

# Postgraduate Certificate Web Programming Languages





## Postgraduate Certificate Web Programming Languages

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/school-of-business/postgraduate-certificate/web-programming-languages](http://www.techtute.com/us/school-of-business/postgraduate-certificate/web-programming-languages)

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# 01 Welcome

This intensive program develops specialized knowledge in website creation from the programmer's point of view. In terms of the customer environment, it delves into design and layout (HTML and CSS), including the creation of dynamic pages (JavaScript). Professionals will also work on the server side, using PHP and a database manager (MySQL). Furthermore, different techniques, tools, frameworks and libraries will be used to facilitate many programming tasks, such as the creation of visual effects and the use of complex functions. Finally, students will approach different optimization techniques and good programming practices, especially useful during project development.



Postgraduate Certificate in Web Programming Languages  
TECH Technological University



“

*You will learn how to lead agile team roles and recommend strategies to overcome the challenges faced by spread-out or offshore agile teams”*

02

# Why Study at TECH?

TECH is the world's largest 100% online business school. It is an elite business school, with a model based on the highest academic standards. A world-class centre for intensive managerial skills training.



“

*TECH is a university at the forefront of technology, and puts all its resources at the student's disposal to help them achieve entrepreneurial success"*

## At TECH Technological University



### Innovation

The university offers an online learning model that combines the latest educational technology with the most rigorous teaching methods. A unique method with the highest international recognition that will provide students with the keys to develop in a rapidly-evolving world, where innovation must be every entrepreneur's focus.

"Microsoft Europe Success Story", for integrating the innovative, interactive multi-video system.



### The Highest Standards

Admissions criteria at TECH are not economic. Students don't need to make a large investment to study at this university. However, in order to obtain a qualification from TECH, the student's intelligence and ability will be tested to their limits. The institution's academic standards are exceptionally high...

**95%** | of TECH students successfully complete their studies



### Networking

Professionals from countries all over the world attend TECH, allowing students to establish a large network of contacts that may prove useful to them in the future.

**100,000+**  
executives trained each year

**200+**  
different nationalities



### Empowerment

Students will grow hand in hand with the best companies and highly regarded and influential professionals. TECH has developed strategic partnerships and a valuable network of contacts with major economic players in 7 continents.

**500+** | collaborative agreements with leading companies



### Talent

This program is a unique initiative to allow students to showcase their talent in the business world. An opportunity that will allow them to voice their concerns and share their business vision.

After completing this program, TECH helps students show the world their talent.



### Multicultural Context

While studying at TECH, students will enjoy a unique experience. Study in a multicultural context. In a program with a global vision, through which students can learn about the operating methods in different parts of the world, and gather the latest information that best adapts to their business idea.

TECH students represent more than 200 different nationalities.



TECH strives for excellence and, to this end, boasts a series of characteristics that make this university unique:



### Analysis

---

TECH explores the student's critical side, their ability to question things, their problem-solving skills, as well as their interpersonal skills.



### Academic Excellence

---

TECH offers students the best online learning methodology. The university combines the Relearning methodology (the most internationally recognized postgraduate learning methodology) with Harvard Business School case studies. A complex balance of traditional and state-of-the-art methods, within the most demanding academic framework.



### Economy of Scale

---

TECH is the world's largest online university. It currently boasts a portfolio of more than 10,000 university postgraduate programs. And in today's new economy, **volume + technology = a groundbreaking price**. This way, TECH ensures that studying is not as expensive for students as it would be at another university.



### Learn with the best

---

In the classroom, TECH's teaching staff discuss how they have achieved success in their companies, working in a real, lively, and dynamic context. Teachers who are fully committed to offering a quality specialization that will allow students to advance in their career and stand out in the business world.

Teachers representing 20 different nationalities.



*At TECH you will have access to Harvard Business School case studies"*

03

# Why Our Program?

Studying this TECH program means increasing the chances of achieving professional success in senior business management.

It is a challenge that demands effort and dedication, but it opens the door to a promising future. Students will learn from the best teaching staff and with the most flexible and innovative educational methodology.



