



Master's Degree Website Management Engineering

» Modality: online

» Duration: 12 months

» Certificate: TECH Global University

» Credits: 60 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/engineering/master-degree/master-website-management-engineering

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		Methodology		Certificate	

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tech 06 | Introduction

The Internet and the digital environment have rapidly transformed the world. Numerous tasks that were previously performed analogically and offline, today have come to be carried out in the digital world; so it has become essential to have an online presence to perform all kinds of management, promotions and sales. Furthermore, the democratizing nature of the Internet has meant that all kinds of people and institutions have the possibility of creating their own web page for different purposes, which has given rise to countless job opportunities.

This need to be present in the online environment has led to the emergence of different professional positions with expertise in different web spaces. However, there are some positions that, although in demand, still suffer a skills shortage. Thus, this Master's Degree in Website Management Engineering from the TECH School of Engineering fills this gap and offers students a definitive opportunity to become highly sought-after experts.

After completing this program, students will possess the necessary knowledge to carry out effective and competitive web management, thanks to tools and contents prepared by the best experts in the field. As a result, students will provide their clients and employers with a set of services related to the administration of web pages that will make them a valuable resource in this professional field.

To ensure that students get the most out of the contents provided by this program, TECH has developed a detailed methodology, with innovative and totally flexible teaching, tailored to their individual needs, and they will be accompanied at all times by experts in the field.

This **Master's Degree in Website Management Engineering** contains the most complete and up-to-date program on the market. The most important features include:

- Acquisition of essential knowledge to become an expert in web management
- A 100% digital and practical approach, which makes the content directly applicable in the professional environment
- Flexible study methodology adapted to each student, taking their needs into account
- The possibility of developing innovative knowledge in an ever-changing field that requires constant adaptation
- Lessons carried out in different ways, both theoretical and practical, by experts in web management who will make all their knowledge available to students in order to lead them to success
- Content that is accessible from any fixed or portable device with an Internet connection



Introduction | 07 tech



The teaching staff includes professionals from the sector who contribute their professional experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

Its multimedia content, developed with the latest educational technology, will allow the professional a situated and contextual learning. In other words, a simulated environment that will provide immersive education programmed to prepare for real situations.

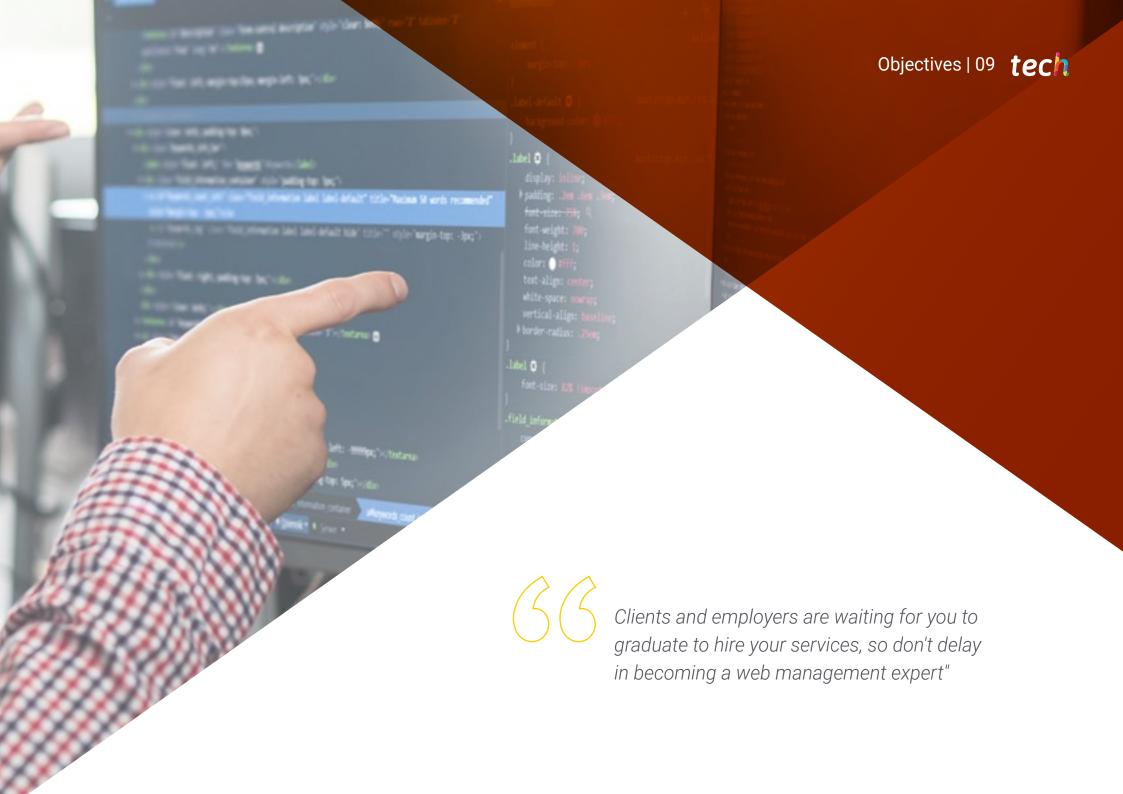
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced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

Specialize and find the career opportunities you deserve with this impressive Master's Degree.

Give your career a boost: learn how to manage websites at the highest level.







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General Objectives

- Examine the process of creating web content through the HTML markup language, as well as determining the style and improving 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 the types and stages of web architecture, linking it to web and application development
- Build expertise on the creation of web architecture and its implication in the success of the project
- Establish steps to perform security audits in web environments, focussing on the most commonly detected and exploited vulnerabilities globally and their prevention
- Establish a security incident response process
- 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
- Develop specialized knowledge to create an E-Commerce business from scratch
- Analyze databases and programming structures
- Examine a successful marketing strategy and determine how to carry out promotional campaigns
- Establish a strategy for a web environment under development and production
- Install, manage and optimize, in a comprehensive manner, a web hosting service in production and develop a secure environment against external attacks and Backups
- Analyze and examine the context of content managers in web projects



Specific Objectives

Module 1. Ethical and Legal Aspects of the Web

- Establish a classification according to legal aspects surrounding websites
- Specify those factors that mark the difference between presence or activity
- In-depth examination of the laws commonly used in the web environment
- Identify the practical matters that ensure proper compliance with the standard
- Present the real-world consequences of our obligations

Module 2. 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



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Module 3. Web Programming Languages

- Integrate applications developed in PHP with MySQL databases
- Master customer interaction processes 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 4. Website Engineering and Architecture

- Assess the origin of web architecture and its role in website 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

Module 5. Website Security Systems

- ◆ Analyze the OWASP Top 10 project
- Manage CMS Environment Security
- Check the differences between the different authentication methods
- Determine the most common vulnerabilities found in web applications
- Identify the different attacks and risks in APIs
- Analyze the different HTTP headers in terms of security
- Distinguish the different types of web audits that we can undertake
- Evaluate web vulnerabilities associated with communications

Module 6. 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

Module 7. E-Commerce Creation and Administration

- Develop the structure for the creation of an E-Commerce store
- Assess the professional E-Commerce market
- Analyze the different options that exist to develop an E-Commerce business
- Set up an online store using the different CMSs currently available on the online market
- Analyze the logistic and functional system as well as virtual payment systems
- Carry out a comprehensive marketing strategy and roadmap
- Develop online promotions and create traffic to the store
- Manage sales and customers
- Seek full search engine optimization
- Build a complete store from the ground up to the first sales

Module 8. Web Server Administration

- Develop a real high-availability working environment
- Determine the necessary parameters to create a cloud hosting service
- Examine the different versions of operating systems that best suit your needs
- Determine a web administration environment focused on external customers
- Set up configurations for private/public networks
- Create a complete hosting service for any type of website or platform
- Examine security settings for anti-malware, viruses, brute force attacks and others
- Analyzing a high-security backup system with redundancy
- Identify and solve problems in real environments

