## Hybrid Professional Master's Degree Website Management Engineering





## Hybrid Professional Master's Degree Website Management Engineering

Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Global University 60 + 5 ECTS Credits

Website: www.techtitute.com/us/information-technology/hybrid-professional-master-degree/hybrid-professional-master-degree-website-management-engineering

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## 01 Introduction

If you are not on the Internet, you do not exist. The Internet presence of companies, organizations and institutions is key to their visibility. Websites are the essential showcase, but without a correct structure, focus and quality content, no search engine will position the website, nor will the client achieve the sales results and return on investment. This program allows the professional to acquire specialized training in the development and creation of pages that will improve their careers. The 100% online syllabus, available from day one, will allow you to acquire the necessary knowledge while adapting the course load to your needs. In addition, an Internship Program in a leading company in the sector will complete this program.



Create web pages that really monetize and reach the objective that companies and clients are looking for thanks to the learning of this Hybrid Professional Master's Degree"

## tech 06 | Introduction

Presence in the digital era is a must. The continuous advances and updates of the programs and systems that make possible the creation of web pages, makes it necessary for the professional to have a deep and constant knowledge about it. Companies are looking for return on investment, product sales and Internet presence as indispensable goals in order to make a profit.

This Hybrid Professional Master's Degree, taught by a teaching team specialized in the area, will provide all the necessary tools that students need to create web pages that monetize, finding the market niche that best fits the customer's requests, making an effective web structure, detectable by different search engines and allowing a correct positioning. All this, under the current national legal framework, which avoids incurring in errors that could be detrimental to both the client and the creator of the website

Language, content creation and protection against the countless attacks that web pages can suffer are some of the highlights of this blended learning program. A complete program that will allow students to advance in one of the sectors of information technology that has advanced the most in recent years and, due to the growing need to be on the network, is expected to continue for quite some time.

TECH offers students the opportunity to acquire updated and innovative knowledge in a first theoretical phase 100% online. Where you can access at any time of the day from a device or cell phone with internet connection. In addition, students will culminate this program with a second phase consisting of a 120-hour Practical Training in an international reference center that will allow them to apply everything they have learned in the theoretical framework. This **Hybrid Professional Master's Degree in Website Management Engineering** contains the most complete and up-to-date program on the market. The most important features include:

- Development of more than 100 cases presented by nursing professionals with expertise in web development and web page creation
- The graphic, schematic, and practical contents with which they are created provide scientific and practical information on the disciplines that are essential for professional practice
- The development of case studies presented by Website Management Engineering experts
- The graphic, schematic, and practical contents with which they are created, provide scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection
- All of this will be complemented by 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
- In addition, you will be able to do an internship in one of the best centers of reference in the creation of web pages

666 A unique training experience, key and decisive to boost your professional development"

## Introduction | 07 tech

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This Hybrid Professional Master's Degree will allow you to learn the main programming languages and optimize any web project. Click and enroll"

In this proposal of Hybrid Professional Master's Degree, of professional character and online mode, the program is aimed at updating computer personnel who develop the creation of web pages, and who need a high level of qualification The contents are based on the latest scientific evidence, and oriented in a didactic way to integrate theoretical knowledge in the practice of web design, and the theoretical-practical elements will facilitate the updating of knowledge and allow decision making in its construction.

Thanks to multimedia content developed with the latest educational technology, professionals will enjoy a situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to prepare professionals 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 throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts. Create a flawless E-commerce and succeed in an area in constant growth. Enroll now.

For 3 weeks you will be together with great professional web page creators.



## 02 Why Study this Hybrid Professional Master's Degree?

The digital marketplace, as well as the expansion of the Internet as a precursor space for more and more commercial transactions, has highlighted the importance of the role of the engineer specialized in website management. However, it is a profession that, due to the many advances that are made in this area, is constantly being updated, which is why this Hybrid Professional Master's Degree is the perfect choice if the graduate is looking to catch up with the latest developments in this field. It is a unique program that combines theory and practice in an experience that will undoubtedly mark a before and after in the career of any professional who seeks to succeed in the field of Website Management Engineering.

