

# Postgraduate Certificate

## Digital Sculpture of Animals and Creatures





## Postgraduate Certificate Digital Sculpture of Animals and Creatures

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

Website: [www.techtute.com/videogames/postgraduate-certificate/digital-sculpture-animals-creatures](http://www.techtute.com/videogames/postgraduate-certificate/digital-sculpture-animals-creatures)

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# 01

# Introduction

Creating surprising beings that are part of the plot of the videogame is a maxim of every developer; and very few stories are conceived without a creature or pet character. It is even very common to see them as companions of the heroes and they are the ones that leave their mark; they become so successful that they manage to become models for the generation of other types of products such as clothing or accessories, toys, etc., for sale in the market. Studying the most updated techniques to develop Animals and Creatures in digital sculpture is therefore a maxim of every professional who wishes to evolve in their environment. For this reason, a specific program has been created that will deepen the use of software and the development of complex forms, 100% online and which is condensed in a highly effective pedagogical system.



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*Do you want to advance to the next level in your career? Enroll now in this update program, in one of the most demanded areas in the videogame industry”*

There are many examples of the importance that animals and creatures are regaining in the creation of stories for videogames: Sonic The Hedgehog, Fox McCloud from Star Fox, Amaterasu the sun goddess in Okami or the peculiar birds of Angry Birds, to mention a few that show the scope and success that can be obtained with these beings in the creations for video games with more and more followers.

In this Postgraduate Certificate in Digital Sculpture of Animals and Creatures, we seek to deepen in the physiology, weight distribution, structures and animal musculature. To evolve in an animal imaginary, of hybridizations and bestiaries; and thus create human-beast transformations. The student will be exposed to a range of styles from realistic to NPR (non-photorealistic renderings), such as Anime or Cartoon, as well as the important field of Fan Art by means of projection panels on the sculpture.

Likewise, special attention will be paid to a variety of species, such as birds, reptiles and fish. Turning the modeling professional into an expert creator of beings. Organic modeling in ZBrush will lead you towards achieving complex textures such as: feathers, hair, scales and fur. With the use of procedural pattern generators, the use of alphas and the sculpting of shapes with Chisel brushes, you will perfect your talent.

All the content is available from day one, rigorously selected by experts with renowned experience in this professional area, who will also accompany the student at all times, from a modern virtual campus, as it is a 100% online program with a duration of 6 weeks. The variety of multimedia resources and formats presented will make the study experience much more effective and dynamic.

This **Postgraduate Certificate in Digital Sculpture of Animals and Creatures** is the most comprehensive 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 self-assessment can be used 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



*Create amazing creatures for professional game development"*

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*Study 100% online, through the best platform and methodology based on relearning. At TECH, the world's largest digital university"*

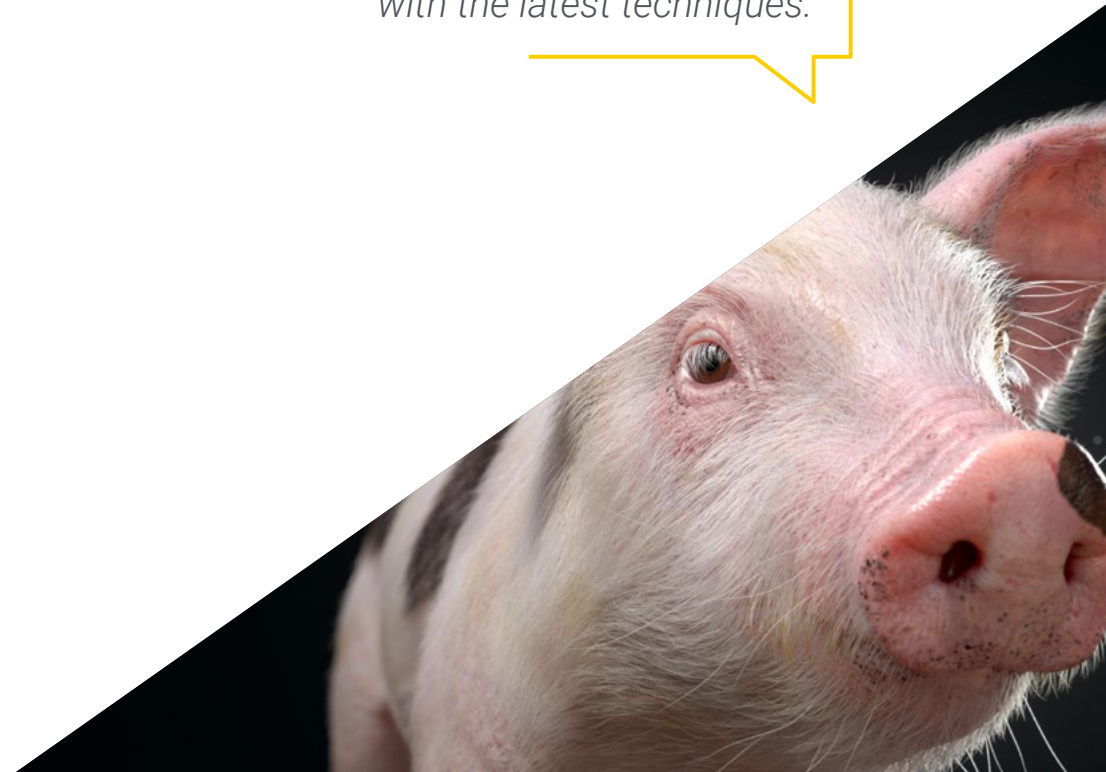
The programs teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities.

