Postgraduate Certificate
Creation of Machines through Digital Sculpture

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Postgraduate Certificate
Creation of Machines through Digital Sculpture

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

Website: www.techtitute.com/us/information-technology/postgraduate-certificate/creation-machines-digital-sculpture

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01
Introduction

The recreation of machines through digital sculpture is already a discipline that not only has application in the development and design of animation or video games. The incipient interest in virtual reality, as well as the recreation of complex plans and models or infoarchitecture, are here to stay in a time that increasingly sees more benefits, including economic ones, in digital recreation than in physical recreation. Therefore, this education plan includes all the phases and tools necessary for the creation of machines through digital sculpture. All this, through a convenient online program that makes all of the content available to students on the virtual platform.
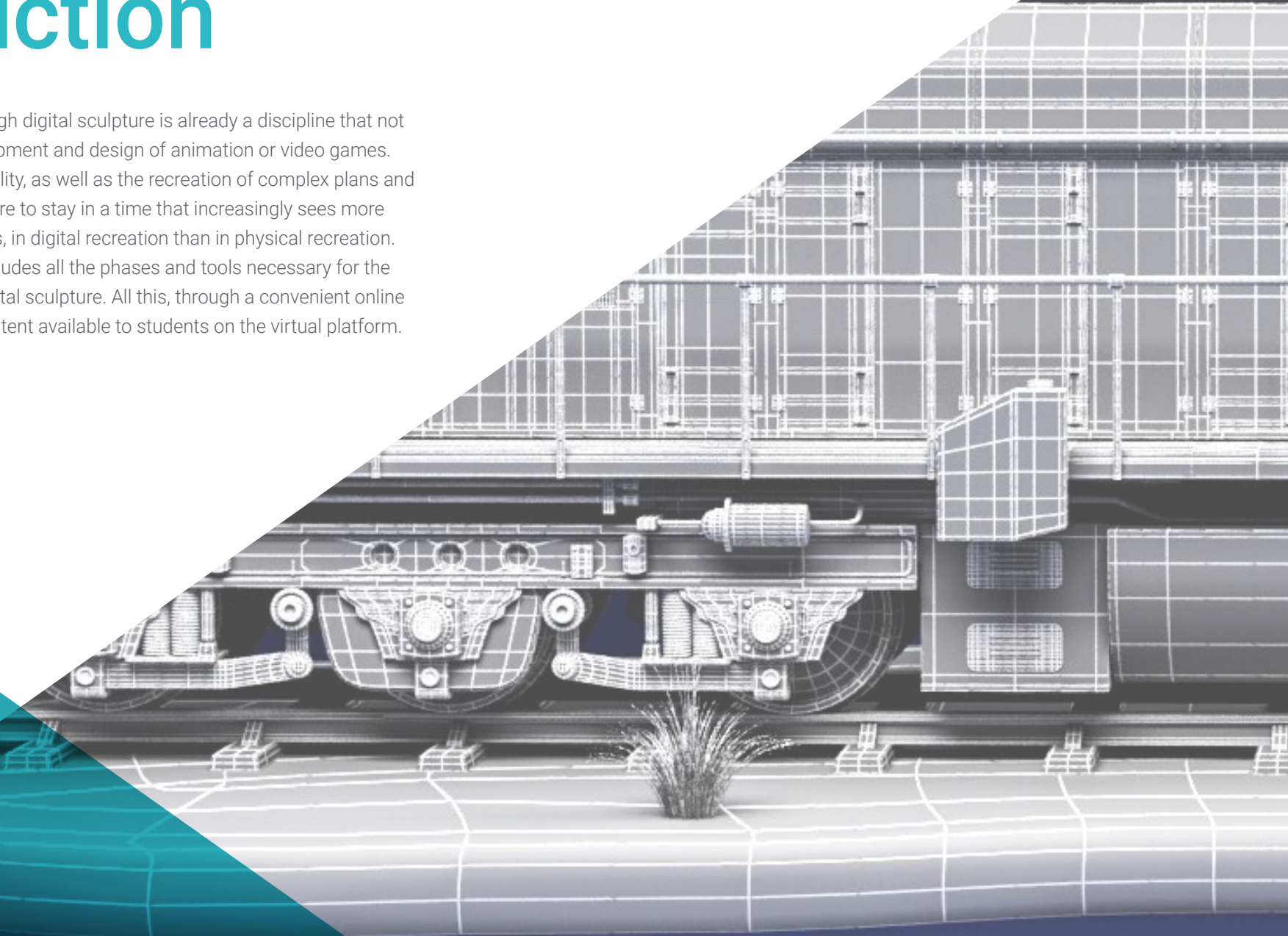
Create a competitive advantage in your portfolio with the development of machines, with all their components and elements, through digital sculpture"

