Postgraduate Certificate
3D Hard Surface Modeling

tech technological university

Postgraduate Certificate
3D Hard Surface Modeling

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

Website: **www.techtitute.com/in/design/postgraduate-certificate/3d-hard-surface-modeling**

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01
Introduction

The precision modeling of hard surfaces or 3D Hard Surface has established itself as one of the cornerstones that govern the industrial production industry and engineering, and therefore, a specialty increasingly required by leading companies in these sectors. This program offers the necessary tools to put into practice the knowledge acquired, as well as to redirect the professional career, through the study of the different types of Modeling and the implementation of the same in the elaboration of physical or virtual models.
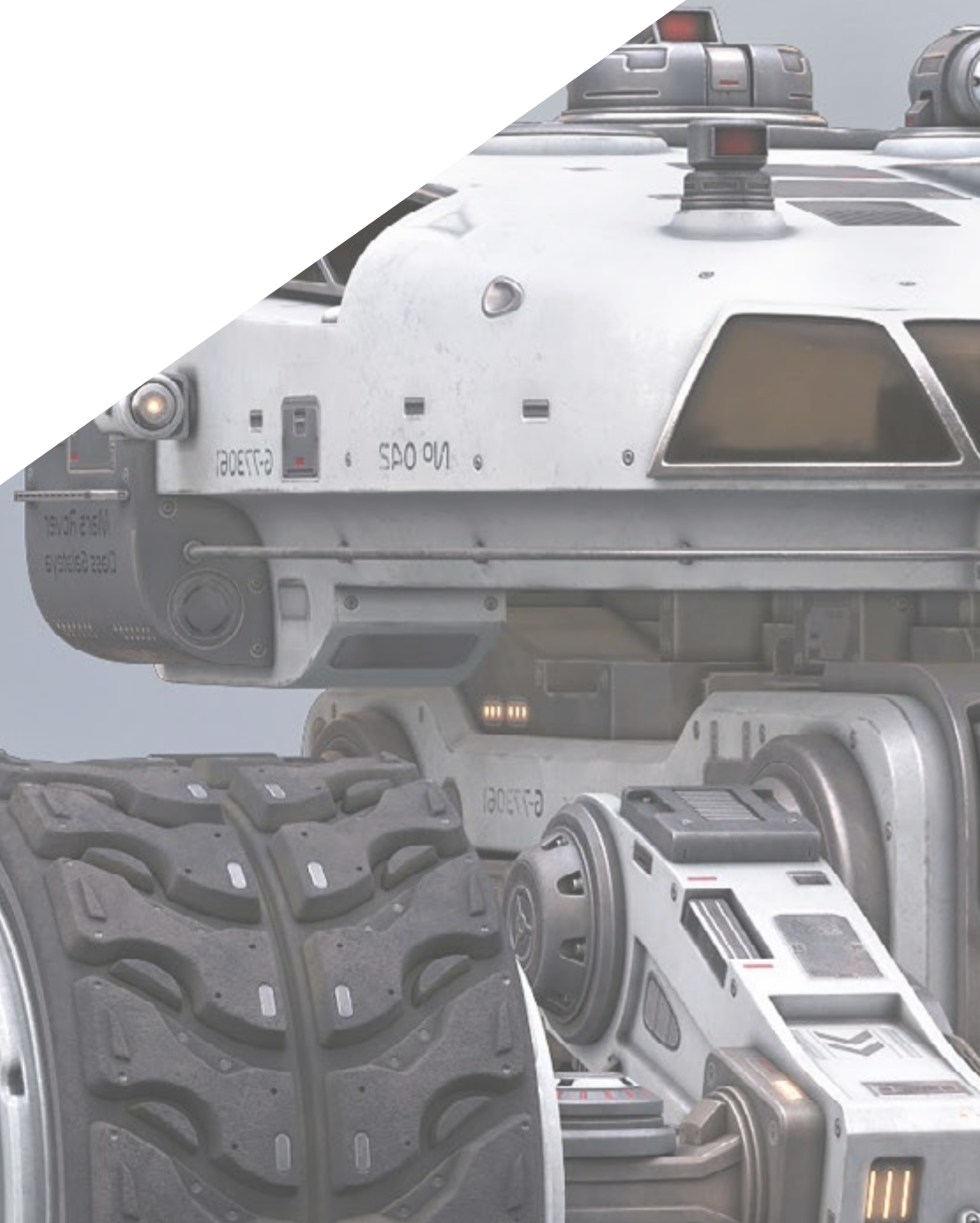
Add value to companies and to your CV with the knowledge acquired in this Postgraduate Certificate specialized in 3D Hard Surface Modeling"

Boosting the professional career in 3D Hard Surface Modeling is easier through this online Postgraduate Certificate taught by TECH Technological University. To do this, this program provides access to all multimedia content, being able to access the platform at any time and place, making it easier to adapt the study to the most appropriate time.