Module 9. Web Content Managers

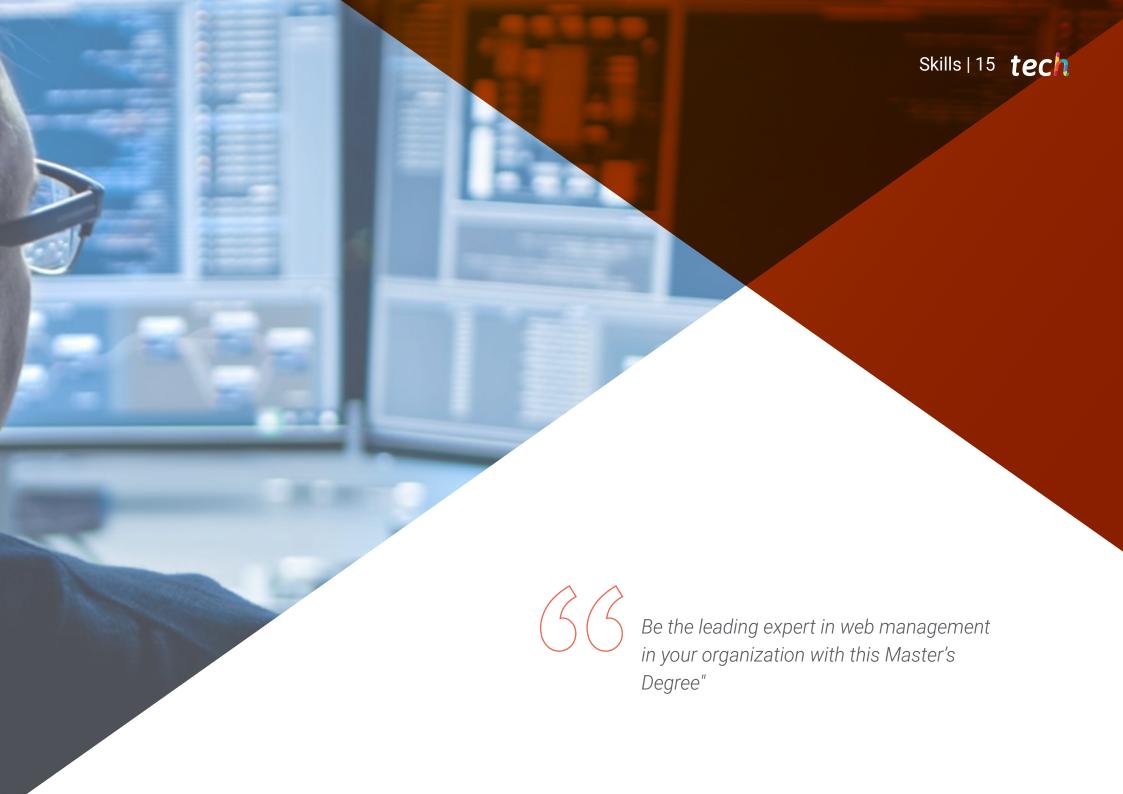
- Identify the different types of content management systems and their tools
- Evaluate the best content manager according to the web project scope
- Analyze and delve deeper into the main resources used by content managers and their implications
- Establish the relation between content management systems and web project modeling
- Demonstrate the importance of content managers in SEO practice
- Compare different content management systems, their features and applications

Module 10. Website Marketing

- Determine the project business objectives
- Identify the target audience
- Interpret analytical data to make business decisions
- Apply different user-centric marketing methodologies and tools







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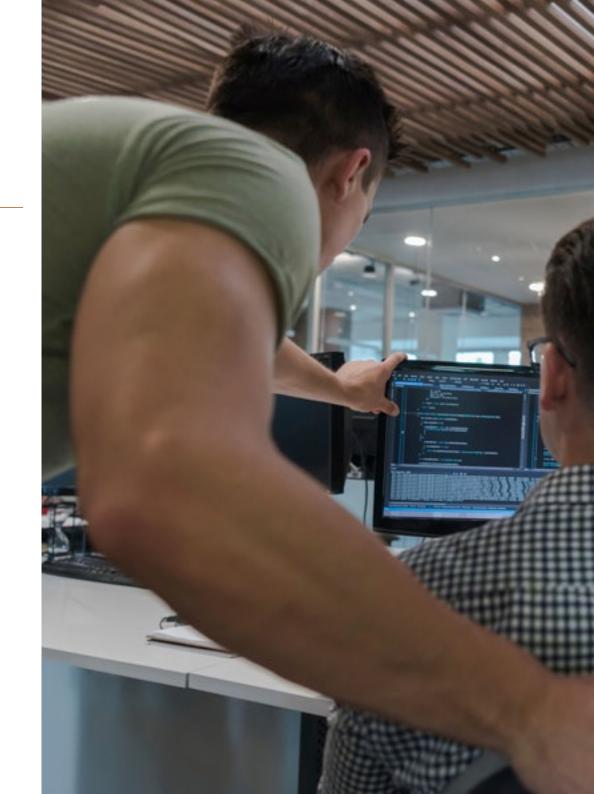


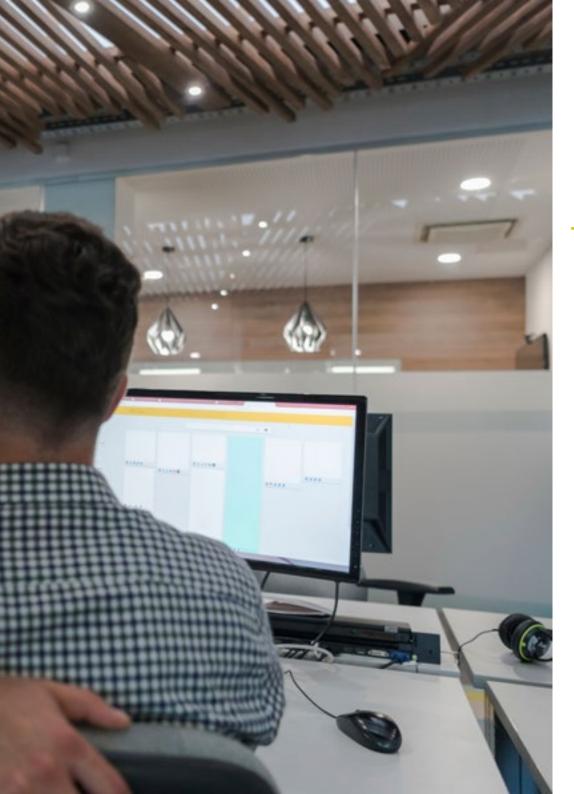
General Skills

- Respond to the basic demands of Website Management Engineering
- Understand and become familiar with all the elements that go into the creation and management of web pages
- Efficiently and effectively manage all types of web services
- To be able to react adequately to the different events that may arise in the web management environment



Your professional career will shine thanks to the skills you will develop in this program"



