Postgraduate Certificate
Anatomical 3D Modeling

tech *global university*

Postgraduate Certificate
Anatomical 3D Modeling

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

Website: **www.techtitute.com/us/design/postgraduate-certificate/anatomical-3d-modeling**

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Introduction

When making any kind of 3D model, especially human figures, it is essential to know the anatomy of the body and the natural behavior of muscles and joints. A lack of learning in this regard can lead to impossible poses or unrealistic proportions that can ruin all the rest of the designer's work. Given that most 3D models created today are of humanoid figures, this TECH qualification aims to respond to a growing market demand in which design students can masterfully adopt any type of anatomical 3D modeling.

You will not miss any details when correctly modeling any human figure thanks to your advanced knowledge of anatomy"

3D model designers will encounter, in the course of their working life, assignments of all types and categories, most of them possibly being human figures that require special precision to be sculpted correctly.

A human 3D model that does not have the correct proportions or does not follow natural looking patterns will stand out negatively in a very noticeable way, which can tarnish the work of the designer who has made it and detract from all the work and hours invested.

To avoid this type of situation TECH has developed this Postgraduate Certificate in Anatomical 3D Modeling, which contains all the necessary theory for the student to graduate with a much deeper understanding of all the vicissitudes of the human body. This will allow you to represent and sculpt 3D models of human figures much more realistically and efficiently.

The Postgraduate Certificate in Anatomical 3D Modeling is taught completely online, which means that the student has the advantage of being able to decide when, where and how to study it. All content can be downloaded from any device with an internet connection and is available from the first day of the program.

This **Postgraduate Certificate in Anatomical 3D Modeling** contains the most complete and up-to-date educational program on the market. Its most notable features are:

- The development of case studies presented by experts in 3D modeling
- 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 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

You will be the reference that your colleagues will consult to make human 3D models, making you an indispensable asset in your company's organization chart"

" *This is the opportunity you were waiting for to improve your profile as a 3D designer. Don't let it pass you by and formalize your enrollment today"*

You will know how to sculpt any realistic or science fiction human character, with perfect precision to represent all its details.

TECH provides all possible facilities to its students, so you will get your Postgraduate Certificate in Anatomical 3D Modeling without having to do a final project.

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 throughout the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

Objectives

The objective proposed in this qualification is to instruct 3D modeling professionals in all the most relevant aspects of human anatomy. In this way, they can confidently take on any commission or project that requires perfectly detailed and recreated anatomical sculptures. This will greatly enhance the performance and professional value of the graduates, who will see how they will improve their work methodology while at the same time obtaining better job opportunities.

"

This Postgraduate Certificate will be the springboard that will lead you to greater responsibilities and better jobs in the field of 3D design"

General Objectives

- Expand knowledge of human and animal anatomy in order to develop hyper-realistic creatures
- Master retopology, UVs and texturing to perfect the models created
- Create an optimal and dynamic workflow to work more efficiently with 3D modeling
- Have the skills and knowledge most in demand in the 3D industry to be able to apply for the best jobs

Specific Objectives

- Investigate both male and female human anatomy
- Develop the highly detailed human body
- Hyper-realistic face sculpting

Human anatomy is fundamental if you want your models to have more realism and verisimilitude. Master it by enrolling in this program"

Course Management

This Postgraduate Certificate in Anatomical 3D Modeling has the best professionals in the 3D modeling industry, who have sculpted a multitude of human bodies throughout their careers. With the teachers' advanced knowledge of human anatomy, students are guaranteed access to high-quality resources and teaching material for their professional performance, as well as the advice of professionals whose goal is to see them grow at a professional and personal level.

TECH only chooses the best professionals for the development of its programs, so you are assured of the best possible training in anatomical 3D modeling"

International Guest Director

Joshua Singh is a leading professional with over 20 years of experience in the **video game** industry, internationally recognized for his skills in **art direction** and **visual development**. With solid training in **software** such as **Unreal, Unity, Maya, ZBrush, Substance Painter** and **Adobe Photoshop**, he has made a significant mark in the field of **game design**. In addition, his experience spans **visual development** in both **2D** and **3D**, and is distinguished by his ability to collaboratively and thoughtfully solve problems in **production environments**.