Students will delve into specific design programs that allow the study of form and composition analysis, thus generating realistic models of any project or object that may be required. The syllabus covers the concepts underlying Hard Surface Modeling: topology control, function and speed communication and efficiency, as well as delving into the development, structure and applications in both physical and virtual industry.

The types of modeling are also studied, distinguishing between technical modeling/Nurbs, polygonal modeling and Sculp modeling, and delving into the aspects that characterize them in order to provide total control over the different techniques for modeling.

Finally, all this would not be possible without laying the foundations of the geometry and understanding of 3D Hard Surface Modeling, in terms of topology and retopology applied to the development of virtual or real models of hard surfaces.

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

- The development of case studies presented by experts in 3D Hard Surface 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 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
- Content that is accessible from any fixed or portable device with an Internet connection

Get a head start on 3D Hard Surface Modeling in your immediate environment and do what you love"

" *From dental appliances, to the creation of spare parts, to the development of materials for animation and any type of industrial element, hard surface modeling needs experts in the field"*

Hard Surface 3D Modeling is here to stay in a context where printed models have revolutionized industrial production.

Become an indispensable figure in today's production landscape and add value to your CV.

The program's teaching staff includes professionals from the sector who contribute their work experience to this educational 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 during the academic year. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.
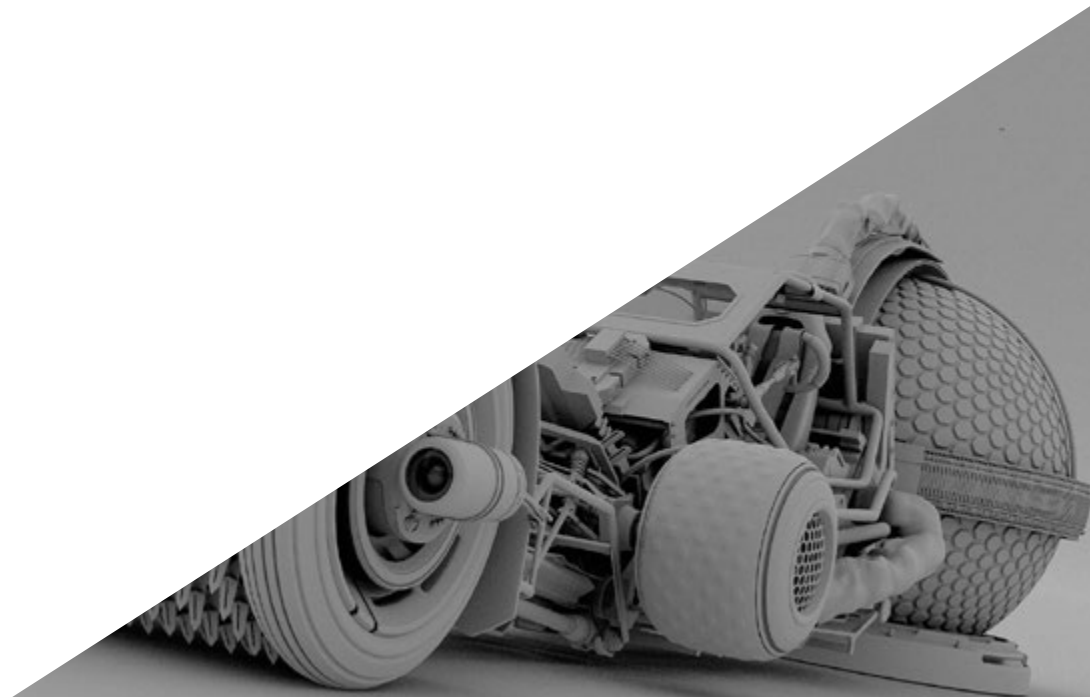
02
Objectives