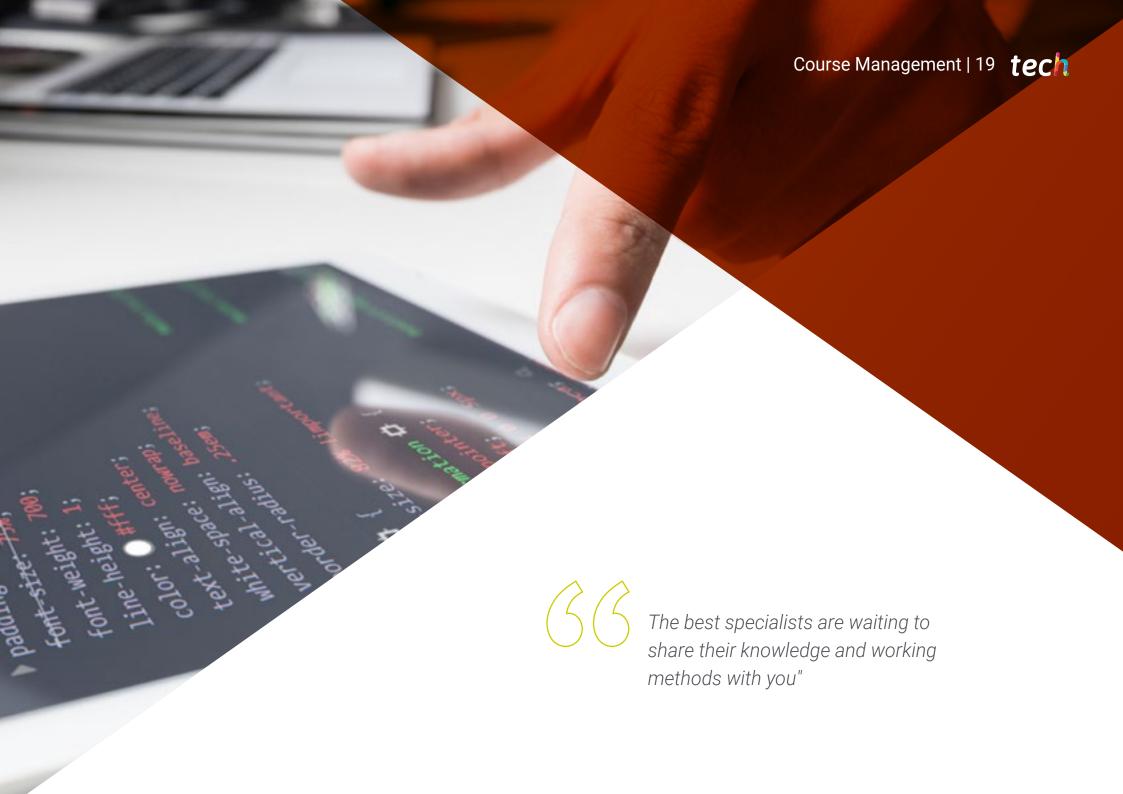




Specific Skills

- Develop highly complex websites
- Create attractive, usable and accessible digital environments to offer satisfactory user experience
- Examine and diagnose problems, providing possible solutions, for different web services
- Analyze the different web solutions on the market to offer future customers the best possible service
- Analyze the types and stages of web architecture, its advantages and applications, in order to offer the best possible solutions in all types of situations
- Establish steps to perform security audits in web environments, focussing on the most commonly detected and exploited vulnerabilities globally and their prevention
- Examine the process of creating web content through the HTML markup language, as well as determining the style and improving 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 a successful marketing strategy and determine how to carry out promotional campaigns





Management



Mr. Gris Ramos, Alejandro

- Technical Engineer in Computer Management
- CEO & Founder of Club de Talentos
- CEO Persatrace, Online Marketing Agency
- Business Development Director at Alenda Golf
- Director of PI Study Center
- Director of the Web Applications Engineering Department at Brilogic
- Web Programmer at Grupo Ibergest
- Software/Web Programmer at Reebok Spain
- Technical Engineer in Computer Management
- Master's Degree in Digital Teaching and Learning, Tech Education
- Master's Degree in High Abilities and Inclusive Education
- Master's Degree in E-Commerce
- Specialist in Latest Technologies Applied to Teaching, Digital Marketing, Web Applications and Internet Business Development

Professors

Mr. Vicente Miralles, David

- ◆ CEO at CE Informática
- Responsible for Expansion Strategies in ICU Medical Technologies
- CEO at Computer Elche, S.L.
- Professor in private entities
- \bullet Diploma in Computer Engineering from the Miguel Hernández University of Elche

Mr. Herrero García, Diego

- Responsible Director of the DHG Engineering Team
- Support Team Manager at JIG Internet Consulting
- Computer Programmer at Hiberus Tecnologia.
- Master's Degree in Industrial Engineering from the University of La Rioja.
- Industrial and Electronic Engineer from the University of La Rioja.

Mr. Alfaro, José

- Team Leader Entertainment at Disneyland Paris
- Entertainment Operations Field Trainer at Disneyland Paris
- Guest Relations at Disneyland Paris
- Interpreter and Character Presenter at Disneyland Paris
- Cruise Entertainment Staff at Royal Caribbean
- Tourist Entertainer at Klan-e
- Presenter, Editor and Cameraman at Alacantí TV
- Graduate in Journalism from the Miguel Hernández University of Elche.
- Specialization in Project Management from the School of Industrial Organization.

Mr. Méndez Martínez, Brandon

- Designer and Web Development at the Service of Marketing
- TLH and PLN researcher in Language and Computer Systems faculties
- Master's Degree in Software Engineering from the University of Alicante
- Master's Degree in Multimedia Engineering from the University of Alicante
- Web Programmer at the University of Alicante

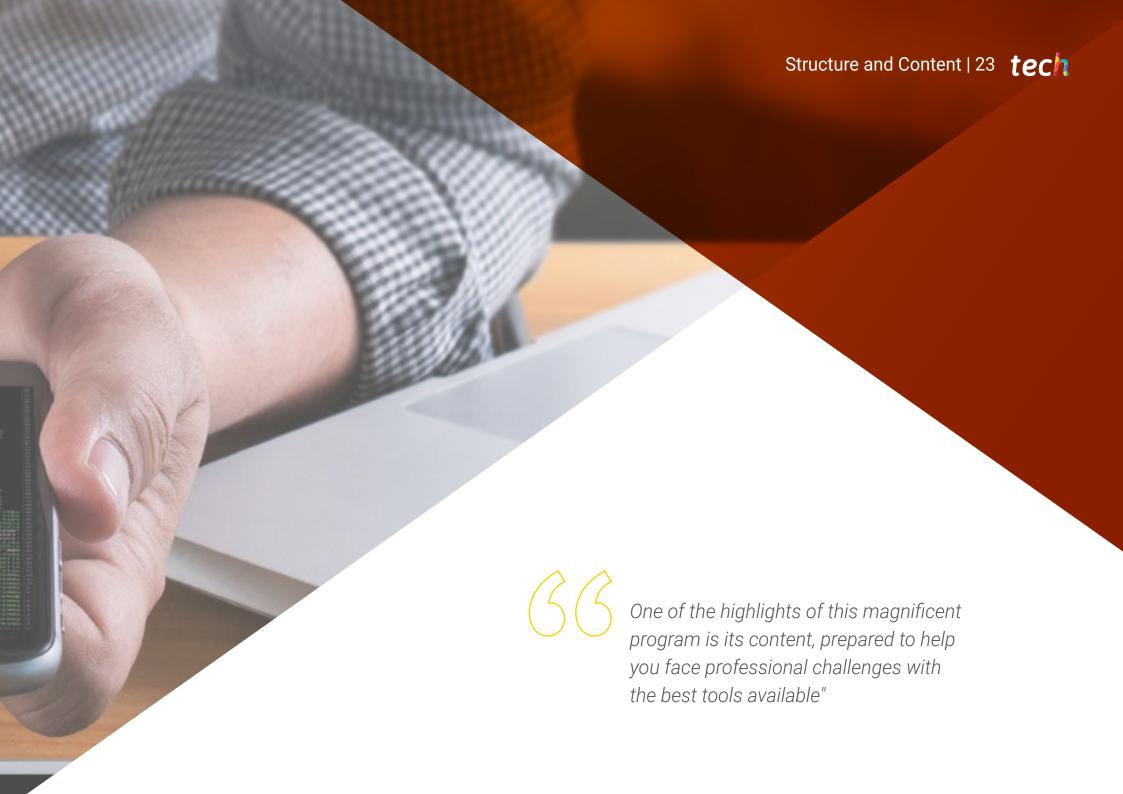
Mr. Del Moral García, Francisco José

- Cyber Security Manager at Roca Group
- Cyber Security Analyst at Roca Group
- Security Information Analyst at Allianz Technology
- Security Analyst at PageGroup
- Solutions Assistant at Everis
- Security and Risk Analyst at Eurofins
- Degree in Telecommunication Technologies Engineering from the University of Granada with specialization in Telecommunication Systems
- Master's Degree in Computer Security at the International University of La Rioja

Mr. Boix Tremiño, Jorge

- Founder of HostingTG
- Founder of GrupoTG
- ◆ Co-founder of TiendaWebOnline
- Graphic Designer at Intergon2000
- Graphic Designer at Ibertex
- ◆ IT Project Manager at Xion Animation
- Sales and Marketing Director at Kingest
- Computer Engineer at UNED
- Business Excellence Award from the Institute for Professional Excellence.
- European Medal for Merit at Work by the European Association for Economy and Competitiveness.





