Postgraduate Certificate

Creating Organic Landscapes and Environments with Digital Sculpture

tech technological university

tech technological university

Postgraduate Certificate

Creating Organic Landscapes and Environments with Digital Sculpture

- 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/creating-organic-landscapes-environments-digital-sculpture

Index

01

Introduction

Developing terrains is one of the most interesting specializations, since focusing all the creativity on the space where the plot of the videogame will be developed, allows fostering the most amazing hyperrealism. It gives a great quality to the project with the creation of diverse environments, where to carry out animation tests of the characters. Therefore, developing new skills expands the possibilities of today's professional in a market with high demand. This 100% online educational program aims to provide the professional with all the necessary knowledge to create spaces and approach nature in all its forms and landscapes, through the guidance of experts based on the most innovative methodology based on relearning.

Learn fractal systems such as SpeedTree and use powerful organic terrain generation tools with Heightmap surveys"

Encouraging creativity or the most amazing hyperrealism in today's technological world is a task for entrepreneurs. Those who always take the risk to innovate and demonstrate that, with technique and knowledge, it is always possible to obtain the best result. Those who wish to stand out for their skills can count on this Postgraduate Certificate in Creating Organic Landscapes and Environments with Digital Sculpture, where they will find all the theoretical and practical content chosen by experts for their learning.

The syllabus of this refresher program is structured in such a way that the student will be able to master low poly elements to integrate them in virtual reality spaces or videogames, to high poly systems by modeling in ZBrush. In addition to fractal systems such as SpeedTree and powerful organic terrain generation tools. With realtime heightmapping like Unity or Unreal Terrain and even realistic water and dynamics like wind.

In the same way, you will learn how to use fast motion capture rigging techniques and create motion spaces in which to test the development of future interactive projects. Finally, to film the projects with cinematic cameras for a possible showreel and to create scenes with immersive experiences in virtual reality (VR). Plus an executable program to pass on to your customers without the development software.

All this is possible thanks to the best online learning system, based on relearning, implemented by TECH. Combining different content formats, exhaustively selected by experts, available from day one for consultation or download from a device of your choice with an internet connection. This offers greater convenience to today's professional, who wishes to continue training.

This **Postgraduate Certificate in Creating Organic Landscapes and Environments with Digital Sculpture** is the most complete and up-to-date educational program on the market. The most important features include:

- The development of case studies presented by experts in 3D Modeling and Digital Sculpture
- The graphic, schematic, and eminently practical contents with which they are created, provide scientific and 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
- Access to content from any fixed or portable device with an Internet connection

You will create spaces where you can foster creativity or the most amazing hyperrealism, implementing virtual reality"

Terrain development is one of the most interesting specializations in the digital environment for video games. Expand your possibilities with this Postgraduate Certificate"