A few years ago, even the offer of such training would have been incomprehensible. The panorama, however, has taken such a turn that today three-dimensional modeling or digital sculpture are considered jobs on the order of the day and useful in various fields. For this reason, TECH has devised this Postgraduate Certificate, so that the users of this program are one step ahead and become true experts in the Creation of Machines through Digital Sculpture.

A complete study plan that covers the creation of robot figures and robot parts, as well as cyborgs, followed by ships, airplanes and land vehicles. In addition, special attention is also paid to events such as: the passing of time, accidents or adaptations and evolution. Finally, the process of realistic renders and NPR for hardsurface will be discussed.

All the qualifications offered by TECH are based on the teaching methodology Relearning and Learning by Doing, to encourage autonomous learning at the students' own pace and time. In addition, the format of this program is convenient: totally online and with constant access to the teaching materials in the virtual classroom, in addition to the fact that it has a direct accreditation system, which means that once this program is completed, it is not necessary to submit any project or final project to validate it.

This **Postgraduate Certificate in Creation of Machines through Digital Sculpture** contains the most complete and up-to-date program on the market. The most important features include:

- Practical cases presented by experts in 3D modeling and digital sculpture
- The graphic, schematic and practical contents with which it is conceived scientific and practical information on those 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

Enter the exciting world of robot, cyborg and machine design with this online Postgraduate Certificate"

"_Access all the content on the virtual platform whenever you want and whenever you can. Balance academic retraining with your other personal or professional projects"_

Upgrade your knowledge in Machine Building through Digital Sculpture and add a plus to your portfolios with this innovative training.

At your own speed: the Relearning methodology used in this Postgraduate Certificate will allow you to learn in an autonomous and progressive way.

The program's teaching staff includes professionals from sector who contribute their work experience to this 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 professionals 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

This qualification aims to understand the techniques for the creation of robots, cyborgs, means of transport and, in general, machines, through digital sculpture. To achieve this, the student will apply the advanced handling and use of various organic modeling systems, such as Edit Poly and Splines. They will also gain knowledge about specialized hardsurface and infoarchitecture finishes and learn about the most necessary software and tools in this sector. All this will be approached in a practical way in the study and elaboration of practical cases, to guarantee a greater retention of knowledge.

Become an expert in the management and advanced use of various organic modeling systems, such as Edit Poly and Splines through this Postgraduate Certificate"

General Objectives

- Understand the need for good topology at all levels of development and production
- Understand the techniques for creating machines to enhance digital sculpture projects
- Advanced handling and use of various organic modeling systems, Edit Poly and Splines
- Obtain specialized hard surface and infoarchitecture finishes.
- Understand current film and video game industry systems to deliver great results

Specific Objectives

- Create, characterize and model robots, vehicles and cyborgs
- Handle internal modeling masks
- Evolve robots, vehicles and cyborgs, through the course of time and decay by sculpting shapes and using Substance Painter
- Adapt to biomimicry, sci-fi or cartoon aesthetics
- Create a lighting studio in Arnold
- Handle rendering in photorealistic and non-photorealistic aesthetics
- Launch wireframe rendering

Learn what tools are useful in the Creation of Machines through Digital Sculpture and apply them"

03
Course Management

This program in Creation of Machines through Digital Sculpture is made up of a faculty and teaching staff of true professionals in the field of digital sculpture. With an extensive background in research and professional application, they will provide students not only with theoretical and practical knowledge, but also with criteria and sensitivity towards elaborations. In addition, they will be available to solve any doubts or problems that students may have while taking this program.