In addition, as **Art Director at Marvel Entertainment**, he has collaborated with and guided elite teams of artists, ensuring that the artwork meets the required quality standards. He has also served as **Lead Character Artist** at **Proletariat Inc**. where he has created a safe environment for his team and has been responsible for all character assets in **video games**.

With an outstanding track record, including **leadership roles** at companies such as **Wildlife Studios** and **Wavedash Games**, Joshua Singh has been an advocate for artistic development and a mentor to many in the industry. Not to mention his time at large and well-known companies, such as **Blizzard Entertainment** and **Riot Games**, where he has worked as a **Senior Character Artist**. And, among his most relevant projects, stands out for his participation in hugely successful **video games**, including **Marvel's Spider-Man 2, League of Legends** and **Overwatch**.

Thus, his ability to unify the vision of **Product, Engineering and Art** has been fundamental to the success of numerous projects. Beyond his work in the industry, he has shared his experience as an instructor at the prestigious **Gnomon School of VFX** and has been a presenter at renowned events such as the **Tribeca Games Festival** and the **ZBrush Summit**.

D. Singh, Joshua

- Art Director at Marvel Entertainment, California, USA
- Lead Character Artist at Proletariat Inc
- Art Director at Wildlife Studios
- Art Director at Wavedash Games
- Senior Character Artist at Riot Games
- Senior Character Artist at Blizzard Entertainment
- Artist at Iron Lore Entertainment
- 3D Artist at Sensory Sweep Studios
- Senior Artist at Wahoo Studios/Ninja Bee
- General Studies from Dixie State University
- Degree in Graphic Design from Eagle Gate Technical College

" Thanks to TECH, you will be able to learn with the best professionals in the world"

Management

Ms. Gómez Sanz, Carla

- 3D Generalist at Blue Pixel 3D
- Concept Artist, 3D Modeler, Shading in Timeless Games Inc.
- Collaboration with multinational consulting firm for the design of vignettes and animation for commercial proposals
- Advanced Technician in 3D Animation, video games and interactive environments at CEV School of Communication, Image and Sound
- Master's Degree and Bachelor's Degree in 3D Art, Animation and Visual Effects for video games and cinema at CEV School of Communication, Image and Sound

Structure and Content

The structure and contents of this Postgraduate Certificate respond to market demands for more realistic and natural 3D human models than ever before. Therefore, the syllabus covers all the most fundamental aspects of the body: the skeletal mass, the anatomical differences between genders, the different parts of a human being, the sculpting of these parts and the composition of all parts of the model to create a genuine and authentic sculpture.

You will find a good amount of audiovisual material with which to see first-hand the most relevant parts of a human 3D model"

Module 1. Anatomy

1.1.   General Skeletal Masses, Proportions
    1.1.1.   Bones
    1.1.2.   The Human Face
    1.1.3.   Anatomical Canons
1.2.   Anatomical Differences between Genders and Sizes
    1.2.1.   Shapes Applied to Characters
    1.2.2.   Curves and Straight Lines
    1.2.3.   Behavior of Bones, Muscles and Skin
1.3.   Head
    1.3.1.   The Skull
    1.3.2.   Muscles of the Head
    1.3.3.   Layers: Skin, Bone and Muscle Facial Expressions
1.4.   The Torso
    1.4.1.   Torso Musculature
    1.4.2.   Central Axis of the Body
    1.4.3.   Different Torsos
1.5.   The Arms
    1.5.1.   Joints: Shoulder, Elbow and Wrist
    1.5.2.   Arm Muscle Behavior
    1.5.3.   Detail of the Skin
1.6.   Hand Sculpting
    1.6.1.   Hand Bones
    1.6.2.   Hand Muscles and Tendons
    1.6.3.   Hand Skin and Wrinkles
1.7.   Leg Sculpting
    1.7.1.   Joints: Hip, Knee and Ankle
    1.7.2.   Muscles of the Leg
    1.7.3.   Detail of the Skin

This program will be decisive when it comes to applying for more relevant positions in the industry, demonstrating that you are a professional with the necessary qualities to take on more important projects"

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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 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.

