Postgraduate Certificate
3D Art for Video Games

tech technological university

Postgraduate Certificate
3D Art for Video Games

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

Website: **www.techtitute.com/in/design/postgraduate-certificate/3d-art-video-games**

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01
Introduction

3D art in video games is a fundamental aspect to provide a certain realism to the images that are projected. Often, however, it is not a matter of creating that effect but of differentiating the background from the figure, allowing the user to better understand the story and gameplay. Designers who are specialized in this area are of great value to the industry. Therefore, this program provides students with the opportunity to specialize in a sector that is growing at an international level. They will learn the tools they need to join a development company or provide their services independently.
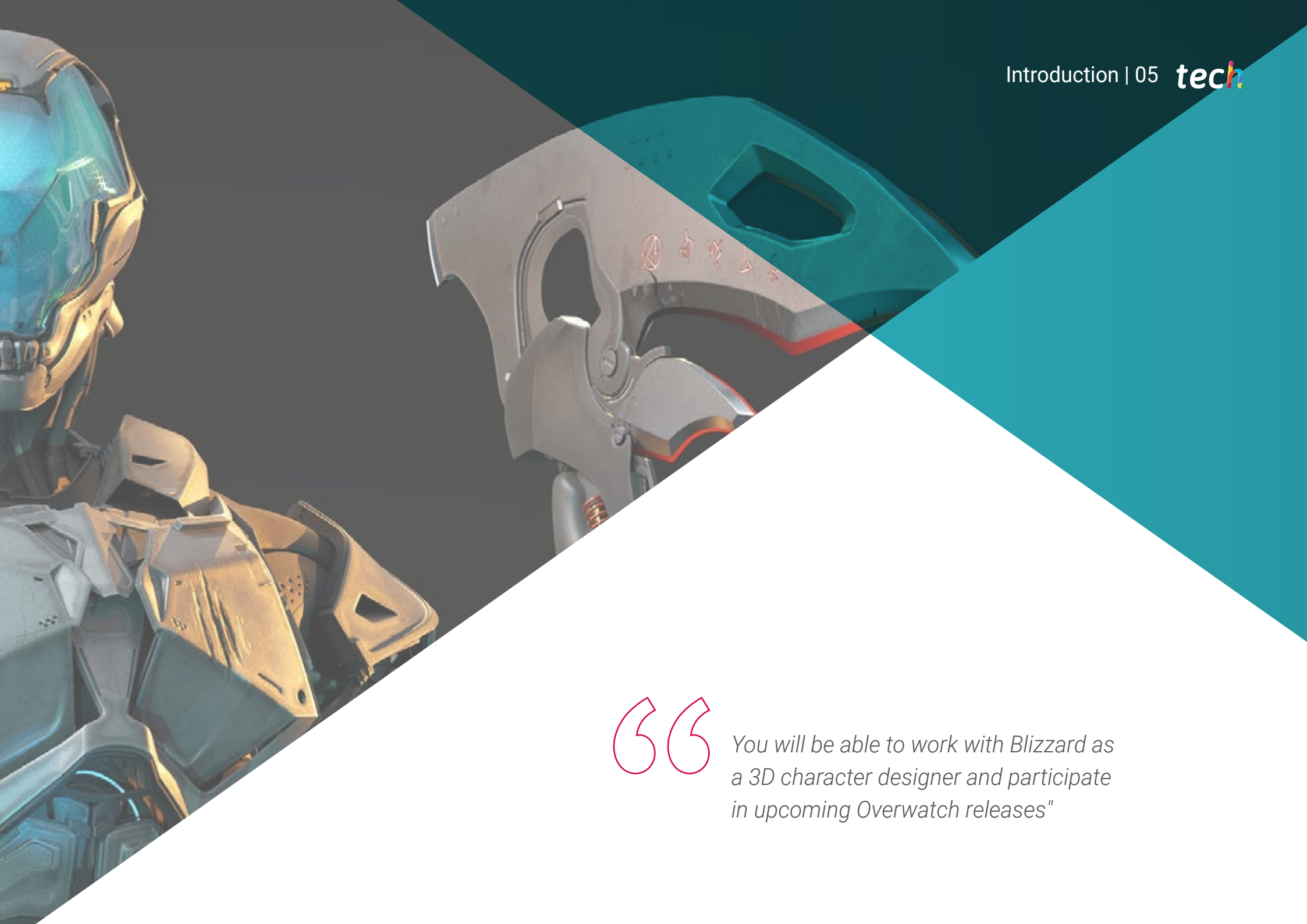
You will be able to work with Blizzard as a 3D character designer and participate in upcoming Overwatch releases"

