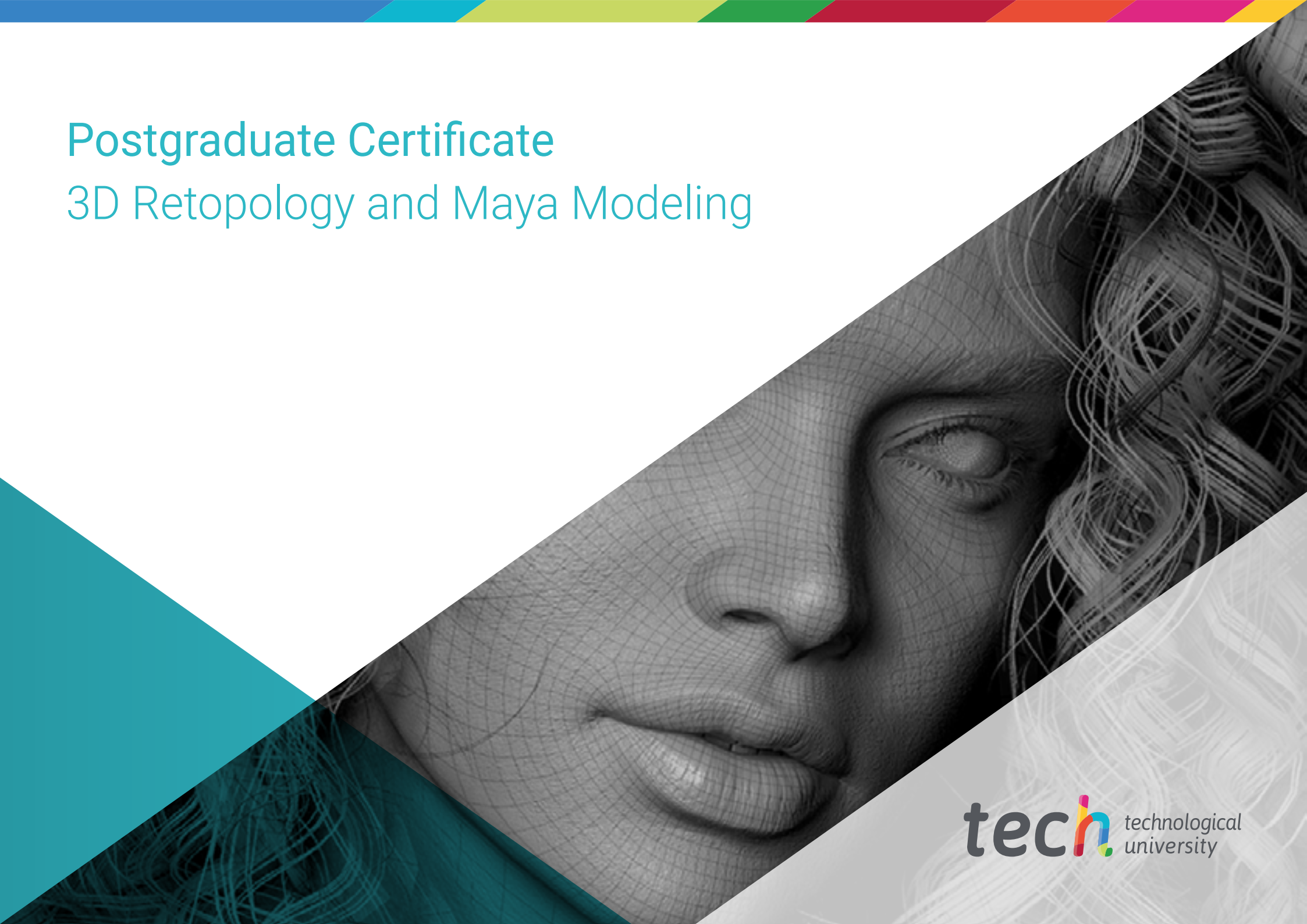
Postgraduate Certificate

3D Retopology and Maya Modeling



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Postgraduate Certificate

3D Retopology and Maya Modeling

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Technological University**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/videogames/postgraduate-certificate/3d-retopology-maya-modeling

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01

Introduction

In any complex process such as creating a video game, coordination between different departments is essential. The mainstay of the entire 3D environment is in the design and modeling section, so a good treatment of the models at this stage makes the rest of the chain work much more optimally. With exceptional skill in handling retopology, the design professional can become a key player in development, becoming more involved and thus reaching higher positions of responsibility and financial compensation.
With this knowledge and detailed training at Maya Modeling, the student will have no obstacles to reach the peak of 3D video game design.

