

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/in/design/postgraduate-certificate/digital-sculpture-animals-creatures

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01

Introduction

Sonic The Hedgehog, Fox McCloud from Star Fox, Amaterasu the sun goddess in Okami or the peculiar birds from Angry Birds. These are all examples of the importance that animals and creatures are regaining in the creation of stories for video games. They become models for the generation of other types of products such as clothing, accessories, or toys that are for sale in the market. Studying all the techniques to develop Animals and Creatures through digital modeling is, therefore, fundamental. That is what this program explores in depth. During this course, the use of specialized software and the ways to control the texturing of complex shapes will be studied in great detail





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*Master the art of digital modeling
using advanced techniques of
Animal and Creature Sculpting"*

This Postgraduate Certificate in Digital Sculpture of Animals and Creatures will study animal physiology, weight distribution, structure and musculature. Evolve in an animal imaginary of hybridizations and bestiaries and create human-beast transformations. A wide range of styles will be opened to you, from realistic to NPR (non-photorealistic rendering) styles. Anime or *Cartoons*, as well as the important sector of *FanArt* 3D printing by means of projection panels on the sculpture

We will work based on organic modeling in ZBrush towards complex textures such as: feathers, hair, scales and reptile skins. Procedural pattern generators and alphas will be employed. Students will also learn how to sculpt shapes with Chiselbrushes

They will learn to use cutting tools and Boolean tools for printing and to enhance the character of the animal models created. Likewise, special attention will be paid to birds, reptiles and fish, and other species. With this course, modeling professionals will become expert creators of beings

Students of this postgraduate Certificate will have the continued support of an expert teaching team and work in an online environment for at least 6 weeks, while also being able to interact in meeting rooms, private chats and forums. The educational material is distributed into different formats, which will make the study experience much more agile and convenient

This **Postgraduate Certificate in Digital Sculpture of Animals and Creatures** contains the most complete and up-to-date program on the market. Its most notable features are

- ♦ Practical cases presented by experts in 3D modeling and digital sculpture
- ♦ 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
- ♦ 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 to
develop games professionally"*

“*TECH offers you the best 100% online study platform. That is why it is positioned as the world's largest digital university*”

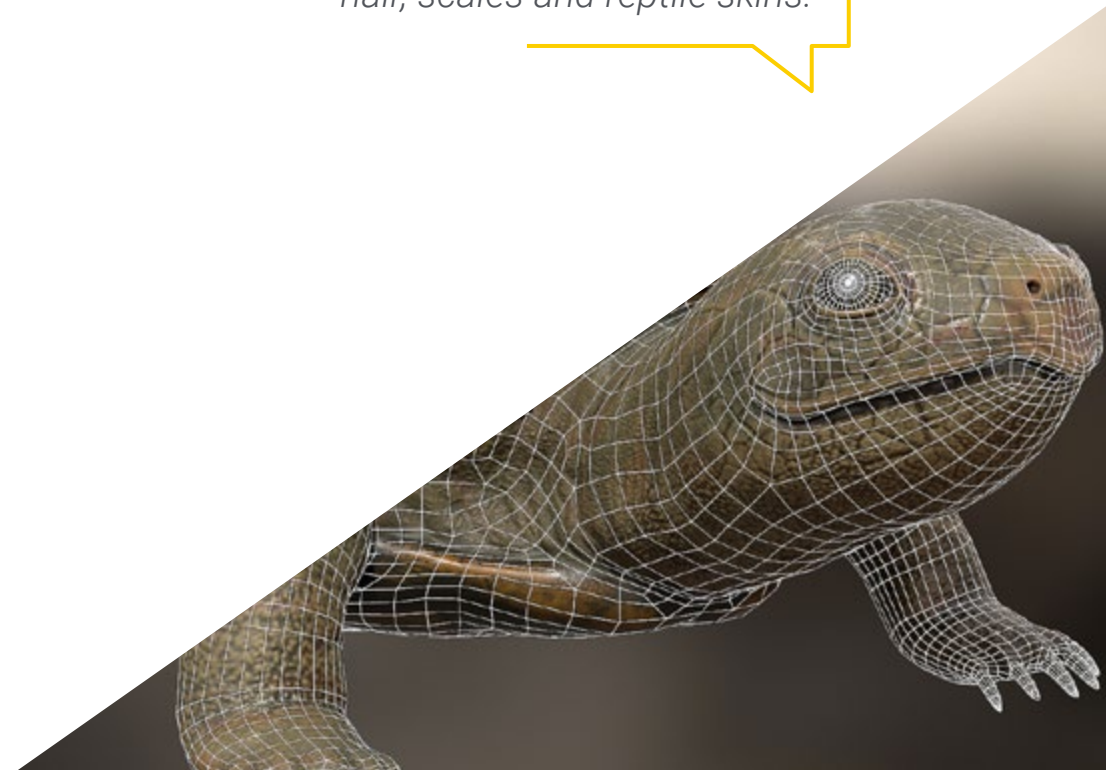
The program's teaching staff includes professionals from the sector who contribute their work experience to this training program, as well as renowned specialists from leading societies and prestigious universities