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Module 1. Ethical and Legal Aspects of the Web

- 1.1. Web Regulations in Force in Europe
- 1.2. Legal Aspects of the Web (Presence vs. Activity)
 - 1.2.1. Preliminary Matters: Classification
 - 1.2.2. Web Classification According to Legal Framework
 - 1.2.3. Practical Legal Aspects of Presence-Only Websites
 - 1.2.4. Practical Legal Aspects of E-Commerce Websites
 - 1.2.5. Practical Legal Aspects of Social Networks, Forums and Blogs
 - 1.2.6. Practical Legal Aspects of Download and Multimedia Content Websites
- 1.3. Laws and Regulations Commonly Used on Websites
 - 1.3.1. The LSSICE Law (Law on Information Society Services and Electronic Commerce)
 - 1.3.2. The RGPD- General Data Protection Regulation
 - 1.3.3. The LOPDGDD Law (Organic Law on the Protection of Personal Data and Guarantee of Digital Rights)
- 1.4. Laws and Regulations Specifically Used on Websites
 - 1.4.1. Law on General Contracting Conditions
 - 1.4.2. Law on Retail Trade Management
 - 1.4.3. Law on Intellectual Property
 - 1.4.4 General Law for the Defense of Consumers and Users
- 1.5. European Taxation for e-commerce
 - 1.5.1. Preliminary Matters: Taxation as a Set of Laws
 - 1.5.2. European Taxation Framework: Operating under European Regulations
- 1.6. Child Protection on the Web
 - 1.6.1. The Legal Rights and Obligations of Parents and Guardians as a Starting Point
 - 1.6.2. Training as the Best Tool for Prevention
 - 1.6.3. Minors on Social Media
 - 1.6.4. Fraudulent Purchases and Contracting
- 1.7. Practical Aspects for Compliance Assurance
 - 1.7.1. Reasons behind Legal Aspects on Websites
 - 1.7.2. Moving toward Legal Compliance in Practical Aspects
 - 1.7.3. Typified Penalties for the Most Common Non-Compliances

- 1.8. Tools and Procedures
 - 1.8.1. Plugins and Addons Most Commonly Used
 - 1.8.2. Other Essential Tools and Services
- 1.9. Implications and Results of Practical Legal Aspects
 - 1.9.1. Legal Rulings (I): LSSICE
 - 1.9.2. Legal Rulings (II): RGPD / LOPDGDD
- 1.10. E-Commerce Tax Offenses against Intellectual Property and against Consumers and Users
 - 1.10.1. Legal Rulings (III): E-Commerce Tax Offenses
 - 1.10.2. Legal Rulings (IV): Intellectual Property Offenses
 - 1.10.3. Legal Rulings (V): Offenses against Consumers and Users

Module 2. Web Application Development Methodologies

- 2.1. Agile Project Management: Foundation for Web Application Development
 - 2.1.1. The Agile Approach
 - 2.1.2. Agile Values and Principles
 - 2.1.3. Traditional Project Management and Agile
 - 2.1.4. Agile Project Management Models
 - 2.1.5. Agile Methodologies
- 2.2. Using Agile Approach for Web Application Development
 - 2.2.1. Myths and Realities Regarding Agility
 - 2.2.2. Agile Practices
 - 2.2.3. Selecting Agile Practices for a Project
 - 2.2.4. Developing an Agile Mentality
 - 2.2.5. Implementing and Communicating Adopting Agile Principles
- 2.3. Agile Methodologies for Web Application Development
 - 2.3.1. Lean Development
 - 2.3.2. Extreme Programming (XP)
 - 2.3.3. Crystal Methods
 - 2.3.4. Feature Driven Development (FDD)
 - 2.3.5. Dynamic Systems Development Method (DSDM) and Unified Agile Processes



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2.4.	Aaile	Methodologies	for Advanced \	Web Application	Development

- 2.4.1. Kanban Method
- 2.4.2. Scrum and Scrumban
- 2.4.3. DA Disciplined Agile
- 2.4.4. Hybrid Methodologies
- 2.4.5. Comparing Agile Methodologies

2.5. Web Development Projects: Planning Process

- 2.5.1. Starting an Agile Project
- 2.5.2. Agile Planning Process
- 2.5.3. Gathering Requirements and User History
- 2.5.4. Establishing Project Scope Using Agile Methods: Product Backlog
- 2.5.5. Agile Tools to Prioritize Requirements

2.6. Stakeholders in Agile Projects for Web Application Development

- 2.6.1. Stakeholders in Agile Projects
- 2.6.2. Fomenting Effective Participation among Stakeholders
- 2.6.3. Participatory Decision Making
- 2.6.4. Agile Knowledge Sharing and Gathering

2.7. Launch Plan and Estimate Creation

- 2.7.1. Launch Plan
- 2.7.2. Estimating User History Size
- 2.7.3. Estimating Speed
- 2.7.4. Agile Estimation Techniques
- 2.7.5. User History Prioritization

2.8. Iterations Planning and Monitoring

- 2.8.1. Iteration and Progressive Development
- 2.8.2. Iteration Planning Process
- 2.8.3. Creating Iteration Backlog
- 2.8.4. Buffers and Agile Schedule
- 2.8.5. Iteration Progress Monitoring
- 2.8.6. Monitoring and Release Progress Report

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2.9.	Team L	eadership in Web Application Development	3.2.	HTML	
	2.9.1.	Agile Teams		3.2.1.	HTML
	2.9.2.	Agile Project Leader		3.2.2.	Labels
	2.9.3.	The Agile Team			3.2.2.1. Nesting
	2.9.4.	Virtual Agile Team Management			3.2.2.2. Attributes
	2.9.5.	Coaching for Team Performance Improvement		3.2.3.	Documents Structure
2.10.	Value M	lanagement and Delivery in Web Development Projects			3.2.3.1. Headings
	2.10.1.	Delivery Processes Focused on Value			3.2.3.2. Body
	2.10.2.	Product Quality		3.2.4.	Semantic Components
	2.10.3.	Quality Agile Practices			3.2.4.1. Root Elements
	2.10.4.	Risk Management			3.2.4.2. Metadata
	2.10.5.	Agile Contracts			3.2.4.3. Scripting
	2.10.6.	Value Gained Management in Agile Projects			3.2.4.4. Sections
Mod	ule 3. V	Veb Programming Languages			3.2.4.5. Comments
				3.2.5.	Text Content
3.1.		ogramming			3.2.5.1. Headings
	3.1.1.	The Web			3.2.5.2. Paragraphs
	3.1.2.	Web Design			3.2.5.3. Lists
	3.1.3.	Web Development			3.2.5.4. Text Formats
		3.1.3.1. Front-End			3.2.5.5. Special Characters
		3.1.3.2. Back-End		3.2.6.	Blocks
		3.1.3.3. Full-Stack		3.2.7.	Hyperlinks
	3.1.4.	Types of Languages		3.2.8.	Embedded Content
		3.1.4.1. Programming Languages		3.2.9.	Tables
		3.1.4.2. Markup Languages		3.2.10.	Forms
		3.1.4.3. Scripting Languages	3.3.	CSS	
	3.1.5.	Framework vs. Libraries		3.3.1.	CSS
	3.1.6.	Development Environments (IDE - Integrated Development Environment)		3.3.2.	Style Applications
	3.1.7.	Navigation Systems		3.3.3.	Rules
					3.3.3.1. Selectors
					3.3.3.2. Properties and Value
					3.3.3.3. Comments