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.

*Become an expert creator of beings, sculpting shapes with Chisel brushes and the most specialized tools.*

*It evolves into an animal imaginary, hybridizations and bestiaries. Create transformations professionally and with the latest techniques.*



# 02 Objectives

This Postgraduate Certificate aims to provide the student with the most updated knowledge about Digital Sculpture of Animals and Creatures, to achieve increasingly realistic projects, thanks to the set of techniques and tools detailed in the syllabus of this program. Thus, it can offer its clients or employers, differentiating results in the development of projects that implement the three dimensions.





A close-up photograph of a spider's head and legs, showing fine details of its anatomy. The spider is positioned on the left side of the page, with its head and front legs visible. The background is a dark, textured surface. The image is partially obscured by a large, diagonal, light-colored shape that covers the right and bottom portions of the page.

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*To go far you have to start by taking the first step. Start your training now to excel in an industry as evolving as digital"*



## General Objectives

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- ◆ Knowledge of human and animal anatomy to apply it to modeling, texturing, lighting and rendering processes in an accurate way
- ◆ Understand the need for a good topology at all levels of development and production
- ◆ Creation of realistic and cartoon-like characters of high quality
- ◆ Advanced handling and use of various organic modeling systems
- ◆ Understand current systems in the film and video game industry to deliver great results





## Specific Objectives

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- ◆ Handle and apply anatomy to animal sculpture
- ◆ Apply the correct animal topology of models to be used in 3D animation, video games and 3D printing
- ◆ Sculpting and texturing animal surfaces such as: feathers, scales, skins, fur and refinement of animal hair
- ◆ Perform the evolution of animals and humans to fantastic animals, hybridizations and mechanical beings, shape sculpting and the use of Substance Painter
- ◆ Handling photorealistic and non-photorealistic rendering of animals in Arnold

