

Postgraduate Certificate 3D Character Modeling





Postgraduate Certificate 3D Character Modeling

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

Website: www.techtute.com/us/information-technology/postgraduate-certificate/postgraduate-certificate-3d-character-modeling

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Methodology

p. 20

06

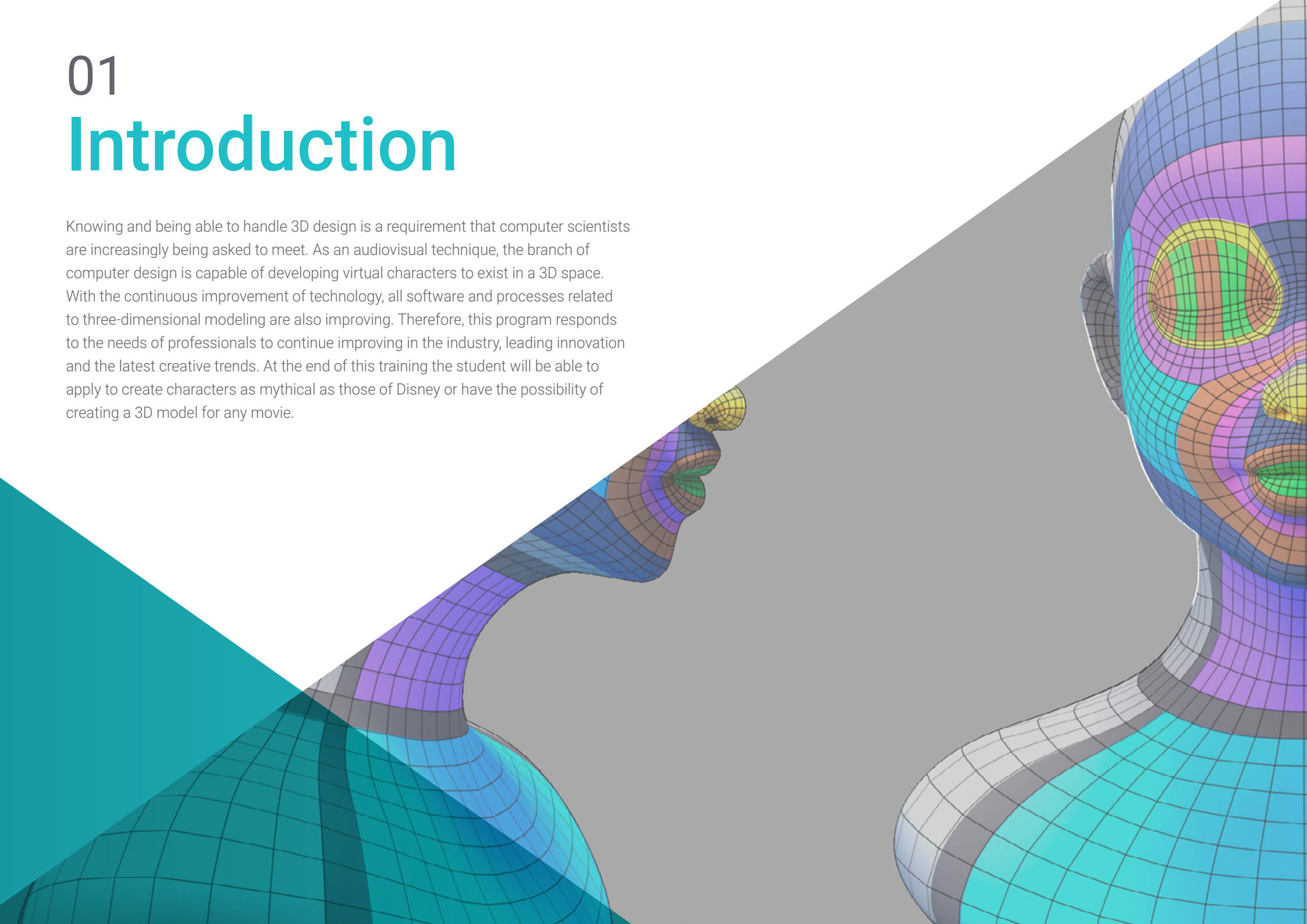
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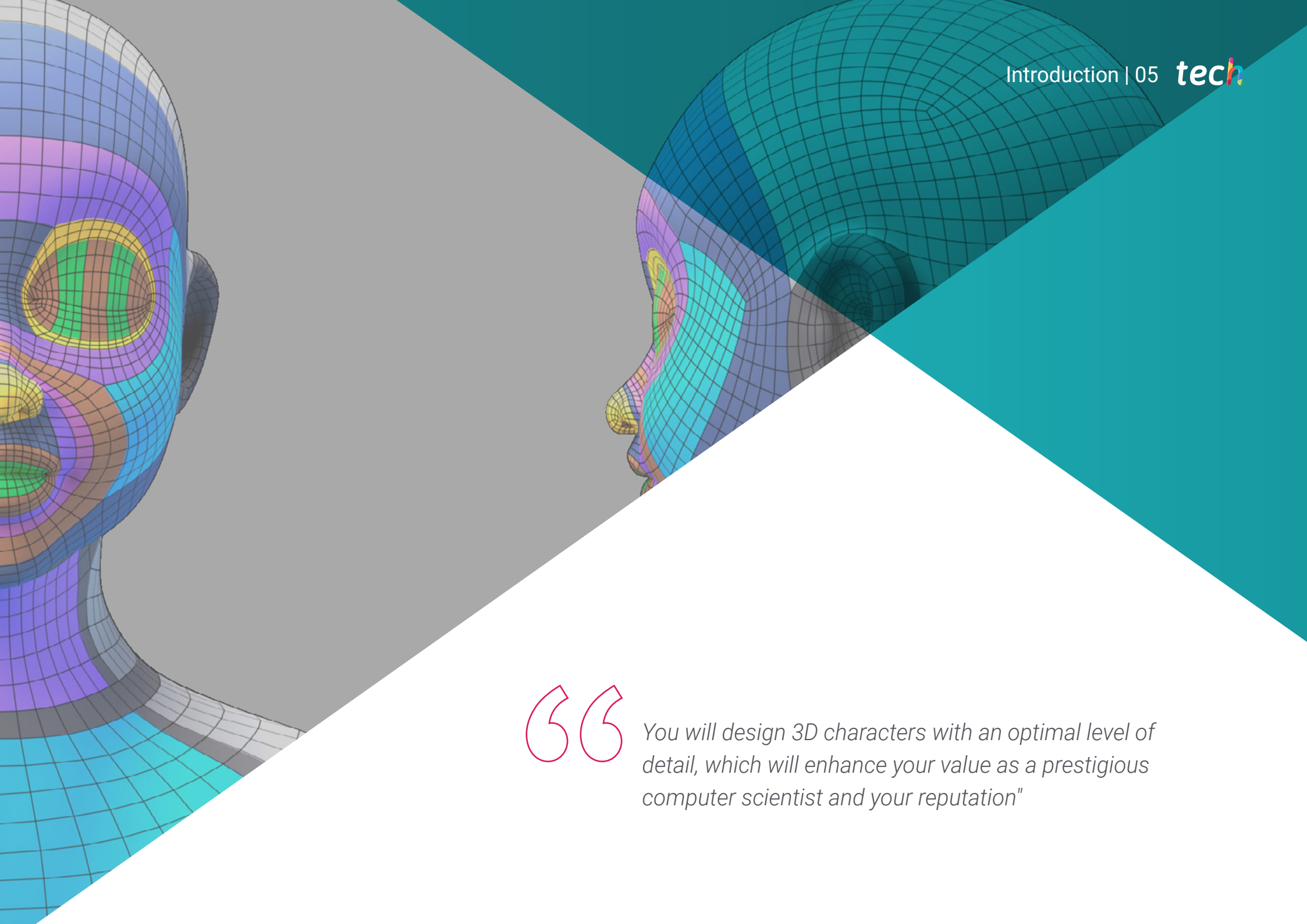
p. 28

