

# Postgraduate Certificate SCI-Environment in Art for Virtual Reality



## Postgraduate Certificate SCI-Environment in Art for Virtual Reality

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

Website: [www.techtute.com/us/design/postgraduate-certificate/sci-environment-art-virtual-reality](http://www.techtute.com/us/design/postgraduate-certificate/sci-environment-art-virtual-reality)

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# 01

# Introduction

The video game industry using Virtual Reality technology has seen a boom in users in recent years. Steam revealed in 2020 that VR video game sales increased 32% compared to the previous year. These figures have been increasing in recent years. This booming sector is a great opportunity for artistic designers, who must have a professional dossier to gain access to major studios. This teaching with a specialized teaching team, a 100% online methodology, and a library with interactive content allows students to complete a comprehensive and high-quality Sci-Fi Environment.





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*Gamers are looking to immerse themselves in increasingly realistic universes. Show your best Sci-Fi Environment to the big studios and win them over”*

The Postgraduate Certificate in SCI-Environment in Art for Virtual Reality offers artistic designers the essential preparation to create three-dimensional scenarios and spaces of a high level. This will allow them to advance their careers in a growing industry.

This training will be provided by a teaching team with experience in Virtual Reality projects and with a background in graphic design and video game creation, which will give students the necessary tools to make high-quality assets and a Sci-Fi Environment at the level of the great designers in the industry.

This program, with a content based on eminently practical cases, will allow graphic designers to optimize their workflows and identify those design points where they should invest more or less time. All this so they can obtain a professional final result in line with the requirements of the VR video game industry.

The exclusively online methodology of this Postgraduate Certificate offered by TECH is an opportunity for professionals who wish to combine their work environment with learning. Additionally, video summaries, complementary readings, and the Relearning system will facilitate the consolidation of knowledge.

This **Postgraduate Certificate in SCI-Environment in Art for Virtual Reality** contains the most complete and up-to-date program on the market. The most important features include:

- ◆ The development of case studies presented by experts in Art for Video Virtual Reality
- ◆ The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- ◆ Practical exercises where the self-assessment process can be carried out to improve learning
- ◆ Its 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



*Your artistic creations are fantastic. Now, you just need to submit an excellent dossier thanks to the syllabus of this Postgraduate Certificate”*

“

*Go one step further in your professional career in the field of VR video game design thanks to this Postgraduate Certificate”*

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

Its multimedia content, developed with the latest educational technology, will allow professionals to learn in a contextual and situated learning environment, i.e., a simulated environment that will provide immersive education programmed to prepare in real situations.

The design of this program focuses on Problem-based Learning, by means of which professionals must try to solve the different professional practice situations that are presented to them throughout the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Implement your creations in Unity like a true graphic design professional. Enroll in this Postgraduate Certificate.*

*Create graphic designs from start to finish with this Postgraduate Certificate. A specialized teaching team will accompany you.*



# 02 Objectives

Thanks to this Postgraduate Certificate in SCI-Environment in Art for Virtual Reality, graphic designers will be able to tackle the creation of an *Environment* with professionalism and in an efficient way during the whole creative process until its conclusion. Additionally, students will learn how to identify the best tool depending on the design they wish to obtain, as well as the programs needed for this purpose. Throughout this course, the teaching team will show the students the most useful resources to obtain a real and high-quality modeling project.







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*Be able to correctly select the programs  
that best fit your Pipeline”*



## General Objectives

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- ◆ Understand the advantages and constraints provided by Virtual Reality
- ◆ Develop high-quality hard surface modeling
- ◆ Create high-quality organic modeling
- ◆ Understand the principles of retopology
- ◆ Understand the principles of UVs
- ◆ Master baking in Substance Painter
- ◆ Expertly manage layers
- ◆ Be able to create a dossier and submit works at a professional level, at the highest quality
- ◆ Make a conscious decision as to which programs best fit your Pipeline





## Specific Objectives

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- ◆ Understand the knowledge acquired
- ◆ Understand the usefulness of all the tips applied to a real project
- ◆ Make a conscious decision as to which programs best fit your Pipeline
- ◆ Have a professional quality work in your dossier
- ◆ Analyze and understand an Environment from start to finish

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*The multimedia resource library will facilitate your learning and the consolidation of knowledge in this Postgraduate Certificate”*

03

# Course Management

The specialized team that teaches this program has been carefully selected by TECH in order to guarantee the students a high-quality education in line with the video game industry based on Virtual Reality technology. For this purpose, this training has a teaching team with extensive knowledge in the tools used in the sector for graphic design and video game creation. Their knowledge and experience will be of great help to the graphics professional who seek to advance their career.