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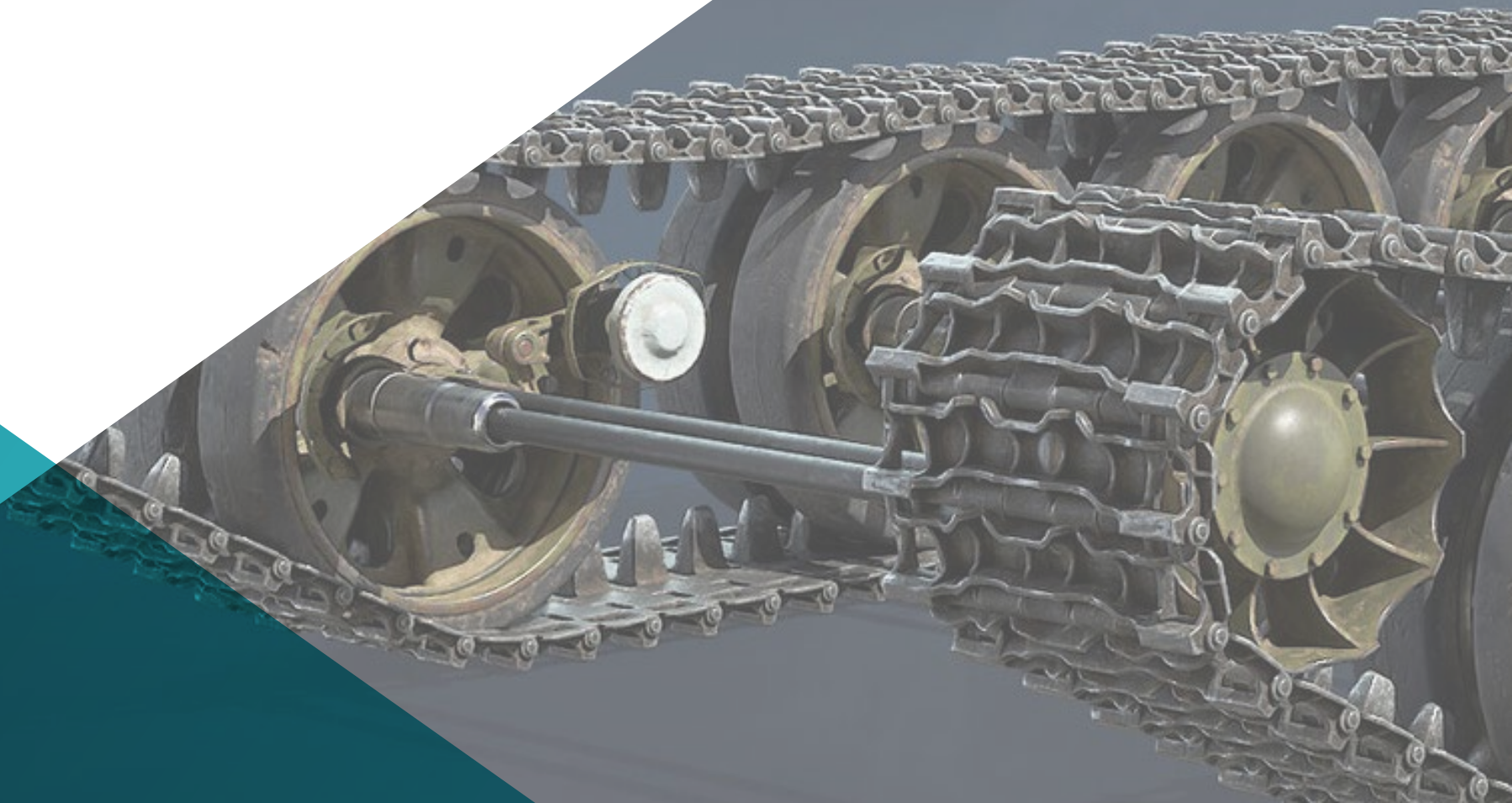