01

Introduction

Knowing and being able to handle 3D design is a requirement that computer scientists are increasingly being asked to meet. As an audiovisual technique, the branch of computer design is capable of developing virtual characters to exist in a 3D space. With the continuous improvement of technology, all software and processes related to three-dimensional modeling are also improving. Therefore, this program responds to the needs of professionals to continue improving in the industry, leading innovation and the latest creative trends. At the end of this training the student will be able to apply to create characters as mythical as those of Disney or have the possibility of creating a 3D model for any movie.





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You will design 3D characters with an optimal level of detail, which will enhance your value as a prestigious computer scientist and your reputation"

Whether watching an animated short film, a movie or playing a video game, 3D Character Modeling is an area of computer science and design that is constantly interacted with. In general, it is an indispensable part of the entertainment industry, since nowadays it is required to create many characters for video games, series or animated films.

Taking into account all these circumstances, this Postgraduate Certificate has gathered the best possible content in 3D Character Modeling, with the most innovative techniques in the industry so that the student can stand out prominently in their daily work and can apply to projects and positions of greater relevance within the sector. Retopology, rendering, lighting or texturing are some of the aspects that this program deals with in depth.

A qualification that responds to all the needs of its students, as it is also taught completely online so that students can combine it with their personal or professional responsibilities. All didactic content is available from day one and can be downloaded to any device with an internet connection.

This **Postgraduate Certificate in 3D Character Modeling** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The development of practical cases presented by experts in 3D Character Modeling
- ◆ The graphic, schematic, and eminently 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



Get your qualification in 3D Character Modeling directly, without the need to do a final work"

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You will be able to create characters for the best productions in video games or cinema thanks to the careful and detailed techniques taught by this program"

The program's teaching staff includes professionals from 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.

You will finish the qualification having knowledge in the most used software in the industry in the field of 3D modeling and sculpting.

This is the best time for you to stand out as a computer scientist by creating the most detailed and realistic 3D characters.



02

Objectives

The objective of this program is to offer its students a complete training in 3D Character Modeling. The professionals who take this course will broaden their knowledge of both human and animal anatomy to be able to develop any creature from hyperrealism to stylized models, since they will have a great base to approach it. In this way, they will be able to create any type of completely organic living being with the most advanced techniques in the industry.





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This Postgraduate Certificate, unique in the market, will provide you with the necessary updating of skills in a constantly evolving environment”



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

- ◆ Focus anatomical knowledge in simpler, *cartoon*-like forms
- ◆ Create a *cartoon* model from the base to the detail by applying what has been previously learned
- ◆ Review the techniques learned in the course in a different modeling style

