

Postgraduate Certificate

Web Game Design and Development



Postgraduate Certificate Web Game Design and Development

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

Website: www.techtitute.com/in/videogames/postgraduate-certificate/web-game-design-development

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01

Introduction

The popularity of the Internet has meant that many activities that used to be carried out exclusively in the offline world are now also found online. And today's entertainment par excellence is not left out of this. Video games, once confined to consoles, can now also be enjoyed over the web. In addition, there are games that are designed specifically to be played online. But these need precise knowledge to be designed, as not just anyone can do it. This program offers its students the knowledge required to design and develop web games, in such a way that they can create big successful works and, as a result, advance professionally.





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*Design very popular web games and
achieve professional success”*

The video game industry is enormous. There are many companies that design a wide variety of games, depending on circumstances such as the target audience, budget, genre or target platform. Therefore, among this complex industry there is also room for web games.

This type of game can be enjoyed through a web page, so it works externally to platforms and consoles, and you only need a computer with an internet connection or a cell phone to try them. Therefore, it is a peculiar video game that needs specific knowledge to be developed and designed correctly.

For that reason, this Postgraduate Certificate in Web Game Design and Development is the answer for all those looking to advance professionally in the video game industry. Therefore, this program contains the best content in video game development for the field of web sites, and uses a completely online learning format, thereby facilitating the balance between the working life and studies of its students.

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

- ◆ Practical cases presented by experts in web games development
- ◆ 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
- ◆ Content that is accessible from any fixed or portable device with an Internet connection



Web games are very successful on a global level. Don't wait any longer and perfect your designing skills with this Postgraduate Certificate"

“

Web games have a huge presence on the Internet and millions of people enjoy them. Gain access to such a prosperous field thanks to this Postgraduate Certificate”

The teaching staff of this program includes professionals from the industry, who contribute the experience of their work to this program, in addition to recognized 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.

The best companies in the sector are looking for experts in web games design. Don't keep them waiting.

You will be the best web game developer in your field when you finish this program.

```
test_sample_name
anTask task.define('clean-extension-${name}', use
distribus_
Beta define('compile-extension:${name}',
true);
```

02 Objectives

The main objective of this Postgraduate Certificate in Web Game Design and Development is to offer its students a professional improvement in the video game industry, and for this purpose, this program provides great knowledge and skills, so that students can enter the best companies in the sector. Therefore, upon finishing this program, they will be in the best position to take an important leap in their working lives.





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Achieve all your professional goals thanks to this Postgraduate Certificate in Web Game Design and Development”



General Objectives

- ◆ Know the different programming methods applied to video games
- ◆ Master the basic programming languages used in video games
- ◆ Understand the role of programming in video game development
- ◆ Develop web video games





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

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You want to go far and this program will help you to do so”

03

Structure and Content

This Postgraduate Certificate in Web Game Design and Development has been created by great experts in the field who belong to some of the biggest video game companies in the world. For this reason, students will enjoy the most innovative content, taken directly from the professional field. In this way, it ensures that students can apply everything they have learnt throughout the program to their jobs. That will carry them to success.





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Comprehensive and innovative content to help you become a specialist in Web Game Design and Development”

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



- 1.9. PlayCanvas for Web Game Development
 - 1.9.1. What Is PlayCanvas?
 - 1.9.2. Project Configuration
 - 1.9.3. Creating an Object
 - 1.9.4. Adding Physics
 - 1.9.5. Adding Models
 - 1.9.6. Changing the Gravity and Scene Settings
 - 1.9.7. Executing Scripts
 - 1.9.8. Camera Control
- 1.10. Phaser for Web Game Development
 - 1.10.1. What Is Phaser?
 - 1.10.2. Loading Resources
 - 1.10.3. Building the World
 - 1.10.4. Platforms
 - 1.10.5. The Player
 - 1.10.6. Adding Physics
 - 1.10.7. Using the Keyboard
 - 1.10.8. Pickups
 - 1.10.9. Points and Scoring
 - 1.10.10. Bouncing Bombs



*These contents will
make you a great expert"*

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.





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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.



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 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.

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.



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.





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 Games Design and Development guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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

This **Postgraduate Certificate in Web Game Design and Development** contains the most complete and up-to-date program on the market.

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

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

Title: **Postgraduate Certificate in Web Game Design and Development**

Official N° of Hours: **150 h.**



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

future
health confidence people
education information tutors
guarantee accreditation teaching
institutions technology learning
community commitment
personalized service innovation
knowledge present
development language
virtual classroom



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