

# Postgraduate Certificate Web Development with HTML and CSS from Scratch



## Postgraduate Certificate Web Development with HTML and CSS from Scratch

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/information-technology/postgraduate-certificate/web-development-html-css-scratch](http://www.techtitute.com/us/information-technology/postgraduate-certificate/web-development-html-css-scratch)

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# 01

# Introduction to the Program

Web Development has evolved significantly in recent decades, becoming a key discipline within the field of computer science and digital technologies. According to a report by Harvard University and the Mozilla Foundation, these languages are the foundations of web development, and mastering them is crucial for anyone interested in creating modern applications. In this context, TECH has developed this Postgraduate Certificate that will provide all the knowledge necessary to design and develop functional web pages, adapted to current market needs. Through a 100% online methodology, specialists will learn how to structure web content using HTML and design attractive and functional interfaces with CSS, ensuring an attractive and optimized visual experience for users.



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*Are you ready to take your first step in web development? With this Postgraduate Certificate you will learn how to create web pages from scratch, at your own pace and completely online. Enroll today and transform your digital future!”*



Web Development with HTML and CSS from Scratch is essential because it lays the foundation for understanding how web pages are created and structured. In this sense, HTML (HyperText Markup Language) and CSS (Cascading Style Sheets) are the fundamental languages that give shape to any website. By learning these languages from the beginning, you gain a deep understanding of the elements that make up a web page and how they interact with each other. This not only allows you to create simple pages, but also to develop more complex and personalized designs, adapted to certain needs.

Taking into account the importance of this field, TECH has developed this Postgraduate Certificate in Web Development with HTML and CSS from Scratch that will provide everything from the most basic to the most advanced in the creation of functional and visually appealing web pages. Using a comprehensive and multidisciplinary approach, the program will cover everything from the basic structure of a website to the creation of personalized and optimized interfaces for the user experience. Likewise, professionals will know how to apply principles of web design, accessibility and best practices to ensure that their pages are functional and aesthetically appealing. Based on this, graduates will not only find multiple professional opportunities in the digital industry, but will also be prepared to face the challenges of web development and take the next step in their professional career.

At the same time, the 100% online format will allow students to prepare at their own pace, without interfering with other personal or professional activities. In addition, with the implemented Relearning methodology, emphasis will be placed on repetition and constant practice, ensuring that key concepts are effectively assimilated. Finally, the content will be available 24 hours a day, seven days a week, allowing access from any device with an Internet connection.

This **Postgraduate Certificate in Web Development with HTML and CSS from Scratch** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- ♦ The development of case studies presented by experts in programming
- ♦ Graphic, schematic, and practical contents which provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the process of self-assessment can be used to improve learning
- ♦ Special emphasis on innovative methodologies in Web Development with HTML and CSS from Scratch
- ♦ 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



*This Postgraduate Certificate will offer you a 100% online methodology so that you can study at your own pace and from wherever you want. What are you waiting for to get started? Take the next step towards your career in the digital world"*

“

*Would you like to learn how to create your own website? With a flexible online methodology and an up-to-date syllabus, you will master everything from the basics to the most advanced web design techniques”*

Its teaching staff includes professionals from the field of programming, who bring their work experience to this program, as well as renowned specialists from leading companies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersive learning experience designed to prepare for real-life situations.

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

*In this Postgraduate Certificate, highly qualified teachers will guide you step by step in creating websites from scratch. All through our online platform. Give your career a boost!*

*Turn your passion for web design into a career! This innovative qualification will give you the practical skills and essential knowledge to develop attractive and functional websites.*



02

# Why Study at TECH?

TECH is the world's largest online university. With an impressive catalog of more than 14,000 university programs available in 11 languages, it is positioned as a leader in employability, with a 99% job placement rate. In addition, it relies on an enormous faculty of more than 6,000 professors of the highest international renown.