The objective of this Postgraduate Certificate is clear: to provide the designer with all the knowledge needed to master the most important modeling programs in the world. Therefore, you will have the most current and practical content, with which you will have a variety of exercises to edit, transform geometries and organize scenes, through the implementation of different models. Likewise, you will be able to differentiate between each program to use according to the industry you work in, such as Low Poly for automotive design or Nurbs for engineering.
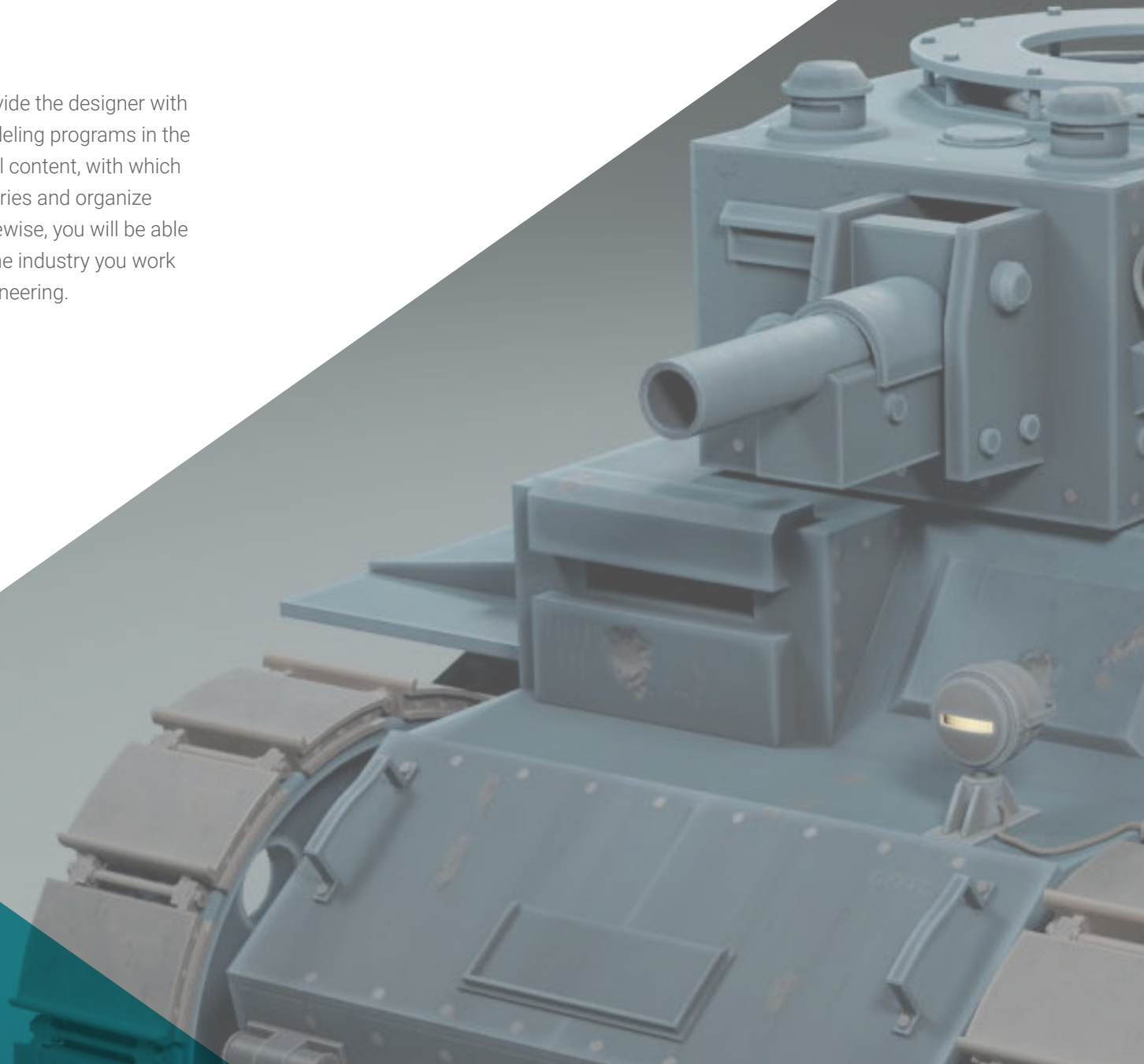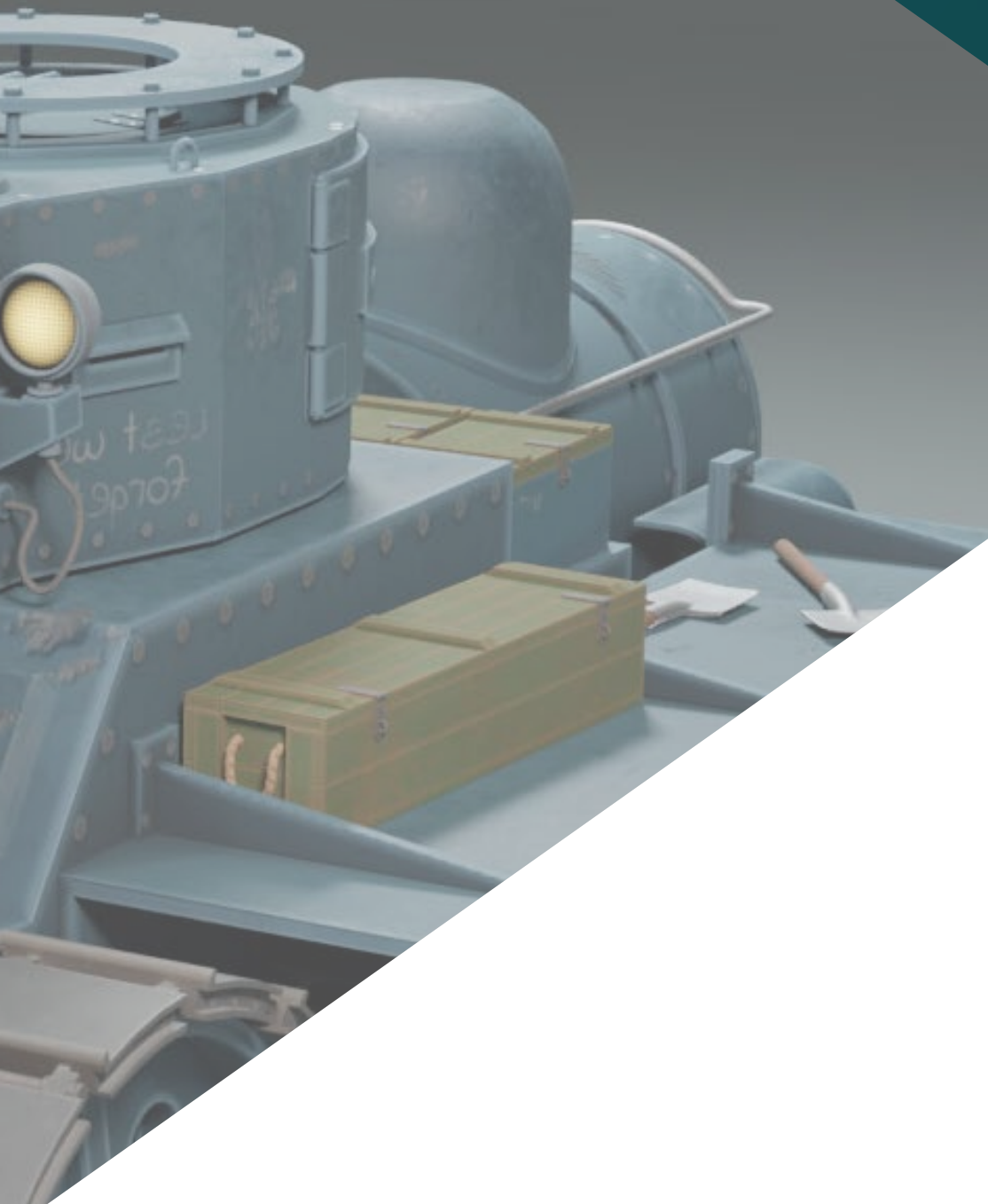
*Get a head start in the world of 3D Modeling of hard surfaces by taking this University Program"*