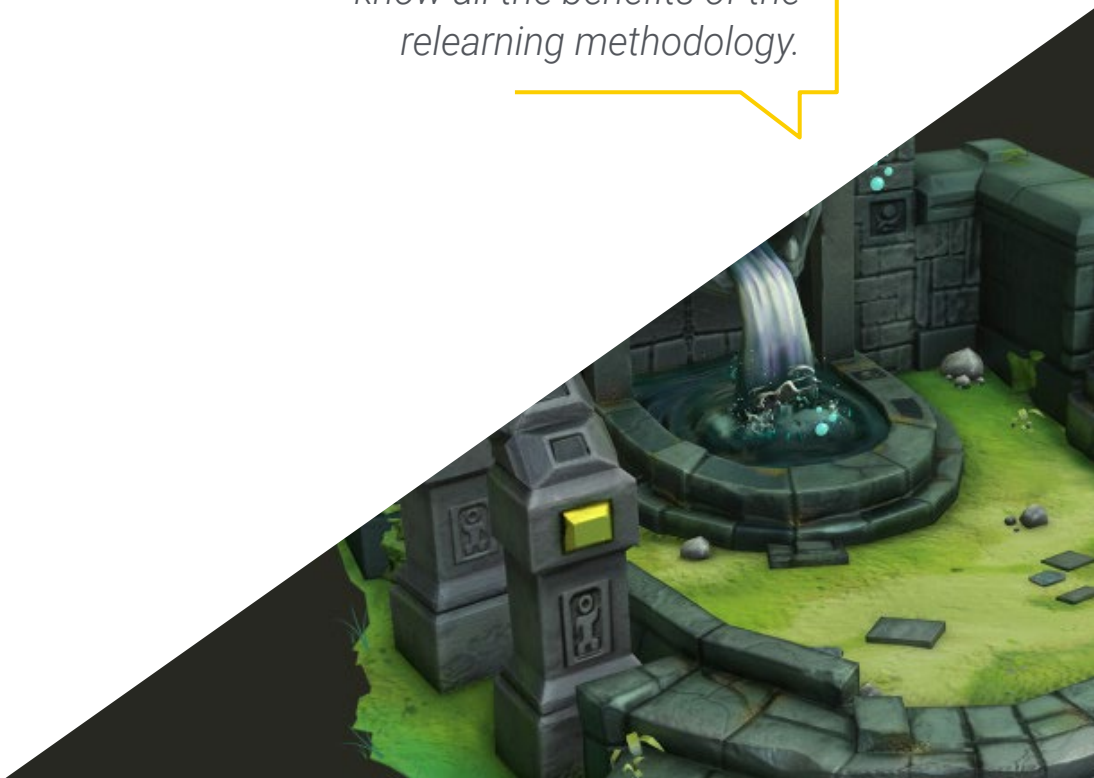
This mode of study allows you to include new techniques to your current projects and improve them.

Enroll now and get to know all the benefits of the relearning methodology.

The programs teaching staff includes professionals from the 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 immersive 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.



