

# Postgraduate Certificate Humanoid Modeling





## Postgraduate Certificate Humanoid Modeling

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

Website: [www.techtute.com/in/information-technology/postgraduate-certificate/humanoid-modeling](http://www.techtute.com/in/information-technology/postgraduate-certificate/humanoid-modeling)

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# 01

# Introduction

Humanoid shapes are part of the cast of characters for various scenarios today. In this way, the appearance of these almost human forms is contemplated with different functionalities among which stand out: animation and scenography of video games, anatomical models for the development of prosthesis and other elements related to health, clothing design, etc. Many aspects can take advantage of the digital and faithful representation of a humanoid form. This comprehensive educational program delves into the notions and knowledge necessary to effectively create humanoid forms using digital sculpture. All of this is available in a fully online format to make it easier to combine learning with other personal and professional projects.





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*Apply yourself in the design of humanoids through digital sculpture, in the most comfortable way with this online training"*

Sculpture and 3D digital design currently have a myriad of applications in many fields. Humanoids are quasi-human forms or characters created for animation and video games, they also have other applications. It is possible to recreate prosthetic models for any part of the body, design custom clothing, infoarchitecture simulations and many other applications can be pointed out.

Due to the importance of this field, TECH has designed this Postgraduate Certificate in Humanoid Modeling through digital sculpture, to meet the specific demand for professionals versed in this area. The study plan contemplates a path that starts from the most fundamental aspects such as the study of human anatomy for modeling, topology of the lower and upper body and characterization of characters.

In this program, in order to achieve the handling and application of anatomy to human sculpture and to know the correct topology of the models to be used, there is also a study of expressions and poses, as well as manual retopology. Predefined, crowded and repetitive spaces are also studied. It also delves into useful tools in the process such as ZBrush, Morpho transformer and 3ds Max.

This Postgraduate Certificate in Humanoid Modeling through digital sculpting is taught in a completely online format. TECH's training courses are designed so that students can combine their studies with other areas of their private and professional lives, which is why all the multimedia material and teaching resources are available on the virtual platform. In addition, the study plan is led by an expert teaching staff made up of real experts and professionals in the sector.

This **Postgraduate Certificate in Humanoids Modeling** contains 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



*Learn to model humanoids with this Postgraduate Certificate in only 6 weeks. Give your portfolio an edge with your own designs"*

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*With the Postgraduate Certificate offered by TECH you will learn at your own time and speed, with all the material available on the virtual platform for consultation whenever you wish"*

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 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.