## Why Study this Hybrid Professional Master's Degree? | 09 tech

An ideal program to update your technical and specific knowledge to successfully deploy with a systematic approach any web-based system and its applications"

### tech 10 | Why Study this Hybrid Professional Master's Degree?

#### 1. Updating from the Latest Technology Available

As it could not be otherwise, the graduate who enrolls in the Hybrid Professional Master's Degree in Website Management Engineering will have access to the most sophisticated, advanced and innovative information technology in the sector. In this way, you will be able to get up to date on their management, implementing in your practice the management of extremely complex programs and applications, as well as the mastery of their pros and cons depending on the objective of the programm.

#### 2. Gaining In-depth Knowledge from the Experience of Top Specialists

The graduate will become part of a highly qualified team in the area of web resource management. In addition, the student will have the support of an internship tutor, who will ensure that all the requirements for which this degree was designed are met. You will be able to get the most out of it, using your experience to implement the most sophisticated IT strategies available today.

#### 3. Entering First-Class Clinical Environments

Access to this program will allow the graduate to participate in various jobs related to the management of web platforms and structures. In this way, you will be able to work on the improvement of your engineering skills in a guaranteed way, addressing, together with your colleagues, the different customer problems and proposing effective solutions drawn from your own experience, as well as from what you have learned during the theoretical education period. mirror\_mod.use\_y = Tote mirror\_mod.use\_z = False elif \_operation == "MIRROR\_Z mirror\_mod.use\_x = False mirror\_mod.use\_y = False mirror\_mod.use\_z = True

#selection at the end -add back the desel mirror\_ob.select=1 modifier\_ob.select=1 bpy.context.scene.objects.active = modifier\_op print("Selected" + str(modifier\_ob)) # modifier\_op mirror\_ob\_select

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### Why Study this Hybrid Professional Master's Degree? | 11 tech

#### 4. Combining the Best Theory with State-of-the-Art Practice

This Hybrid Professional Master's Degree is presented as a unique opportunity to expand the knowledge of the graduate from the theoretical and practical point of view, addressing a comprehensive and integral specialization of the work in the management of content and web structures. In this way, you will be able to face an increasingly demanding and complex labor market with the guarantee of having everything you need to take on any type of project with confidence.

#### 5. Expanding the Boundaries of Knowledge

This Hybrid Professional Master's Degree program will raise the graduate's knowledge to the highest level, with special emphasis on those aspects that are most valued by the current labor demand. In addition, it is a program whose curriculum has been developed following international standards of engineering specialized in website management, so its completion will be the key to practice in any country in an effective and guaranteed manner.

**666** You will have full practical immersion at the center of your choice"

## 03 **Objectives**

The design of the program of this Hybrid Professional Master's Degree will allow the student to acquire the necessary skills to update in the profession after delving into the key aspects in the design and creation of web pages. Therefore, the teaching team specialized in this field will provide the tools and knowledge necessary to correctly implement a web architecture and fully execute an E-commerce, taking into account all the technical parameters required.



<sup>5</sup> Update your knowledge in an area that requires highly qualified professionals. An expert teaching team will guide you"

## tech 14 | Objectives

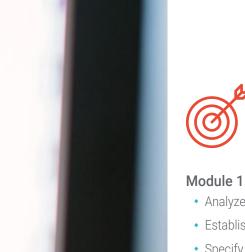


## **General Objective**

The Hybrid Professional Master's Degree in Website Management Engineering
provides the knowledge and tools necessary for students during the completion of this
program to be able to achieve a deep knowledge of the international legal framework
for the creation of a website, to master the main programming languages to carry
out a correct web structure, master the process of creating HTML, master the CSS,
develop applications with complex structures and obtain specialized knowledge about
PHP. Extensive multimedia content with video summaries of each topic and case
studies will facilitate the understanding of the entire syllabus



## Objectives | 15 tech



## Specific Objectives

#### Module 1. Ethical and Legal Aspects of the Web

- Analyze the current legal framework from a chronological perspective
- 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. 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

## tech 16 | Objectives

#### Module 3. 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 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 establish
- 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

## Objectives | 17 tech

#### 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 grow 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. Web Site Marketing

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



Correctly identify the market target, determine the objectives and get started with the creation of a profitable website with this Hybrid Professional Master's Degree"

## 04 **Skills**

At the end of this Hybrid Professional Master's Degree Website Management Engineering, the professional will have the skills and technical knowledge to meet the needs of building an effective website, creating attractive, usable and accessible digital environments. All this, in compliance with existing regulations and accompanied by a team of professionals who will indicate the guidelines to be followed at each stage.