Stop imagining what a better job future would look like and make it a reality by learning how to design versatile, creative and impactful 3D models"

Thanks to retopology, which is the process of recreating an existing surface with a more optimized geometry, the animation and texturization processes are greatly simplified. This reduces times and improves workflow, which in an industry with delivery dates as tight as that of video games becomes essential.

Professionals with specific instruction in this technique have greater opportunities to grow within the industry and qualify for the best positions in 3D design departments, being able to even lead work teams thanks to a refined work methodology prepared for the biggest challenges in the industry.

The student will also have access to a complete agenda in the use of Maya Modeling, the preferred tool of thousands of top designers in the video game industry. The student will see both their professional ability and the final quality of their own projects and models improved, giving a strong argument in quality to their portfolio to qualify for the job improvement they are looking for.

A program that is taught in 100% online format, without classes or schedules, being able to choose the student the best time of the day to assume the entire teaching load. This innovative TECH methodology allows students to combine their work with the study of this program, being the ideal option to not leave work aside while continuing to improve and achieve new goals.

This **Postgraduate Certificate in 3D Retopology and Maya 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 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

Well applied retopology will be your best cover letter as a solvent professional, effective and able to take on greater challenges"

Accelerate production processes, achieve greater performance in your projects and position yourself as an example to follow within the 3D modeling department"

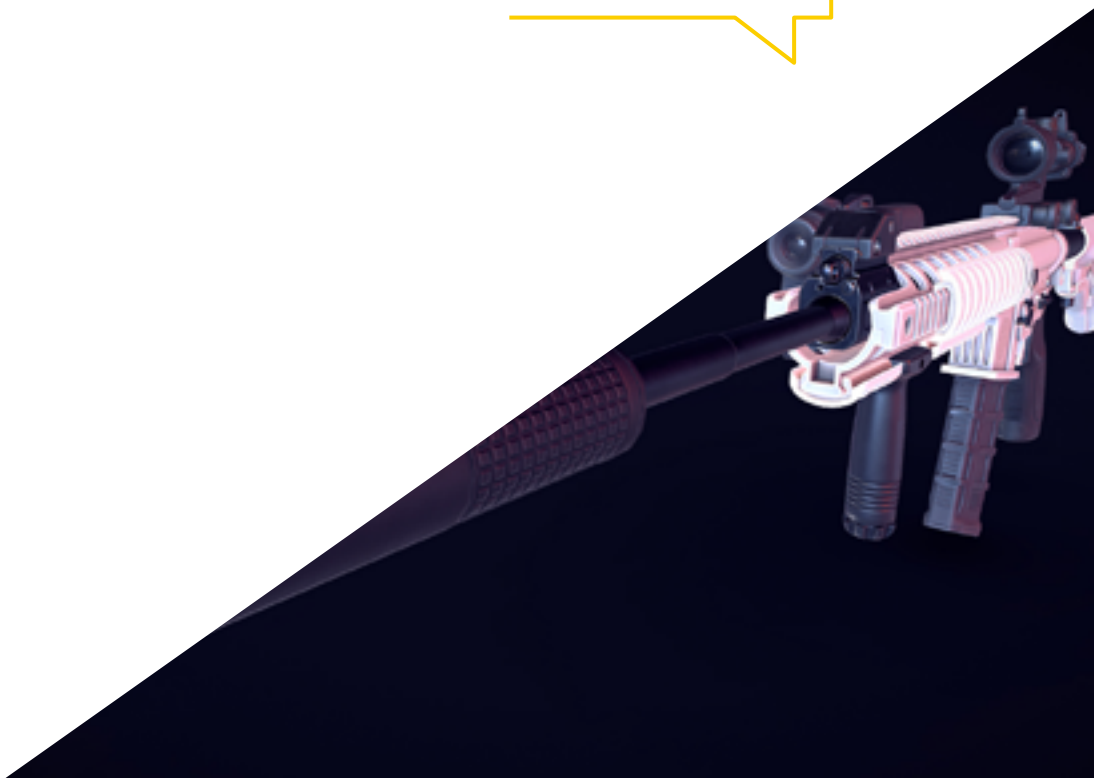
You will get your Postgraduate Certificate in 3D Retopology and Maya Modeling directly, without doing a final work or excessive teaching load.

Do not miss this unique opportunity to combine this advanced qualification in Maya Modeling with the rest of your responsibilities.