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*Study at the world's largest online university and guarantee your professional success. The future starts at TECH”*

**The world's best online university, according to FORBES**

The prestigious Forbes magazine, specialized in business and finance, has highlighted TECH as "the best online university in the world" This is what they have recently stated in an article in their digital edition in which they echo the success story of this institution, "thanks to the academic offer it provides, the selection of its teaching staff, and an innovative learning method oriented to form the professionals of the future".

**The best top international faculty**

TECH's faculty is made up of more than 6,000 professors of the highest international prestige. Professors, researchers and top executives of multinational companies, including Isaiah Covington, performance coach of the Boston Celtics; Magda Romanska, principal investigator at Harvard MetaLAB; Ignacio Wistumba, chairman of the department of translational molecular pathology at MD Anderson Cancer Center; and D.W. Pine, creative director of TIME magazine, among others.

**The world's largest online university**

TECH is the world's largest online university. We are the largest educational institution, with the best and widest digital educational catalog, one hundred percent online and covering most areas of knowledge. We offer the largest selection of our own degrees and accredited online undergraduate and postgraduate degrees. In total, more than 14,000 university programs, in ten different languages, making us the largest educational institution in the world.



**The most complete syllabuses on the university scene**

TECH offers the most complete syllabuses on the university scene, with programs that cover fundamental concepts and, at the same time, the main scientific advances in their specific scientific areas. In addition, these programs are continuously updated to guarantee students the academic vanguard and the most demanded professional skills. and the most in-demand professional competencies. In this way, the university's qualifications provide its graduates with a significant advantage to propel their careers to success.

**A unique learning method**

TECH is the first university to use Relearning in all its programs. This is the best online learning methodology, accredited with international teaching quality certifications, provided by prestigious educational agencies. In addition, this innovative academic model is complemented by the "Case Method", thereby configuring a unique online teaching strategy. Innovative teaching resources are also implemented, including detailed videos, infographics and interactive summaries.

#### The official online university of the NBA

TECH is the official online university of the NBA. Thanks to our agreement with the biggest league in basketball, we offer our students exclusive university programs, as well as a wide variety of educational resources focused on the business of the league and other areas of the sports industry. Each program is made up of a uniquely designed syllabus and features exceptional guest hosts: professionals with a distinguished sports background who will offer their expertise on the most relevant topics.

#### Leaders in employability

TECH has become the leading university in employability. Ninety-nine percent of its students obtain jobs in the academic field they have studied within one year of completing any of the university's programs. A similar number achieve immediate career enhancement. All this thanks to a study methodology that bases its effectiveness on the acquisition of practical skills, which are absolutely necessary for professional development.



#### Google Premier Partner

The American technology giant has awarded TECH the Google Premier Partner badge. This award, which is only available to 3% of the world's companies, highlights the efficient, flexible and tailored experience that this university provides to students. The recognition not only accredits the maximum rigor, performance and investment in TECH's digital infrastructures, but also places this university as one of the world's leading technology companies.



#### The top-rated university by its students

Students have positioned TECH as the world's top-rated university on the main review websites, with a highest rating of 4.9 out of 5, obtained from more than 1,000 reviews. These results consolidate TECH as the benchmark university institution at an international level, reflecting the excellence and positive impact of its educational model.



# 03 Syllabus

Throughout a comprehensive syllabus, professionals will master the essential foundations for creating effective websites, starting with the basic structure of pages using HTML. From the creation of tags, lists, links, tables and forms, to the use of multimedia elements such as images and videos, this Postgraduate Certificate will offer a solid foundation in the development of structured content. At the same time, CSS will be studied in depth, allowing graduates to customize the design and presentation of websites.