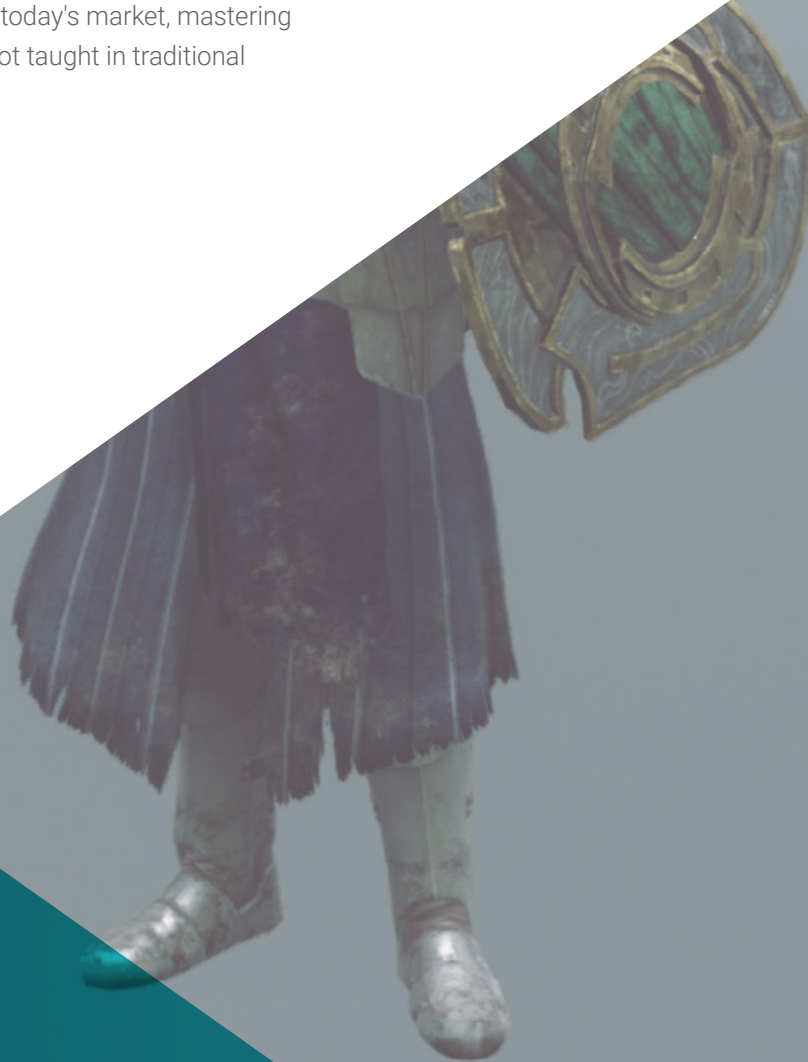
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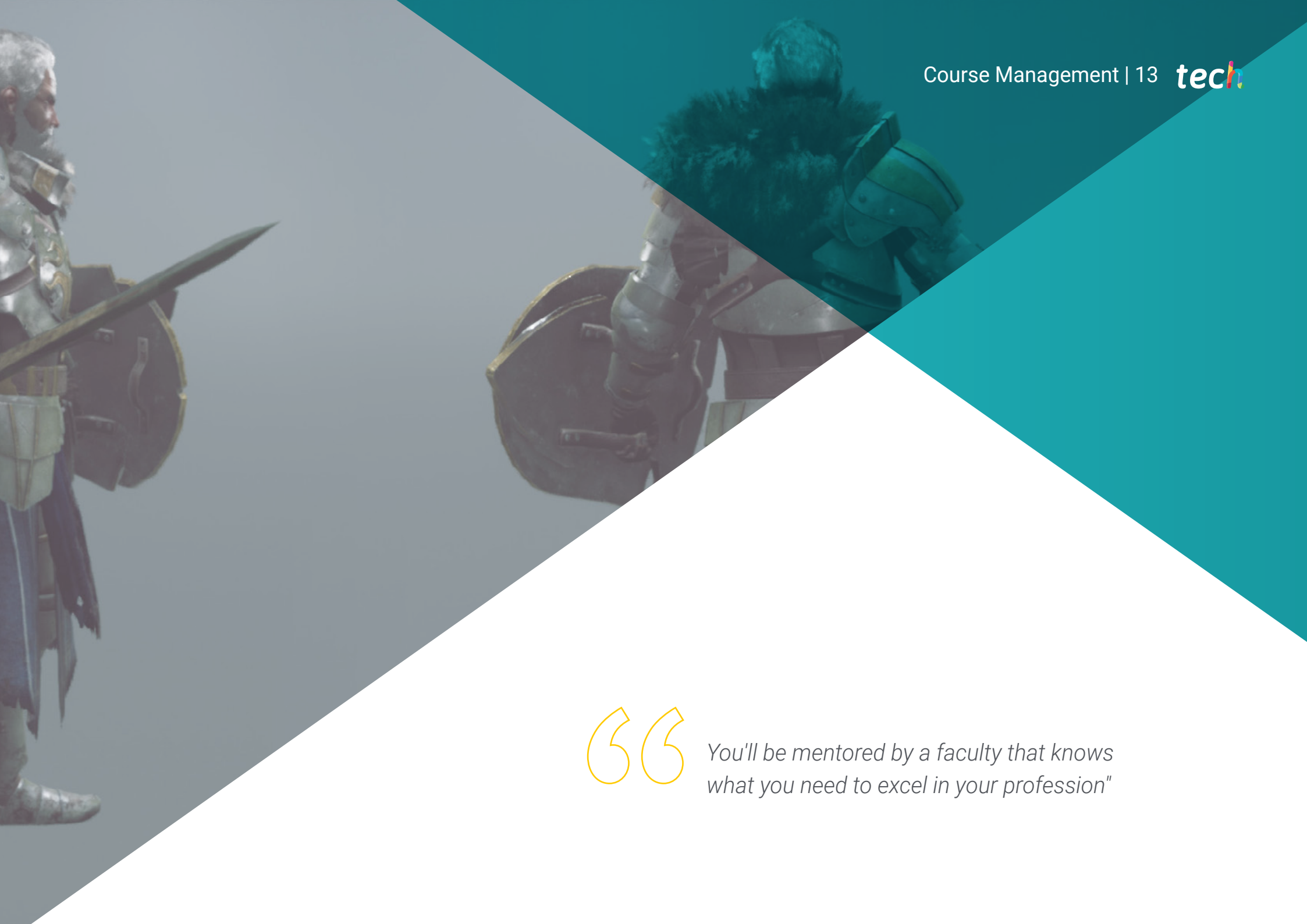
You will be able to become a 3D computer scientist in film, advertising and video game companies, as well as a great digital sculptor who can freelance”