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

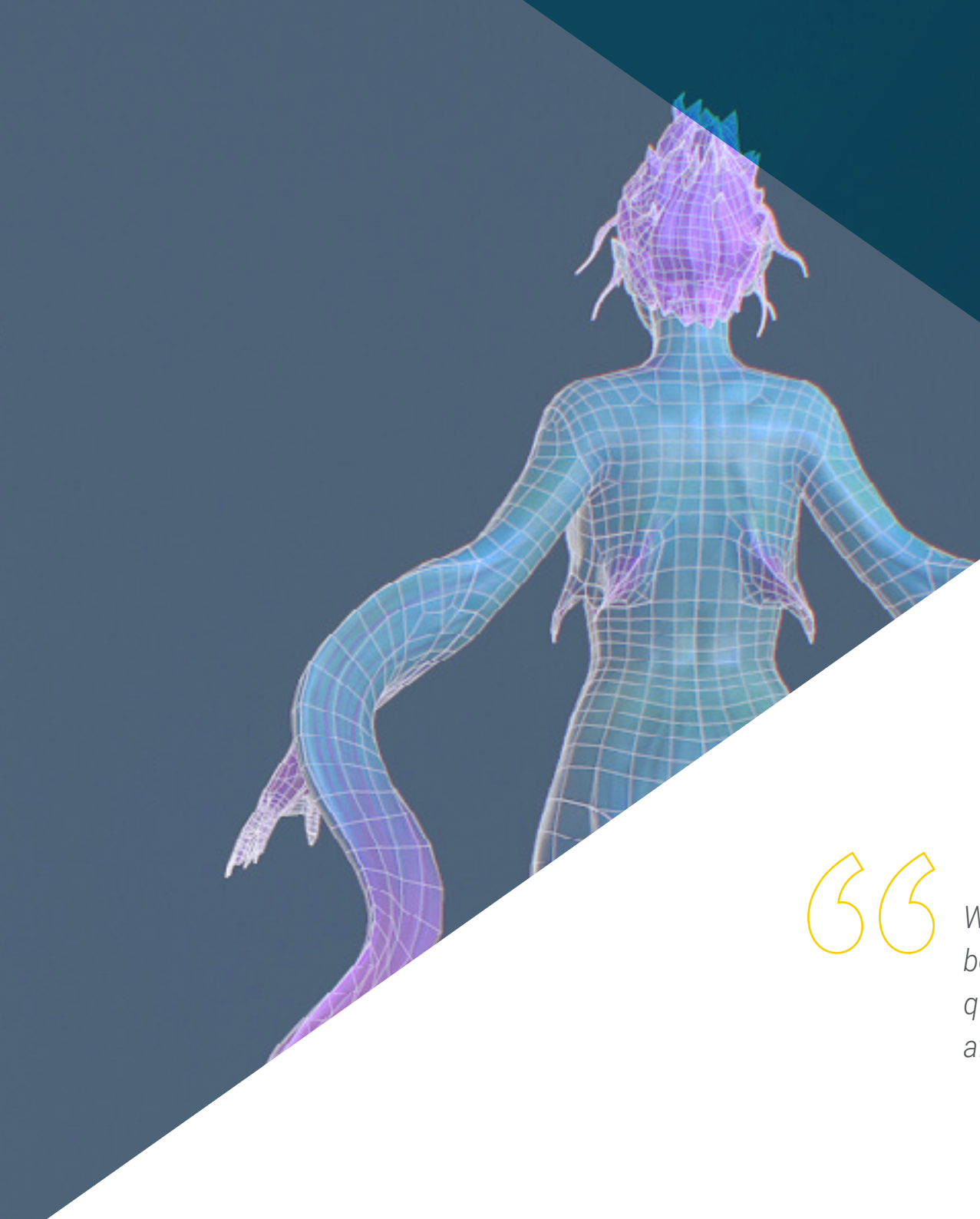
This program is designed around Problem-Based Learning, whereby the professional must try to solve different professional practice situations that arise during the program. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts



02

Objectives

It is clear to the students who choose this program that excellence will lead them to a much more prosperous future. That is why TECH does not spare expenses to have the best possible teaching staff, the most innovative educational methodology and the necessary resources to get the student to reach the video game project of their dreams. Therefore, all the teaching is aimed at making the most of the advantages that Maya makes available to the most seasoned and advanced designers.