Skills | 19 tech

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Achieve your goals with comprehensive learning and real-world application in a growing technology sector"

## tech 20 | Skills



**General Skills** 

- Respond to the demands of Website Management Engineering
- Create attractive, usable and accessible digital environments to offer satisfactory user experience
- Create a website in compliance with existing legal regulations

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The ideal program for a comprehensive and integrated approach to the web programming language: from the basics to the mastery of the most complex CSS and HTML patterns"





### Specific Skills

- Develop applications with complex structures by using a range of different procedures
- Classify the types of web sites according to their legal nature and the laws that affect them
- Analyze the different agile methodologies and determine the best framework to adopt according to project characteristics
- Analyze the types and phases of web architecture, their advantages and applications
- Perform analysis and metrics compressions
- Install and manage a complete web hosting service

## 05 Course Management

TECH's philosophy is to offer teaching at the academic forefront and to meet the demands of the sector in each of its programs. This time, the educational team selected to teach this Hybrid Professional Master's Degree has been chosen for their high professional qualifications and their participation in web creation and development projects for public and private entities. This provides guarantees to students who wish to acquire knowledge close to the reality of this area of the technology sector.



A team of experts with extensive experience in web creation and development will be your great support in this Hybrid Professional Master's Degree. Click and reach your goals"

## tech 24 | Course Management

#### Management



#### Mr. Gris Ramos, Alejandro

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

#### Professors

#### Mr. Herrero Garcia, Diego

- Responsible Director of the DHG Engineering Team
- Support Team Manager at JIG Internet Consulting

- Computer Programmer at Hiberus Tecnología
- Professional Master's Degree in Industrial Engineering from the Universidad de La Rioja
- Industrial and Electronic Technical Engineer from the University of La Rioja

### Course Management | 25 tech

#### Mr. David Vicente, Miralles

- CEO at CE Informática
- Head of Expansion Strategies at ICU Medical Technologies
- CEO at Computer Elche, S.L.
- Teacher in private institutions
- Diploma in Technical Computer Engineering from Miguel Hernández University of Elche

#### Mr. Alfaro Navarra, 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
- Personal de Cruise Entertainment at Royal Caribbean
- Tourist Animator 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 Escuela de Organización Industrial (School of Industrial Organization)

#### Mr. Del Moral García, Francisco José

- Cyber Security Manager at Roca Group
- Cybersecurity analyst at Roca Group
- Security Information Analyst at Allianz Technology
- Security Analyst at PageGroup

- Solutions Assistant at Everis
- Safety and Risk Analyst at Eurofins
- Bachelor's Degree in Telecommunication Technologies Engineering from the University of Granada, specializing in Telecommunication Systems
- Professional Master's Degree in Computer Security from the International University of La Rioja

#### Mr. Boix Tremiño, Jorge

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

#### Mr. Méndez Martínez, Brandon

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

## 06 Educational Plan

The study plan of this Hybrid Professional Master's Degree has been designed to address in detail each of the steps, tools and software that should be widely known by an IT professional who wants to create and design web pages successfully. The syllabus, made up of a wide variety of multimedia resources and a Relearning system, which favors learning, will help to achieve the objectives. Therefore, the syllabus will cover legal aspects, structure and web programming languages, their administration and detection of vulnerabilities in the event of possible attacks.