“

*We have highly qualified teachers and the most complete syllabus on the market, which allows us to offer you training of the highest academic level"*

This program will provide students with a multitude of professional and personal advantages, particularly the following:

**01**

### A significant career boost

---

By studying at TECH, students will be able to take control of their future and develop their full potential. By completing this program, students will acquire the skills required to make a positive change in their career in a short period of time.

*70% of participants achieve positive career development in less than 2 years.*

**02**

### Develop a strategic and global vision of companies

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TECH offers an in-depth overview of general management to understand how each decision affects each of the company's different functional areas.

*Our global vision of companies will improve your strategic vision.*

**03**

### Consolidate the student's senior management skills

---

Studying at TECH means opening the doors to a wide range of professional opportunities for students to position themselves as senior executives, with a broad vision of the international environment.

*You will work on more than 100 real senior management cases.*

**04**

### Take on new responsibilities

---

The program will cover the latest trends, advances and strategies, so that students can carry out their professional work in a changing environment.

*45% of graduates are promoted internally.*

05

### Access to a powerful network of contacts

TECH connects its students to maximize opportunities. Students with the same concerns and desire to grow. Therefore, partnerships, customers or suppliers can be shared.

*You will find a network of contacts that will be instrumental for professional development.*

06

### Thoroughly develop business projects

Students will acquire a deep strategic vision that will help them develop their own project, taking into account the different areas in companies.

*20% of our students develop their own business idea.*

07

### Improve *soft* skills and management skills

TECH helps students apply and develop the knowledge they have acquired, while improving their interpersonal skills in order to become leaders who make a difference.

*Improve your communication and leadership skills and enhance your career.*

08

### Be part of an exclusive community

Students will be part of a community of elite executives, large companies, renowned institutions, and qualified professors from the most prestigious universities in the world: the TECH Technological University community.

*We give you the opportunity to train with a team of world renowned teachers.*

# 04 Objectives

With this high-level training, professionals will find a unique opportunity to improve in a field of great importance, since they will learn how to develop a website correctly, including key aspects such as current legality and Internet security. In this way, they will become professional experts in different branches, so they will be able to control all areas of the company.



“

*A unique opportunity to specialize in a promising sector with recognized experts in the field”*

TECH makes the goals of their students their own goals too.

We work together to help you achieve them.

The Postgraduate Certificate in Web Programming Languages trains students to:

01

Examine the characteristics of agile project management and determine the differences with predictive or traditional approaches

04

Initiate, plan, execute, monitor, and close an agile project

02

Assimilate the key principles of agile mindset and practice

03

Analyze the different agile methodologies and determine the best framework to adopt according to project characteristics

05

Lead and differentiate the roles of an agile team and recommend strategies for overcoming the challenges faced by dispersed or offshore agile teams





06

Integrate applications developed in PHP with MySQL databases

08

Gain specialized knowledge of web application and web page development, both on the client and server side

09

Examine web programming languages and their implementation in development environments

07

Master customer interaction processes using forms, cookies and sessions

10

Analyze the different frameworks and libraries for the main web programming languages



05

# Structure and Content

TECH has designed this high-level training to fulfill the specialization needs of business professionals who wish to expand their knowledge toward website management, a booming field that demands qualified professionals. Thus, this Postgraduate Certificate will allow them to acquire specific knowledge that they can immediately apply to their work practice. And, to do so, they will use a totally online methodology so they can balance their studies with the rest of their daily obligations.



“

*A complete training of high professional interest that will allow you to compete among the best in the sector”*

## Syllabus

The Postgraduate Certificate in Web Programming Languages at TECH Technological University is an intensive program that prepares students to face challenges and business decisions on a national and international level. Its content is designed to promote the development of managerial skills that enable more rigorous decision-making in uncertain environments.

Throughout 150 hours of study, students will analyze a multitude of practical cases through individual work, which will allow them to acquire the necessary skills to successfully carry out their daily practice. It is, therefore, an authentic immersion in real business situations.

This program deals with the different areas of a company in depth, and it is designed for managers to understand website programming languages from a strategic, international and innovative perspective.

A plan designed for students, focused on their professional development, which prepares them to achieve excellence in the field of information security management and administration. A program that understands your needs and those of your company through innovative content based on the latest trends, and supported by the best educational methodology and an exceptional teaching staff, which will provide you with the skills to creatively and efficiently resolve critical situations.