What will be the day to day of the best 3D video game designers? It is a question that you yourself will answer after finishing this qualification"

General Objectives

- Expand knowledge of human and animal anatomy in order to develop hyper-realistic creatures
- Master the 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

- Master the different professional sculpting techniques
- Create advanced full body and face retopology in Maya
- Delve into how to apply details using alphas and brushes in ZBrush

You'll have what the world's best designers need to access the elite of 3D modeling in video games"

03

Course Management

This Postgraduate Certificate in 3D Retopology and Maya Modeling is led by a group of professionals who have a wide curriculum in the management of this important 3D design tool. Thanks to their expertise, the student will be able to streamline their work methodology, learning in a practical context and with real cases to use Maya in a more efficient and orderly way. The advice of these professionals of 3D modeling for videogames will be decisive in the future professional success of the student.

The best in the 3D design industry are at TECH. Do not miss the opportunity to learn from the hand of professionals who know your work and know how to improve it"

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.

04

Structure and Content

The content of this entire program is enriched with extensive support in audiovisual material and examples based on the teacher's own experiences, which makes all teaching more complete and adapted to the video game market. Instead of learning through outdated oratory, TECH employs the most current educational methodology for the student to retain the most important information and concepts, incorporating them immediately into its 3D design toolkit.

Enroll today in this Postgraduate Certificate in 3D Retopology and Maya Modeling and make this specialty significantly improve your job and salary expectations"

Module 1. 3D Retopology and Maya Modeling

1.1. Advanced Facial Retopology
- 1.1.1. Importing into Maya and the Use of Quad Draw
- 1.1.2. Retopology of the Human Face
- 1.1.3. Loops

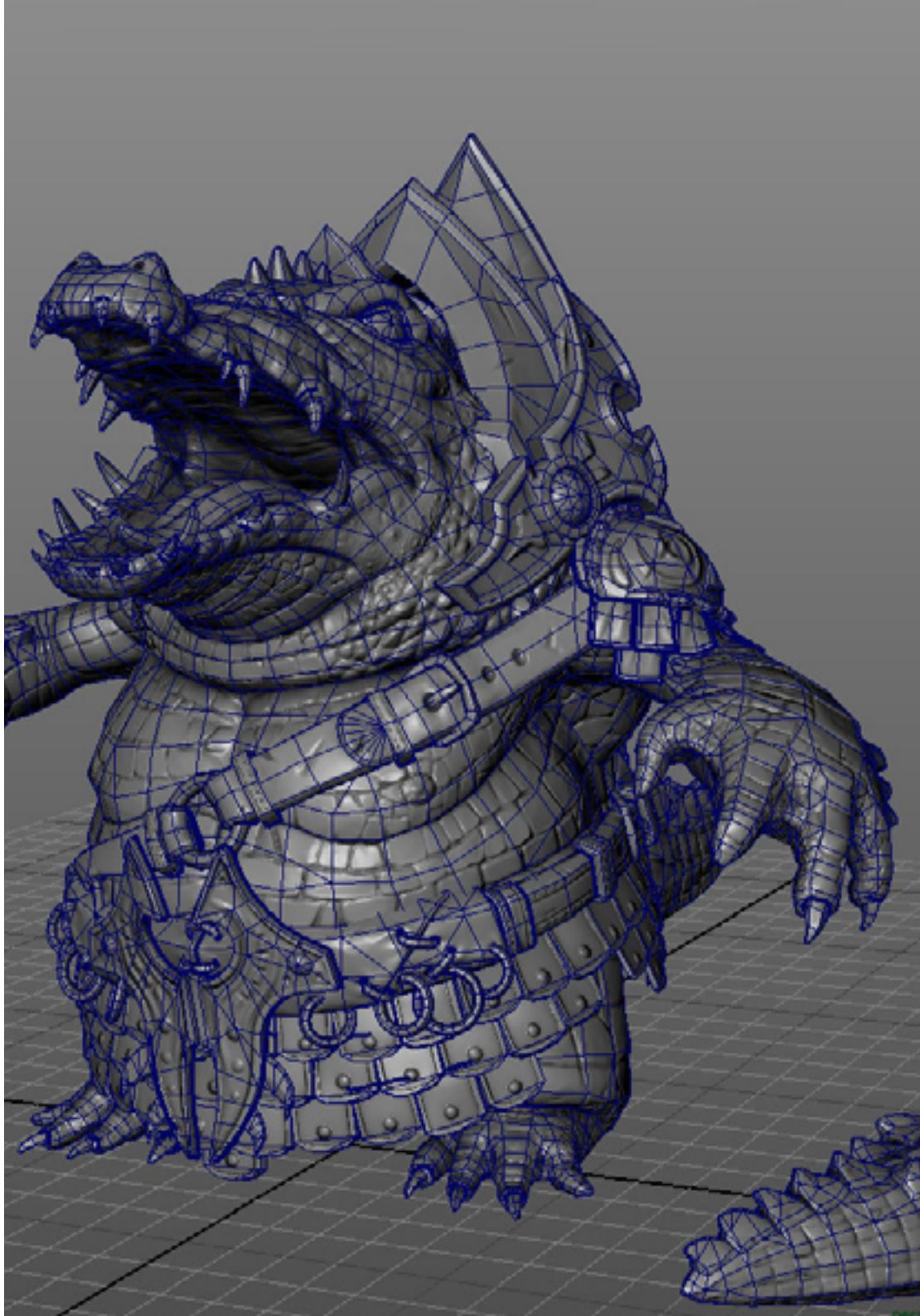
1.2. Human Body Retopology
- 1.2.1. Creation of Loops in the Joints
- 1.2.2. Ngons and Tris and When to Use Them
- 1.2.3. Topology Refinement