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3.3.4.	Style Collisions		3.4.11.	Object Oriented Programming
	3.3.4.1. Heritage			3.4.11.1. Classes
	3.3.4.2. Cascade			3.4.11.2. Objects
3.3.5.	Selectors			3.4.11.2.1. Properties
3.3.6.	Combiners			3.4.11.2.2. Methods
3.3.7.	Pseudo Classes		3.4.12.	AJAX
3.3.8.	Pseudo Components	3.5.	PHP	
3.3.9.	Box Models		3.5.1.	PHP
3.3.10.	Attributes		3.5.2.	Documents Structure
3.3.11.	Measuring Units		3.5.3.	Generating HTML Content
	3.3.11.1. Absolute Units		3.5.4.	Constants and Variables
	3.3.11.2. Relative Units		3.5.5.	Operators
3.3.12.	Positioning		3.5.6.	Types of Data
3.3.13.	Colors		3.5.7.	Flow Control Structures
3.3.14.	Variables		3.5.8.	Functions
3.3.15.	Animations		3.5.9.	Forms, Cookies and Sessions
JavaSc	ript	3.6.	MySQL	
3.4.1.	JavaScript		3.6.1.	MySQL
3.4.2.	Code Inclusion in HTML		3.6.2.	Databases
3.4.3.	Syntax		3.6.3.	Characters Codification
	3.4.3.1. Statements		3.6.4.	Types of Data
	3.4.3.2. Comments		3.6.5.	Users and Privileges
3.4.4.	Types of Data		3.6.6.	Accessing Databases
3.4.5.	Variables and Areas		3.6.7.	Creating and Manipulating Databases
3.4.6.	Operators		3.6.8.	Clauses
3.4.7.	Flow Control Structures		3.6.9.	Consultas
3.4.8.	Functions	3.7.	HTML a	and CSS Libraries and Frameworks
3.4.9.	Document Object Model (DOM) Manipulation		3.7.1.	Bootstrap
3.4.10.	Events		3.7.2.	Foundation
			3.7.3.	Skeleton
			3.7.4.	Bulma

3.4.

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	3.7.5.	Materialize			
	3.7.6.	PureCSS			
	3.7.7.	TailwindCSS			
	3.7.8.	Susy			
	3.7.9.	Ulkit			
3.8.	JavaSc	ript Libraries and Frameworks			
	3.8.1.	Angular			
	3.8.2.	jQuery			
	3.8.3.	React			
	3.8.4.	Meteor			
	3.8.5.	Polymer			
	3.8.6.	Mithril			
	3.8.7.	Aurelia			
	3.8.8.	Vue.js			
	3.8.9.	Ember.js			
	3.8.10.	Node.js			
	3.8.11.	Backbone.js			
3.9.	PHP Libraries and Frameworks				
	3.9.1.	Laravel			
	3.9.2.	Symfony			
	3.9.3.	Zend			
	3.9.4.	Codelgniter			
	3.9.5.	FuelPHP			
	3.9.6.	CakePHP			
	3.9.7.	Phalcon			
	3.9.8.	Yii			
	3.9.9.	Slim			
3.10.	Web Pro	ogramming Techniques			
	3.10.1.	Beautify			
	3.10.2.	Minimizing Code			
	3.10.3.	Image Optimization			
		3.10.3.1. File Formats			
		3.10.3.2. Compression Quality vs. Size			

3.10.4. Code Normalization and Compatibility between Browsers 3.10.5. Code Debugging and Validation 3.10.6. Bundling 3.10.7. Repository and Version Control Module 4. Website Engineering and Architecture

- 4.1. Website Engineering and Architecture 4.1.1. Website Architecture
 - 4.1.2. Uses and Applications
- 4.2. The Pillars of Web Architecture
 - 4.2.1. Public
 - 4.2.2. Contents
 - 4.2.3. Context
- 4.3. Horizontal Web Architecture
 - 4.3.1. Advantages
 - 4.3.2. Examples:
- 4.4. Vertical Web Architecture
 - 4.4.1. Advantages
 - 4.4.2. Examples:
- 4.5. Web Architecture Phases
 - 4.5.1. Taxonomy
 - 4.5.2. Labelling
 - 4.5.3. Site Map
- Web Architecture and Web Design
 - 4.6.1. Types of Pages
 - 4.6.2. Component Presence
 - 4.6.3. Linking Needs
- 4.7. Web Architecture and Web Browsing
 - 4.7.1. Structure
 - 4.7.2. Categorization
 - 4.7.3. Marking
 - 4.7.4. Usability

- 4.8. Web Architecture and SEO
 - 4.8.1. Benchmark
 - 4.8.2. Keyword Research
 - 4.8.3. URLs
 - 4.8.4. Internal Links
 - 4.8.5. Cannibalization
- 4.9. Web Architecture Tools
 - 4.9.1. Mindmeister Mind Maps
 - 4.9.2. Analyzing URLs Screaming Frog SEO Spider
 - 4.9.3. Analyzing Web Traffic Using Google Analytics
- 4.10. Google Search Console
 - 4.10.1. Keyword Analysis
 - 4.10.2. Opportunity Keywords
 - 4.10.3. Website Performance

Module 5. Website Security Systems

- 5.1. Perimeter Security
 - 5.1.1. Network Firewall
 - 5.1.2. Demilitarized Zone (DMZ)
 - 5.1.3. Load Balancers

5.1.3.1. Content Delivery Network (CDN)

- 5.1.4. Web Application Firewall (WAF)
- 5.2. Encrypted Web Communications
 - 5.2.1. SSL Certified
 - 5.2.2. Protocols
 - 5.2.3. Cipher Suit
 - 5.2.4. Vulnerabilities
 - 5.2.4.1. Poodle
 - 5.2.4.2. Ticketbleed
 - 5.2.4.3. Beast attack
 - 5.2.4.4. ROBOT
 - 5.2.4.5. Heartbleed

- 5.3. Vulnerability Analysis
 - 5.3.1. XXS (Cross Site Scripting)
 - 5.3.2. SQL Injection
 - 5.3.3. CSRF
 - 5.3.4. Code Injection
 - 5.3.5. DoS

5.3.5.1. DDoS

- 5.4. Security Headers
 - 5.4.1. X-Frame Options
 - 5.4.2. X-XSS-Protection
 - 5.4.3. X-Content-Type-Options
 - 5.4.4. Referrer Policy
 - 5.4.5. HTTPS Strict Transport Security (HSTS)
 - 5. Authentication and Authorization
 - 5.5.1. HTTP Authentication
 - 5.5.1.1. Basic
 - 5.5.1.2. Digest
 - 5.5.1.3. NTLM
 - 5.5.2. Protocols and Standards
 - 5.5.2.1. Oauth
 - 5.5.2.2. OpenID
- 5.6. Web Auditing
 - 5.6.1. Auditing Technique
 - 5.6.1.1. Black Box
 - 5.6.1.2. White Box
 - 5.6.1.3. Grey Box
 - 5.6.2. OWASP Methodology
 - 5.6.3. Bug Bounty

