Postgraduate Certificate
Hard Surface 3D Modeling

tech global university

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Hard Surface 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/videogames/postgraduate-certificate/hard-surface-3d-modeling**

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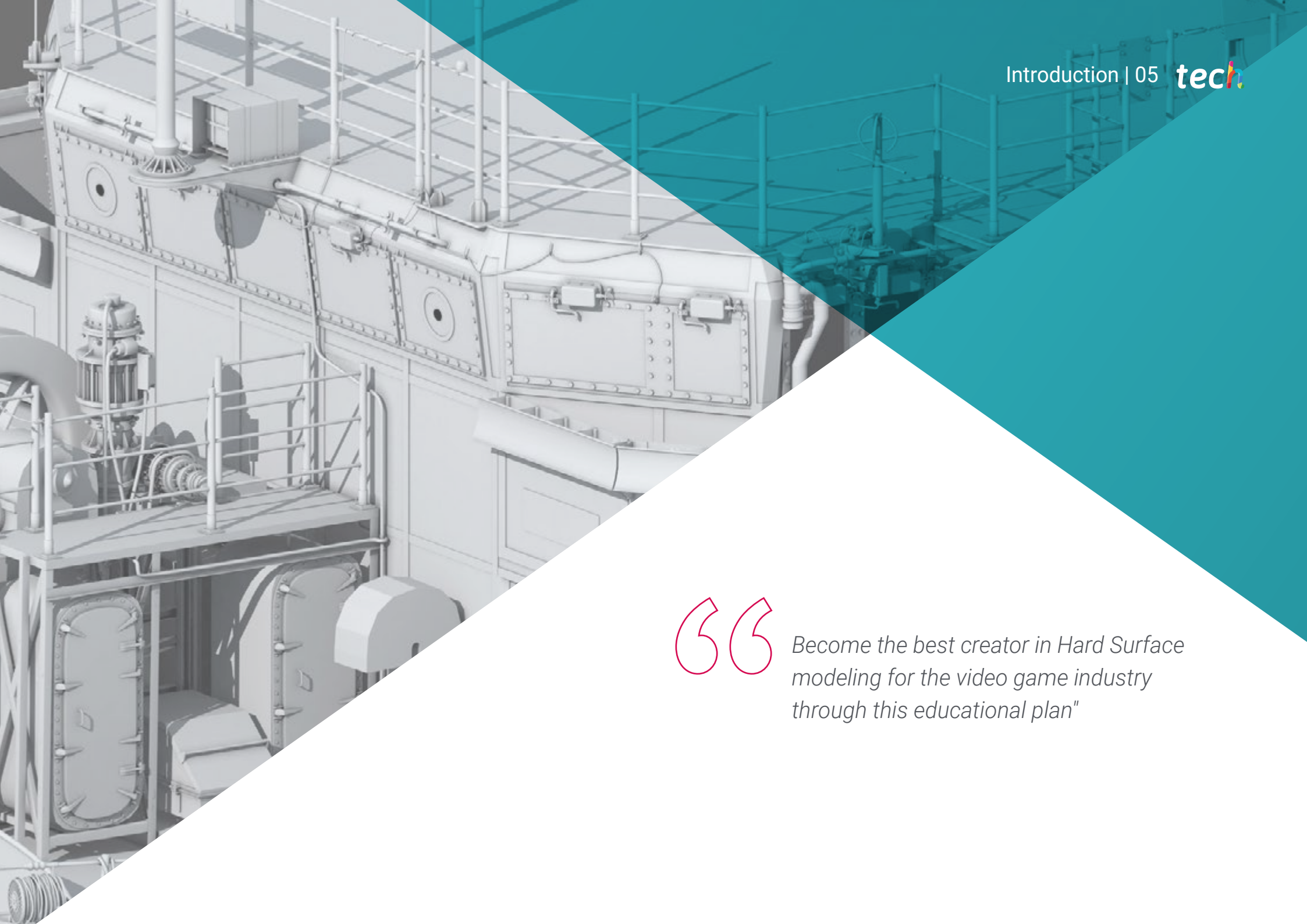
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Introduction