02

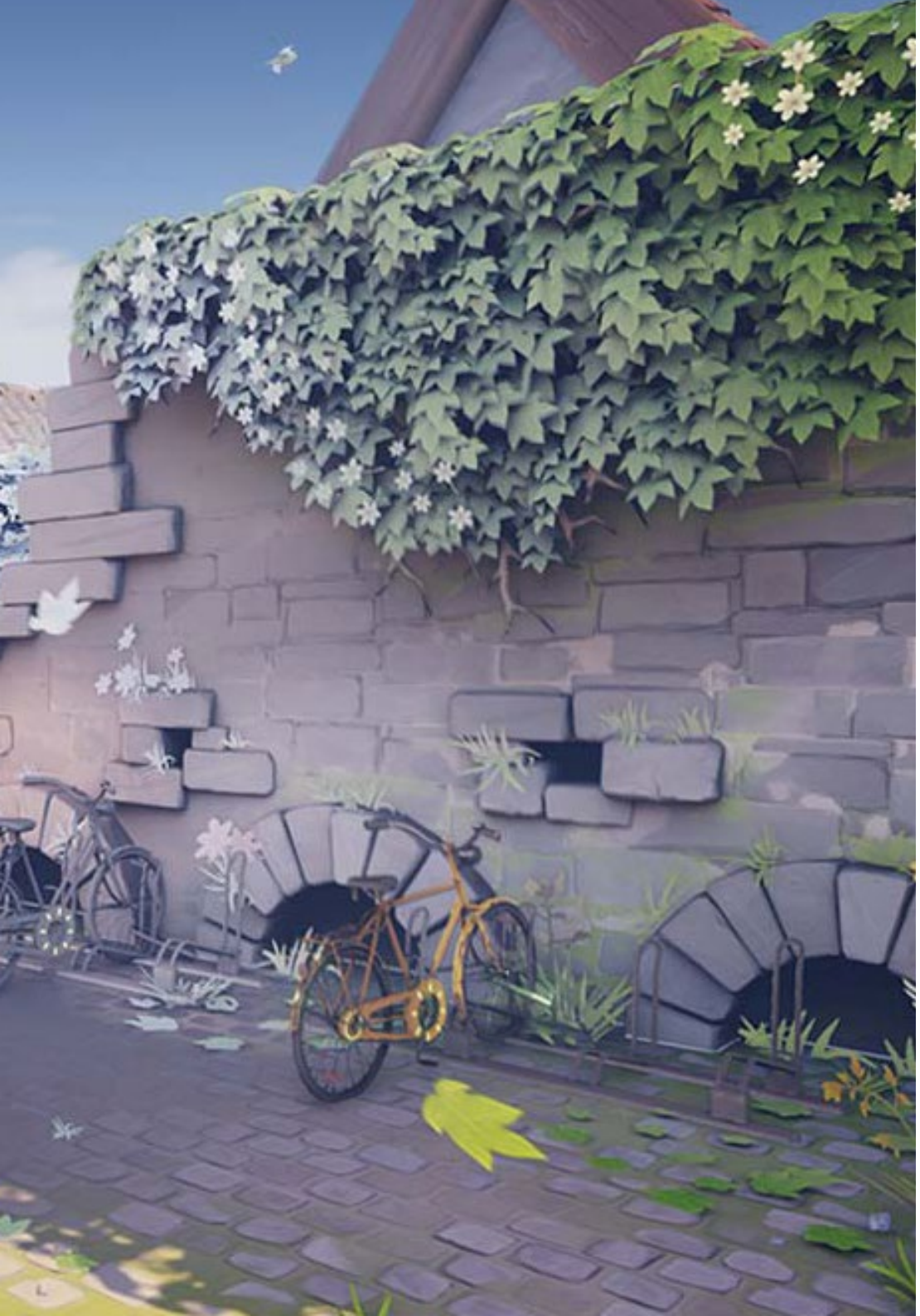
Objectives

That the professional develops in new fields of work and obtains the best results in each of his projects, applying the different techniques of organic modeling and fractal systems for the generation of elements of nature, is the main objective of this Postgraduate Certificate, which deepens in all the techniques and tools for the Creation of Landscapes and Organic Environments with Digital Sculpture. A program that combines the maximum pedagogical rigor, the highest academic demands and the latest educational technology.

Boost your career with exclusive and unique training. As only TECH can offer them to you"

General Objectives

- Apply processes of modeling, texturing, lighting and rendering in a precise way
- Develop spaces full of creativity and hyperrealism using the organic model
- Understand the need for a good topology at all levels of development and production
- Understand current systems in the film and video game industry to deliver great results



Specific Objectives

- Learn the different techniques of organic modeling and fractal systems for the generation of elements of nature and terrain, as well as the implementation of our own models and 3D scans
- Deepen in the vegetation creation system and how to control it professionally in Unity and Unreal Engine
- Create scenes with immersive VR experiences

With this degree you will be able to create spaces full of creativity in your next video game development"

03

Course Management