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5.7.		tion Programming Interface (API) Security
	5.7.1.	Types of APIs
		5.7.1.1. REST
		5.7.1.2. SOAP
		5.7.1.3. Others
	5.7.2.	Attacks and Risks
	5.7.3.	Traffic Analysis
5.8.	Content	: Management System (CMS) Security Management
	5.8.1.	Wordpress
	5.8.2.	Joomla
	5.8.3.	Drupal
	5.8.4.	Magento
5.9.	Secure	Application Development
	5.9.1.	Secure Software Development Life Cycle
	5.9.2.	Risk Assessment
	5.9.3.	Security Tests
	5.9.4.	Good Practices
5.10.	Crisis N	lanagement and Resilience
	5.10.1.	Crisis Management and Incident Response
	5.10.2.	Security Incident Response Process
		5.10.2.1. Preparation
		5.10.2.2. Identification
		5.10.2.3. Containment
		5.10.2.4. Eradication
		5.10.2.5. Recovery
		5.10.2.6. Lessons Learned
	5.10.3.	Backup Copies





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Module 6. User Interface Design and Programming

- 6.1. User Experience
 - 6.1.1. User Experience (UX)
 - 6.1.2. Interface Design (UI)
 - 6.1.3. Interaction Design (IxD)
 - 6.1.4. Context and New Paradigms
- 6.2. User Interface Design
 - 6.2.1. Design and UX
 - 6.2.2. Web Design Psychology
 - 6.2.3. Design Thinking
 - 6.2.4. Types of Web Design
 - 6.2.4.1. Fixed Design
 - 6.2.4.2. Elastic Design
 - 6.2.4.3. Liquid Design
 - 6.2.4.4. Responsive Design
 - 6.2.4.5. Flexible Design
 - 6.2.5. Design System & Atomic Design
- 6.3. UX Research
 - 6.3.1. UX Research
 - 6.3.2. Importance and Process
 - 6.3.3. Research and Analysis
 - 6.3.4. Heuristic Evaluation
 - 6.3.5. Eye Tracking
 - 6.3.6. Test A/B
 - 6.3.7. Crazy Egg
 - 6.3.8. Card Sorting
 - 6.3.9. Customer Journey
 - olors. Gastorner Gaarrie,
 - 6.3.10. Other Techniques

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6.4.	UX Writ	Writing				
	6.4.1.	UX Writing				
	6.4.2.	UX Writing vs. Copyrighting				
	6.4.3.	Uses and Benefits				
	6.4.4.	Microcopy				
	6.4.5.	Web Structure				
6.5.	Interact	tion Design and Web Prototyping				
	6.5.1.	Prototyping Phase				
	6.5.2.	Methods				
		6.5.2.1. Sketches				
		6.5.2.2. Wireframes				
		6.5.2.3. Mock-ups				
	6.5.3.	Browsing Flows				
	6.5.4.	Interaction				
	6.5.5.	Managing Online Tools				
6.6.	Usabilit	у				
	6.6.1.	Impact of Usability on User Experience				
	6.6.2.	Metrics				
	6.6.3.	Tests				
		6.6.3.1. Internal Usability Test				
		6.6.3.2. Unmoderated Remote Usability Testing				
		6.6.3.3. Moderated Remote Usability Testing				
	6.6.4.	Assessment Tools				
6.7.	Access	ibility				
	6.7.1.	Web Accessibility				
	6.7.2.	Beneficiaries				
	6.7.3.	Disabilities				
		6.7.3.1. Visual Impairment				
		6.7.3.2. Hearing Impairment				
		6.7.3.3. Motor Disability				
		6.7.3.4. Speech Impairment				
		6.7.3.5. Cognitive Impairment				

	6.7.4.	Accessibility Guidelines
	0.7	6.7.4.1. WCAG 2.1 and Priorities
		6.7.4.2. Perceptible
		6.7.4.3. Operable
		6.7.4.4. Comprehensible
		6.7.4.5. Robust
	6.7.5.	Validation Tools and Techniques
6.8. In	formatio	n Architectures
	6.8.1.	Organization Systems
	6.8.2.	Labeling Systems
	6.8.3.	Browsing Systems
	6.8.4.	Search Systems
6.9.	SXO: U>	(y SEO
	6.9.1.	Similarities between UX and SEO
	6.9.2.	SEO Factors
	6.9.3.	Impact and Benefits of Optimizing UX for SEC
	6.9.4.	UX Advice to Improve SEO
6.10.	Style Gu	uides
	6.10.1.	Objectives
	6.10.2.	Context
	6.10.3.	Color Palettes
	6.10.4.	Typography
	6.10.5.	Iconography
	6.10.6.	Components
		6.10.6.1. Basic Components
		6.10.6.2. Complex Components
	6.10.7.	Layout
	6.10.8.	Consistency and Identity
	6.10.9.	Utility Extension
	6.10.10	. Examples:

Module 7. E-Commerce Creation and Administration

- 7.1. E-Commerce Development
 - 7.1.1. Functions
 - 7.1.2. Advanced Functions
 - 7.1.3. Administration
 - 7.1.3.1. Payment Systems
 - 7.1.3.2. Customer Management
 - 7.1.3.3. Order Management
 - 7.1.4. Dropshipping
- 7.2. Database Programming and Structure
 - 7.2.1. Selecting Development Environment
 - 7.2.2. Web Structure for e-Commerce
 - 7.2.3. Database Structure
- 7.3. E-Commerce Design
 - 7.3.1. Main Screen
 - 7.3.2. Login and Register Areas
 - 7.3.3. Product Screen Structure
 - 7.3.4. Internal Pages about Shipping, Terms and Conditions, Legal Notices, etc
- 7.4. In-house Development vs. CMS (Content Management System)
 - 7.4.1. Advantages and Disadvantages of Using CMS
 - 7.4.2. Selecting CMS According to Development Types
 - 7.4.3. Proprietary System or Online Cloud
 - 7.4.3.1. Wordpress + Woocommerce
 - 7.4.3.2. Prestashop
 - 7.4.3.3. Magento
 - 7.4.3.4. Shopify
- 7.5. Installing and Configuring the Work Environment
 - 7.5.1. Hosting and Domain
 - 7.5.1.1. SSL Activation and PHP Configuration

- 7.5.2. Installing CMS
 - 7.5.2.1. Wordpress + Woocommerce Installation
 - 7.5.2.2. Prestashop Installation
 - 7.5.2.3. Magento Installation
- 7.5.3. Configuring and Launching CMS
 - 7.5.3.1. Configuring and Launching Wordpress + Woocommerce
 - 7.5.3.2. Configuring and Launching Prestashop
 - 7.5.3.3. Configuring and Launching Magneto
- 7.5.4. Selecting a Definitive Work Environment
- 7.6. UX (User eXperience)
 - 7.6.1. Design
 - 7.6.2. Functionality vs. Design
 - 7.6.3. Final Customer Optimization
 - 7.6.4. Visibility of Priority Parts
- 7.7. SEO (Search Engines)
 - 7.7.1. Keyword Search for Our Store
 - 7.7.2. Optimizing Pages, Meta Labels, Titles and Others
 - 7.7.3. Optimized Content
 - 7.7.4. Backlinks, Press Releases and Reviews
 - 7.7.5. Social Networks and Marketing
 - 7.7.5.1. Creating Promotions
 - 7.7.5.2. Optimizing Promotions and Buyer Persona
- 7.8. Payment and Logistics Systems
 - 7.8.1. Configuring Virtual and Physical Payment Systems
 - 7.8.1.1. PayPal
 - 7.8.1.2. Stripe
 - 7.8.1.3. Cash on Delivery
 - 7.8.1.4. POS Banking
 - 7.8.1.5. Installment Payment Systems
 - 7.8.2. Logistics
 - 7.8.2.1. Optimizing Shipment Channels
 - 7.8.2.2. Optimized Shipment Selector Configuration
 - 7.8.3. Delivery Automation