3D Hard Surface precision modeling has become an extremely important axis for the design, production and creation of video game graphics industry, and, therefore, a specialty increasingly required in professionals working in this sector. This educational plan offers the necessary tools to put into practice the knowledge acquired, as well as to redirect the professional path, through the study of the different types of modeling and their implementation. Online, and with the best pedagogical resources, with this program, you can acquire the knowledge without having to abandon other personal or professional tasks.
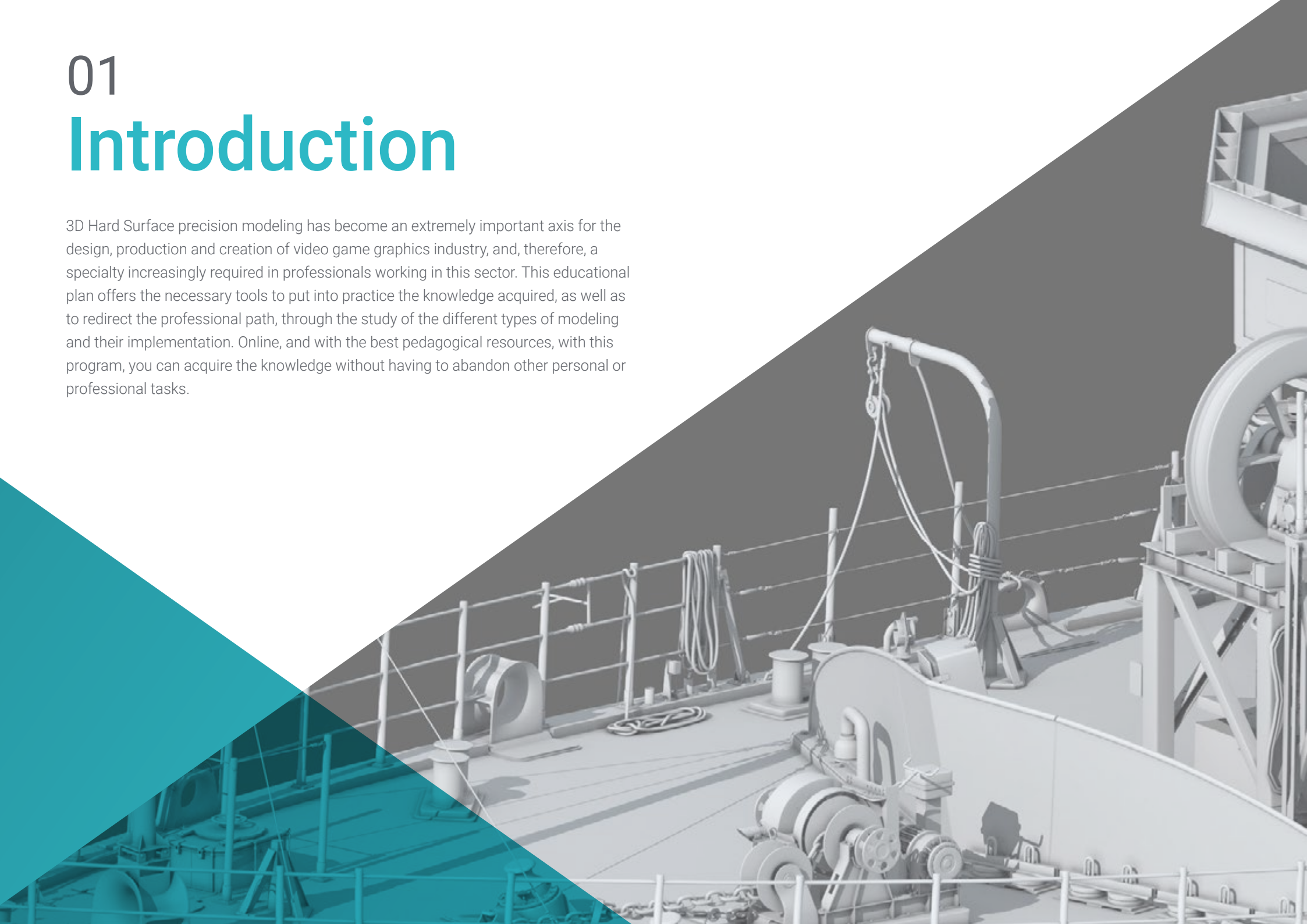
Become the best creator in Hard Surface modeling for the video game industry through this educational plan"

Students will delve into the specific design tools that allow the study of form and composition analysis, therefore generating realistic models of any project or object that may be required. The curriculum covers the concepts underlying 3D Hard Surface modeling such as topology control, function communication, speed and efficiency, as well as delving into development, structure and applications, all with a focus on developing the most realistic graphical finishes for games.

This Postgraduate Certificate also delves into the different types of modeling within this technique, including NURBS technical modeling, polygonal modeling and Sculpt modeling, and delves into their characteristic aspects in order to provide total control over the different techniques for modeling.

Additionally, the plan is designed to lay the foundations of the geometry and understanding of 3d Hard Surface modeling, in terms of topology and retopology applied to the elaboration of virtual or real hard surface models.

Thanks to this complete Hard Surface 3D modeling program you will be able to implement this skill in the field of video game development. This program provides access to all multimedia content, being able to access the platform at any time and place, facilitating the adaptation of educational recycling to the most appropriate moment in between professional routines.