03

Course Management

In its commitment to provide an elite education for all, TECH has selected teachers who have extensive experience in different types of design work for both the video game industry and the film world. Thanks to this professional experience, the student benefits from studying a theory adapted to the realities of today's market, mastering the aspects most in demand by companies and that are not taught in traditional computer science faculties.





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You'll be mentored by a faculty that knows what you need to excel in your profession"

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

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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 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

TECH has put together a very practical syllabus for dealing with stylized characters. Thus, in this Postgraduate Certificate in 3D Character Modeling, the students have access to high quality didactic material, complemented with audiovisual content and practical examples with which they will observe the application of model refinement, clean retopology and texturing in Substance Painter.





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Once you have established the basics of realism, you will be able to transform what you have learned into a cartoon character”

Module 1. Stylized Characters

- 1.1. Choice of a Stylized Character and *Blocking* of Base Forms
 - 1.1.1. References and *Concept Arts*
 - 1.1.2. Base Forms
 - 1.1.3. Deformities and Fantastic Shapes
- 1.2. Conversion of our *Low Poly* into *High Poly* Model: Head, Hair and Face Sculpting
 - 1.2.1. Head *Blocking*
 - 1.2.2. New Hair Creation Techniques
 - 1.2.3. Improvements
- 1.3. Model Refinement: Hands and Feet
 - 1.3.1. Advanced Sculpting
 - 1.3.2. Refinement of General Shapes
 - 1.3.3. Shape Cleaning and Smoothing
- 1.4. Creation of Jaw and Teeth
 - 1.4.1. Creation of Human Teeth
 - 1.4.2. Increase its Polygons
 - 1.4.3. Fine Detailing of Teeth in *Zbrush*
- 1.5. Modeling Clothing and Accessories
 - 1.5.1. Types of *Cartoon* Clothing
 - 1.5.2. *Zmodeler*
 - 1.5.3. Applied Maya Modeling
- 1.6. Retopology and Clean Topology Creation from Scratch
 - 1.6.1. Retopology
 - 1.6.2. Loops According to the Model
 - 1.6.3. Optimization of the Mesh
- 1.7. *UV Mapping and Baking*
 - 1.7.1. UVS
 - 1.7.2. *Substance Painter*: Baking
 - 1.7.3. *Polishing Baking*





- 1.8. *Texturing and Painting In Substance Painter*
 - 1.8.1. *Substance Painter: Texturing*
 - 1.8.2. *Hand Painted Cartoon Techniques*
 - 1.8.3. *Fill Layers with Generators and Masks*
- 1.9. *Lighting and Rendering*
 - 1.9.1. *Lighting of Our Character*
 - 1.9.2. *Color Theory and Presentation*
 - 1.9.3. *Substance Painter: Render*
- 1.10. *Posing and Final Presentation*
 - 1.10.1. *Diorama*
 - 1.10.2. *Posing Techniques*
 - 1.10.3. *Presentation of Models*



You will create a portfolio that will serve you to achieve professional success and occupy the best positions"

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"

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 Information Technology 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 Information Technology 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 Postgraduate Certificate, students will be confronted 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 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.