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The case studies and the Relearning system will facilitate a learning process adapted to you and your needs"

## tech 28 | Educational Plan

#### Module 1. Ethical and Legal Aspects of the Web

- 1.1. Web regulations in force in Spain and Europe
  - 1.1.2. Web Regulations in Force in Spain
    - 1.1.2.1. Web Regulations in Force in Europe
    - 1.1.2.2. Impact of European Regulation
- 1.2. Legal Aspects of the Web (Presence vs. Activity) 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. Spanish and European Taxation for e-commerce
  - 1.5.1. Preliminary Matters: Taxation as a Set of Laws
  - 1.5.2. Spanish Taxation Framework for e-Commerce
  - 1.5.3. 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. Education 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. Checklist Procedure LSSICE / RGPD / LOPDGDD
  - 1.8.2. Plugins and Addons Most Commonly Used
  - 1.8.3. Other Essential Tools and Services
- 1.9. Implications and Results of Practical Legal Aspects
  - 1.9.1. Legal resolutions I: LSSICE
  - 1.9.2. Legal resolutions II: RGPD / LOPDGDD
- 1.10. Tax Offenses in e-commerce, against intellectual property
  - 1.10.1. Legal Resolutions III: e-Commerce Tax Offenses
  - 1.10.2. Legal Resolutions IV: Intellectual Property Offenses
  - 1.10.3. Legal Resolution V: Offenses against Consumers and Users

#### Module 2. Methodologies for Web Application Development

- 2.1. Agile Project Management: Basis 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 an 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

## Educational Plan | 29 tech

- 2.4. Agile Methods 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

- 2.9. Team Leadership in Web Application Development
  - 2.9.1. Agile Teams
  - 2.9.2. Agile Project Leader
  - 2.9.3. The Agile Team
  - 2.9.4. Virtual Agile Team Management
  - 2.9.5. Coaching for Team Performance Improvement
- 2.10. Value Management and Delivery in Web Development Projects
  - 2.10.1. Delivery Processes Focused on Value
  - 2.10.2. Product Quality
  - 2.10.3. Quality Agile Practices
  - 2.10.4. Risk Management
  - 2.10.5. Agile Contracts
  - 2.10.6. Value Gained Management in Agile Projects

#### Module 3. Web Programming Languages

- 3.1. Web Programming
  - 3.1.1. The Web
  - 3.1.2. Web Design
  - 3.1.3. Web Development
    - 3.1.3.1. Front-End
    - 3.1.3.2. Back-End
    - 3.1.3.3. Full-Stack
  - 3.1.4. Types of Languages
    - 3.1.4.1. Programming Languages
    - 3.1.4.2. Markup Languages
    - 3.1.4.3. Scripting Languages
  - 3.1.5. Framework vs. Libraries
  - 3.1.6. Development Environments (IDE Integrated Development Environment)
  - 3.1.7. Navigation Systems
- 3.2. HTML
  - 3.2.1. HTML
  - 3.2.2. Labels
    - 3.2.2.1. Nesting
    - 3.2.2.2. Attributes

### tech 30 | Educational Plan

3.2.3. Documents Structure 3.2.3.1. Headings 3.2.3.2. Body 3.2.4. Semantic Components 3.2.4.1. Root Elements 3.2.4.2. Metadata 3.2.4.3. Scripting 3.2.4.4. Sections 3.2.4.5. Comments 3.2.5. Text Content 3.2.5.1. Headings 3.2.5.2. Paragraphs 3.2.5.3. Lists 3.2.5.4. Text Formats 3.2.5.5. Special Characters 3.2.6. Blocks 3.2.7. Hyperlinks 3.2.8. Embedded Content 3.2.9. Tables 3.2.10. Forms CSS 3.3.1. CSS 3.3.2. Style Applications 3.3.3. Rules 3.3.3.1. Selectors 3.3.3.2. Properties and Values 3.3.3.3. Comments 3.3.4. Style Collisions 3.3.4.1. Heritage

3.3.4.2. Cascade

3.3.