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

- The development of practical cases presented by experts in Hard Surface 3D Modeling
- 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

" *Develop your competitive advantage in three-dimensional Hard Surface modeling applied to video game development"*

Three-dimensional modeling of hard surfaces is an area that requires professionals with expertise in the field"

Develop your best skills as a three-dimensional modeler in Hard Surface and enhance your professional profile.

Become an essential figure in the field of video game development by specializing your CV.

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 education programmed to learn 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.

Objectives

The objective of this Postgraduate Certificate is clear: to provide students with the knowledge they need to master the most advanced three-dimensional Hard Surface modeling programs. Therefore, students will be provided with the most current and practical content with which they will have at their disposal a variety of exercises to edit and transform geometries, organize scenes, through the implementation of different models. Likewise, they will be able to discriminate between each program to be used according to their needs.

Achieve your goal with this program: master the most advanced Hard Surface 3D modeling programs"

General Objectives

- In-depth knowledge of the different types of Hard Surface modeling, the different concepts and characteristics to apply them in the 3D modeling industry
- Delve into the theory of form creation to develop form masters
- Learn in detail the basics of 3D modeling in its various forms
- Generate designs for different industries and their application
- Be a technical expert and/or artist in 3D modeling for Hard Surface
- Know all the tools related to the 3D modeling profession
- Acquire skills for the development of textures and FX of 3D models

Specific Objectives

- In-depth understanding of how to control a topology
- Develop communication of functions
- Have knowledge on the emergence of Hard Surface
- Detailed knowledge of the different industries where it is applied
- Gain a broad understanding of the different types of modeling
- Have valid information on the areas that make up modeling

Achieve your goals thanks to our fully up-to-date content and specialize your knowledge"

Course Management

This program has been designed thanks to the expertise of a select teaching staff. They are professionals of the highest level and are interested in providing the most current and cutting-edge content in the video game development sector. As a result, students will be able to learn to make different surfaces regardless of the area in which they specialize, completing their studies in a sector that is in great demand at an international level.

"
This program relies on the expertise of a select management and teaching staff"

Management

Mr. Salvo Bustos, Gabriel Agustín

- 9 years of experience in Aeronautical 3D modeling
- 3D Artist at 3D Visualization Service Inc
- 3D production for Boston Whaler
- 3D Modeler for Shay Bonder Multimedia TV Production Company
- Audiovisual Producer in Digital Film
- Product Designer for Escencia de los Artesanos by Eliana M
- Industrial Designer Specializing in Products National University of Cuyo
- Mendoza Late Contest Honorable Mention
- Exhibitor in Regional Visual Arts Salon Vendimia
- Digital Composition Seminar National University of Cuyo
- National Congress of Design and Production CPRODI
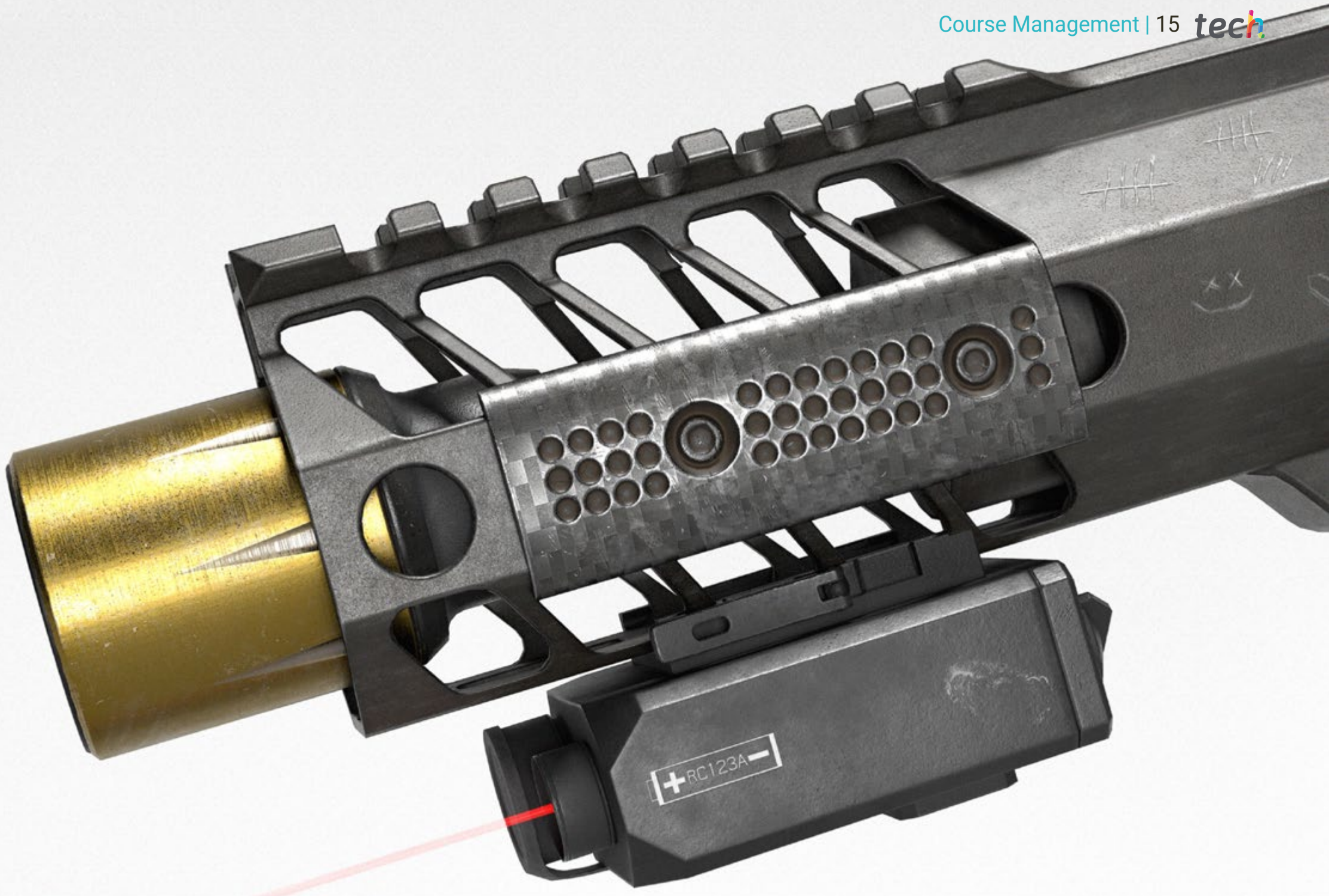
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Structure and Content