3D art and design are currently experiencing a very important moment. The technological development of consoles and processors, as well as more powerful design programs, have contributed to the development of more realistic or, at least, more eye-catching graphics. Gone are the days when you could only see a set of pixels forming a human figure. Nowadays, the realism of characters, environments and objects are one of the attractions of video games.

For all these reasons, 3D art in video games is indispensable for the sector. Without this group of professionals, users would not be able to enjoy titles such as *Dragon Age*, *FIFA* and *Final Fantasy*, among others. To this end, the following Postgraduate Certificate has been proposed, which offers students the opportunity to specialize in the area as designers. This will allow them to learn how to model and texture 3D characters using different development software, such as 3D Studio Max and Mudbox.

It is important to mention that the contents of the program are included in a fully online course, which greatly benefits students' careers, since they do not have to abandon their daily responsibilities to attend class. You will be able to connect from anywhere in the world at any time you choose.

This **Postgraduate Certificate in 3D Art for Video Games** contains the most complete and up-to-date academic program on the market. The most important features include:

- General knowledge about video game design
- Specific first level contents on 3D Art for Video Games
- Practical exercises where the self-assessment process can be carried out to improve learning
- Access to content from any fixed or portable device with an Internet connection

" *3D art has brought more than just realism to games. It has become the seal of presentation"*

You can accomplish much more. Enroll in this program to achieve excellence in 3D Art.

" *This program is carried out 100% online and provides a direct qualification, allowing you to apply what you have learned right away"*

Show your talent in 3D art in the new games to be released.

The program's teaching staff includes professionals from sector who contribute their work experience to this training program, as well as renowned specialists from leading 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 immersion training programmed to train 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.

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Objectives

This Postgraduate Certificate aims to provide students with the best tools to increase their skills in 3D Art for Video Games. This way, they will be able to create unique characters and environments using 3D Studio Max or Mudbox, two of the most widely used programs in the industry. That is why this course is essential for all those who wish to be successful in this promising field.

"

*Achieving your goals will allow you
to break into the video game industry"*

General Objectives

- Know the different genres of video games, the concept of gameplay and features in order to apply them in the analysis of video games and in the creation of the design of the video game

- In-depth knowledge of 2D and 3D animation, as well as the key elements of object and character animation

- Know how to perform 3D modelling tasks

- Perform professional programming with the Unity 3D engine

Specific Objectives

- Model and texturize 3D objects and characters
- Understand the 3D Studio Max and Mudbox program interface for modeling objects and characters
- Understand the theory of 3D modeling
- Know how to extract textures
- Learn how 3D cameras work

" *Model and texture characters to give them the look and feel you want"*

Course Management

This Postgraduate Certificate has been designed by the best experts in the video game industry, who have participated in numerous game development projects. Therefore, they are aware of the capabilities and competencies that designers must have to specialize in 3D art. To all this, we must add their professional achievements as pioneers in the sector and for developing video games on different platforms. The training that students receive is, therefore, of the highest quality.

tech

"

The best teachers specialized in the video game industry will help you to specialize in 3D texture modeling"