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 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. This will be done with the help of an innovative system of interactive videos made by renowned experts

Learn all about animal and creature modeling with this Postgraduate Certificate course.

Master organic modeling in ZBrush and design complex textures such as feathers, hair, scales and reptile skins.



02 Objectives

This Postgraduate Certificate opens the doors to professionalization by providing in-depth knowledge on the Digital Sculpture of Animals and Creatures which covers all perspectives. Make projects more and more realistic thanks to the set of techniques and tools detailed in the syllabus, which will allow the professional to offer clients or employers differentiating results in the development of works designed in three dimensions





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To be great at something, you have to study. Specialize to work in an evolving industry like the digital one”



General Objectives

- ◆ Understand human and animal anatomy to apply it to modeling, texturing, lighting and rendering processes in a precise way
- ◆ Understand the necessity of having an adequate topology at all levels of development and production
- ◆ Creation of realistic and high quality cartooncharacters
- ◆ Advanced management and use of various organic modeling systems
- ◆ Understand the current demands of the movie and video game industries in order to offer best results





Specific Objectives

- ◆ Manage and apply anatomical knowledge to animal sculpture
- ◆ Apply the correct animal topology of models to be used in 3D animation, video games and 3D printing
- ◆ Sculpt and texturize animal surfaces such as: feathers, scales, fur and animal hair refinement
- ◆ Develop animals and humans into fantastic animals, hybridizations and mechanical beings through shape sculpting and the use of Substance Painter
- ◆ Mastering photorealistic and non-photorealistic rendering of animals using Arnold

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Do something that no one else will ever do like you and make a difference. Prepare to be the best animal and creature modeler"

03

Course Management

For the design of the Postgraduate Certificate in Digital Sculpture of Animals and Creatures, TECH Technological University has selected a high-level teaching staff composed of professional specialized in 3D modeling. These professors will transmit their knowledge through innovative methods so that students learn the subjects in an effective way and are able to integrate them in their professional activities.





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Those who aren't willing to take risks don't understand success. These experts will show you why specialization is the best weapon to open up doors in the working world"