General Objectives

- Learn in depth the different types of Hard surface modeling, the different concepts and features to apply them in the 3D modeling industry
- Delve into the theory of shape creation in order to develop Shape Masters
- Learn in detail the basics of 3D modeling in its different 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 involved in the 3D modeling profession
- Acquire skills for the development of textures and FX of 3D models
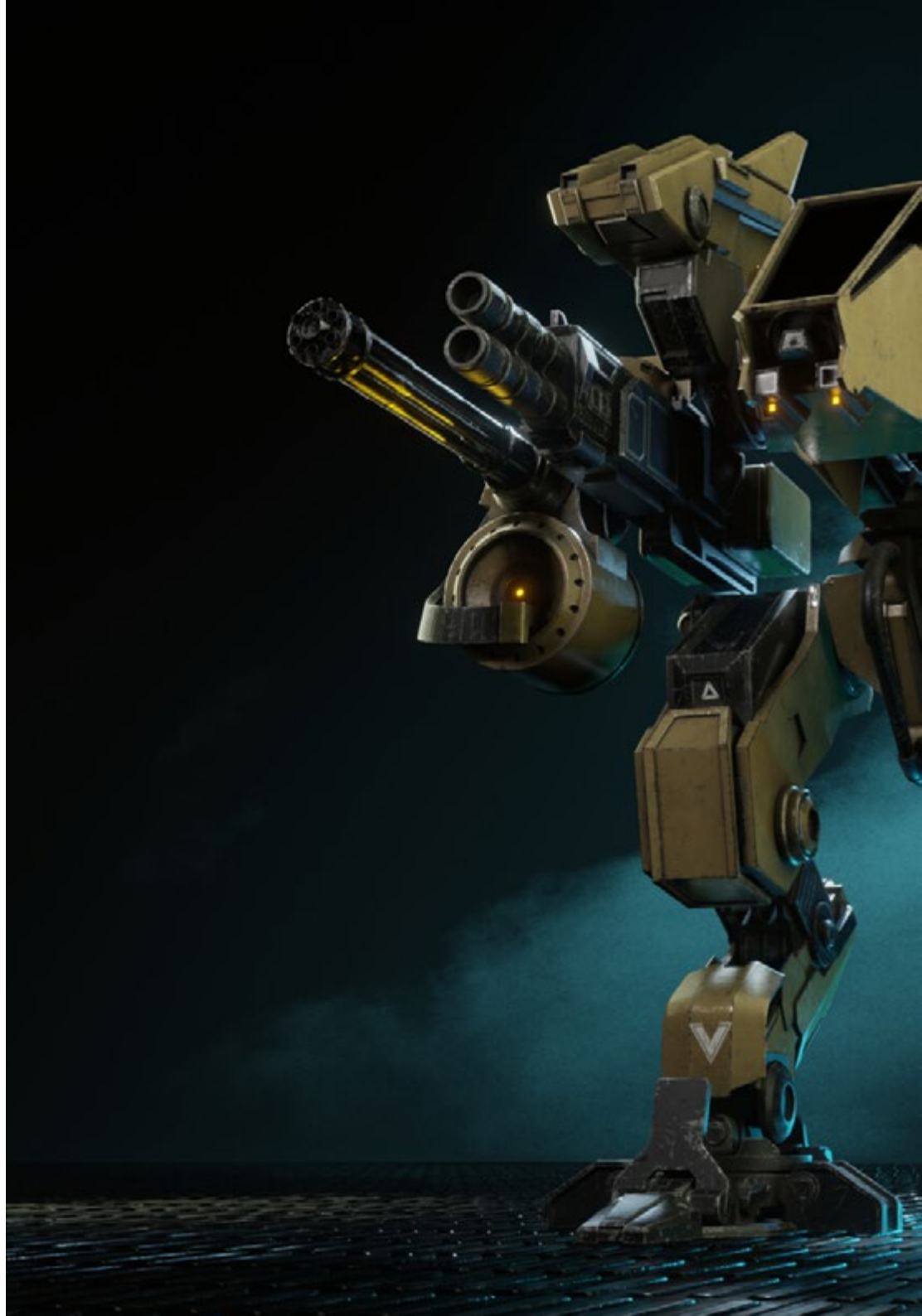
Specific Objectives

- Understand in depth how to control the topology
- Develop function communication
- Have knowledge of the emergence of Hard Surface
- Have a detailed understanding of the different industries of its application
- Have a comprehensive understanding of the different types of modeling
- Possess valid information on the fields that make up modeling

You will achieve your goals thanks to our tools, and you will be accompanied along the way by leading professionals"

03
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 design sector. Students will be able to learn how to create different surfaces regardless of the field in which they specialize, completing their studies in a sector of great demand at an international level.