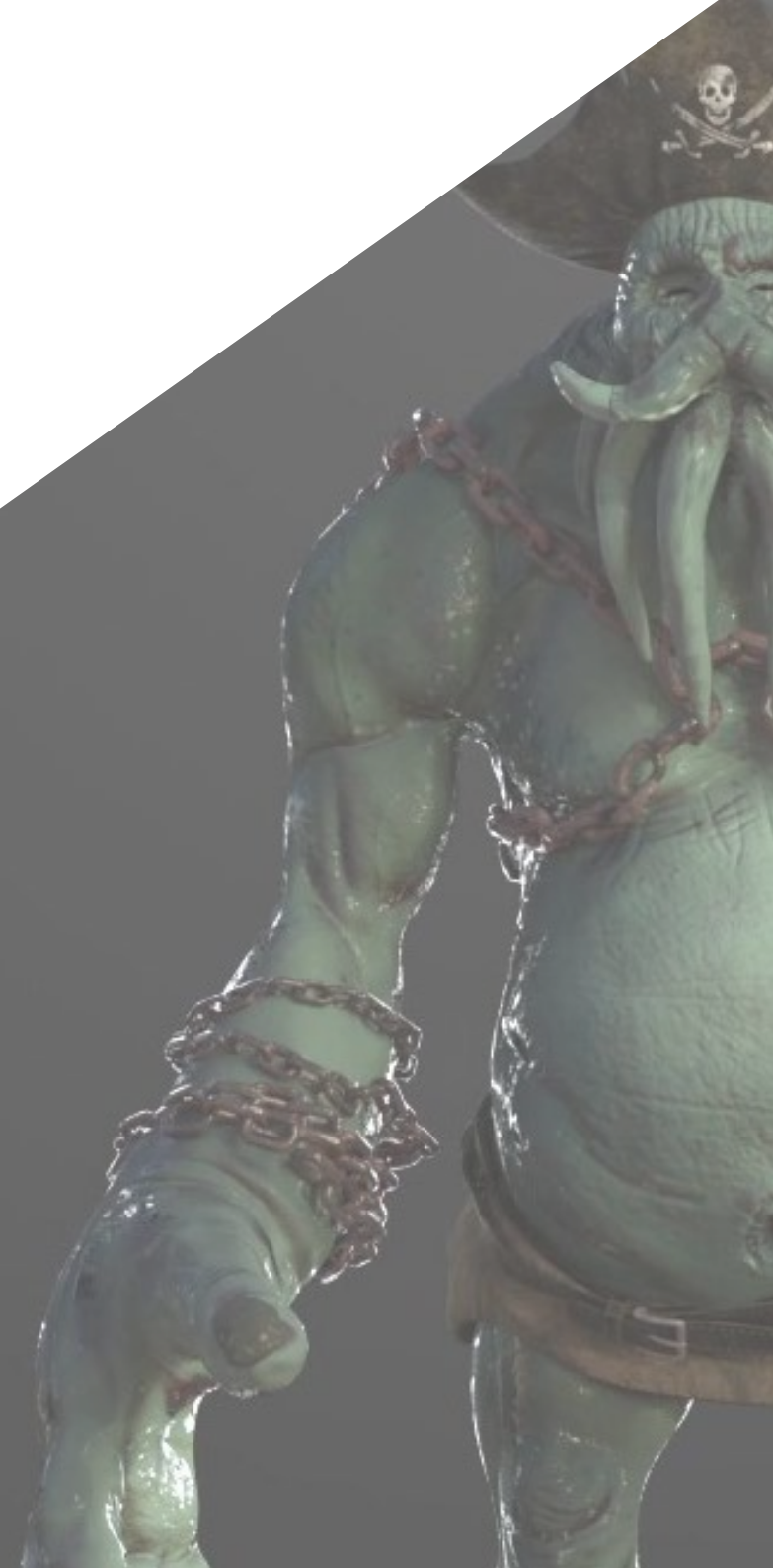
*Position yourself as an expert humanoid modeler and get a competitive advantage from this Postgraduate Certificate.*

*It studies the entire human anatomy and its topology for its subsequent application in the design of humanoids.*



# 02 Objectives

The purpose of this training is for the graduate student to be able to completely model a humanoid form, applying the necessary tools and professional criteria acquired to achieve the best results. The contents offered by TECH always cover a theoretical and practical dimension of learning, as well as enhancing the student's own professional criteria and transversal skills and abilities that will give added value. The materials are taught with a relearning methodology so that learning takes place in an autonomous and progressive manner.