It is a program which is carried out in six weeks and is divided into one module:

### Module 1

### Web Programming Languages



### Where, When and How is it Taught?

TECH offers you the possibility of taking this program completely online. Throughout the six weeks of training, you will be able to access all the program contents at any time, allowing you to self-manage your study time.

*A unique, key, and decisive educational experience to boost your professional development and make the definitive leap.*

Module 1. Web Programming Languages

1.1. Web Programming

- 1.1.1. The Web
- 1.1.2. Web Design
- 1.1.3. Web Development
- 1.1.4. Types of Languages
- 1.1.5. Framework vs. Library
- 1.1.6. Development Environments (IDE - Integrated Development Environment)
- 1.1.7. Browsers

1.2. HTML

- 1.2.1. HTML
- 1.2.2. Labels
- 1.2.3. Documents Structure
- 1.2.4. Semantic Components
- 1.2.5. Text Content
- 1.2.6. Blocks
- 1.2.7. Hyperlinks
- 1.2.8. Embedded Content
- 1.2.9. Tables
- 1.2.10. Forms

1.3. CSS

- 1.3.1. CSS
- 1.3.2. Style Applications
- 1.3.3. Rules
- 1.3.4. Style Collisions
- 1.3.5. Selectors
- 1.3.6. Combiners
- 1.3.7. Pseudo Classes
- 1.3.8. Pseudo Components
- 1.3.9. Box Models
- 1.3.10. Attributes
- 1.3.11. Measuring Units
- 1.3.12. Positioning
- 1.3.13. Colors
- 1.3.14. Variables:
- 1.3.15. Animation

1.4. JavaScript

- 1.4.1. JavaScript
- 1.4.2. Code Inclusion in HTML
- 1.4.3. Syntax
- 1.4.4. Types of Data
- 1.4.5. Variables and Areas
- 1.4.6. Operators
- 1.4.7. Flow Control Structures
- 1.4.8. Functions
- 1.4.9. Document Object Model (DOM) Manipulation
- 1.4.10. Events
- 1.4.11. Object Oriented Programming
- 1.4.12. AJAX

1.5. PHP

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

1.6. MySQL

- 1.6.1. MySQL
- 1.6.2. Databases
- 1.6.3. Characters Codification
- 1.6.4. Types of Data
- 1.6.5. Users and Privileges
- 1.6.6. Accessing Databases
- 1.6.7. Creating and Manipulating Databases
- 1.6.8. Clauses
- 1.6.9. Queries

1.7. HTML and CSS Libraries and Frameworks

- 1.7.1. Bootstrap
- 1.7.2. Foundation
- 1.7.3. Skeleton
- 1.7.4. Bulma
- 1.7.5. Materialize
- 1.7.6. PureCSS
- 1.7.7. TailwindCSS
- 1.7.8. Susy
- 1.7.9. UIKit

1.8. JavaScript Libraries and Frameworks

- 1.8.1. Angular
- 1.8.2. jQuery
- 1.8.3. React
- 1.8.4. Meteor
- 1.8.5. Polymer
- 1.8.6. Mithril
- 1.8.7. Aurelia
- 1.8.8. Vue.js
- 1.8.9. Ember.js
- 1.8.10. Node.js
- 1.8.11. Backbone.js

1.9. PHP Libraries and Frameworks

- 1.9.1. Laravel
- 1.9.2. Symfony
- 1.9.3. Zend
- 1.9.4. CodeIgniter
- 1.9.5. FuelPHP
- 1.9.6. CakePHP
- 1.9.7. Phalcon
- 1.9.8. Yii
- 1.9.9. Slim

1.10. Web Programming Techniques

- 1.10.1. Beautify
- 1.10.2. Minimizing Code
- 1.10.3. Image Optimization
- 1.10.4. Code Normalization and Compatibility between Browsers
- 1.10.5. Code Debugging and Validation
- 1.10.6. Bundling
- 1.10.7. Repository and Version Control



# 06

# Methodology

This training program offers 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"*

## At TECH Business School we use the Harvard case method

Our program offers a revolutionary method of skills and knowledge development. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

“

*At TECH, you will experience a way of learning that is shaking the foundations of traditional universities around the world"*



*We are the first online university to combine Harvard Business School case studies with a 100% online learning system based on repetition.*



## A learning method that is different and innovative

This intensive program from TECH Technological University School of Business prepares students to face all the challenges in this area, both nationally and internationally. We are committed to promoting personal and professional growth, the best way to strive for success, that is why TECH uses Harvard case studies, with which we have a strategic agreement that allows us to provide our students with material from the best university the world.