- 3.3.5. Selectors
- 3.3.6. Combiners
- 3.3.7. Pseudo Classes
- 3.3.8. Pseudo Components
- 3.3.9. Box Models
- 3.3.10. Attributes
- 3.3.11. Measuring Units
  - 3.3.11.1. Absolute Units 3.3.11.2. Relative Units
- 3.3.12. Positioning
- 3.3.13. Colors
- 3.3.14. Variables
- 3.3.15. Animations
- 3.4. JavaScript
  - 3.4.1. JavaScript
  - 3.4.2. Code Inclusion in HTML
  - 3.4.3. Syntax
    - 3.4.3.1. Statements
    - 3.4.3.2. Comments
  - 3.4.4. Types of Data
  - 3.4.5. Variables and Areas
  - 3.4.6. Operators
  - 3.4.7. Flow Control Structures
  - 3.4.8. Functions
  - 3.4.9. Document Object Model (DOM) Manipulation
  - 3.4.10. Events
  - 3.4.11. Object Oriented Programming
    - 3.4.11.1. Classes
    - 3.4.11.2. Objects
    - 3.4.11.2.1. Properties
    - 3.4.11.2.2. Methods
  - 3.4.12. AJAX

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#### 3.5. PHP

3.5.1. PHP

- 3.5.2. Documents Structure
- 3.5.3. Generating HTML Content
- 3.5.4. Constants and Variables
- 3.5.5. Operators
- 3.5.6. Types of Data
- 3.5.7. Flow Control Structures
- 3.5.8. Functions
- 3.5.9. Forms, Cookies and Sessions
- 3.6. MySQL
  - 3.6.1. MySQL
  - 3.6.2. Databases
  - 3.6.3. Characters Codification
  - 3.6.4. Types of Data
  - 3.6.5. Users and Privileges
  - 3.6.6. Accessing Databases
  - 3.6.7. Creating and Manipulating Databases
  - 3.6.8. Clauses
  - 3.6.9. Consultas
- 3.7. HTML and CSS Libraries and Frameworks
  - 3.7.1. Bootstrap
  - 3.7.2. Foundation
  - 3.7.3. Skeleton
  - 3.7.4. Bulma
  - 3.7.5. Materialize
  - 3.7.6. PureCSS
  - 3.7.7. TailwindCSS
  - 3.7.8. Susy
  - 3.7.9. Ulkit

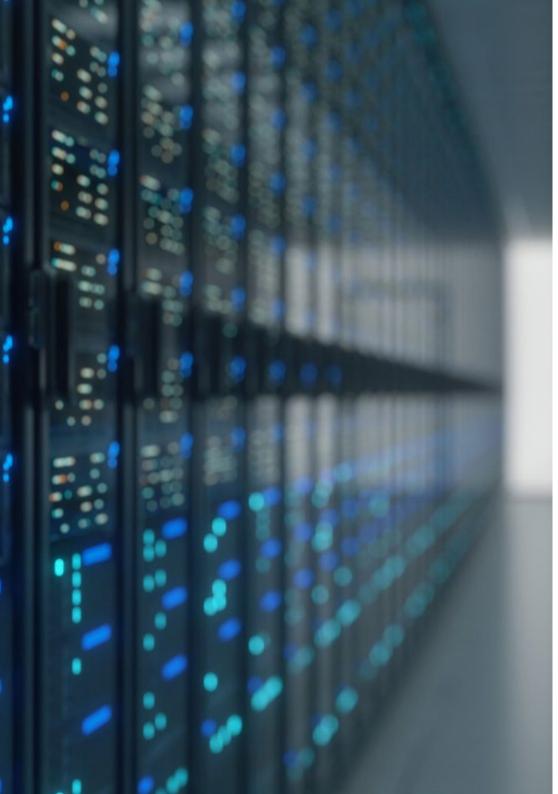
- 3.8. JavaScript Frameworks and Libraries
  - 3.8.1. Angular
  - 3.8.2. jQuery 3.8.3. React
  - 3.8.4. Meteor
  - 3.8.5. Polymer
  - 3.8.6. Mithril
  - 3.8.7. Aurelia
  - 3.8.8. Vue.js
  - 3.8.9. Ember.js
  - 3.8.10. Node.js
  - 3.8.11. Backbone.js
- 3.9. PHP Libraries and Frameworks
  - 3.9.1. Laravel
  - 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 Programming 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

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#### Module 4. Website Engineering and Architecture