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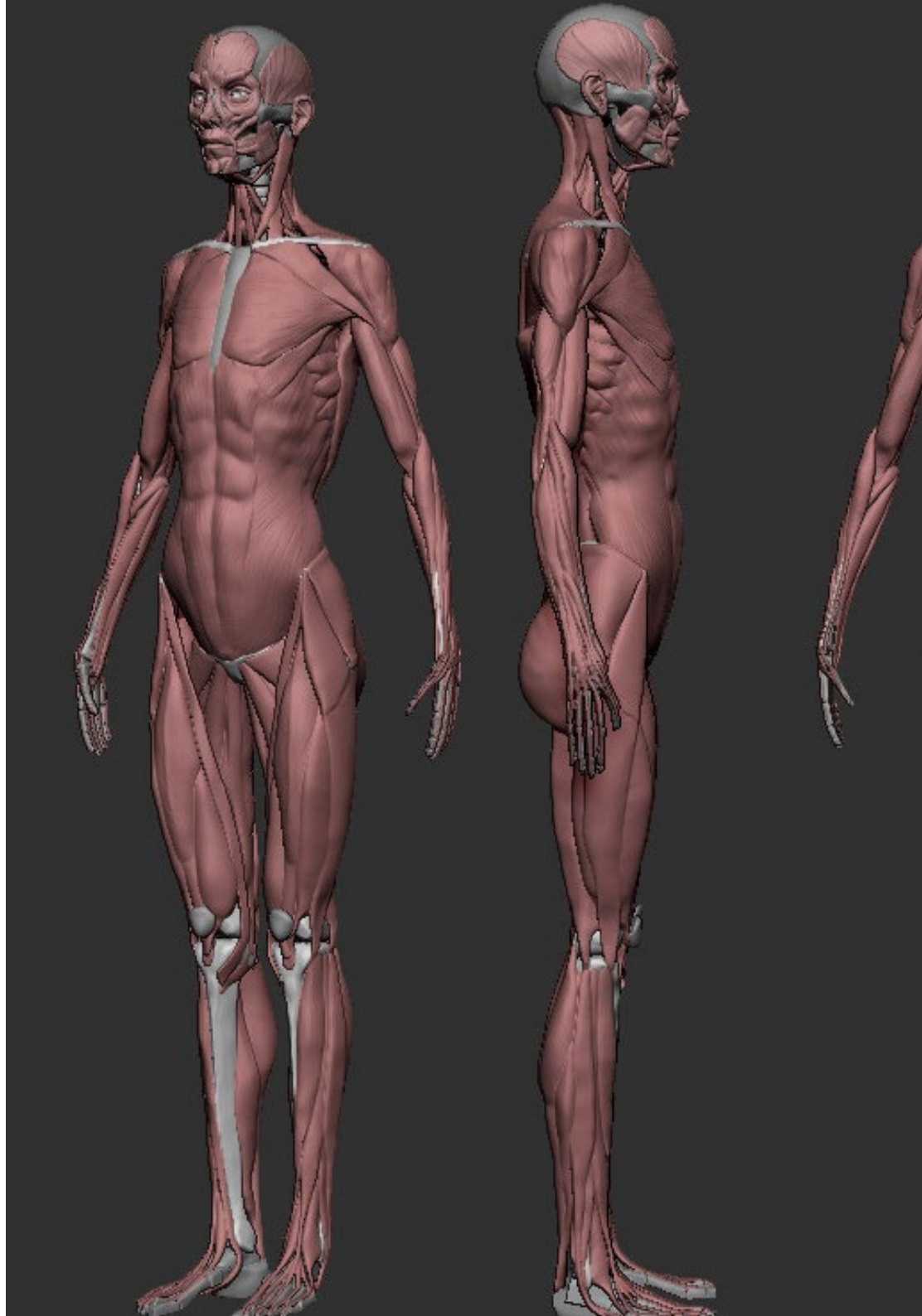
*It achieves an integral learning with theoretical and practical notions, but also professional criteria and transversal skills"*