TECH has chosen the most specialized teachers in the discipline of 3D modeling and concept art, to design and teach this Postgraduate Certificate in Creating Organic Landscapes and Environments with Digital Sculpture. They have exhaustively chosen each of the study topics and will accompany the student throughout the learning process in a 100% online environment through a secure and dynamic platform.

Expert teachers in Digital Sculpture are in charge of this program, which provides a seal of quality to the content"

Management

Mr. Sequeros Rodríguez, Salvador

- Freelance 2D/3D modeler and generalist
- Concept art and 3D modeling for Slicecore Chicago
- Videomapping and modeling Rodrigo Tamariz Valladolid
- Professor of Higher Level Training Cycle 3D Animation Superior School of Image and Sound ESISV Valladolid
- Professor of Higher Level Training Cycle GFGS 3D Animation European Institute of Design IED Madrid
- 3D modeling for the falleros Vicente Martinez and Loren Fandos Castellón
- Master in Computer Graphics, Games and Virtual Reality URJC University. Madrid
- Bachelor of Fine Arts at the University of Salamanca (specializing in Design and Sculpture)

04

Structure and Content

This Postgraduate Certificate presents a distribution of the syllabus that allows the student the continuous learning of the techniques and tools currently used for Creating Organic Landscapes and Environments with Digital Sculpture. Specialized content developed by expert teachers, available from day one for consultation or download from any device with an internet connection. Based on relearning, an innovative methodology that allows an agile learning experience through the repetition of concepts, to achieve the degree in only 6 weeks.