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

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.

01 learning from evidence

02 relearning from evidence

03 testing

04 learning from an expert

05 neurocognitive context dependent learning

06 Von-Restorff effect

07 case based learning through storytelling

08 competencies testing (retesting)

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:
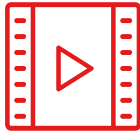
Study Material

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.

30%

10%

8%

20%

25%

4%

3%
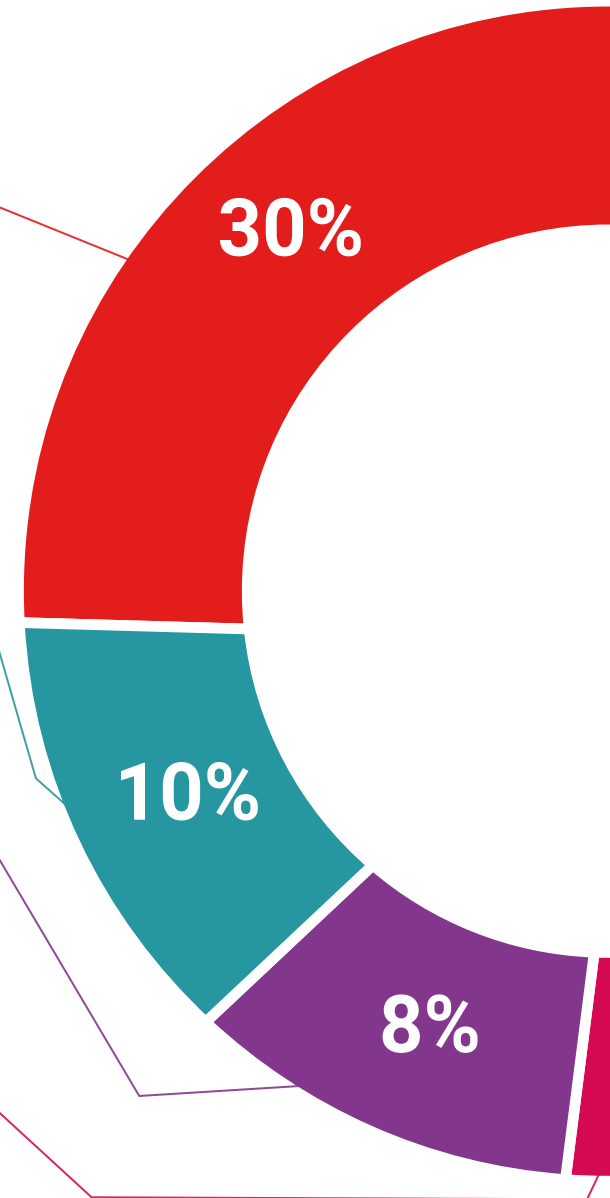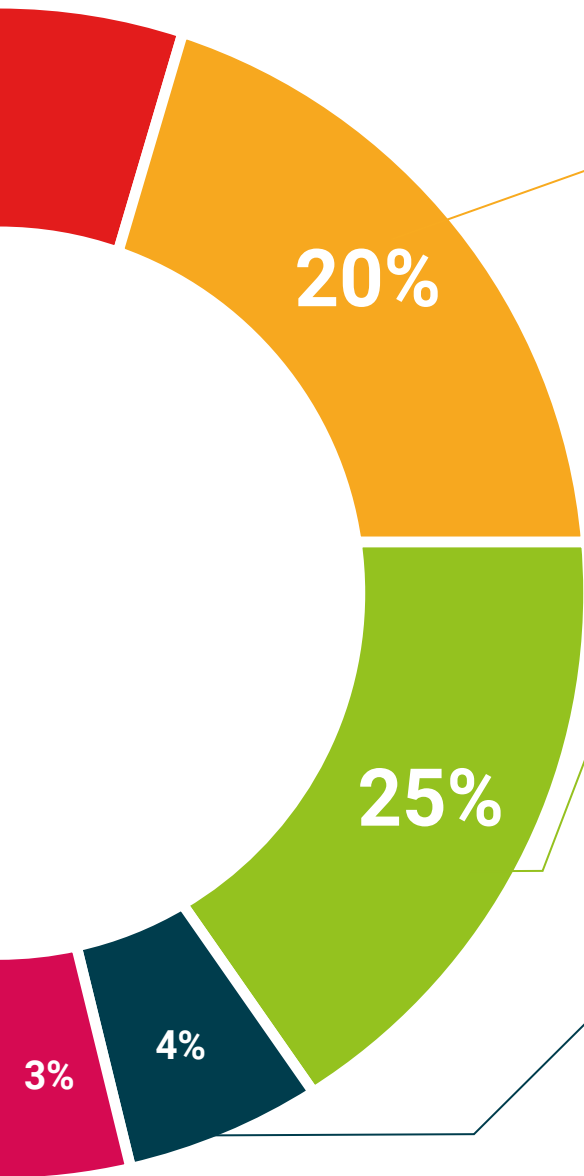
Case Studies