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*With this qualification you will not only acquire technical knowledge, but you will also be ready to apply your new web development skills in a professional environment”*

## Module 1. Front End I - HTML and CSS from Scratch

- 1.1. HTML from Scratch
  - 1.1.1. HTML. Purpose in Web Development
  - 1.1.2. Structure of an HTML Document: DOCTYPE, <html>, <head>, <body>
  - 1.1.3. Semantic and Content Tags: <header>, <nav>, <section>, <footer>
  - 1.1.4. Essential Elements: Paragraphs (<p>), Lists (<ul>, <ol>), Links (<a>), Images (<img>)
  - 1.1.5. Best Practices in HTML
- 1.2. Text and Multimedia Elements in HTML
  - 1.2.1. Essential Text Tags: <p>, Headings, Lists, Bold and Italics
  - 1.2.2. Multimedia Embedding: Attributes of <img>, <audio>, <video>
  - 1.2.3. Essential Attributes for Accessibility (alt, aria-label)
- 1.3. HTML Forms
  - 1.3.1. Form Structure and Components: <form>, <input>, <label>, <button>
  - 1.3.2. Types of Input: Text, Email, Password, Submit Buttons
  - 1.3.3. HTML5 Validation: Client-Side Field Validation
  - 1.3.4. Forms with Basic Validation. Examples
- 1.4. CSS from Scratch
  - 1.4.1. CSS Language from Scratch: Use and Relationship with HTML
  - 1.4.2. CSS Syntax: Selectors, Properties and Values
  - 1.4.3. Application of Styles in Line, Internal and External
  - 1.4.4. Advanced Selectors: Of Type, Class, ID, Pseudoclasses (:hover, :focus)
- 1.5. Box Model in CSS
  - 1.5.1. Box Model: Importance in CSS
  - 1.5.2. Key Properties: Margin, Padding, Border, Width, Height
  - 1.5.3. Using Box-Sizing for Precise Control of the Box Model
  - 1.5.4. Design Applied to the Box Model. Examples
- 1.6. Typography and Text Styles in CSS
  - 1.6.1. Color and Font Properties: Color, Font-Family, Font-Size
  - 1.6.2. Advanced Text Styles: Bold, Italic, Alignment (text-align)
  - 1.6.3. Text Spacing and Separation: Line-Height, Letter-Spacing
  - 1.6.4. CSS Units of Measurement (px, em, rem) and Their Use in Typography



- 1.7. Layout Design with CSS - Flexbox
  - 1.7.1. Flexbox: Purpose
  - 1.7.2. Flexbox Properties: justify-content, align-items, flex-direction
  - 1.7.3. Element Distribution and Alignment in Flexbox
  - 1.7.4. Examples of Layouts with Flexbox
- 1.8. CSS Grid and Responsive Design with CSS
  - 1.8.1. CSS Grid: Rows, Columns and Areas
  - 1.8.2. Media Queries: Structure and Application on Different Devices
  - 1.8.3. Responsive Design for Mobile, Tablet and Desktop
  - 1.8.4. Adjusting Typography and Fluid Units in Responsive Design
- 1.9. Animations and Transitions in CSS
  - 1.9.1. Transitions: Transition Property, Effects on :hover
  - 1.9.2. Animations with CSS: Using @keyframes, Basic Animations
  - 1.9.3. Techniques for Smoothing Transitions and Animations on the Web
- 1.10. Web Accessibility in Design
  - 1.10.1. Web Accessibility: Importance
  - 1.10.2. Accessible Site Design. Best Practices
  - 1.10.3. ARIA Tags and Accessibility Validation Tools



*Do you want to turn your ideas into real web pages with HTML and CSS? This Postgraduate Certificate is the ideal option for you. You will master the essential languages for designing, structuring and customizing your own site"*

# 04

## Teaching Objectives

This Postgraduate Certificate is designed to provide a solid and practical understanding of the fundamentals of web development. In this way, the program will prepare professionals to be able to create functional and aesthetically appealing websites, starting with the most basic concepts and progressing to the most advanced design and layout techniques. Thanks to a progressive and well-structured teaching approach, each student will acquire the necessary skills to develop with confidence in the digital environment. They will also master the correct structuring of web pages using HTML, covering the organization of content with tags and the implementation of forms and interactive elements.





