Postgraduate Certificate
Web and Network Development for Video Games

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Postgraduate Certificate
Web and Network Development for Video Games

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

Website: **www.techtitute.com/us/videogames/postgraduate-certificate/web-network-development-video-games**

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01
Introduction

The internet opened its doors to video games many years ago. The digital environment has a large number of specific features that make it very complex. However, it must be mastered in order to make video games work properly. Without knowing this environment well, the development of web games becomes much more complicated and those games that are played online may fail. For this reason, there is a need for specific expertise in this area and companies are looking for specialists who can handle it. Therefore, this program offers its students the best skills to master networks and web development applied to video games.

Become an expert in Web and Network Development for Video Games and make professional progress"

The Internet environment has become one of the most important paths that the video game industry has followed today. The Internet allows, on the one hand, the connection of millions of users who can play simultaneously and interact, making the experience much more special and complete. And, on the other hand, it allows the existence of video games designed specifically for this area through websites.

Therefore, it is an area that the video game industry has been exploiting intensively for years. And, for this reason, companies are looking for great specialists who are able to develop web games and who understand the functioning of networks applied to video games. But mastering this field is not easy and requires specific knowledge.

This Postgraduate Certificate in Web and Network Development for Video Games offers, therefore, the skills and knowledge required to become a great expert in this area, in such a way that students who graduate from this course can enjoy the best professional opportunities in the industry.

This **Postgraduate Certificate in Web and Network Development for Video Games** contains the most complete and up-to-date program on the market. The most important features include:

- Practical cases presented by experts in video game web and network development in this field
- 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
- Special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Access to content from any fixed or portable device with an Internet connection

" *Master the Internet and video games thanks to this Postgraduate Certificate"*

This Postgraduate Certificate is what you need to achieve success in the video game industry.

This Postgraduate Certificate will teach you to develop web-based video games like the best experts.

" *Knowing how networks work when applied to video games is essential for today's companies. Enroll now and discover how your career can progress immediately"*

The program's teaching staff includes professionals from the sector who contribute the experience of their work to this program, as well as renowned specialists from reference societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive learning programmed to learn in 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 student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

The main objective of this Postgraduate Certificate in Web Development and Networking for Video Games is to help its students progress professionally and, to this end, it offers them the best teaching and the best skills, so that at the end of the program they are able to access the big companies in the industry. Therefore, this program is the solution for those who are looking for an immediate job improvement and new skills that will allow them to face the future with guarantees.

"All of your objectives will be achieved quickly once you finish this program"

General Objectives

- Understand the role that networks play in the use and development of video games
- Develop web and multiplayer video games
- Know the different programming methods applied to video games
- Study the security processes involved in video games
- Include all the phases of a project in the document

TECH knows you are ambitious, and this program will help you achieve all your goals"

Specific Objectives

- Design games and interactive web applications with the corresponding documentation
- Evaluate the main features of games and interactive web applications for professional and adequate communication
- Describe the transmission control protocol/internet protocol (TCP/IP) architecture and the basic operation of wireless networks
- Analyze video game security
- Acquire the ability to develop online games for multiple players

Structure and Content

This Postgraduate Certificate in Web and Network Development for Video Games is structured into 2 specialized modules and has been designed by great experts in the subject. In this way, TECH ensures that students obtain the best content so that they can apply it immediately in their professional fields. For that reason, the focus of this program is ideal for those looking for a short-term career advancement in the video game industry.

"The contents that you are looking for are here. Gain in-depth knowledge in web and network development applied to video games and become a great specialist"

Module 1. Web Game Design and Development

1.1.   Web Origins and Standards
    1.1.1.   Internet Origins
    1.1.2.   World Wide Web
    1.1.3.   First Web Standards
    1.1.4.   Rise in Web Standards

1.2.   HTTP and Client-Server Structure
    1.2.1.   Client-Server Role
    1.2.2.   Client-Server Communication
    1.2.3.   Recent History
    1.2.4.   Centralized Computing

1.3.   Web Programming: Introduction
    1.3.1.   Basic Concepts
    1.3.2.   Preparing Web Servers
    1.3.3.   Basic Concepts of HTML5
    1.3.4.   HTML Forms

1.4.   Introduction to HTML and Examples
    1.4.1.   HTML5 History
    1.4.2.   HTML5 Elements
    1.4.3.   Application Programming Interface (API)
    1.4.4.   CCS3

1.5.   Document Object Model
    1.5.1.   What Is a Document Object Model?
    1.5.2.   Using DOCTYPE
    1.5.3.   The Importance of Validating the HTML
    1.5.4.   Accessing Elements
    1.5.5.   Creating Elements and Texts
    1.5.6.   Using InnerHTML
    1.5.7.   Deleting an Element or Text Node
    1.5.8.   Reading and Writing Element Attributes
    1.5.9.   Manipulating Element Styles
    1.5.10.   Attaching Multiple Files at Once