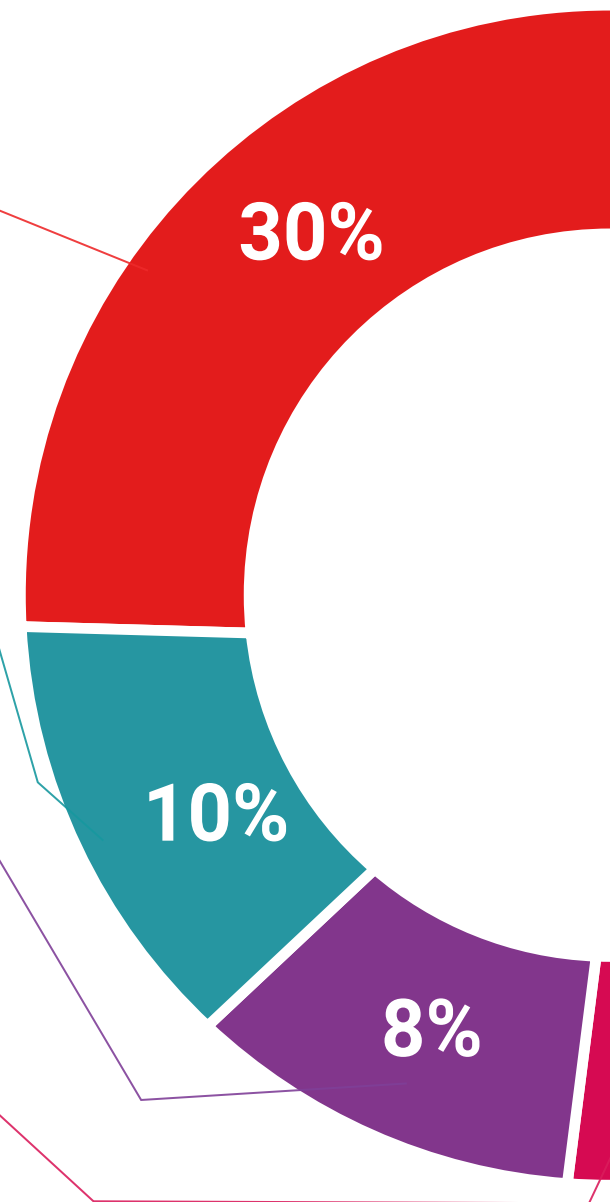
Practising Skills and Abilities

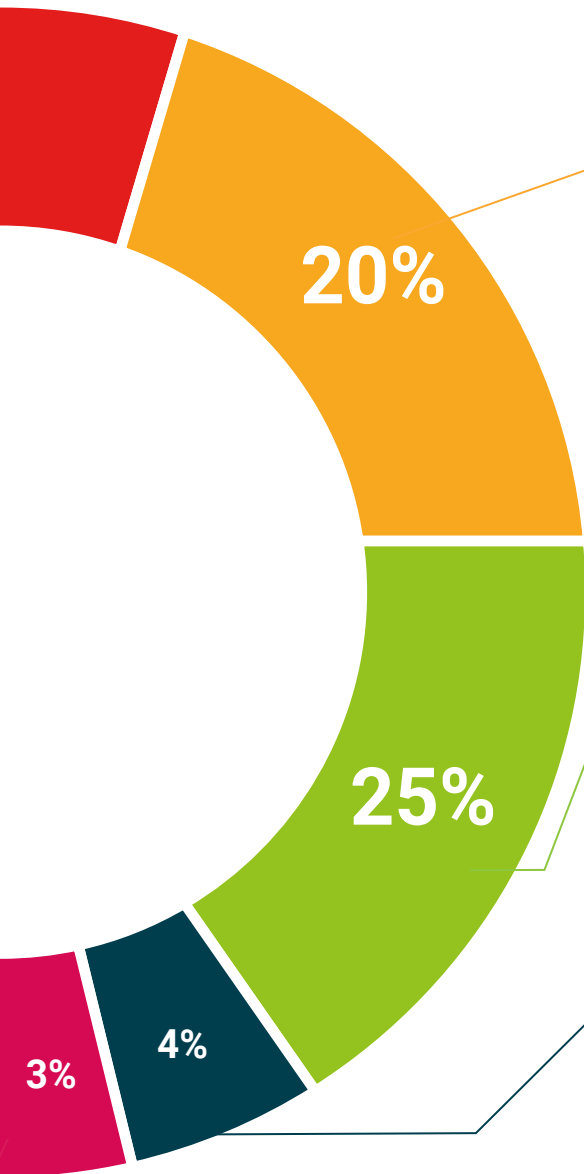
They will carry out activities to develop specific competencies and skills in each thematic area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization we live in.



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 3D Character Modeling guarantees you, 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 3D Character Modeling** contains the most complete and updated program on the market.

After the student has passed the evaluations, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** by 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 Character Modeling**

Official N° of Hours: **150 hours**.



*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 quality
development languages
virtual classroom



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