    - 3.2.4.1. Fixed Design
    - 3.2.4.2. Elastic Design
    - 3.2.4.3. Liquid Design
    - 3.2.4.4. Responsive Design
    - 3.2.4.5. Flexible Design
  - 3.2.5. Design System & Atomic Design
- 3.3. UX or User Research
  - 3.3.1. UX Research
  - 3.3.2. Importance and Process
  - 3.3.3. Research and Analysis
  - 3.3.4. Heuristic Evaluation
  - 3.3.5. Eye Tracking
  - 3.3.6. Test A/B
  - 3.3.7. Crazy Egg
  - 3.3.8. Card Sorting
  - 3.3.9. Customer Journey
  - 3.3.10. Other Techniques

#### 3.4. UX Writing

- 3.4.1. UX Writing
- 3.4.2. UX Writing vs. Copywriting
- 3.4.3. Uses and Benefits
- 3.4.4. Microcopy
- 3.4.5. Web Structure
- 3.5. Interaction Design and Web Prototyping
  - 3.5.1. Prototyping Phase
  - 3.5.2. Methods
    - 3.5.2.1. Sketches
    - 3.5.2.2. Wireframes
    - 3.5.2.3. Mockups
  - 3.5.3. Browsing Flows
  - 3.5.4. Interaction
  - 3.5.5. Managing Online Tools
- 3.6. Usability
  - 3.6.1. Impact of Usability on User Experience
  - 3.6.2. Metrics
  - 3.6.3. Tests
    - 3.6.3.1. Internal Usability Test
    - 3.6.3.2. Unmoderated Remote Usability Testing
    - 3.6.3.3. Moderated Remote Usability Testing
  - 3.6.4. Assessment Tools

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#### 3.7. Accessibility

- 3.7.1. Web Accessibility
- 3.7.2. Beneficiaries
- 3.7.3. Disabilities
  - 3.7.3.1. Visual Impairment
  - 3.7.3.2. Hearing Impairment
  - 3.7.3.3. Motor Disability
  - 3.7.3.4. Speech Impairment
  - 3.7.3.5. Cognitive Impairment
- 3.7.4. Accessibility Guidelines
  - 3.7.4.1. WCAG 2.1 and Priorities
  - 3.7.4.2. Perceptible
  - 3.7.4.3. Operable
  - 3.7.4.4. Comprehensible
  - 3.7.4.5. Robust
- 3.7.5. Validation Tools and Techniques
- 3.8. Information Architectures
  - 3.8.1. Organization Systems
  - 3.8.2. Labeling Systems
  - 3.8.3. Browsing Systems
  - 3.8.4. Search Systems
- 3.9. SXO: UX and SEO
  - 3.9.1. Similarities between UX and SEO
  - 3.9.2. SEO Factors
  - 3.9.3. Impact and Benefits of Optimizing UX for SEO
  - 3.9.4. UX Advice to Improve SEO
- 3.10. Style Guides
  - 3.10.1. Objectives
  - 3.10.2. Context
  - 3.10.3. Color Palettes

- 3.10.4. Typography
- 3.10.5. Iconography
- 3.10.6. Components
  - 3.10.6.1. Basic Components
  - 3.10.6.2. Complex Components
- 3.10.7. Layout
- 3.10.8. Consistency and Identity
- 3.10.9. Utility Extension
- 3.10.10. Examples:

#### Module 4. Methodologies for Web Application Development

- 4.1. Agile Project Management: Basis for Web Application Development
  - 4.1.1. The Agile Approach
  - 4.1.2. Agile Values and Principles
  - 4.1.3. Traditional and Agile Project Management
  - 4.1.4. Agile Project Management Models
  - 4.1.5. Agile Methodologies
- 4.2. Using an Agile Approach for Web Application Development
  - 4.2.1. Myths and Realities Regarding Agility
  - 4.2.2. Agile Practices
  - 4.2.3. Selecting Agile Practices for a Project
  - 4.2.4. Developing an Agile Mentality
  - 4.2.5. Implementing and Communicating the Adoption of Agile Principles
- 4.3. Agile Methodologies for Web Application Development
  - 4.3.1. Lean Development
  - 4.3.2. Extreme Programming (XP)
  - 4.3.3. Crystal Methods
  - 4.3.4. Feature-Driven Development (FDD)
  - 4.3.5. Dynamic Systems Development Method (DSDM) and Unified Agile Processes