1.6.   Introduction to CSS and Examples
    1.6.1.   CSS3 Syntax
    1.6.2.   Style Sheets
    1.6.3.   Labels
    1.6.4.   Selectors
    1.6.5.   CSS Web Design

1.7.   Introduction to JavaScript and Examples
    1.7.1.   What Is JavaScript?
    1.7.2.   A Brief History of the Language
    1.7.3.   JavaScript Versions
    1.7.4.   Displaying Dialog Boxes
    1.7.5.   JavaScript Syntax
    1.7.6.   Understanding Scripts
    1.7.7.   Spaces
    1.7.8.   Comments
    1.7.9.   Functions
    1.7.10.   On-Page and External JavaScript

1.8.   JavaScript Functions
    1.8.1.   Function Declaration
    1.8.2.   Function Expression
    1.8.3.   Calling Functions
    1.8.4.   Recursion
    1.8.5.   Nested Functions and Closures
    1.8.6.   Variable Preservation
    1.8.7.   Multi-Nested Functions
    1.8.8.   Name Conflicts
    1.8.9.   Clauses or Closures
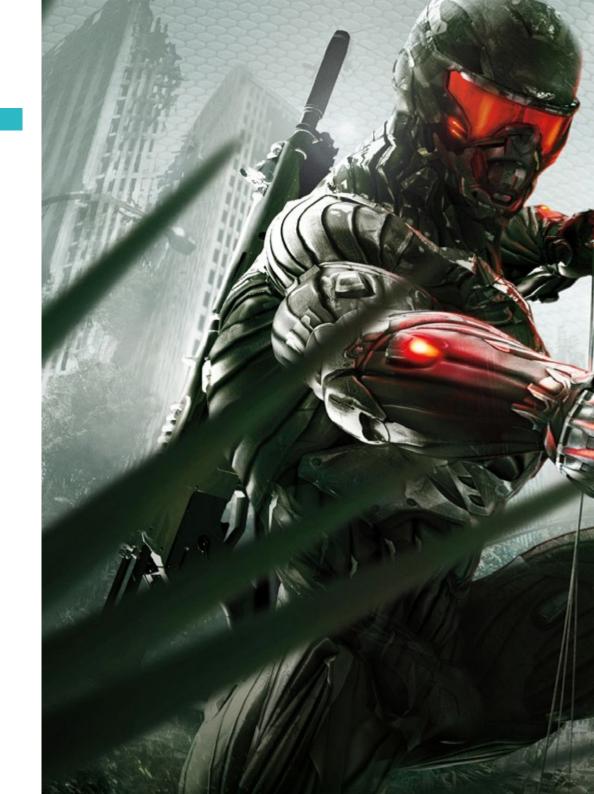   1.8.10.   Function Parameters

You won't find a better program to make your projects triumph"

04
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"

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.

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 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 that you are presented with in the case method, an action-oriented learning method. Over the course of 4 years, you will be presented with multiple practical case studies. You will have to combine all your knowledge, and research, argue, and defend your ideas and decisions.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

Relearning Methodology

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

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

In 2019, we obtained the best learning results of all online universities in the world.

At TECH you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

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

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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.

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

Study Material

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

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

Classes

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

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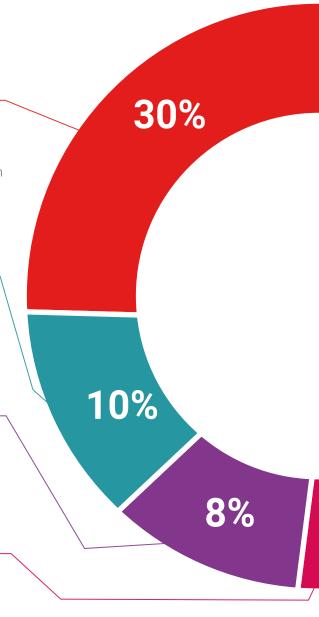
Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization 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.

30%

10%

8%

20%

25%

4%

3%

Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.
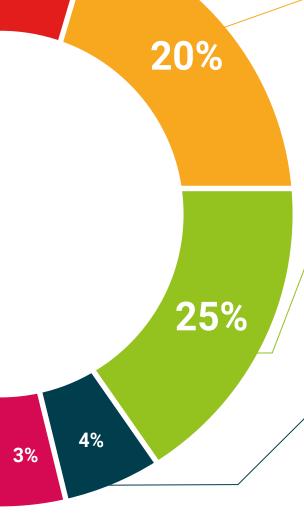
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

05

Certificate

The Postgraduate Certificate in Web and Network Development for Video Games guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

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

This program will allow you to obtain your **Postgraduate Certificate in Web and Network Development for Video Games** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: **Postgraduate Certificate in Web and Network Development for Video Games**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

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

Postgraduate Certificate in Web and Network Development for Video Games

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*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.

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