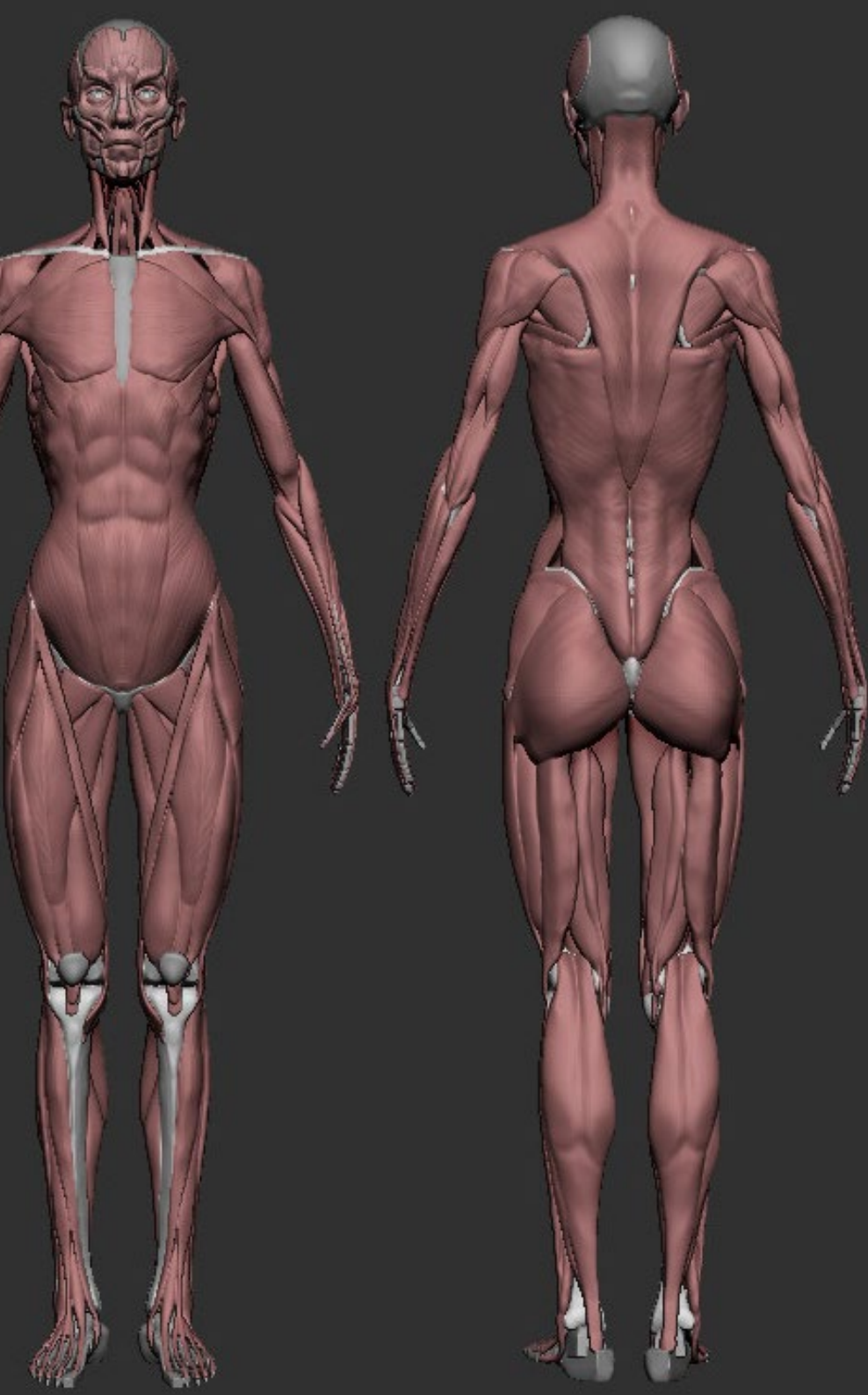


## General Objectives

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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 human sculpture
- ◆ Know the correct topology of models to be used in 3D animation, video games and 3D printing
- ◆ Characterize and stylize humanized characters
- ◆ Making manual retopologies with 3ds Max, Blender and ZBrush
- ◆ Create groups of people and multiple objects
- ◆ Use predefined and human base grids