Learn how to use powerful organic terrain generation tools with Heightmap surveys such as Unity Terrain or Unreal in realtime"

Module 1. Creation of Organic Soils and Environments

1.1. Organic Modeling in Nature
- 1.1.1. Brush Adaptation
- 1.1.2. Creation of Rocks and Cliffs
- 1.1.3. Integration with Substance Painter 3D

1.2. Terrain
- 1.2.1. Terrain Displacement Maps
- 1.2.2. Creation of Rocks and Cliffs
- 1.2.3. Scanning Libraries

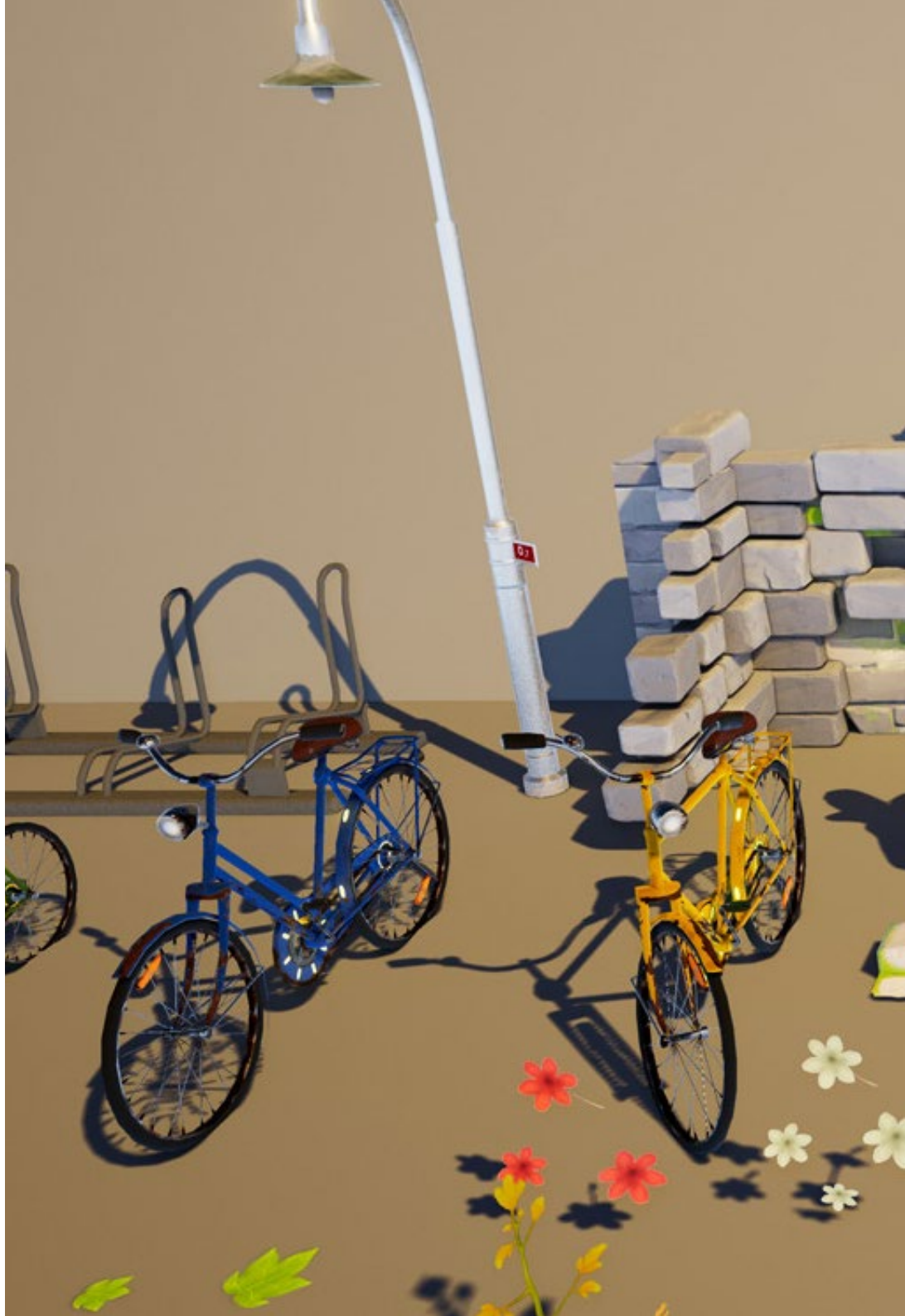
1.3. Vegetation
- 1.3.1. SpeedTree
- 1.3.2. Low Poly Vegetation
- 1.3.3. Fractals