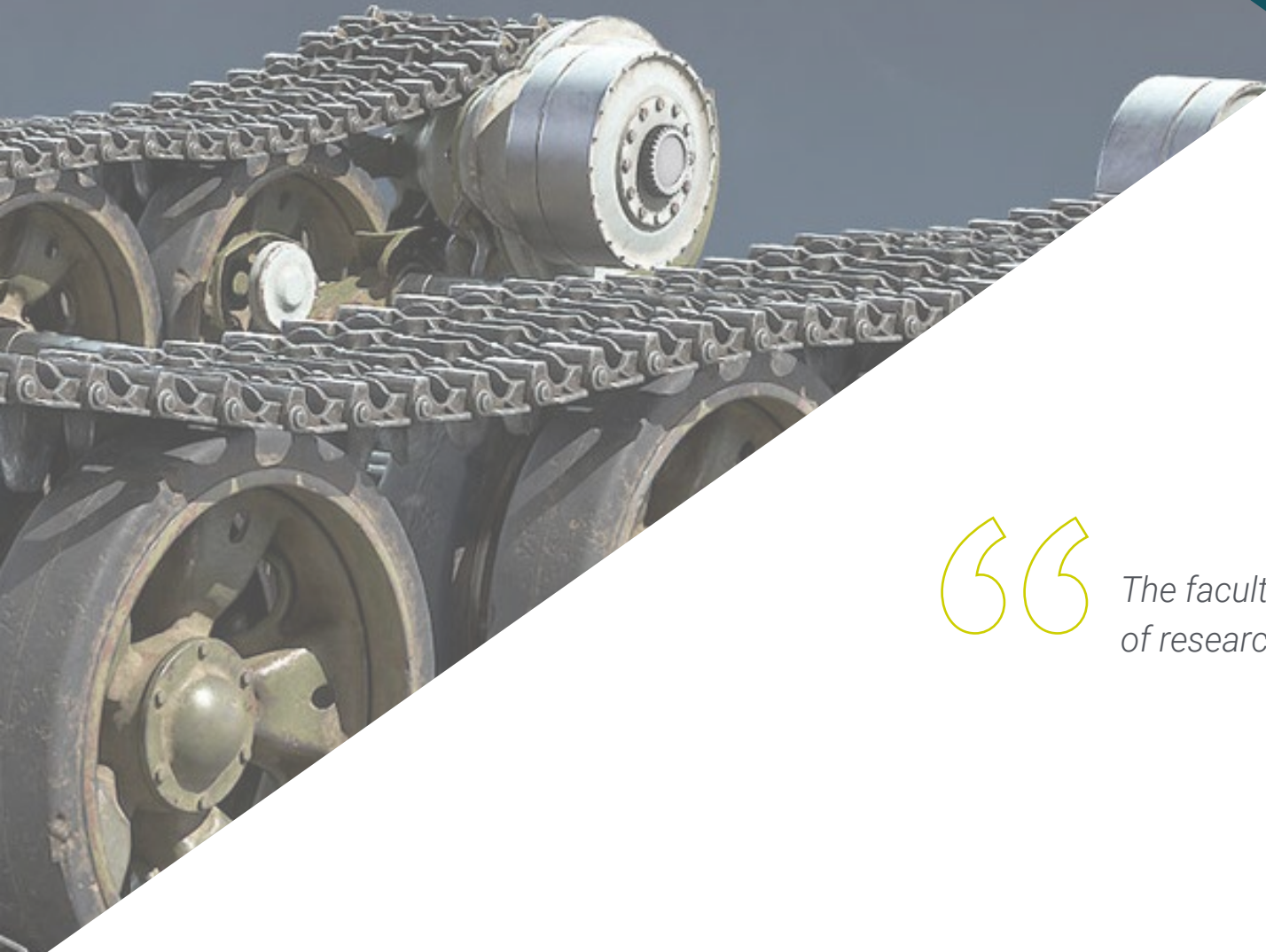
The faculty of this program has a long history of research and professional application"