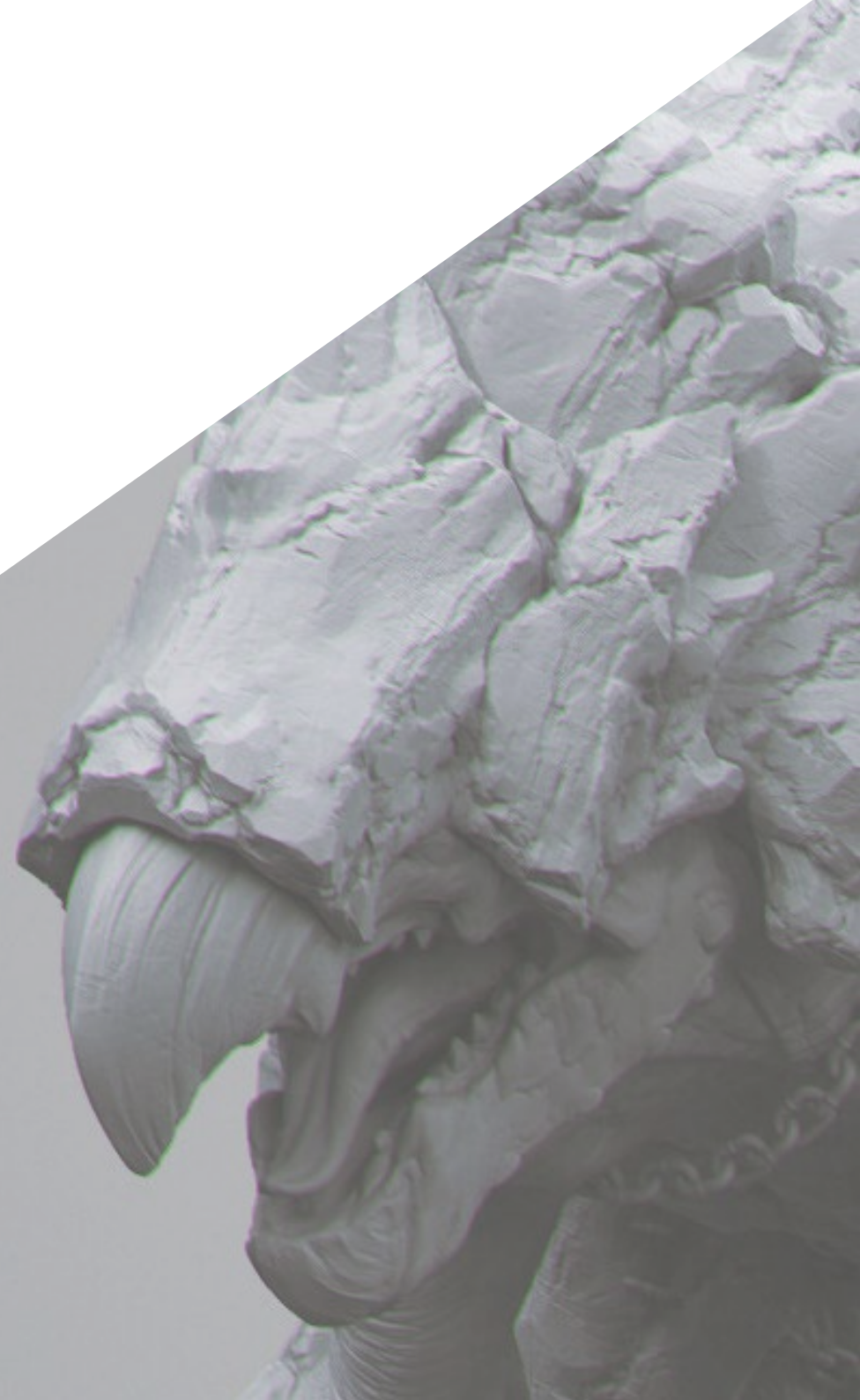
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*To stand out in the video game industry, creativity and talent are not enough. Master the latest techniques in animal and creature modeling with this program”*

# 03

# Course Management

For the design of this Postgraduate Certificate in Digital Sculpting of Animals and Creatures, TECH has selected an expert teaching staff composed of professionals specialized in the field of 3D modeling. They will transmit their knowledge through innovative methods, so that the student learns the subjects of study in an effective way and is able to integrate them in their professional performance.





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*Specialization is the best tool to open doors in the working world. TECH allows you to do it with freedom and ease"*

## 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 has been designed by experts, who have exhaustively selected the content and have chosen a 100% online modality, so that today's professional can be trained without any inconvenience in the course of 6 weeks. The practical and theoretical material on Digital Sculpture of Animals and Creatures will be available from the first day for consultation or download from a modern virtual campus and through any device with internet connection. This facilitates the gradual implementation of what they have learned in their daily lives.