“*You will learn, through collaborative activities and real cases, how to solve complex situations in real business environments”*

The case method has been the most widely used learning system among the world's leading business 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 we face in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They must integrate all their knowledge, research, argue and defend their ideas and decisions.

*Our program prepares you to face new challenges in uncertain environments and achieve success in your career.*

## Relearning Methodology

Our university is the first in the world to combine Harvard University case studies with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

We enhance Harvard case studies with the best 100% online teaching method: Relearning.

*Our online system will allow you to organize your time and learning pace, adapting it to your schedule. You will be able to access the contents from any device with an internet connection.*

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 online business school is the only one in the world licensed to incorporate this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically.

With this methodology we have 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, markets, and financial 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 specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.*

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.



This program offers the best educational material, prepared with professionals in mind:



### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



### Management Skills Exercises

They will carry out activities to develop specific executive competencies in each thematic area. Practices and dynamics to acquire and develop the skills and abilities that a high-level manager needs to develop in the context of the globalization we live in.



### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





### Case Studies

They will complete a selection of the best business cases used at Harvard Business School. Cases that are presented, analyzed, and supervised by the best senior management specialists in Latin America.



### 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 multimedia content presentation training Exclusive system 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 your goals.



07

# Our Students' Profiles

The Postgraduate Certificate in Web Programming Languages is a program aimed at professionals with experience, but who believe in higher specialization as a way of improving on a personal and professional level. A unique opportunity to stand out in a sector with a promising future.







“

*Enroll now for the most innovative teaching resources and the most up-to-date content on the market, taught by a prestigious teaching staff”*

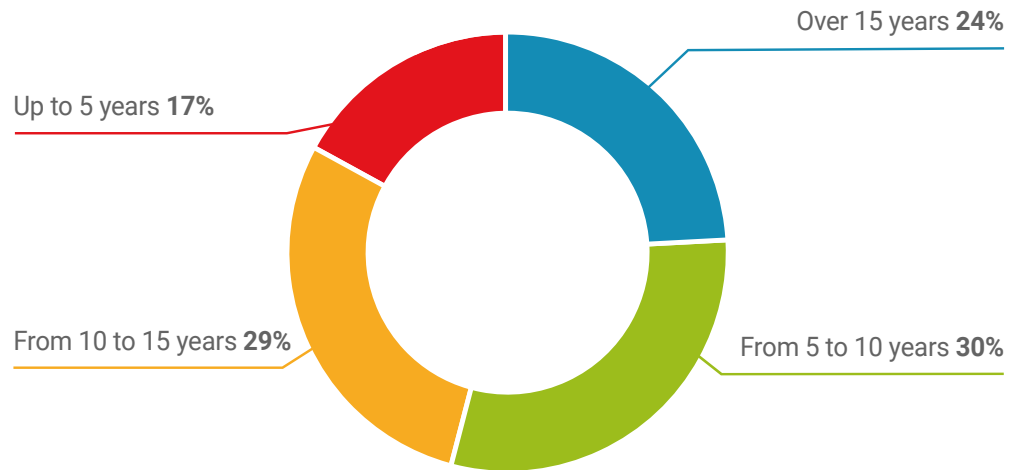
### Average Age

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Between **35** and **45** years old