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8.2.1.1. Installation of Windows Server Environment

7.9.	Market	ing and Advertising			8.2.1.2. Initial Configuration and Networks for Windows Server
	7.9.1.	Competitive Analysis			8.2.1.3. Installation of Components for Production
	7.9.2.	Work Tools			8.2.1.4. Windows Server Optimization
		7.9.2.1. Analysis Tools		8.2.2.	Installing Linux Visual Environment
		7.9.2.2. Design Tools 7.9.2.3. SEO Tools			8.2.2.1. Installation and Configuration of Centos (Operating System for the Enterprise Community)
		7.9.2.4. Optimization Tools			8.2.2.2. Ubuntu Server Installation and Configuration
	7.9.3.	Installing Tracking Pixels for Advanced Segmentation			8.2.2.3. Debian Installation and Configuration
	7.9.4.	Creating Promotions	8.3.	Comm	and Terminal
	,	7.9.4.1. Facebook Ads		8.3.1.	Directories and CHMOD Permissions
		7.9.4.2. Twitter, TikTok, Pinterest and Other Massive Networks			8.3.1.1. Disk and File Management
		7.9.4.3. Google Ads		8.3.2.	Service Analysis
		7.9.4.4. Ad Optimization		8.3.3.	Problem Detection and Analysis / LOGS
7 10	Analysi	is, Data Measuring and Results		8.3.4.	Resource Monitoring
,	-	Measuring Traffic			8.3.4.1. Commands and Automation
		Search Engine Analysis		8.3.5.	Editors and Administration Commands
	7.10.3. Sources and Sales Percentages		8.4.	Networks	
		Creating Promotional Landing Pages		8.4.1.	IP Theory and ISO/TCP Models
		Selling on Marketplace		8.4.2.	IP Utilities and Commands
		7.10.5.1. Amazon		8.4.3.	Network and File Configuration
		7.10.5.2. eBay		8.4.4.	SCP, FTP, SAMBA, NFS Protocols and Services
	7.10.6. Problem Solving			8.4.5.	DNS Service Installation and Configuration
Mod		Web Server Administration	8.5.	Installa	ation and Control Panels
wou	uie o. V	vveb server administration		8.5.1.	Selecting an Adequate Control Panel
8.1.	Selectin	ng a Work Environment			8.5.1.1. Configuration and Optimization
	8.1.1.	Operating Systems (Windows or Linux)		8.5.2.	Installing cPanel
	8.1.2.	Distribution Differences			8.5.2.1. Configuration and Optimization
		8.1.2.1. Choosing the Right Operating System		8.5.3.	Installing Plesk
		8.1.2.2. Test Working Environment (Development)			8.5.3.1. Configuration and Optimization
		8.1.2.3. Professional Working Environment (Production)		8.5.4.	Installing Directadmin
8.2.	Installir	ng and Configuring the Work Environment			8.5.4.1. Configuration and Optimization
	8.2.1.	Installing VirtualBox for Windows Development Environment			•

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	8.6.1.	Installing Apache
		8.6.1.1. PHP/PHP-FPM Installation
	8.6.2.	Installing Mysql
	8.6.3.	Installing MariaDB
	8.6.4.	Installing PHPmyadmin
	8.6.5.	Installing Exim / Dovecot
8.7.	Optimi:	zing Web Services, Databases and Email
	8.7.1.	Installing Nginx
		8.7.1.1. Configuring and Launching Nginx
	8.7.2.	Optimizing Apache
	8.7.3.	Optimizing PHP / PHP-FPM
	8.7.4.	Optimizing Mysql
		8.7.4.1. Data Analysis Tools
	8.7.5.	Optimizing Exim
8.8.	Backup	os in Production Environments
	8.8.1.	Backups
	8.8.2.	Planning a Secure Environment
		8.8.2.1. Base Commands - CP, MV, RSYNC
	8.8.3.	Automating Backup Copies Systems
	8.8.4.	Data Redundancy and Security / Replication
	8.8.5.	Optimizing Secure Environments
8.9.	Securit	y/Safety
	8.9.1.	Dedicated/Virtual Server Security
	8.9.2.	Installing Monitoring Tools
		8.9.2.1. Brute force and scanning prevention
	8.9.3.	Installing Firewalls
	8.9.4.	Antimalware/Virus Systems
		8.9.4.1. Scanning and Quarantine Automation
	8.9.5.	Anti-Spam Mail

Installing Core Web Services

8.10.	Problem	Solving	and	Eventualities
	8.10.1.	Service	Stop)

- 8.10.2. Disk Errors in Production Environments
- 8.10.3. Monitoring and Delegating Services
- 8.10.4. Web Migration/Databases/E-mail/Files
- 8.10.5. Hacked Web Resolution
- 8.10.6. Email Problems
 - 8.10.6.1. Blacklist IP Difficulties
 - 8.10.6.2. IP Assignment to a Particular Domain
 - 8.10.6.3. Mail Arriving in Spam Folder
- 8.10.7. Server Not Responding (Rescue Mode)
 - 8.10.7.1. RAM Memory Test
 - 8.10.7.2. Hard Drive Test
 - 8.10.7.3. RAID Test/File System Degradation
- 8.10.8. Administrating and Monitoring Disc Space
 - 8.10.8.1. Problems with INODOS
- 8.10.9. Nmap and Tracert for Network Problem Detection

Module 9. Web Content Managers

- 9.1. Content Management Systems (CMS)
 - 9.1.1. Current CMS
- 9.2. Types of CMS
 - 9.2.1. Open Source vs. Proprietary
 - 9.2.2. Local Installation vs. Cloud-Based
 - 9.2.3. Programming Languages
 - 9.2.4. Uses and Functionality
 - 9.2.5. Other Types of CMS (ECM, WCM, DMS etc.)
- 9.3. CMS Tools and Resources
 - 9.3.1. User Management
 - 9.3.2. Page Management
 - 9.3.3. Templates
 - 9.3.4. Plug-ins
 - 9.3.5. Others (Media Library, Comment Moderation, Sales Management, etc.)

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9.4. CMS Architecture and Design 9.4.1. The Use of CMS 9.4.2. Templates 9.5. CMS and SEO 9.5.1. Technical SEO 9.5.2. SEO Content 9.5.3. Plug-ins WordPress 9.6.1. Applications 9.6.2. Examples: Drupal 9.7.1. Applications 9.7.2. Examples: Prestashop 9.8.1. Applications 9.8.2. Examples: Shopify 9.9. 9.9.1. Applications 9.9.2. Examples: 9.10. Other CMS 9.10.1. Wix 9.10.2. Blogger