# Structure and Content 25 tech

- 4.4. Agile Methodologies for Advanced Web Application Development
  - 4.4.1. Kanban Method
  - 4.4.2. Scrum and Scrumban
  - 4.4.3. DA Disciplined Agile
  - 4.4.4. Hybrid Methodologies
  - 4.4.5. Comparing Agile Methodologies
- 4.5. Web Development Projects: Planning Process
  - 4.5.1. Starting an Agile Project
  - 4.5.2. Agile Planning Process
  - 4.5.3. Gathering Requirements and User History
  - 4.5.4. Establishing Project Scope Using Agile Methods: Product Backlog
  - 4.5.5. Agile Tools to Prioritize Requirements
- 4.6. Stakeholders in Agile Projects for Web Application Development
  - 4.6.1. Stakeholders in Agile Projects
  - 4.6.2. Promoting Effective Participation among Stakeholders
  - 4.6.3. Participatory Decision-Making
  - 4.6.4. Agile Knowledge Sharing and Gathering
- 4.7. Launch Plan and Estimate Creation
  - 4.7.1. Launch Plan
  - 4.7.2. Estimating User History Size
  - 4.7.3. Estimating Speed
  - 4.7.4. Agile Estimation Techniques
  - 4.7.5. User History Prioritization
- 4.8. Iterations Planning and Monitoring
  - 4.8.1. Iteration and Progressive Development
  - 4.8.2. Iteration Planning Process
  - 4.8.3. Creating Iteration Backlog
  - 4.8.4. Buffers and Agile Schedule
  - 4.8.5. Iteration Progress Monitoring
  - 4.8.6. Monitoring and Release Progress Report

- 4.9. Team Leadership in Web Application Development
  - 4.9.1. Agile Teams
  - 4.9.2. Agile Project Leader
  - 4.9.3. The Agile Team
  - 4.9.4. Virtual Agile Team Management
  - 4.9.5. Coaching for Team Performance Improvement
- 4.10. Value Management and Delivery in Web Development Projects
  - 4.10.1. Delivery Processes Focused on Value
  - 4.10.2. Product Quality
  - 4.10.3. Quality Agile Practices
  - 4.10.4. Risk Management
  - 4.10.5. Agile Contracts
  - 4.10.6. Value Gained Management in Agile Projects



A unique program that stands out due to the quality of its contents and its excellent teaching staff"

# 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"

# tech 28 | Methodology

#### Case Study to contextualize all content

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





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

# Methodology | 29 tech



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.

# tech 30 | Methodology

#### **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.



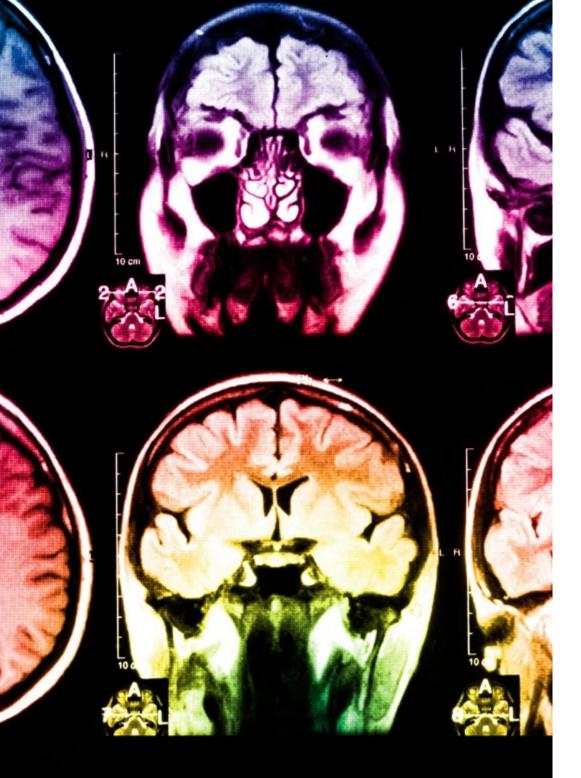
## Methodology | 31 tech

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.



# tech 32 | Methodology

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.

30%

10%

8%

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.

# Methodology | 33 tech



#### **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.



20%

25%

# 06 **Certificate**

The Postgraduate Diploma in Website Engineering 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"

# tech 36 | Certificate

This program will allow you to obtain your **Postgraduate Diploma in Website Engineering** 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 Website Engineering** Modality: **online** Duration: **6 months** Accreditation: **24 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.

tecn global university Postgraduate Diploma Website Engineering » Modality: online » Duration: 6 months » Certificate: TECH Global University » Credits: 24 ECTS » Schedule: at your own pace » Exams: online

Postgraduate Diploma Website Engineering