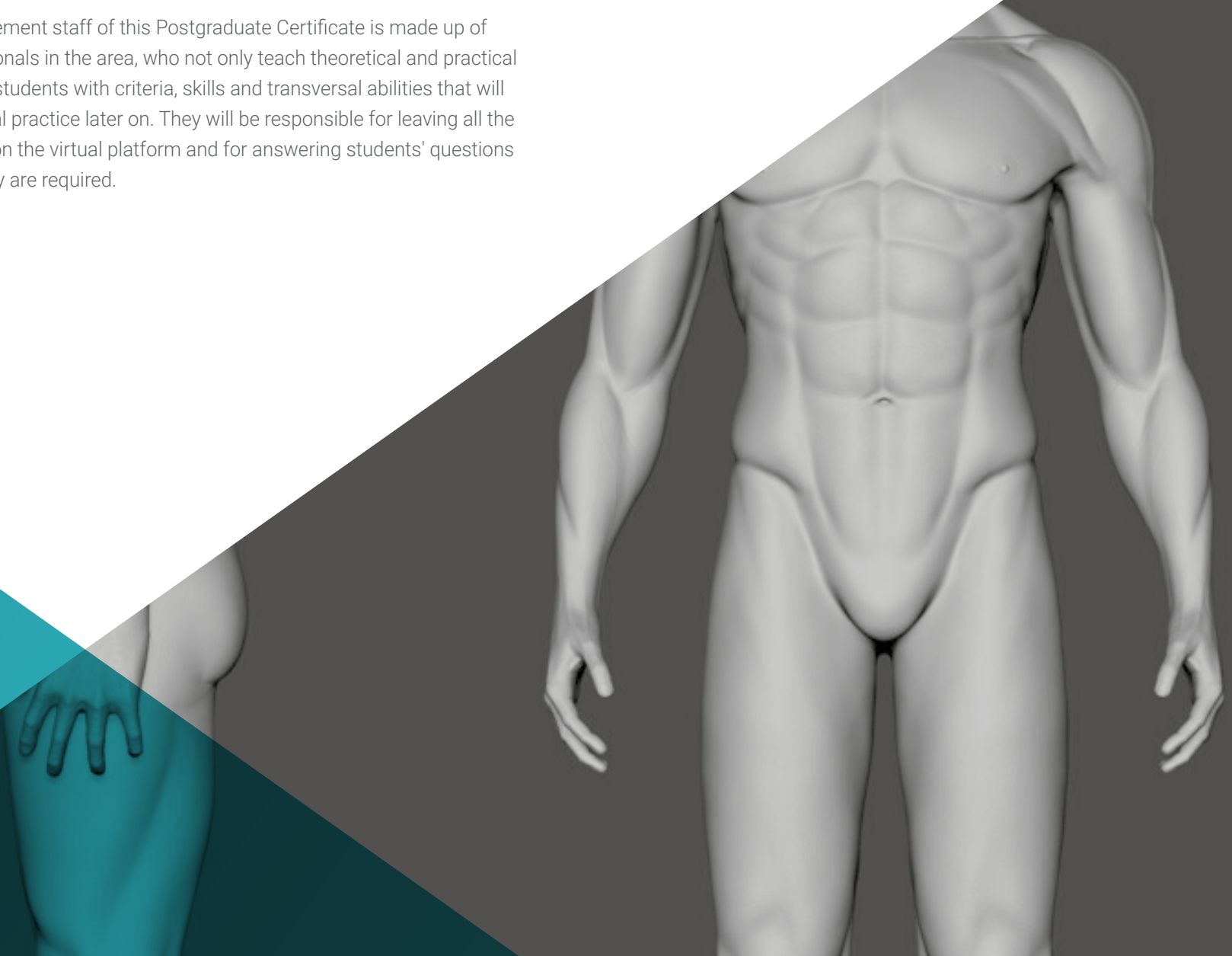
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*Learn how to apply 3ds Max, Blender and ZBrush in manual retopology production with this practical online training”*

# 03

## Course Management

The teaching and management staff of this Postgraduate Certificate is made up of true experts and professionals in the area, who not only teach theoretical and practical notions, but also provide students with criteria, skills and transversal abilities that will facilitate their professional practice later on. They will be responsible for leaving all the didactic material hosted on the virtual platform and for answering students' questions and doubts whenever they are required.





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*An excellent teaching staff made up of true professionals in the area"*

## 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 Design IED (Madrid)
- 3D modeling for the falleros Vicente Martinez and Loren Fandos Castellón)
- Master's Degrees 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

The content of this Postgraduate Certificate is developed in an orderly and structured manner, so that the acquisition of knowledge occurs gradually and progressively in the student. The study plan starts with the most theoretical concepts and issues, which are considered the basis of a more advanced and specialized knowledge. The syllabus will be available in the virtual classroom so that it can be downloaded and consulted, even without internet connection, and there will also be direct communication with the teaching staff so that students can resolve doubts and questions.





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*You can download the syllabus of this program for consultation even without an internet connection, as well as ask the teachers any questions you may have"*

## Module 1. Humanoid

- 1.1. Human Anatomy for Modeling
  - 1.1.1. Canon of Proportions
  - 1.1.2. Evolution and Functionality
  - 1.1.3. Superficial Muscles and Mobility
- 1.2. Lower Body Topology
  - 1.2.1. Torso
  - 1.2.2. Legs
  - 1.2.3. Feet
- 1.3. Upper Body Topology
  - 1.3.1. Arms and Hands
  - 1.3.2. Neck
  - 1.3.3. Head and Face and Inside Mouth
- 1.4. Characterized and Stylized Characters
  - 1.4.1. Details with Organic Modeling
  - 1.4.2. Anatomy Characterization
  - 1.4.3. Styling
- 1.5. Expressions
  - 1.5.1. Facial Animations and Layer
  - 1.5.2. Morpher
  - 1.5.3. Texture Animation
- 1.6. Pose
  - 1.6.1. Character Psychology and Relaxation
  - 1.6.2. Rig with Zpheras
  - 1.6.3. Posed with Motion Capture