9.10.3. Magento

9.10.4. Joomla!

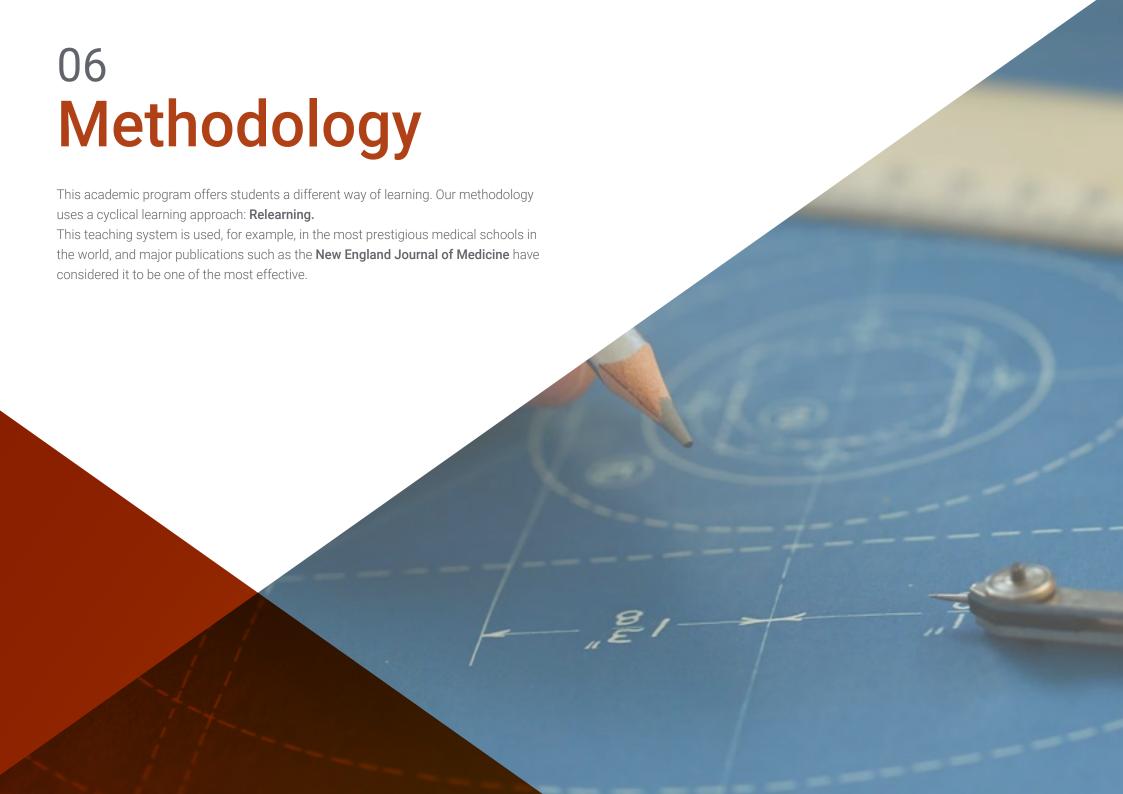
Module 10. Website Marketing

- 10.1. Website Commercialization
 - 10.1.1. Website Commercialization
 - 10.1.2. Website Development Cost
 - 10.1.3. Profitability Calculations
- 10.2. Invoicing and Taxation
 - 10.2.1. Freelance Invoicing
 - 10.2.2. Company Invoicing
 - 10.2.3. Taxation
- 10.3. Sales Funnels: Attraction Phase
 - 10.3.1. Organic Traffic 10.3.1.1. SEO
 - 10.3.2. Payment Traffic
- 10.4. Sales Funnels: Interaction Phase
 - 10.4.1. Emailing
 - 10.4.2. Forms
 - 10.4.3. CTAs
- 10.5. Sales Funnels: Conversion Phase
 - 10.5.1. Offer
 - 10.5.2. Ideas to Close the Sale
 - 10.5.3. Customer Objections
- 10.6. Sales Funnels: Loyalty Phase
 - 10.6.1. Exceeding Customer Expectations
 - 10.6.2. Customer Service
 - 10.6.3. Affiliation Systems
 - 10.6.4. Surveys



- 10.7. Analytics
 - 10.7.1. Analysis
 - 10.7.2. KPIs
 - 10.7.3. Emailing Analytics
 - 10.7.4. Social Network Analytics
- 10.8. Analytics: Analyzing Websites Using Google Analytics
 - 10.8.1. Audience Analytics
 - 10.8.2. Purchase Analytics
 - 10.8.3. Behavior Analytics
 - 10.8.4. Conversion Analytics
- 10.9. Marketing Automation
 - 10.9.1. The Purpose of Automating
 - 10.9.2. Automation Software
 - 10.9.3. Workflows
 - 10.9.4. Scoring
- 10.10. Growth Hacking
 - 10.10.1. Growth Hacking
 - 10.10.2. Growth Hackers
 - 10.10.3. Techniques and Examples







tech 40 | 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.

Methodology | 41 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 is the most widely used learning system in the best faculties in the world. 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 program, the studies 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 42 | Methodology

Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

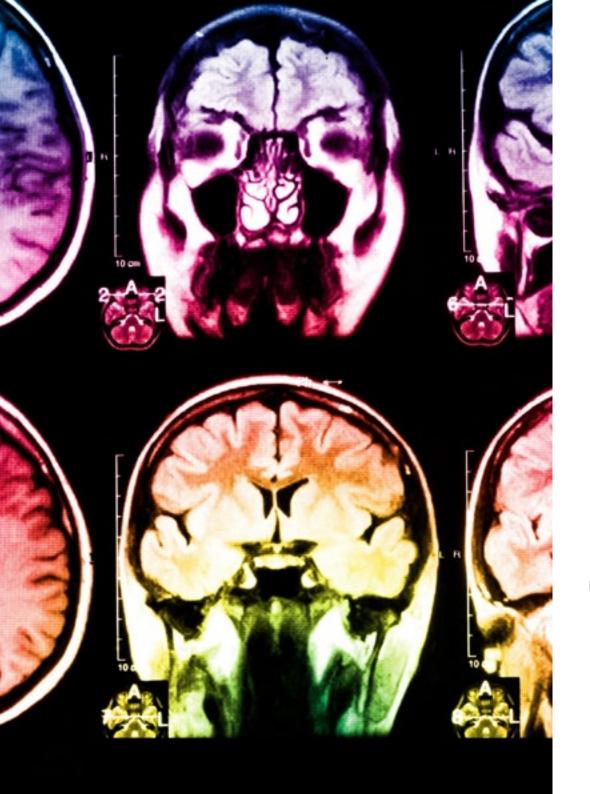
We enhance the Case Study with the best 100% online teaching method: Relearning.

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 | 43 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 44 | 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.

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.



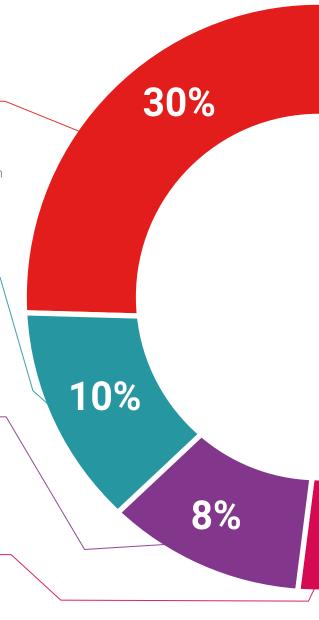
Practising Skills and Abilities

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 | 45 tech



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.

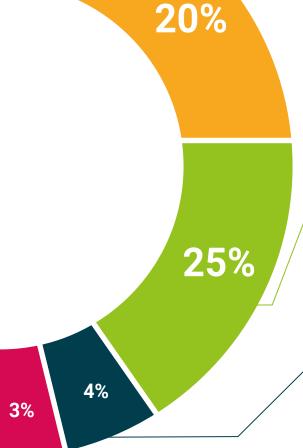


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

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.









tech 48 | Certificate

This program will allow you to obtain your **Master's Degree diploma in Website Management 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.

Mr./Ms. _______ with identification document _______ has successfully passed and obtained the title of:

Master's Degree in Website Management Engineering

This is a program of 1,500 hours of duration equivalent to 60 ECTS, with a start date of dd/mm/yyy 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

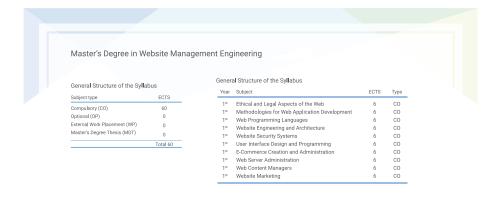
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Master's Degree in Website Management Engineering

Modality: online

Duration: 12 months

Accreditation: 60 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.

tech global university Master's Degree Website Management Engineering

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Global University
- » Credits: 60 ECTS
- » Schedule: at your own pace
- » Exams: online