The Postgraduate Certificate in Hard Surface 3D Modeling includes the necessary theory and practice to be able to elaborate the required models in a totally online way. The content, focused on laying the foundations of shapes and dimensions, focuses on the basic concepts and dimensions of hard surface modeling. It also provides in-depth knowledge of the three different types of modeling, as well as knowledge of topology and retopology.

A Postgraduate Certificate focused on providing the necessary theoretical and practical tools to 3D modelers in Hard Surface"

Module 1. Hard Surface Modeling

Discover your best skills with a content consisting of theoretical conceptualizations and practical dimensions"

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.

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. 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.

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.

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Certificate

The Postgraduate Certificate in Hard Surface 3D Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate 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 Hard Surface 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.
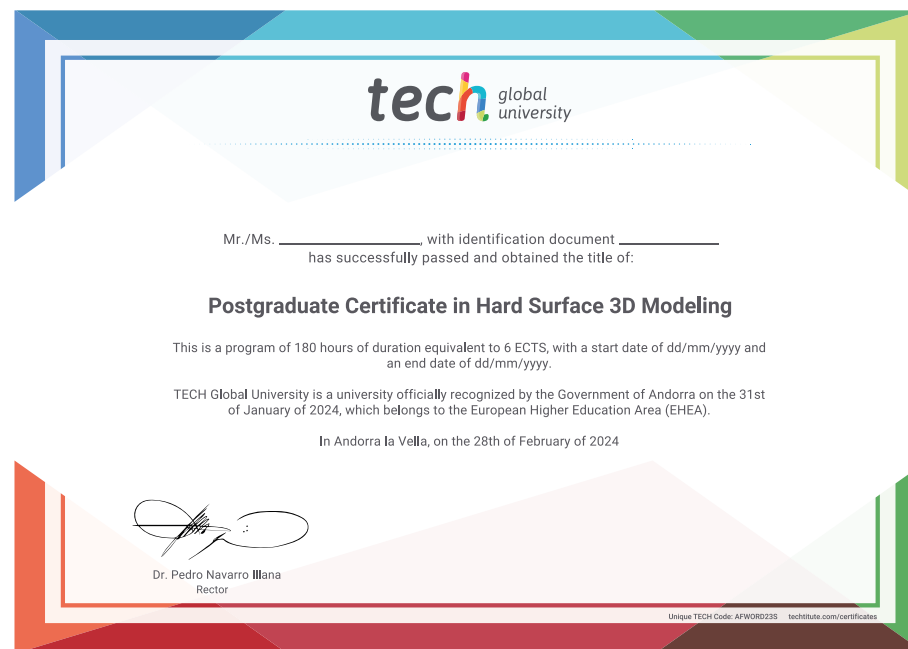
This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Hard Surface 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 Hard Surface 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

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*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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