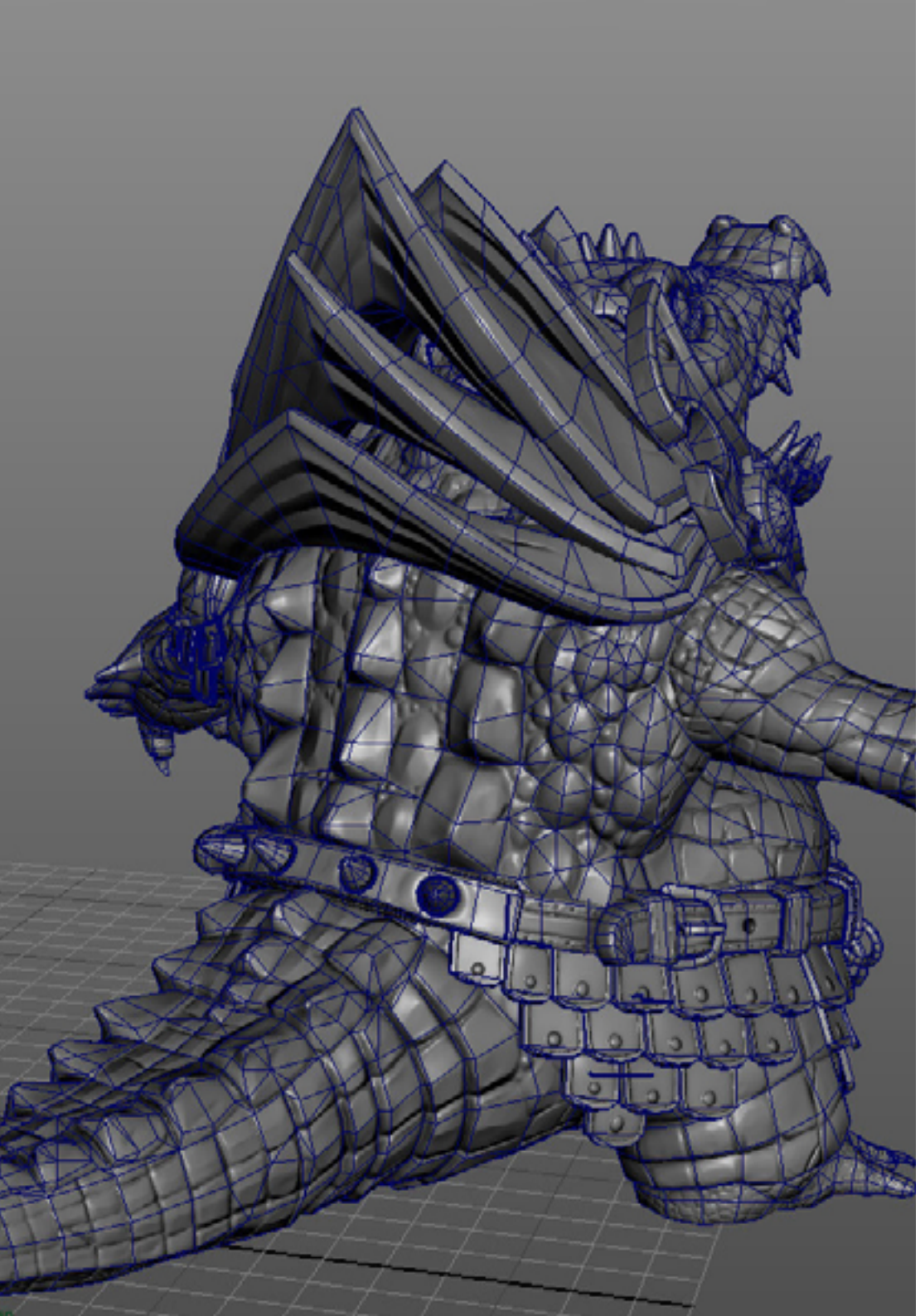
1.3. Retopology of Hands and Feet
- 1.3.1. Movement of Small Joints
- 1.3.2. Loops and Support Edges to Improve the Base Mesh of Feet and Hands
- 1.3.3. Difference of Loops for Different Hands and Feet