Reach the top of your career in the company of the best professionals and experts in hard texture modeling"

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 at Shay Bonder Multimedia TV Production Company
- Audiovisual Producer at Digital Film
- Product Designer for Escencia de los Artesanos by Eliana M
- Industrial Designer Specializing in Products. National University of Cuyo
- Honorable Mention in Mendoza Late Contest
- Exhibitor at the Regional Visual Arts Salon Vendimia.
- Digital Composition Seminar. National University of Cuyo
- National Congress of design and production. C.P.R.O.D.I

04
Structure and Content

The Postgraduate Certificate on 3D Hard Surface Modeling includes the theory and practice necessary to elaborate the required virtual or physical models fully online. The content, focused on laying the foundations of shapes and dimensions, focuses on the basic concepts and dimensions of hard surface modeling. It also delves into the three different types of modeling, as well as knowledge of topology and retopology.
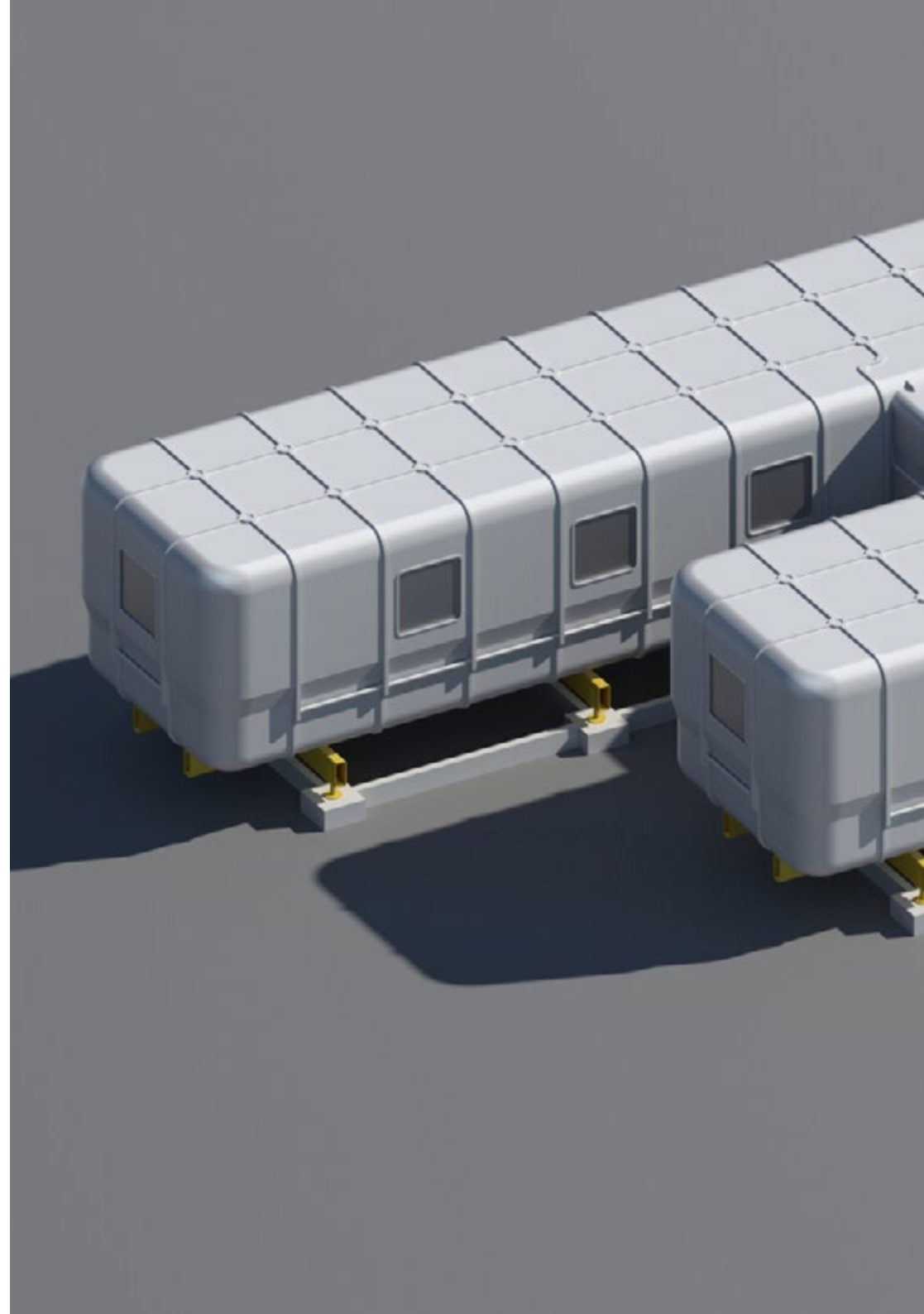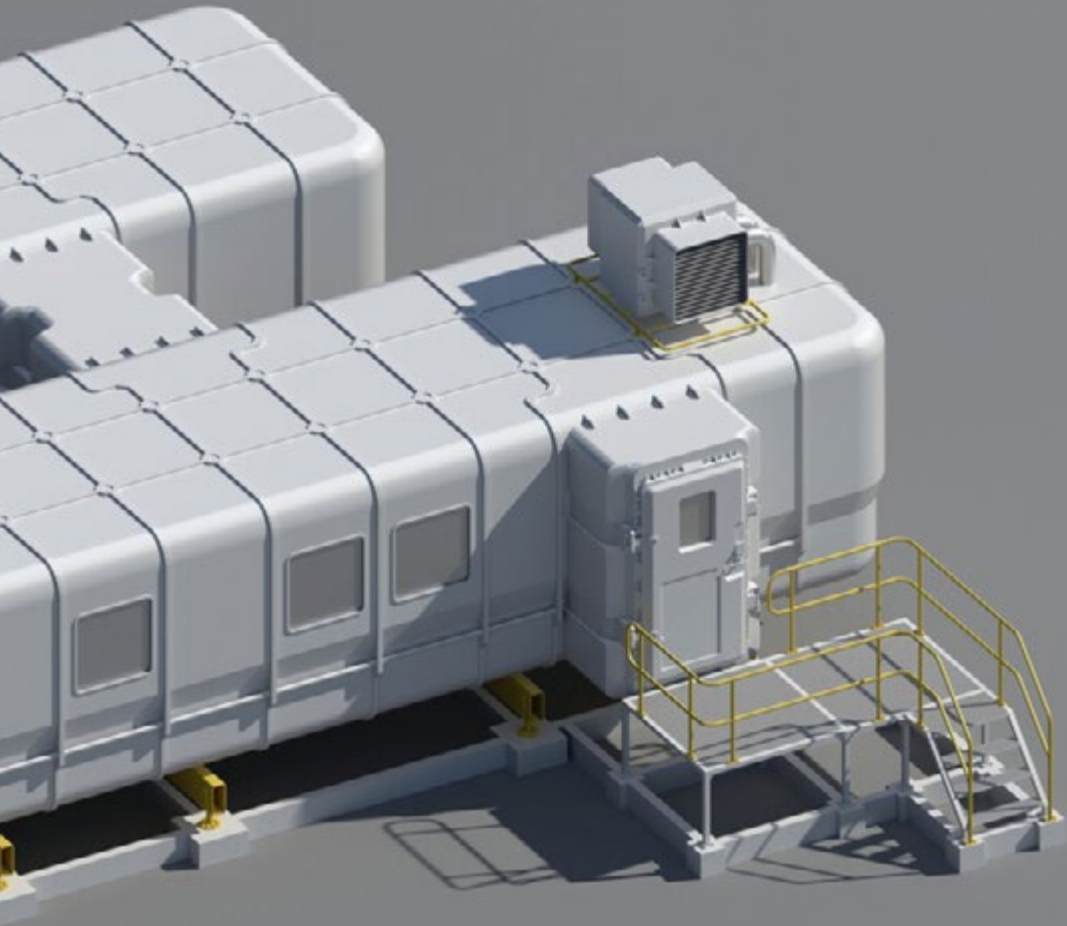
An academic program focused on providing tools and resources to future and upcoming 3D Hard Surface modelers"