- 4.1. Web Site 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. Content
  - 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
- 4.6. 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





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- 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

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#### 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)
- 5.5. 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
- 5.7. Application 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 Management 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

#### 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

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#### 6.3. UX or User 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
- 6.3.10. Other Techniques
- 6.4. UX 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. Interaction 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. Mockups
  - 6.5.3. Browsing Flows
  - 6.5.4. Interaction
  - 6.5.5. Managing Online Tools
- 6.6. Usability
  - 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. Accessibility
  - 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 Guidelines6.7.4.1. 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. Information Architecture
  - 6.8.1. Organization Systems
  - 6.8.2. Labeling Systems
  - 6.8.3. Browsing Systems
  - 6.8.4. Search Systems
- 6.9. SXO: UX 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 SEO
  - 6.9.4. UX Advice to Improve SEO
- 6.10. Style Guides
  - 6.10.1. Objectives
  - 6.10.2. Context
  - 6.10.3. Color Palettes
  - 6.10.4. Typography
  - 6.10.5. Iconography

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#### 6.10.6. Components

6.10.6.1. Basic Components

6.10.6.2. Conplex 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. Own product/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. Self-installation 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 Person
- 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

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8.2.	Installin 8.2.1.	g and Configuring the Virtual Work Environment Installing VirtualBox for Windows Development Environment 8.2.1.1. Installation of Windows Server Environment 8.2.1.2. Initial Configuration and Networks for Windows Server 8.2.1.3. Installation of Components for Production		
		8.2.1.4. Windows Server Optimization		
	8.2.2.	Installing Linux Visual Environment 8.2.2.1. Installation and Configuration Centers (Operating System for the		
		Enterprise Community)		
		8.2.2.2. Ubuntu Server Installation and Configuration		
		8.2.2.3. Debian Installation and Configuration		
8.3.	Command Terminal			
	8.3.1.	Directories and CHMOD Permissions		
		8.3.1.1. Disk and File Management		
	8.3.2.	Service Analysis		
	8.3.3.	Problem Detection and Analysis / LOGS		
	8.3.4.	Resource Monitoring		
		8.3.4.1. Commands and Automation		
	8.3.5.	Editors and Administration Commands		
8.4.	Networks			
	8.4.1.	IP Theory and ISO/TCP Models		
	8.4.2.	IP Utilities and Commands		
	8.4.3.	Network and File Configuration		
	8.4.4.	Protocols and Services SCP, FTP, SAMBA, NFS		
	8.4.5.	DNS Service Installation and Configuration		
8.5.	Installation and Control Panels			
	8.5.1.	Selecting an Adequate Control Panel		
		8.5.1.1. Configuration and Optimization		
	8.5.2.	Installing cPanel		
		8.5.2.1. Configuration and Optimization		
	8.5.3.	Installing Plesk		
		8.5.3.1. Configuration and Optimization		
	8.5.4.	Insalling Directadmin		
		8.5.4.1. Configuration and Optimization		

- 7.8.2. Logistics
  - 7.8.2.1. Optimizing Shipment Channels
  - 7.8.2.2. Optimized Shipment Selector Configuration
- 7.8.3. Delivery Automation
- 7.9. Marketing and Advertising
  - 7.9.1. Competitive Analysis
  - 7.9.2. Work Tools
    - 7.9.2.1. Analysis Tools
    - 7.9.2.2. Design Tools
    - 7.9.2.3. SEO Tools
    - 7.9.2.4. Optimization Tools
  - 7.9.3. Installing Tracking Pixels for Advanced Segmentation
  - 7.9.4. Creating Promotions
    - 7.9.4.1. Facebook Ads
    - 7.9.4.2. Twitter, Tiktok, Pinterest and Other Massive Networks
    - 7.9.4.3. Google Ads
    - 7.9.4.4. Ad Optimization
- 7.10. Analysis, Data Measuring and Results
  - 7.10.1. Measuring Traffic
  - 7.10.2. Search Engine Analysis
  - 7.10.3. Sources and Sales Percentages
  - 7.10.4. Creating Promotional Landing Pages
  - 7.10.5. Selling on Marketplace
    - 7.10.5.1. Amazon
    - 7.10.5.2. eBay
  - 7.10.6. Problem Solving