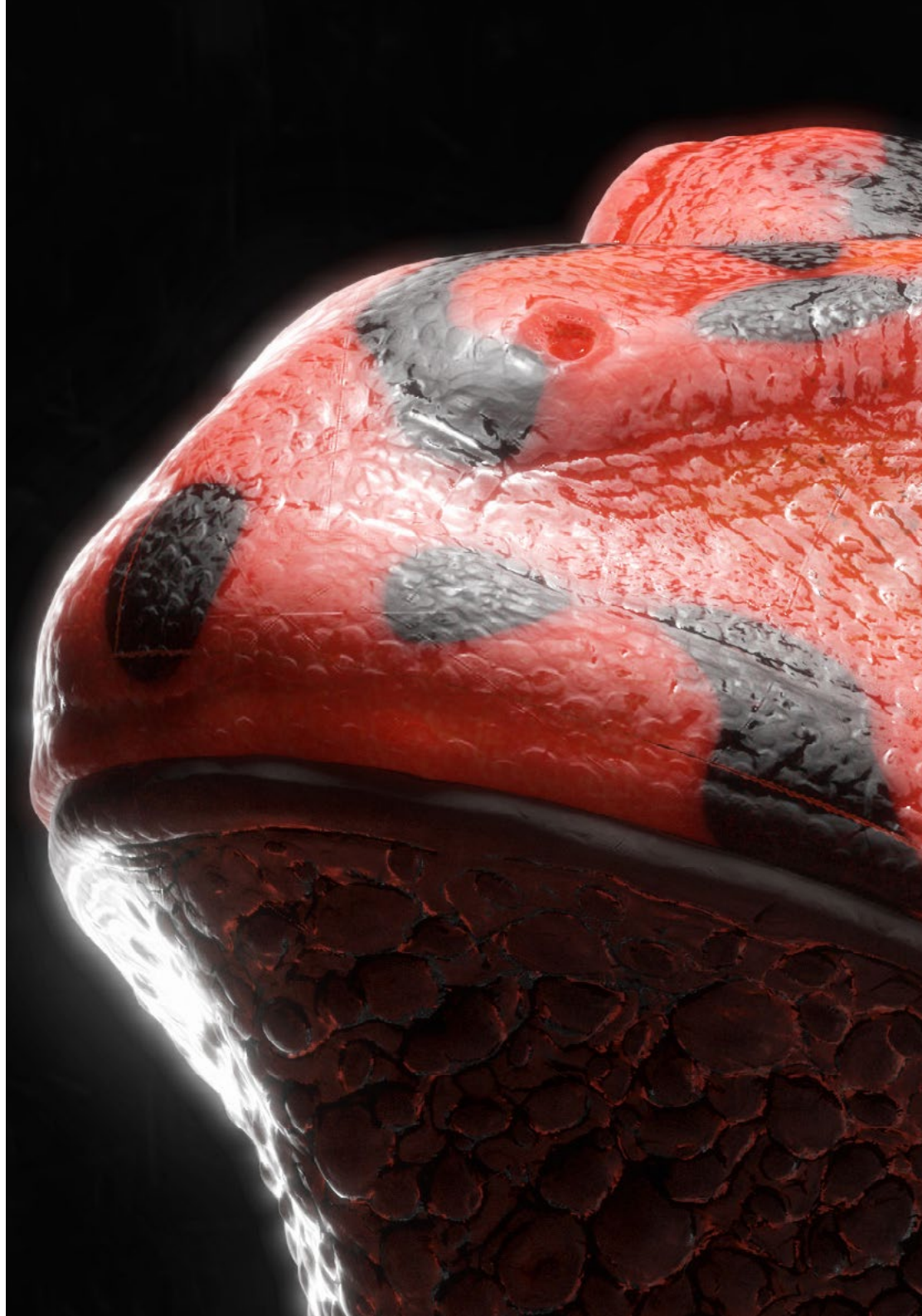


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*Learn how to introduce NPR representation styles such as anime or cartoon into your projects”*

## Module 1. Animals and Creatures

- 1.1. Animal Anatomy for Modelers
  - 1.1.1. Proportion Research
  - 1.1.2. Anatomic Differences
  - 1.1.3. Musculature of the Different Families
- 1.2. Main Masses
  - 1.2.1. Main Structures
  - 1.2.2. Balance Axis Postures
  - 1.2.3. Base Mesh with Zspheres.
- 1.3. Head
  - 1.3.1. Craniums
  - 1.3.2. Jaws
  - 1.3.3. Teeth and Antlers
  - 1.3.4. Rib Cage, Spine and Hips
- 1.4. Central Zone
  - 1.4.1. Rib Cage
  - 1.4.2. Spinal Column
  - 1.4.3. Hips
- 1.5. Extremities
  - 1.5.1. Legs and Hooves
  - 1.5.2. Fins
  - 1.5.3. Wings and Claws
- 1.6. Animal Texture and Adaptation to Shapes
  - 1.6.1. Skin and Hair
  - 1.6.2. Scales
  - 1.6.3. Feathers
- 1.7. The Animal Imaginary: Anatomy and Geometry
  - 1.7.1. Anatomy of Fantastic Beings
  - 1.7.2. Geometry and SliceCuts
  - 1.7.3. Mesh Booleans



- 1.8. The Animal Imaginary: Fantastic Animals
  - 1.8.1. Fantastic Animals
  - 1.8.2. Hybridizations
  - 1.8.3. Mechanical Beings
- 1.9. NPR Species
  - 1.9.1. Cartoon Style
  - 1.9.2. Anime
  - 1.9.3. Fan Art
- 1.10. Animal and Human Rendering
  - 1.10.1. Subsurface Scattering Materials
  - 1.10.2. Mixing Texturing Techniques
  - 1.10.3. Final Compositions

“*Learn in just 6 weeks to create the most amazing creatures in Digital Sculpture. Enroll Now*”



# 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.





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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"*

## 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.

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*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.*



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

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 Digital Sculpture of Animals and Creatures, in addition to the most rigorous and updated training, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this training and receive your university degree without travel or laborious paperwork”*

This **Postgraduate Certificate in Digital Sculpture of Animals and Creatures** is the most comprehensive and update program on the market.

After passing the evaluation the student will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

The diploma 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 Digital Sculpture of Animals and Creatures**

Official N° of hours: **150 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma 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  
classroom



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- » Exams: **online**

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