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*You will master the technical tools and develop critical thinking in problem solving and website optimization, becoming an expert, ready to face the challenges of the modern digital environment”*



## General Objectives

- Understand the fundamental concepts of web development and how it works
- Design semantic web structures using HTML correctly and efficiently
- Implement visual styles in web pages using CSS
- Create responsive designs adaptable to different devices and resolutions
- Apply good practices in the organization and maintenance of HTML and CSS code
- Integrate multimedia resources such as images, videos and audio into web pages
- Use selectors and advanced CSS properties to customize web designs
- Implement modern design techniques such as flexbox and grid for dynamic layouts
- Solve cross-browser compatibility issues in web projects
- Develop functional and attractive websites with a focus on user experience





## Specific Objectives

- ♦ Identify the basic structure of an HTML document and its importance in web development
- ♦ Use HTML to organize and present content on the web in a semantic and accessible way: Web architecture
- ♦ Apply styles with CSS to improve the visual presentation of elements
- ♦ Use the CSS box model to structure and distribute elements in the interface



*TECH will give you access to 100% online learning that combines innovation, flexibility and quality content. This is how you will become the expert who will lead the future of Web Development"*



# 05 Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.





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*TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”*

## The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

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*At TECH you will NOT have live classes  
(which you might not be able to attend)”*



### The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“*TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want*”



## Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.





## Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

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



## A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



*The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”*

### The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

### The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

*Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.*

*You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.*



As such, the best educational materials, thoroughly prepared, will be available in this program:



#### 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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



#### Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



#### Interactive Summaries

We present 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".