#### Module 8. Web Server Administration

- 8.1. Selecting a Work Environment
  - 8.1.1. Operating Systems (Windows or Linux)
  - 8.1.2. Distribution Differences
    - 8.1.2.1. Choosing the Right Operating System
    - 8.1.2.2. Test Working Environment (Development)
    - 8.1.2.3. Professional Working Environment (Production)

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- 8.6. Installing Core Web Services
  - 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. Optimizing Web Services and 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. Backups 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. Security/Safety
  - 8.9.1. Dedicated/Virtual Server Security
  - 8.9.2. Installing Monitoring Tools8.9.2.1. Brute force and scanning prevention
  - 8.9.3. Insalling Firewalls
  - 8.9.4. Anti-malware / Anti-virus Systems8.9.4.1. Scanning and Quarantine Automation
  - 8.9.5. Anti-Spam Mail

- 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 / Email / 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 y 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
- 9.6. WordPress
  - 9.6.1. Applications
  - 9.6.2. Examples:
- 9.7. Drupal
  - 9.7.1. Applications
  - 9.7.2. Examples:
- 9.8. Prestashop
  - 9.8.1. Applications
  - 9.8.2. Examples:
- 9.9. Shopify
  - 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. Web Site Marketing

10.1. Web Site Commercialization

10.1.1. Web Site 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. Work Flows 10.9.4. Scoring 10.10. Growth Hacking 10.10.1. Growth Hacking 10.10.2. Growth Hackers
  - 10.10.3. Techniques and Examples

# 07 Internship

Once the theoretical phase is completed, the students of this program will take an Internship Program, for which TECH has selected a reference company in the sector, which allows students to complete their learning with IT professionals with extensive experience in projects of creation and design of web pages. All this, during 120 hours that will be distributed over 3 weeks of intensive and exhaustive experience.



and the second second

Carry out your internship in one of the reference centers and with a specialized team that will allow you to advance in your professional career"

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The Internship Program will last 3 weeks, where the student will be present at the agreed center from Monday to Friday with 8 consecutive hours of practical training The professional and specialized team in the creation and web designs of the company that you will attend will guide you to advance in a field where more and more people with updated knowledge are required.

In this phase of the Hybrid Professional Master's Degree, the activities are aimed at the design of a web architecture taking into account the advantages of a horizontal or vertical programming, the use of the main current web tools, the definition of SEO through Benchmarks and Keyword Research or to make use of the main programming languages.

This stage of the program offered by TECH will put students in a real situation so that they will be able to develop effectively in the labor market by responding to the requests of companies or clients that require their services.

The practical part will be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for the praxis of computer science (learning to be and learning to relate).

The activities described below form the practical basis of this program, and their realization will be subject to the availability of web design and creation projects during the internship in the company.



The procedures described below will be the basis of the practical part of the training, and their implementation will be subject to the center's own availability and workload, the proposed activities being the following:

Module	Practical Activity
Web ethics update	Program web pages in compliance with the current international legal and ethical frameworks
	Avoid the most common penalties with a specific work methods for web engineering
	Implement an Agile work method for the development of web applications
A 11 11	Plan step by step, following the Agile method, a web development project
Application development and	Monitor and lead activities in web application development teams
updating in web	Make use of the main programming languages when developing web pages
language	Distinguish the use of HTML, CSS, Javascript, PHP and MySQL, as well as their different libraries and repositories
	Use specific web programming techniques such as Beautify or image optimization
	Manage web site security systems during development process
	Analyze vulnerabilities and remediate them in a timely manner
Web site assurity and	Perform web audits with OWASP methods
Web site security and development of stable	Integrate secure development best practices into web architecture
architectures	Design a web architecture taking into account its pillars, as well as the advantages of horizontal or vertical programming
	Make use of today's leading web architecture tools
	Defining SEO through Benchmarks and Keyword Research