Management



Mr. Sequeros Rodríguez, Salvador

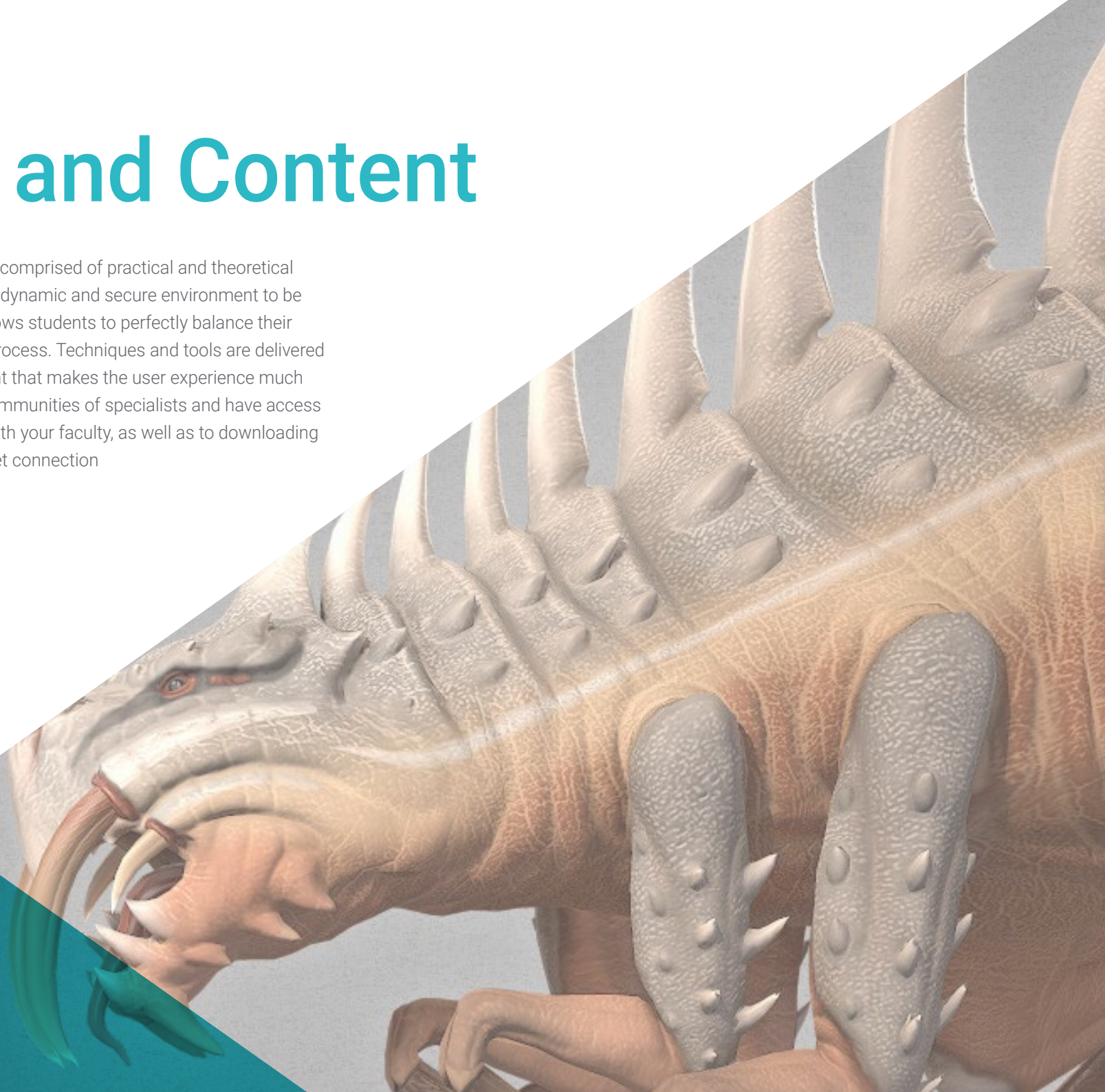
- Freelance 2D/3D modeler and generalist
- Concept Art and 3D Models for Slicecore. Chicago
- Videomapping and modeling, Rodrigo Tamariz. Valladolid
- Professor of Higher-Level Training Cycle in 3D Animation. Higher Education School of Image and Sound ESISV. Valladolid
- Professor of Higher-Level Training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



04

Structure and Content

The content of this Postgraduate Certificate is comprised of practical and theoretical material on Humanoid Modeling, available in a dynamic and secure environment to be studied online in a maximum of 6 weeks. It allows students to perfectly balance their current routine with the professional training process. Techniques and tools are delivered in an effective way thanks to interactive content that makes the user experience much more agile. You will be able to participate in communities of specialists and have access to forums, meeting rooms and private chats with your faculty, as well as to downloading the syllabus for consultation without an internet connection





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With this program, you will control from realistic formats to NPR representation styles such as anime or cartoon"