1.4. Unity Terrain
- 1.4.1. Organic Terrain Modeling
- 1.4.2. Ground Painting
- 1.4.3. Creation of Vegetation

1.5. Unreal Terrain
- 1.5.1. Heightmap
- 1.5.2. Texturing
- 1.5.3. Unreal's Foliage System

1.6. Physics and Realism
- 1.6.1. Physical
- 1.6.2. Wind
- 1.6.3. Fluids

1.7. Virtual Walks
- 1.7.1. Virtual Cameras
- 1.7.2. Third Person
- 1.7.3. First Person FPS



1.8. Cinematography
- 1.8.1. Cinemachine
- 1.8.2. Sequencer
- 1.8.3. Recording and Executables

1.9. Visualization of Modeling in Virtual Reality
- 1.9.1. Modeling and Texturing Tips
- 1.9.2. Exploitation of Interaxial Space
- 1.9.3. Project Preparation

1.10. VR Scene Creation
- 1.10.1. Location of Cameras
- 1.10.2. Land and Infoarchitecture
- 1.10.3. Platforms of Use

Join the community of professionals who see online training as the real key to success"

05

Methodology

This training program offers a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

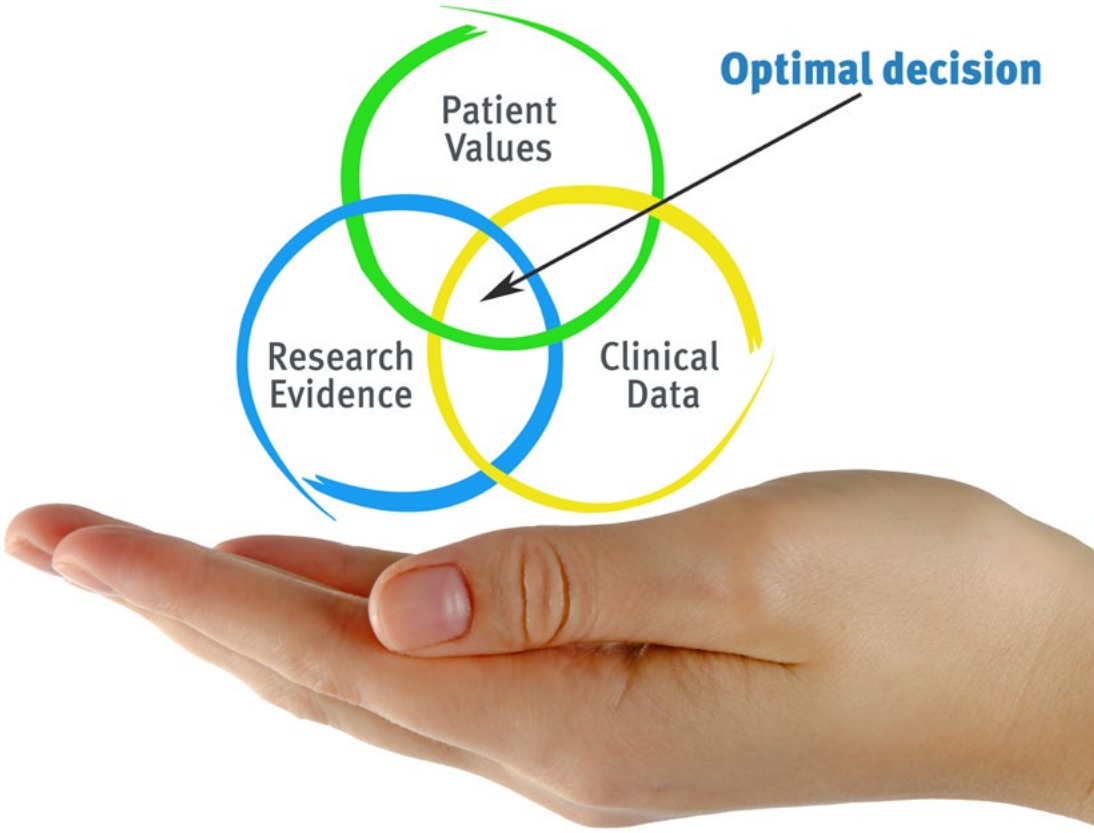
This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.

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 we use the 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.

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

A learning method that is different and innovative

This intensive Video Game Design program at TECH Technological University prepares you to face all the challenges in this field, both nationally and internationally. We are committed to promoting your personal and professional growth, the best way to strive for success, that is why, at TECH Technological University, you will use Harvard case studies, with which we have a strategic agreement that allows us, to offer you material from the best university in the world.