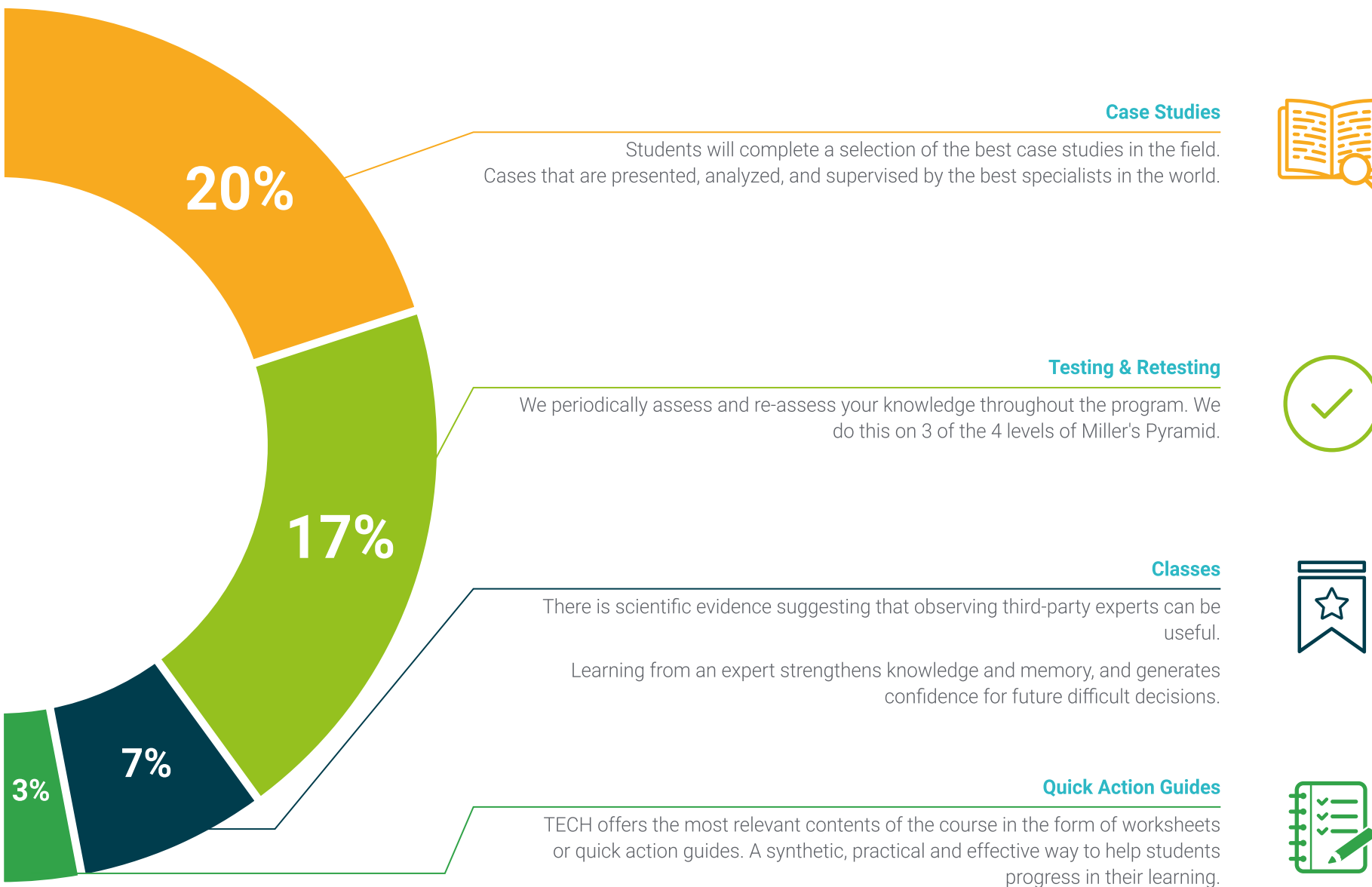


#### Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.







# 06

## Teaching Staff

The teaching staff is made up of a group of highly qualified professionals with extensive experience in Web Development and digital design. In fact, each of them has been carefully selected not only for their technical knowledge, but also for their ability to convey concepts in a clear, accessible and practical way. In this sense, the team of experts works with an innovative teaching approach, guaranteeing that students acquire technical skills and a comprehensive understanding of the fundamentals of Web Development. Thanks to their experience, they will offer an up-to-date perspective on how to create functional and attractive sites.



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*The passion for web development and the dedication of the professors ensure an enriching and motivating experience that will drive you to achieve your goals and excel in a constantly evolving industry”*

## Management



### **Dr. Lucas Cuesta, Juan Manuel**

- ♦ Senior Software Engineer and Analyst at Indizen – Believe in Talent
- ♦ Senior Software Engineer and Analyst at Krell Consulting and IMAGiNA Artificial Intelligence
- ♦ Software Engineer at Intel Corporation
- ♦ Software Engineer at Intelligent Dialog Systems
- ♦ PhD in Electronic Systems Engineering for Intelligent Environments from the Polytechnic University of Madrid
- ♦ Graduate in Telecommunications Engineering at the Polytechnic University of Madrid
- ♦ Master's Degree in Electronic Systems Engineering for Intelligent Environments from the Polytechnic University of Madrid



### **Mr. Márquez Ruiz de Lacanal, Juan Antonio**

- ♦ Software Developer at GTD Defense & Security Solutions
- ♦ Software Developer at Solera Inc
- ♦ Development and Research Engineer at GRVC Sevilla
- ♦ Co-founder of Unmute
- ♦ Co-founder of VR Educa
- ♦ Academic Exchange in Engineering and Entrepreneurship at the University of California, Berkeley
- ♦ Degree in Industrial Engineering from the University of Sevilla





## Professors

### Ms. Domínguez Valderrama, Desirée

- ♦ *Lead Product & Growth Strategist*
- ♦ Master's Degree in Graphic Design and Creativity from the Business School of the Sevilla Chamber of Commerce
- ♦ Expert in UX/UI Designer from CoderHouse
- ♦ Expert in Technology and Entrepreneurship

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*A unique, key and decisive learning experience to boost your professional development"*

# 07 Certificate

This Postgraduate Certificate in Web Development with HTML and CSS from Scratch guarantees, in addition to the most rigorous and up-to-date program, access to an Postgraduate Certificate diploma issued by TECH Global University.





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*Successfully complete this program and  
receive your university qualification without  
having to travel or fill out laborious paperwork”*

This private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Web Development with HTML and CSS from Scratch** 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** private qualification, is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Web Development with HTML and CSS from Scratch**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**







## Postgraduate Certificate Web Development with HTML and CSS from Scratch

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