Module 1. Animals and Creatures

- 1.1. Animal Anatomy for Modeling
 - 1.1.1. Study of Proportions
 - 1.1.2. Anatomic Differences
 - 1.1.3. Musculature of the Different Species
- 1.2. Principal Masses
 - 1.2.1. Main Structures
 - 1.2.2. Balance Axes for Postures
 - 1.2.3. Base Meshes using ZSpheres
- 1.3. Head
 - 1.3.1. Craniums
 - 1.3.2. Jaws
 - 1.3.3. Teeth and Antlers
 - 1.3.4. Ribcage, Spine and Hips
- 1.4. Central Section
 - 1.4.1. Ribcage
 - 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. Fur, Skin and hair
 - 1.6.2. Scales
 - 1.6.3. Feathers





- 1.7. The Imaginary Animal: Anatomy and Geometry
 - 1.7.1. Anatomy of Fantastic Creatures
 - 1.7.2. Geometry and *Slice Cuts*
 - 1.7.3. Boolean Mesh
- 1.8. The Imaginary Animal: Fantastic Animals
 - 1.8.1. Fantastic Animals
 - 1.8.2. Hybridizations
 - 1.8.3. Mechanical Creatures
- 1.9. NPR Species
 - 1.9.1. *Cartoon* Styles
 - 1.9.2. Anime
 - 1.9.3. *Fan Art*
- 1.10. Animal and Human Rendering
 - 1.10.1. *Sub-Surface Scattering* Materials
 - 1.10.2. Mixed Texturing Techniques
 - 1.10.3. Final Composition



In just a few weeks, learn to create the most amazing creatures in Digital Sculpture with this TECH 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.



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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.



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

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.



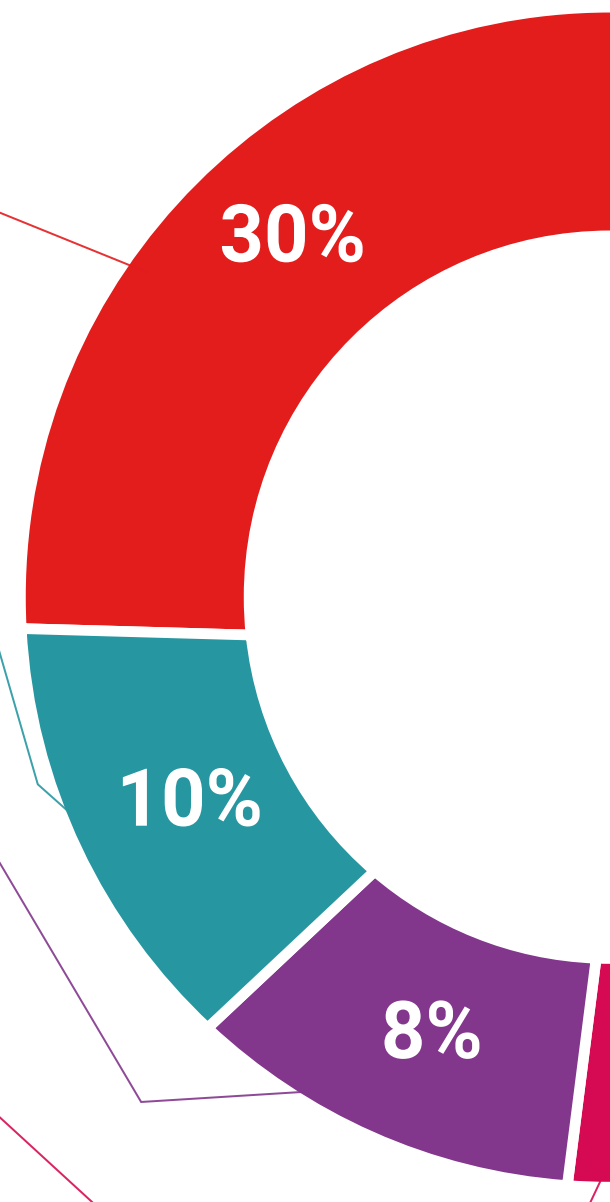
Practising Skills and Abilities

They will carry out activities to develop specific 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.





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 Digital Sculpture of Animals and Creatures 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 Digital Sculpture of Animals and Creatures** contains the most complete and up-to-date program on the market.

After students have 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 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 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
online training
development language
virtual classroom



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

Postgraduate Certificate

Digital Sculpture of Animals and Creatures