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*The experience of the teaching team in Virtual Reality video game projects will be of great help in this Postgraduate Certificate”*

## Management



### Mr. Menéndez Menéndez, Antonio Iván

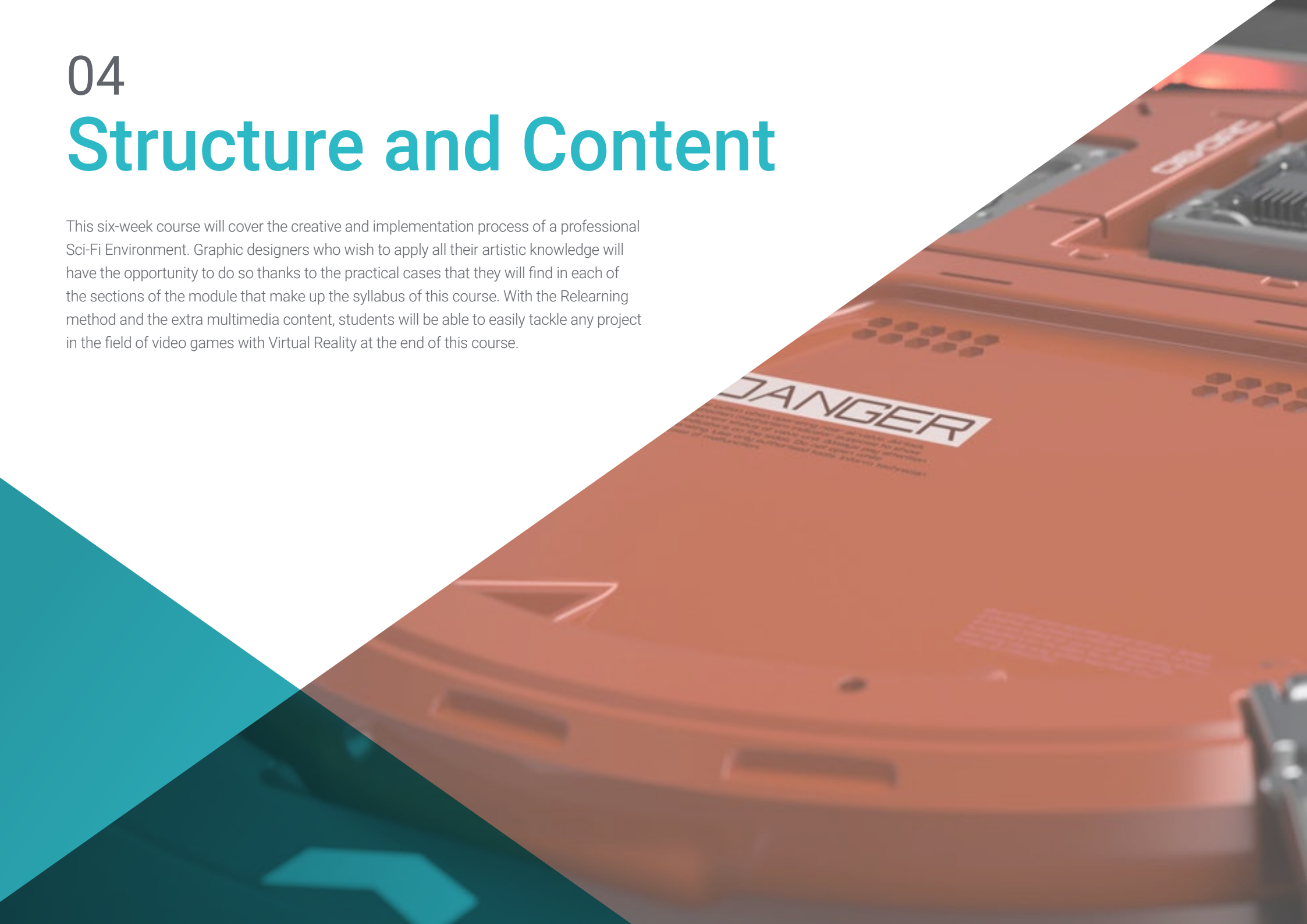
- Senior environment and element artist and 3D consultant at The Glimpse Group VR
- 3D model designer and texture artist at Inmoreality
- Props and environment artist for PS4 games at Rascal Revolt
- Graduated in Fine Arts at the UPV
- Specialist in Graphic Techniques from the University of the Basque Country
- Master's Degree in Sculpture and Digital Modeling by the Voxel School of Madrid
- Master's Degree in Art and Design for Video Games by U-Tad University of Madrid



# 04

## Structure and Content

This six-week course will cover the creative and implementation process of a professional Sci-Fi Environment. Graphic designers who wish to apply all their artistic knowledge will have the opportunity to do so thanks to the practical cases that they will find in each of the sections of the module that make up the syllabus of this course. With the Relearning method and the extra multimedia content, students will be able to easily tackle any project in the field of video games with Virtual Reality at the end of this course.