- 1.7. Characterizations
  - 1.7.1. Tattoos
  - 1.7.2. Scars
  - 1.7.3. Wrinkles, Freckles and Marks
- 1.8. Manual Retopology
  - 1.8.1. In 3ds Max
  - 1.8.2. Blender
  - 1.8.3. Zbrush and Projections
- 1.9. Predefined
  - 1.9.1. Fuse
  - 1.9.2. Vroid
  - 1.9.3. MetaHuman
- 1.10. Crowds and Repetitive Spaces
  - 1.10.1. Scatter
  - 1.10.2. Proxys
  - 1.10.3. Object Groups

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*Don't wait and enroll now in this fully online Postgraduate Certificate in Humanoid Modeling"*

# 05 Methodology

This training program provides you with 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.

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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 program in Computer Science at TECH Technological University prepares you to face all the challenges in this area, 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.

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*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 Computer 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. Throughout the course, students 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

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 Spanish-language 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 Spanish-speaking university qualified 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 Spanish 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.



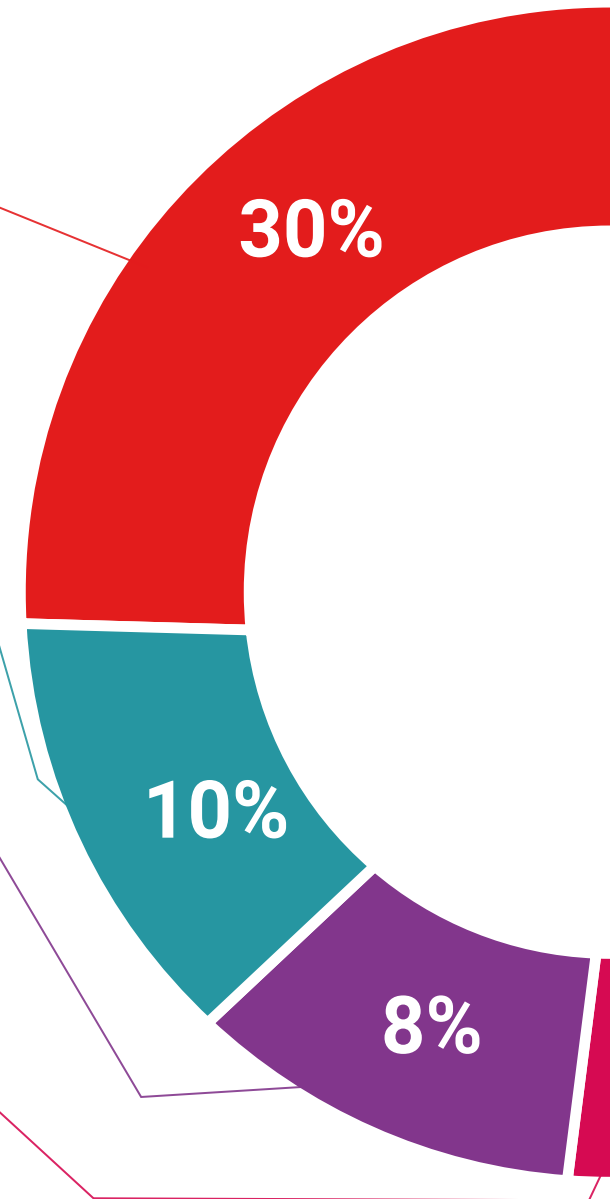
### Practising Skills and Abilities

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 Latin America.



#### 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 & Re-testing

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 Humanoid Modeling, in addition to the most rigorous and up-to-date training, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this training program and receive your diploma without travel or laborious paperwork"*

This **Postgraduate Certificate in Humanoid Modeling** is the most comprehensive and up-to-date 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 through the Postgraduate Certificate, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

**Title: Postgraduate Certificate in Humanoid Modeling**

**Official Number 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 quality  
development language  
classroom

**tech** technological  
university

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