Module	Practical Activity
	Design a website with a clear focus on perfecting the user experience
	Apply design psychology and Design Thinking to the usual work methodology
UX and E-commerce	Follow a style guide, with guidelines on objectives, context, layout and other useful resources in web development
Design	Manage the basic and advanced functions of a traditional E-commerce
	Select in-house development or CMS according to the type of E-commerce project
	Optimize SEO with promotion creation and optimized content management
	Analyze the work of the competition with specific tools for this purpose
	Selecting specific work environments according to the programming work to be developed
	Manage and install web server control panels
Website content	Test security and eventual troubleshooting in web server management
administration,	Manage current content managers
management and	Manage Drupal, Prestashop, Shopifu and other CMS applications
marketing	Analyze the specific marketing of a website, with its specific invoicing and taxation
	Review and reinforce the different sales phases of a product, detecting applicable improvements in each one of them
	Improve techniques such as Growth Hacking

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#### **Civil Liability Insurance**

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



#### **General Conditions of the Internship Program**

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Hybrid Professional Master's Degree, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

**2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

**3. ABSENCE**: If the students does not show up on the start date of the Hybrid Professional Master's Degree, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor. **4. CERTIFICATION:** Professionals who pass the Hybrid Professional Master's Degree will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** The Hybrid Professional Master's Degree shall not constitute an employment relationship of any kind.

6. PRIOR EDUCATION: Some centers may require a certificate of prior education for the Hybrid Professional Master's Degree. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

**7. DOES NOT INCLUDE**: The Hybrid Professional Master's Degree will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed.

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

## 08 Where Can I Do the Internship?

This Hybrid Professional Master's Degree has an Internship Program that will take place in a reference company related to the web creation and design sector, which completes the wide and exhaustive learning acquired by the students during the first theoretical phase of this course. The TECH teaching team will tutor the student to ensure that they acquire the essential knowledge to perform web design and creation services effectively.

## Where Can I Do the Internship? | 47 tech

Complete your education with an Internship Program that will make you grow as a professional in web design and creation"

## tech 48 | Where Can I Do the Internship?

The student will be able to complete the practical part of this Hybrid Professional Master's Degree at the following centers:



 Tribalo

 Country
 City

 Mexico
 Querétaro de Arteaga

Address: Ignacio Pérez Sur Nº49 El Carrizal Querétaro

Advertising and Digital Marketing Agency

Related internship programs: - MBA in Digital Marketing -Advertising Communication





## Where Can I Do the Internship? | 49 tech



Estudio 630

Country Mexico City Mexico City

Address: Av. Santa Fe 428-Piso 15, Lomas de Santa Fe, Contadero, Cuajimalpa de Morelos, 05300 Ciudad de México, CDMX, México

Creative company for digital media

Related internship programs: Graphic Design - MBA in Digital Marketing



#### Grupo Neo

Country Mexico

City Querétaro de Arteaga

Address: Fernando Soler 118 Col. La Joya Querétaro C.P. 76180

Company specialized in Graphic Design and creative works

> Related internship programs: - MBA in Digital Marketing Graphic Design

# 09 **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 52 | 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 | 53 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 54 | 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 | 55 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 56 | 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 | 57 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.

20%

25%

4%

3%



#### **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.

## 10 **Certificate**

The Hybrid Professional Master's Degree in Website Management Engineering guarantees students, in addition to the most rigorous and up-to-date education, access to a Hybrid Professional Master's Degree qualification 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 60 | Certificate

This program will allow you to obtain your **Hybrid Professional 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. 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: Hybrid Professional Master's Degree in Website Management Engineering

Course Modality: Hybrid (Online + Clinical Internship)

Duration: 12 months

Certificate: TECH Global University

Recognition: 60 + 5 ECTS Credits



\*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.

future health <sup>confid</sup>ence people education information tutors guarantee accreditation teaching institutions technology learning

tecn global university

Hybrid Professional Master's Degree Website Management Engineering

Modality: Hybrid (Online + Clinical Internship) Duration: 12 months Certificate: TECH Global University 60 + 5 ECTS Credits

## Hybrid Professional Master's Degree Website Management Engineering