Module 1. Hard Surface Modeling

A concrete and concise syllabus to help you perfect your technique and adapt to the job market with ease"

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 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.

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 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 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%
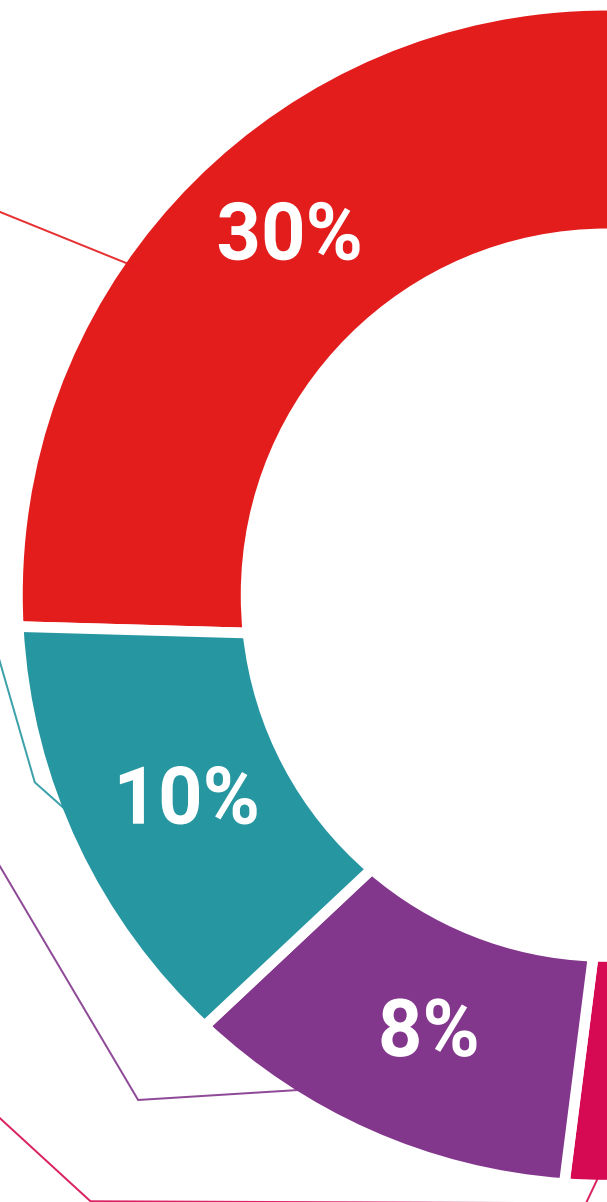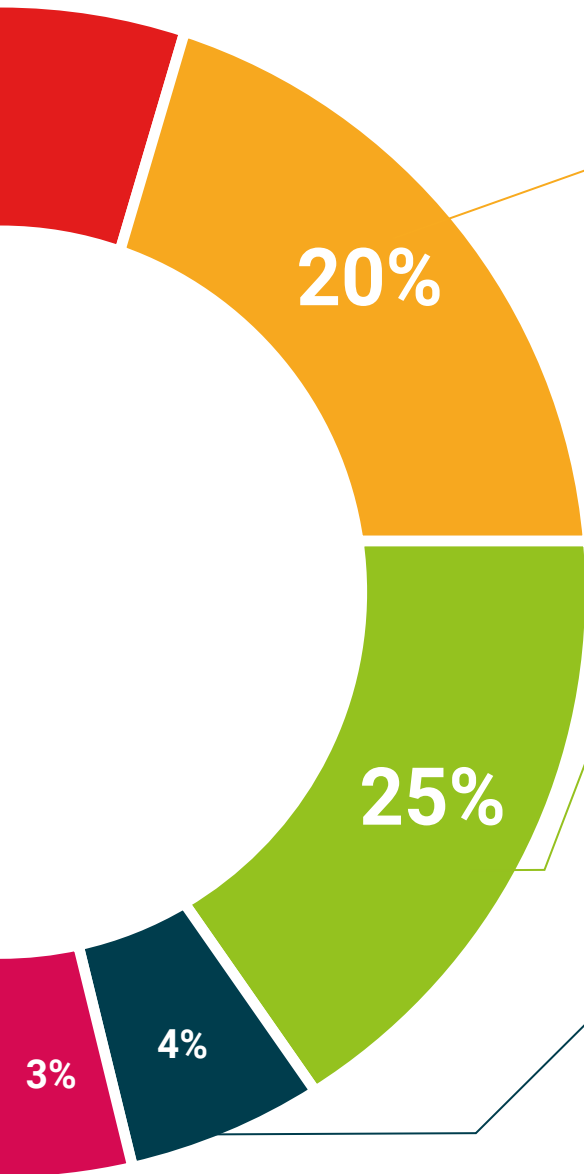
Case Studies

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 3D Hard Surface 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 Hard Surface 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 certificate 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 Hard Surface Modeling**

Official Nº of hours: **150 h.**

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Awards the following
CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in

3D Hard Surface 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

Unique TECH Code: AFWORD23S   techtitute.com/certificates

tech technological university

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