Management

Mr. Blasco Vilches, Luis Felipe

- Narrative designer at Stage Clear Studios, developing a confidential product
- Narrative designer at HeYou Games in the "Youturbo" project
- E-learning and serious games product designer and scriptwriter for Telefónica Learning Services, TAK and Bizpills
- Level designer at Indigo for the "Meatball Marathon" project
- Screenwriting teacher in the Master's Degree in Video Game Creation at the University of Malaga
- Lecturer in Video Game Narrative Design and Production at the TAI Film Department, Madrid
- Narrative Design and Script Workshops teacher, and in the Video Game Design Degree at ESCAV, Granada
- Degree in Hispanic Studies from the University of Granada, Spain
- Master's Degree in Creativity and Television Screenwriting, Rey Juan Carlos University

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Structure and Content

This Postgraduate Certificate has a syllabus that is based on the recommendations of a group of experts, so that students will enjoy updated content adapted to the needs of the sector. Therefore, not only will they learn how to model 2D and 3D characters using different programs, but they will also be able to do it from anywhere in the world and at the time that suits them best. This, thanks to the 100% online modality and the direct degree, in which you will not have to do a final paper to specialize.

Only with TECH will you have the ease of a 100% online program with a direct qualification"

Module 1. 3D Art

1.1.   Advanced Art
    1.1.1.   From Concept Art to 3D
    1.1.2.   3D Modeling Principles
    1.1.3.   Types of Modeling: Organic/Inorganic
1.2.   3D Max Interface
    1.2.1.   3D Software
    1.2.2.   Basic Interface
    1.2.3.   Organization of Scenes
1.3.   Inorganic Modeling
    1.3.1.   Modeling with Primitives and Deformers
    1.3.2.   Editable Polygon Modeling
    1.3.3.   Graphite Modeling
1.4.   Organic Model
    1.4.1.   Character Modeling I
    1.4.2.   Character Modeling II
    1.4.3.   Character Modeling III
1.5.   Creation of UVs
    1.5.1.   Basic Materials and Maps
    1.5.2.   Unwrapping and Texture Projections
    1.5.3.   Retopology
1.6.   Advanced 3D
    1.6.1.   Texture Atlas Creation
    1.6.2.   Hierarchies and Bone Creation
    1.6.3.   Application of a Skeleton
1.7.   Animation Systems
    1.7.1.   Bipet
    1.7.2.   CAT
    1.7.3.   ProperRigging

This Postgraduate Certificate is designed to help you become the best. Start a new career path"

05
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 is the most widely used learning system in the best faculties in the world. 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 will have to combine all their knowledge and research, and argue and defend their 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. 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 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:
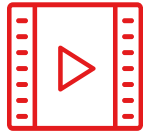
Study Material

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 that we are experiencing.