> *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

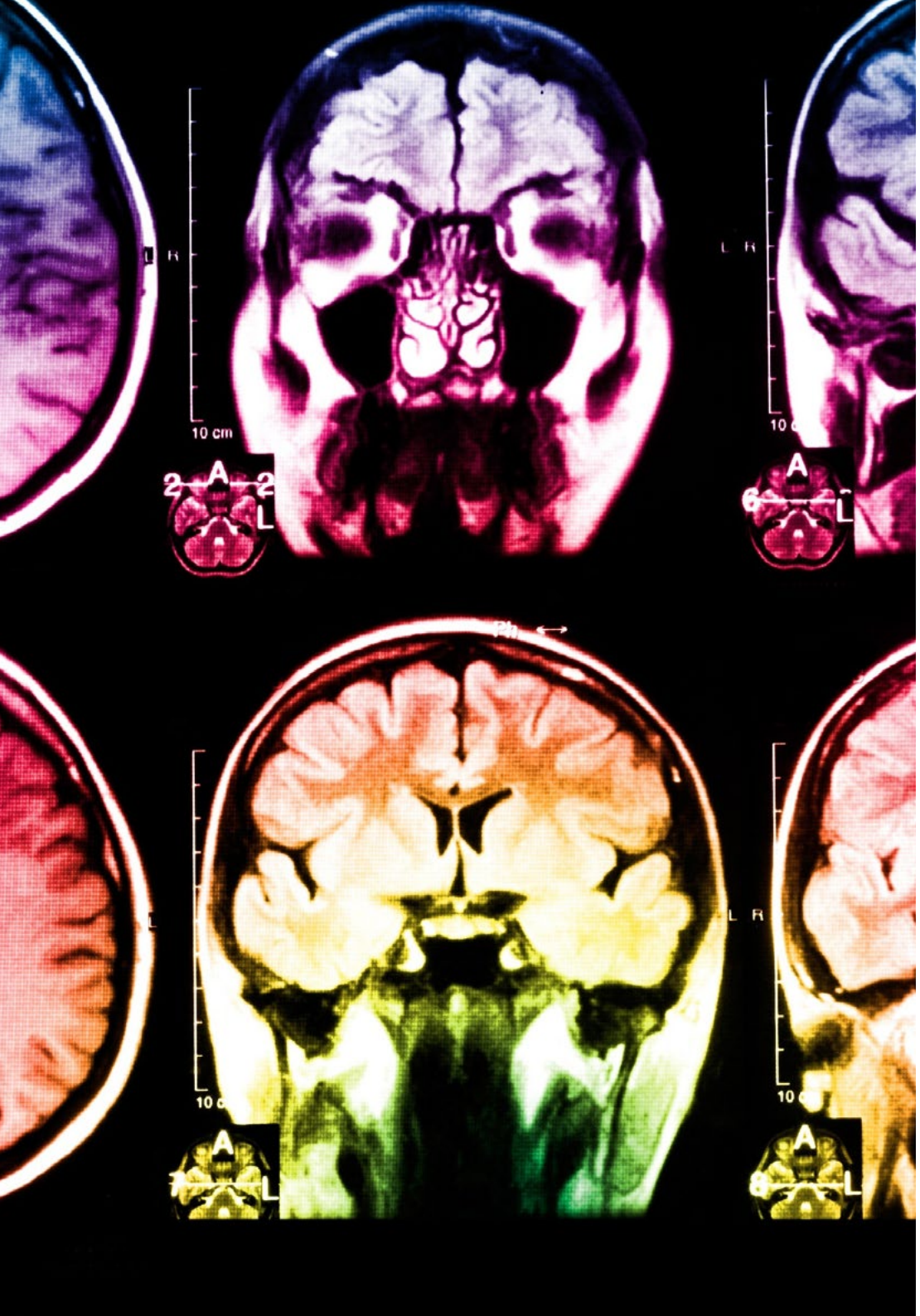
Our university is the first in the world to combine Harvard University case studies with a 100% online learning system based on repetition, which combines different teaching elements in each lesson.

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

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 university 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.

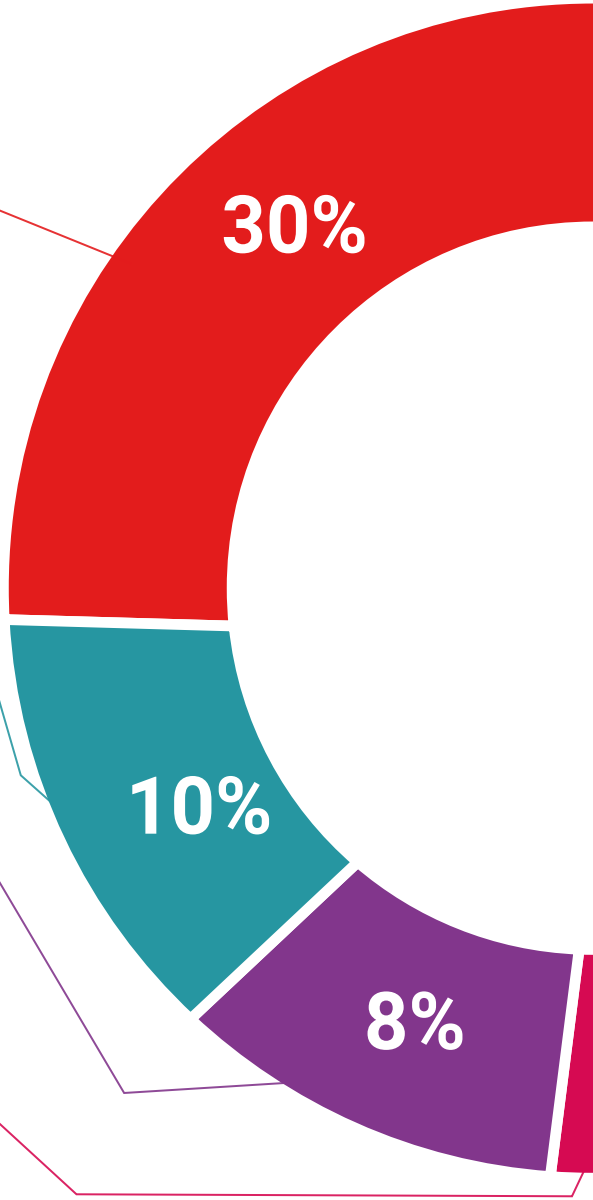
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