1.4. Differences Between Maya Modeling vs. Zbrush Sculpting
- 1.4.1. Different Workflows for Modeling
- 1.4.2. Low Poly Base Model
- 1.4.3. High Poly Model

1.5. Creation of a Human Model from Scratch in Maya
- 1.5.1. Human Model Starting From the Hip
- 1.5.2. General Base Form
- 1.5.3. Hands and Feet and their Topology

1.6. Transformation of Low poly Model to High Poly
- 1.6.1. Zbrush
- 1.6.2. High poly: Differences Between Divide and Dynamesh
- 1.6.3. Sculpting Form: Alternation Between Low Poly and High Poly





1.7. Detail Application in Zbrush: Pores, Capillaries, etc.
- 1.7.1. Alphas and Different Brushes
- 1.7.2. Detail: Dam-Standard Brush
- 1.7.3. Projections and Surfaces in Zbrush

1.8. Advanced Eye Creation in Maya
- 1.8.1. Creation of the Spheres: Sclera, Cornea and Iris
- 1.8.2. Lattice Tool
- 1.8.3. Displacement Map from Zbrush

1.9. Use of Deformers in Maya
- 1.9.1. Maya Deformers
- 1.9.2. Topology Movement: Polish
- 1.9.3. Polishing of the Final Mesh

1.10. Creation of Final UV´s and Application of Displacement Mapping
- 1.10.1. Character UV´s and Importance of Sizes
- 1.10.2. Texturing
- 1.10.3. Displacement Map

You will be different from other 3D designers who do not know how to adapt their work properly, saving time for your organization and yourself”

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.

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.

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

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 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