Additional Reading

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

30%

10%

8%

20%

25%

4%

3%
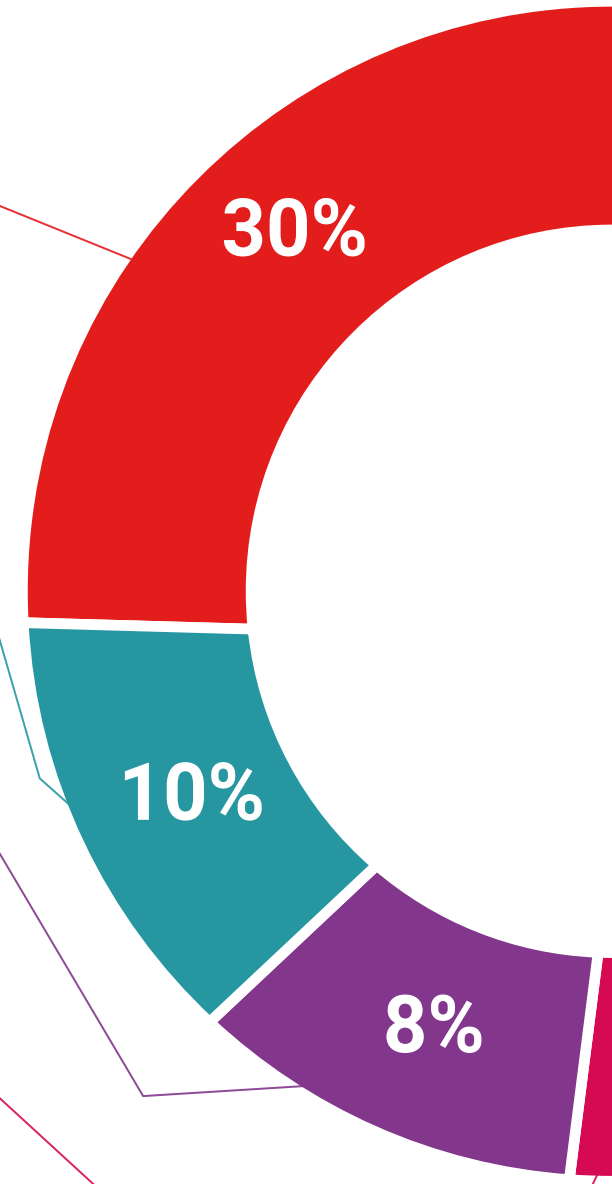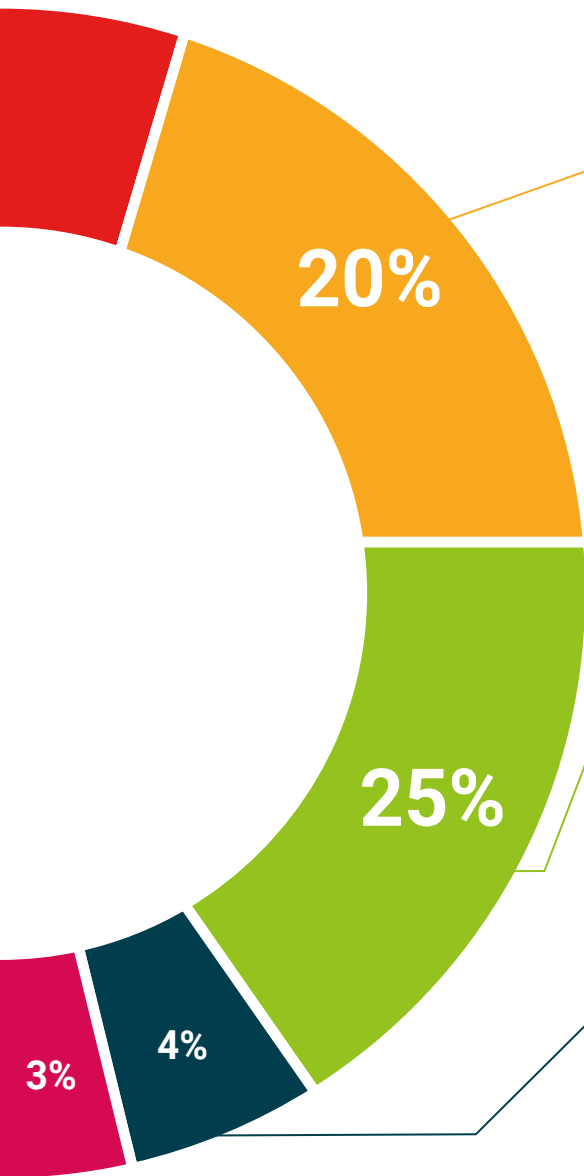
Case Studies

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.

Certificate

The Postgraduate Certificate in 3D Art for Video Games guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

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

This **Postgraduate Certificate in 3D Art for Video Games** contains the most complete and up-to-date academic 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 though the Postgraduate Certificate and meets the requirements commonly demanded by labor exchanges, competitive examinations and professional career evaluation committees.

Title: **Postgraduate Certificate in 3D Art for Video Games**

Official Nº of hours: **150 h.**

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Awards the following
CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

3D Art for Video Games

This is a qualification awarded by this University, equivalent to 150 hours, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH is a Private Institution of Higher Education recognized by the Ministry of Public Education as of June 28, 2018.

June 17, 2020

Tere Guevara Navarro
Dean

Unique TECH Code: AFWORD23S techtitute.com/certificates

*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.

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