Management

Mr. Sequeros Rodríguez, Salvador

- Specialist in Digital Sculpture
- Concept Art and 3D Models for Slicecore (Chicago)
- Videomapping and modeling for Rodrigo Tamariz (Valladolid)
- Restorer at Geocisa
- Professor of Higher-Level Training Cycle in 3D Animation. Higher Education School of Image and Sound ESISV. Valladolid
- Professor of Higher-Level Training Cycle GFGS in 3D Animation. European Institute of Design IED Madrid
- Degree in Fine Arts from the University of Salamanca, specializing in Design and Sculpture
- Master's Degree in Computer Graphics, Games and Virtual Reality from the URJC University of Madrid

04
Structure and Content

The structure of this training includes a perfectly developed content to guarantee the autonomous and efficient learning of the students. This program in Creation of Machines through Digital Sculpture is organized in 10 subsections, which allow students to perfectly balance their routine with the learning process. The course of this study plan focuses initially on the study of robot figures and their exploded views, as well as cyborg figures. It then focuses on land means of transport, ships and aircraft, and finally focuses on processes such as the passing of time or accidents. There will also be sections dedicated to the elaboration of hardsurface renders.
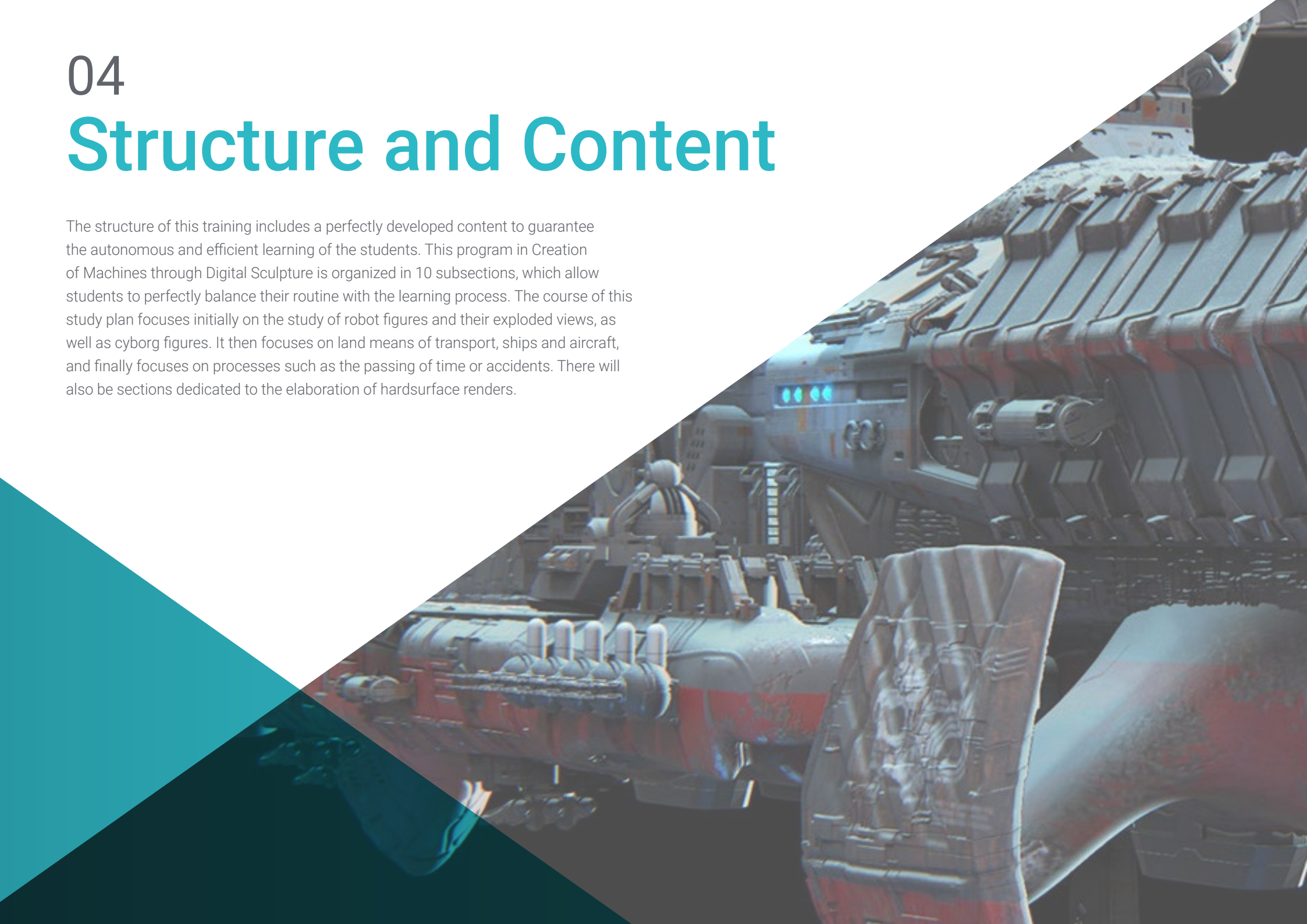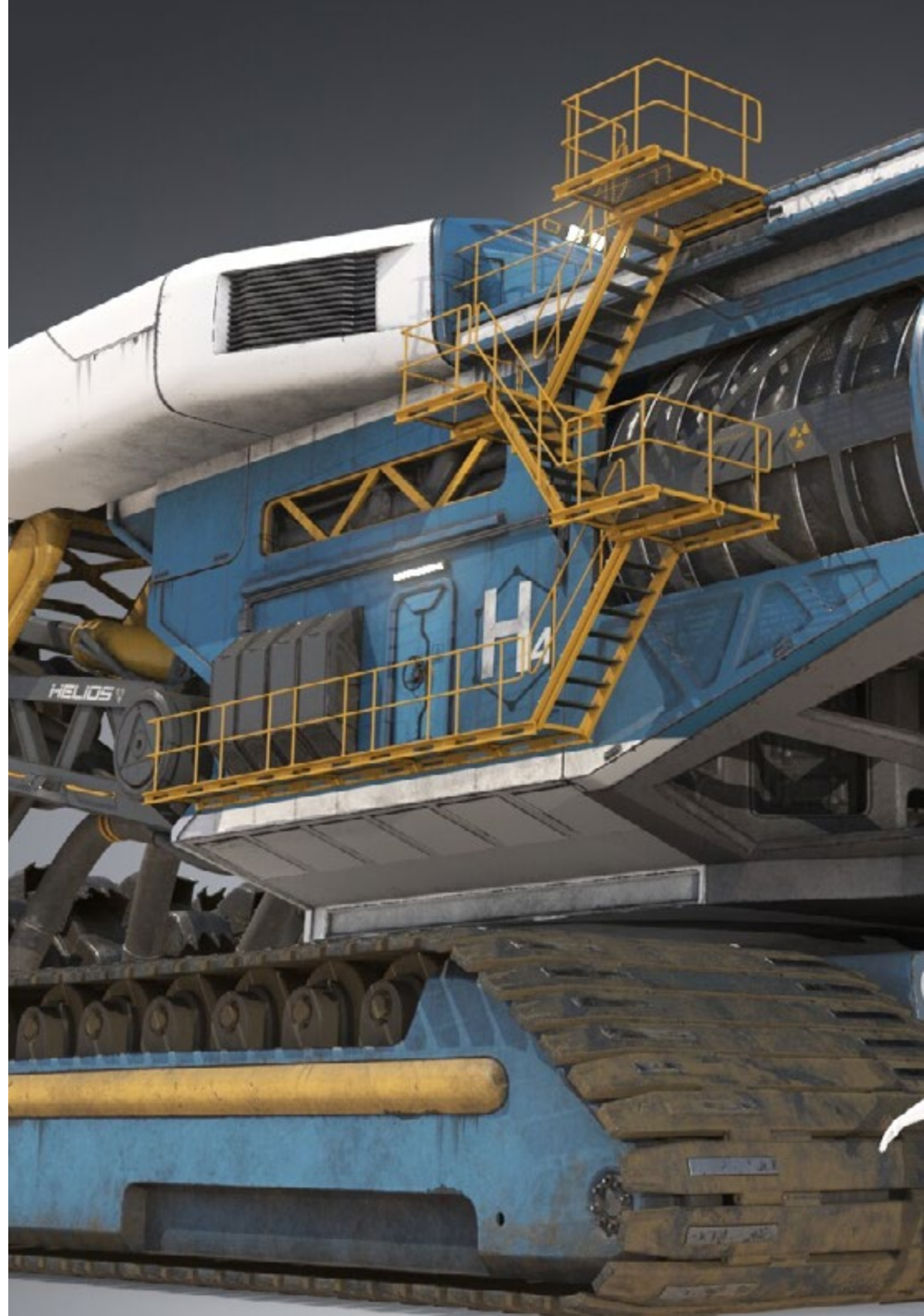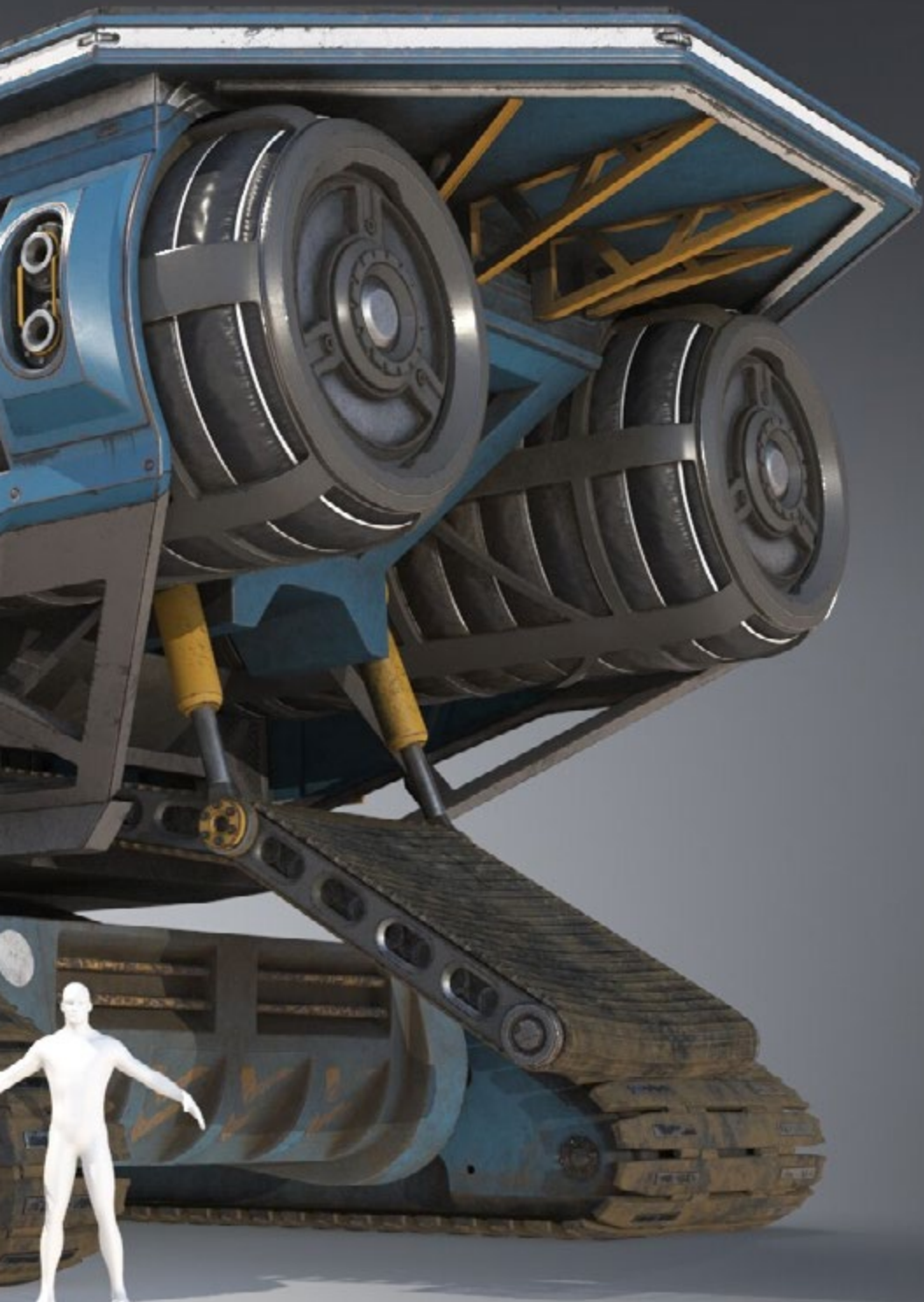
"A complete study program that will prepare you to take on new professional challenges in digital sculpture"