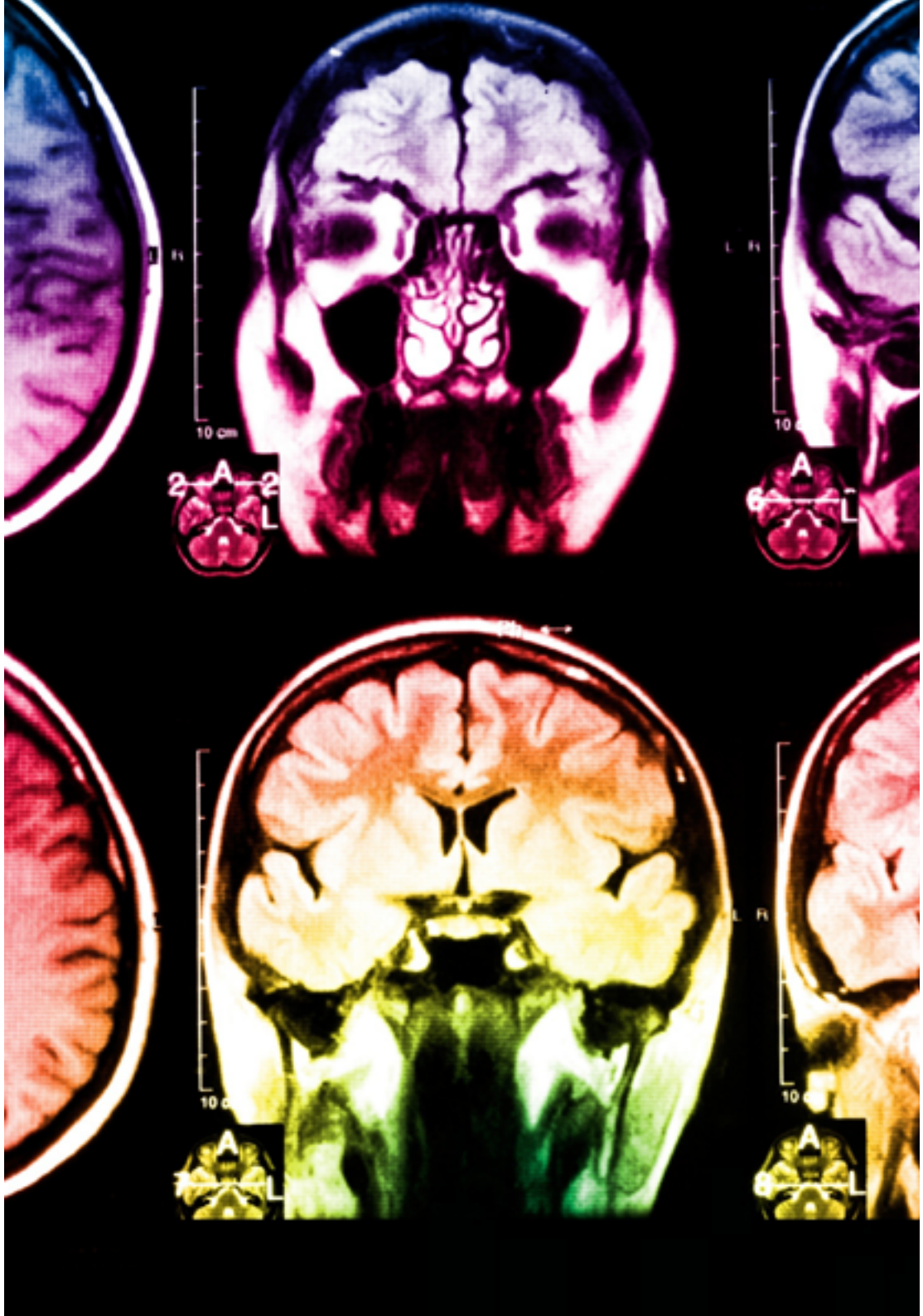
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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. 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.

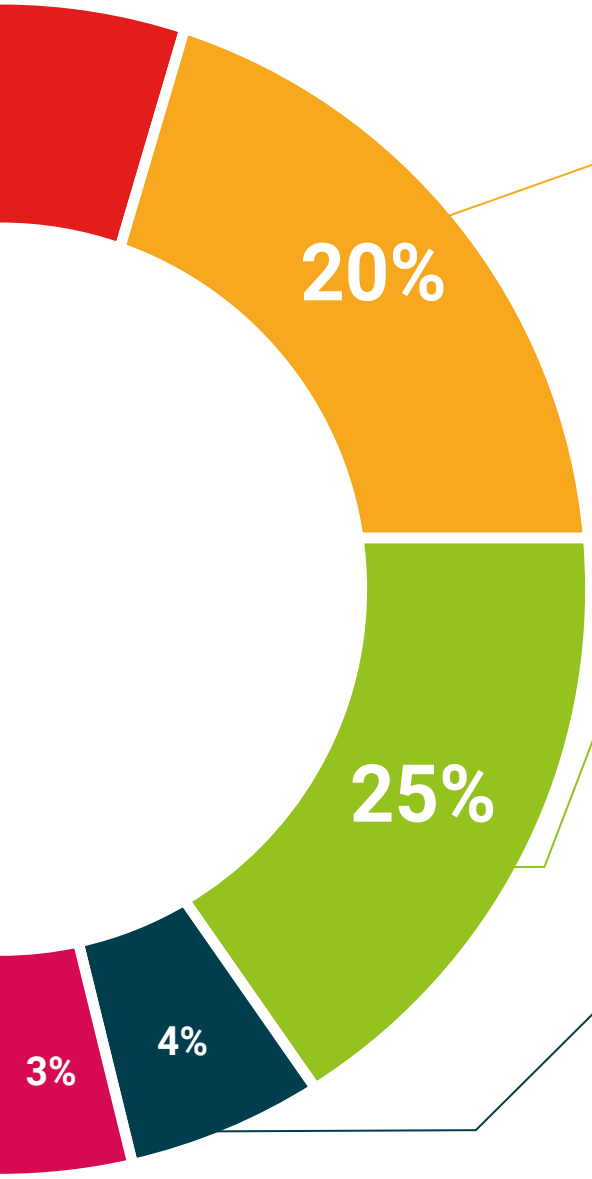
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

Practising Skills and Abilities

They will carry out activities to develop specific 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 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