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 Anatomical 3D Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a certificate issued by TECH Global University.

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 Anatomical 3D Modeling** 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.
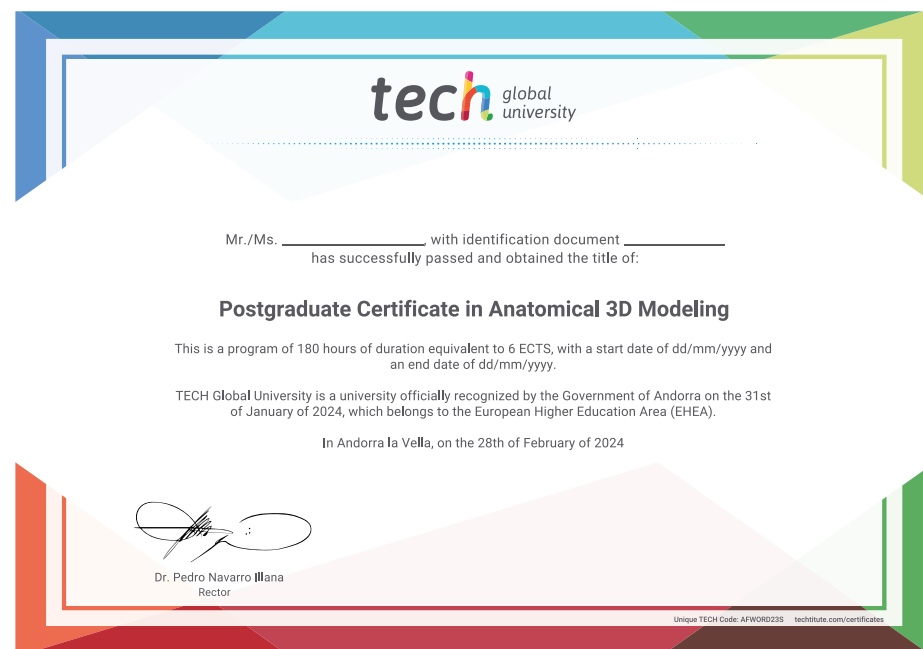
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Anatomical 3D Modeling**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

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Mr./Ms. _____, with identification document _____ has successfully passed and obtained the title of:

Postgraduate Certificate in Anatomical 3D Modeling

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

Unique TECH Code: AFWORD23S   techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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