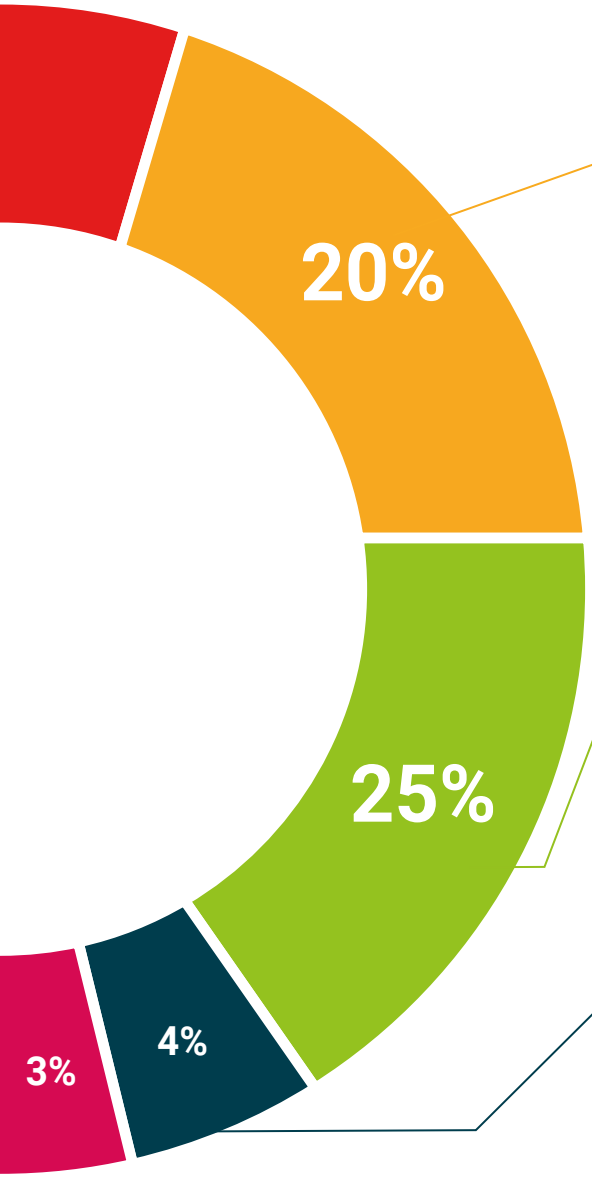
Practising Skills and Abilities

They will carry out activities to develop specific 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 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 case studies in the field used at Harvard. Cases that are presented, analyzed, and supervised by the best senior management 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 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.

06

Certificate

The Postgraduate Certificate in Creating Organic Landscapes and Environments with Digital Sculpture 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 program and receive your diploma without travel or laborious paperwork"

The **Postgraduate Certificate in Creating Organic Landscapes and Environments with Digital Sculpture** contains the most complete and updated program on the market.

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

The certificate issued by **TECH Technological University** will specify 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 Creating Organic Landscapes and Environments with Digital Sculpture**

Official Nº of hours: **150 h.**


tech technological university

Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

Creating Organic Landscapes and Environments with Digital Sculpture

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

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country. 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.

tech technological university

Postgraduate Certificate

Creating Organic Landscapes and Environments with Digital Sculpture

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

Postgraduate Certificate

Creating Organic Landscapes and Environments with Digital Sculpture

tech technological university