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*The texturing and modeling of the different elements of your design will shine after taking this program”*

## Module 1. Sci-Fi Environment

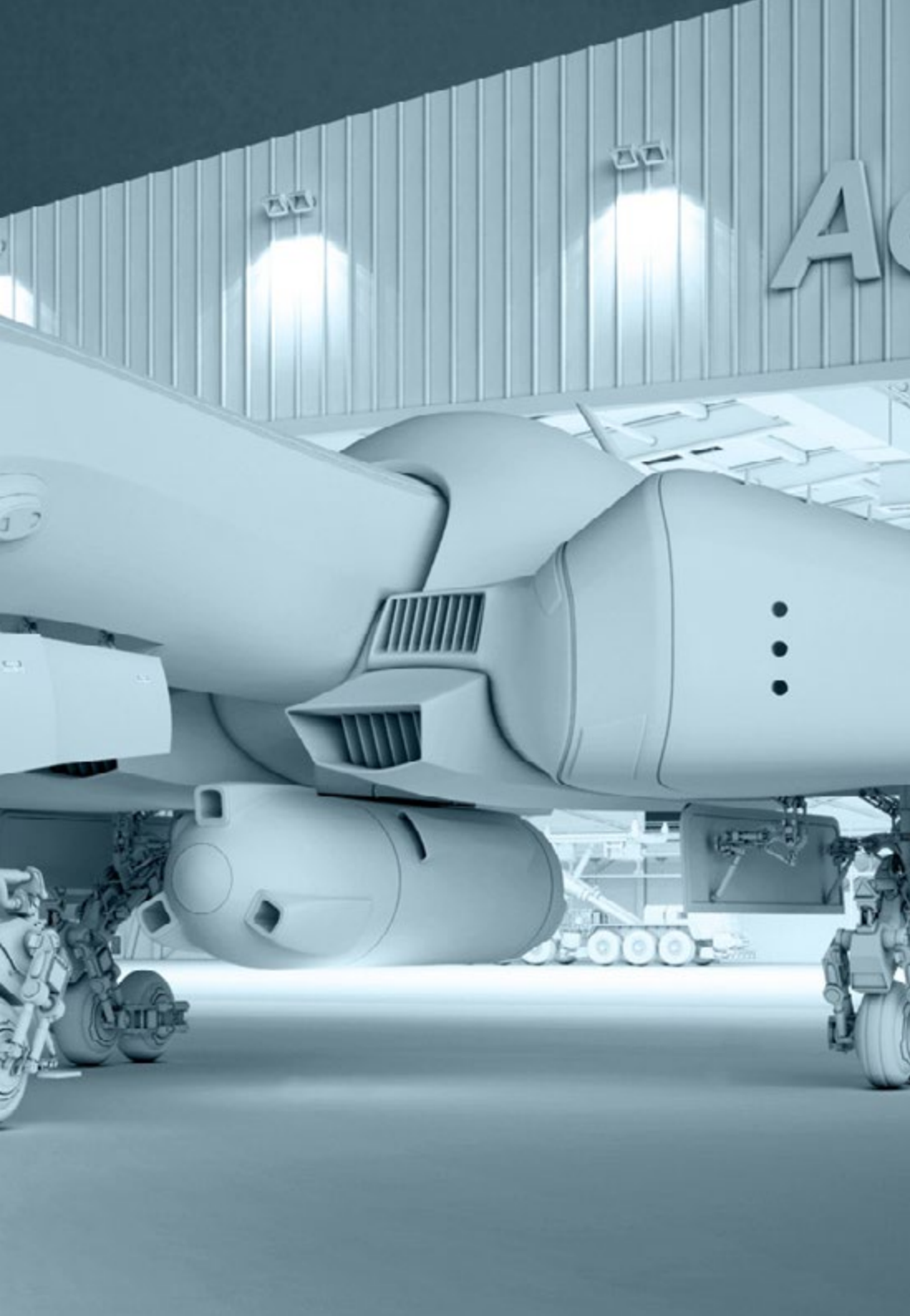
- 1.1. Sci-Fi Concept and Planning
  - 1.1.1. References
  - 1.1.2. Planning
  - 1.1.3. Blockout
- 1.2. Implementation in Unity
  - 1.2.1. Importing Blockout and Verifying Scaling
  - 1.2.2. Skybox
  - 1.2.3. Files and Preliminary Materials
- 1.3. Module 1: Floors
  - 1.3.1. High to Low Modular Modeling
  - 1.3.2. UVs and Baking
  - 1.3.3. Texturing
- 1.4. Module 2: Walls
  - 1.4.1. High to Low Modular Modeling
  - 1.4.2. UVs and Baking
  - 1.4.3. Texturing
- 1.5. Module 3: Roofs
  - 1.5.1. High to Low Modular Modeling
  - 1.5.2. Retopology, UVs, and Baking
  - 1.5.3. Texturing
- 1.6. Module 4: Extras (Pipes, Railings, Etc.)
  - 1.6.1. High to Low Modular Modeling
  - 1.6.2. UVs and Baking
  - 1.6.3. Texturing
- 1.7. Hero Asset 1: Mechanical Doors
  - 1.7.1. High to Low Modular Modeling
  - 1.7.2. Retopology, UVs, and Baking
  - 1.7.3. Texturing
- 1.8. Hero Asset 2: Hibernation Chamber
  - 1.8.1. High to Low Modular Modeling
  - 1.8.2. Retopology, UVs, and Baking
  - 1.8.3. Texturing