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 3D Retopology and Maya Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This **Postgraduate Certificate in 3D Retopology and Maya Modeling** contains the most complete 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 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 3D Retopology and Maya Modeling**

Official Nº of Hours: **150 h.**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Awards the following

DIPLOMA

to

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

For having passed and accredited the following program

POSTGRADUATE CERTIFICATE

in

3D Retopology and Maya Modeling

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 diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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Postgraduate Certificate

3D Retopology and Maya Modeling

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Technological University**
- Schedule: **at your own pace**
- Exams: **online**

Postgraduate Certificate

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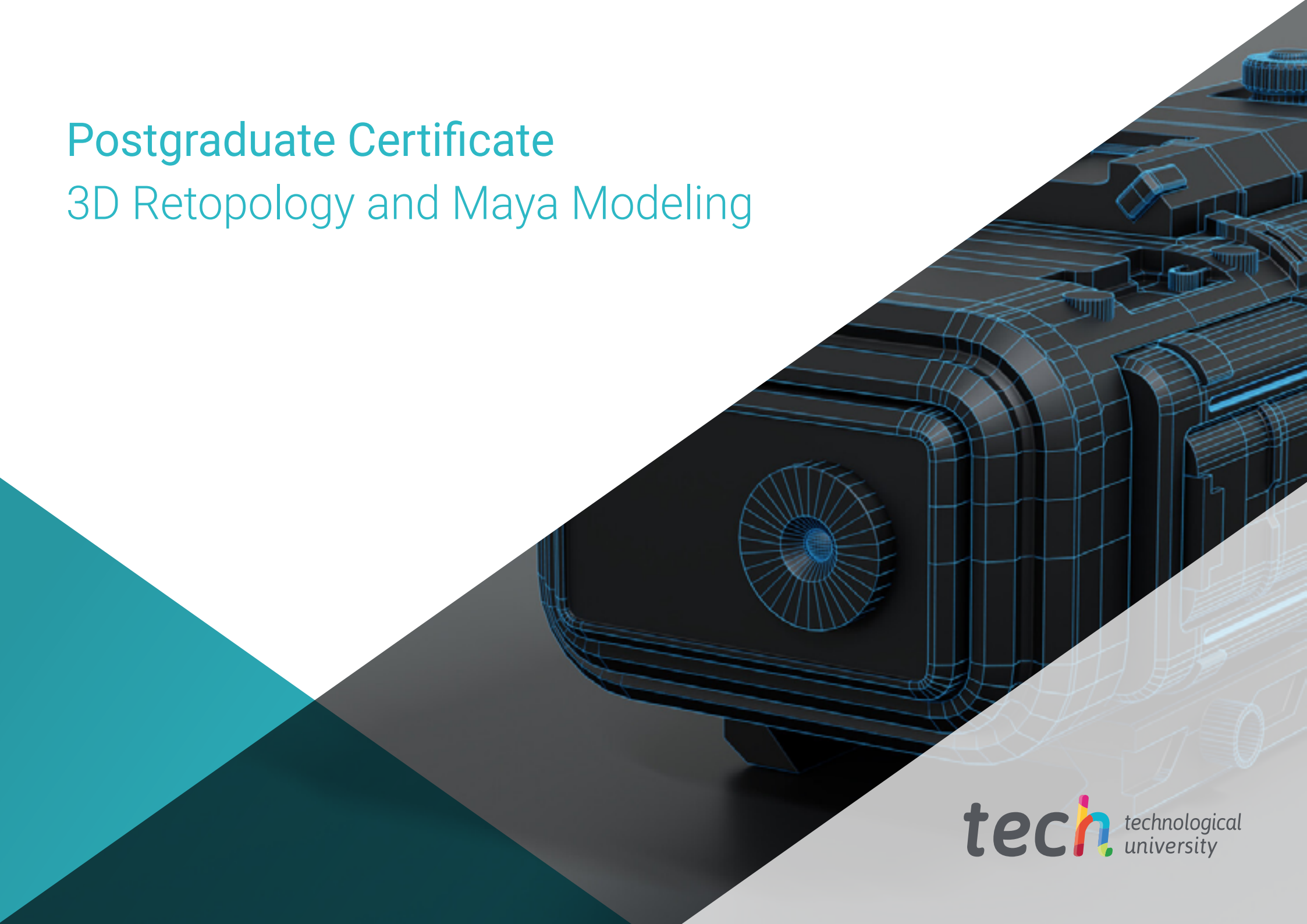

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