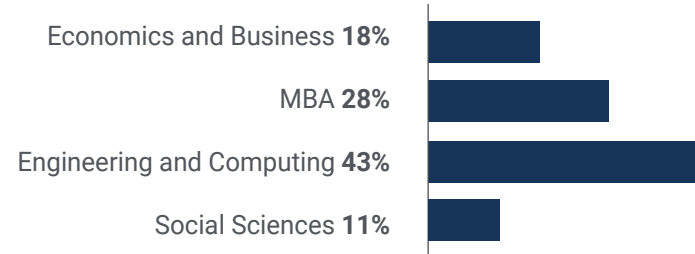
### Years of Experience

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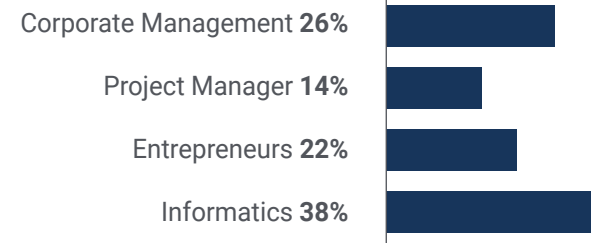
### Training

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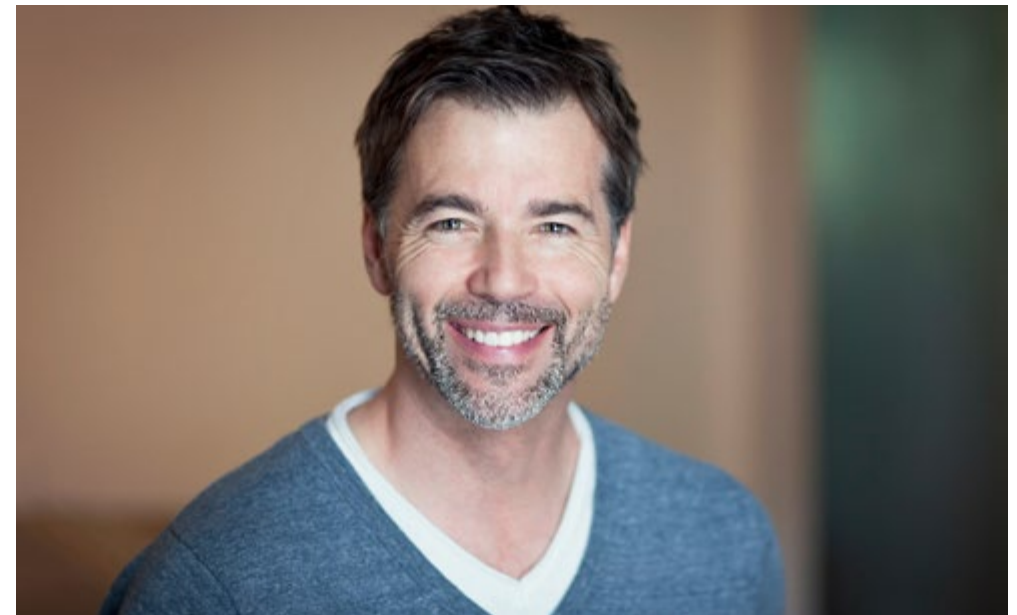
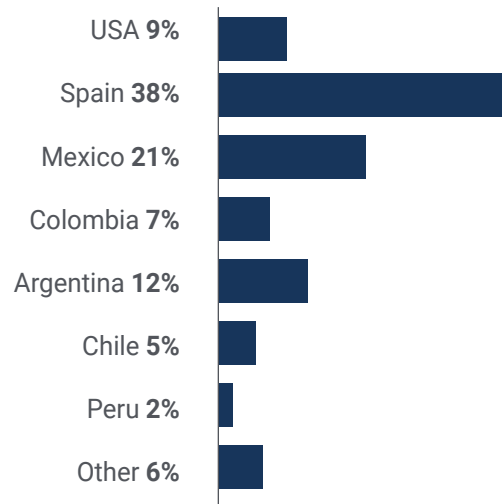
### Academic Profile

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## Geographical Distribution

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## Pablo Jiménez

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Manager at a multinational company

*"Thanks to this TECH training, I've improved my website by incorporating the latest developments in the security sector, increasing the volume of sales in my company. Without a doubt, it was a good decision to specialize at TECH"*

08

# Course Management

The specialization our professors have in this field means they have the necessary qualifications to offer students a complete and high-quality study on subjects that will be useful in their daily work in the business environment. Undoubtedly, people who believe in higher education as a method to advance in their profession and improve the competitiveness of their business.