- 1.9. In Unity
  - 1.9.1. Importing Textures
  - 1.9.2. Application of Materials
  - 1.9.3. Scene Lighting
- 1.10. End of Project
  - 1.10.1. VR Visualization
  - 1.10.2. Prefab and Export
  - 1.10.3. Conclusions

“

*The result of your creations will reflect your level of expertise. Improve your skills with this Postgraduate Certificate”*



# 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.

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*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 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.

## 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.

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.



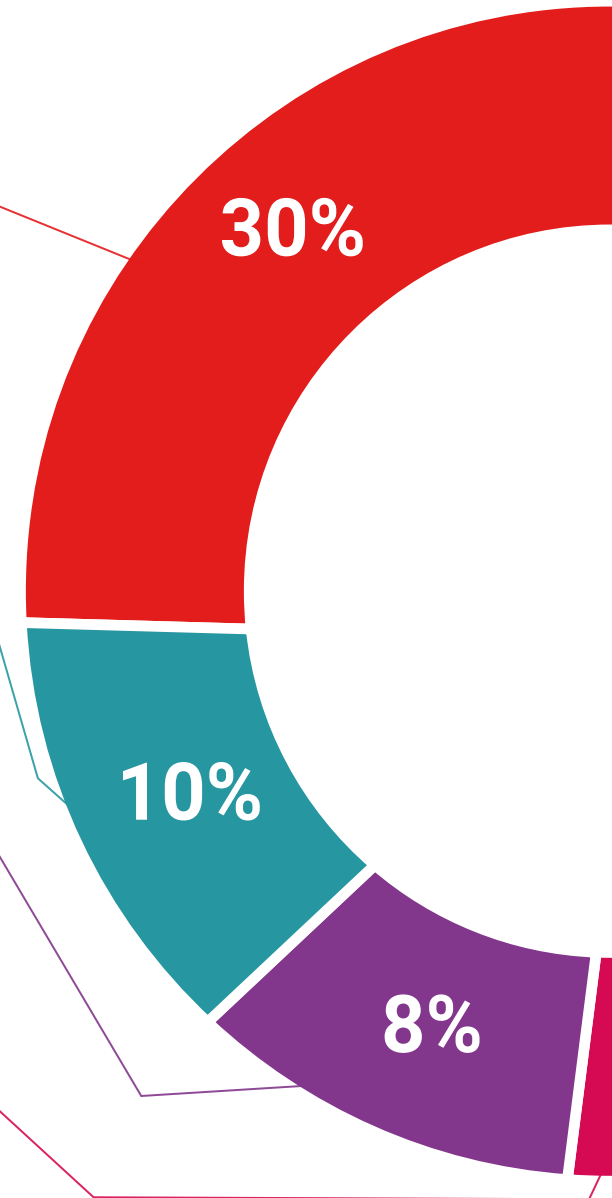
### Practising Skills and Abilities

They will carry out activities to develop specific competencies and skills in each thematic 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.





#### 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.



# 06 Certificate

The Postgraduate Certificate in SCI-Environment in Art for Virtual Reality guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 program will allow you to obtain your **Postgraduate Certificate in SCI-Environment in Art for Virtual Reality** 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 SCI-Environment in Art for Virtual Reality**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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



## Postgraduate Certificate SCI-Environment in Art for Virtual Reality

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

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