“

*Renowned professionals will be your tutors throughout this high-intensity training. A unique opportunity to achieve professional excellence”*

## Management



### Mr. Gris Ramos, Alejandro

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

## Professors

### Mr. Méndez Martínez, Brandon

- ◆ Web design and development - HIADIS Graduated in Multimedia Engineering, University of Alicante in 2016
- ◆ Natural Language Processing (NLP) - GPLSI (University of Alicante)
- ◆ Master's Degree in Web Services and Applications Development by the University of Alicante in 2017
- ◆ "Analysis of gamification techniques to learn complex subjects through collaborative applications" - Technical Committee on Learning Technology Bulletin
- ◆ "Grama: a web application for learning and generating creative language" - INTED2017 Proceedings
- ◆ Research in Human Language Technologies (TLH) - GPLSI (University of Alicante)



09

# Impact on Your Career

The completion of this Postgraduate Certificate in Web Programming Languages will be an added quality to business professionals' qualifications, by offering all the knowledge that, although seemingly totally removed from their daily work, can be very useful to control business processes. For this reason, higher specialization in this field proves essential, both at a personal and professional level for students, but also for the companies where they work.







“

*A unique specialization that stands out due to the quality of its contents and its excellent teaching staff”*

## Are you ready to take the leap? Excellent professional development awaits you

The Postgraduate Diploma in Web Programming Languages at TECH Technological University is an intensive and highly valuable program aimed at improving students' professional skills in an area of extensive competition. Undoubtedly, it is a unique opportunity to improve professionally, but also personally, as it involves effort and dedication.

Students who wish to improve themselves, achieve a positive change at a professional level and interact with the best, will find their place at TECH.

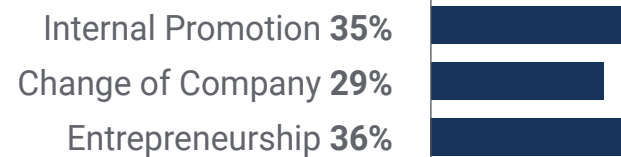
*If you want to make a positive change to your career, don't think twice and join TECH.*

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

### When the change occurs



### Type of change



## Salary increase

---

This program represents a salary increase of more than 25% for our students.



10

# Benefits for Your Company

The Postgraduate Certificate in Web Programming Languages helps to elevate the organization's talent to its maximum potential through the specialization of high-level leaders. That way, business professionals will be able to bring added quality to their company by having the necessary skills to control Web Programming Language processes. A program that adapts to students so they acquire the necessary tools that, later on, they will be able to apply in their daily practice, achieving great benefits for their company.





“

*A program of high academic standing to launch your career to success”*

Developing and retaining talent in companies is the best long-term investment.

**01**

### Intellectual Capital and Talent Growth

The professional will introduce the company to new concepts, strategies, and perspectives that can bring about significant changes in the organization.

---

**02**

### Retaining high-potential executives to avoid talent drain

This program strengthens the link between the company and the executive and opens new avenues for professional growth within the company.

**03**

### Building agents of change

The professional will be able to make decisions in times of uncertainty and crisis, helping the organization overcome obstacles.

---

**04**

### Increased international expansion possibilities

Thanks to this program, the company will come into contact with the main markets in the world economy.



05

### Project Development

Managers will be able to work on a real project or develop new projects in the R&D or Business Development area of their company.

---

06

### Increased competitiveness

This program will equip students with the skills to take on new challenges and drive the organization forward.

11

# Certificate

The Postgraduate Certificate in Web Programming Languages guarantees you, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Technological University.







“

*Successfully complete this training  
and receive your university degree  
without travel or laborious paperwork”*

This **Postgraduate Certificate in Web Programming Languages** contains the most complete and up-to-date scientific program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** diploma issued by **TECH Technological University via tracked delivery**.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Certificate, and meets the requirements commonly demanded by job markets, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in Web Programming Languages**

Official N° of Hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.



## Postgraduate Certificate Web Programming Languages

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- » Certificate: **TECH Technological University**
- » Dedication: **16h/week**
- » Schedule: **at your own pace**
- » Exams: **online**

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