Module 1. Machine Creation

What are you waiting for? Enroll now in this online Postgraduate Certificate and acquire the best skills designing and creating machines in digital sculpture"

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 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 course, students 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 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.
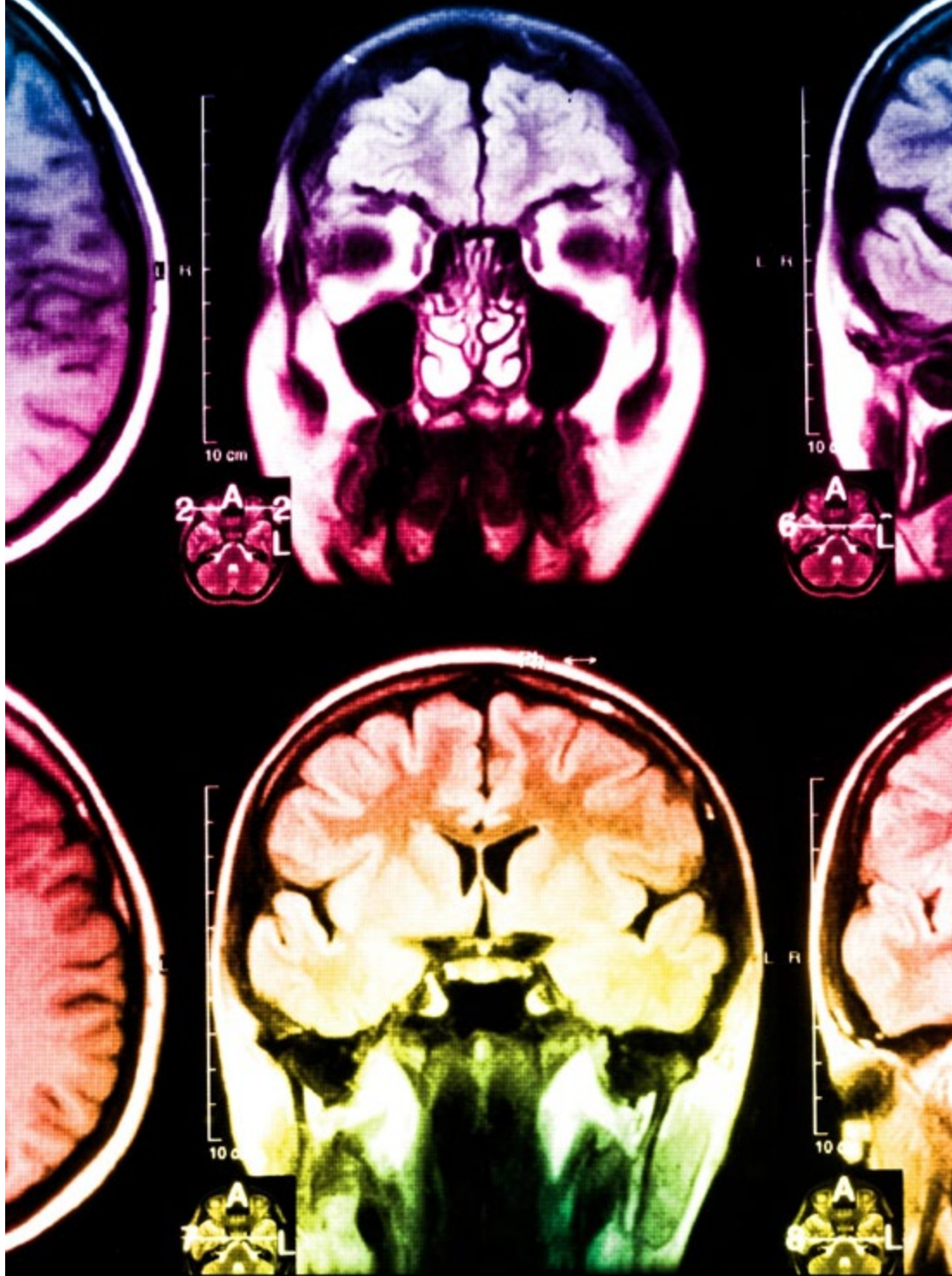
This program offers the best educational material, prepared with professionals in mind:

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 adapted in 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%
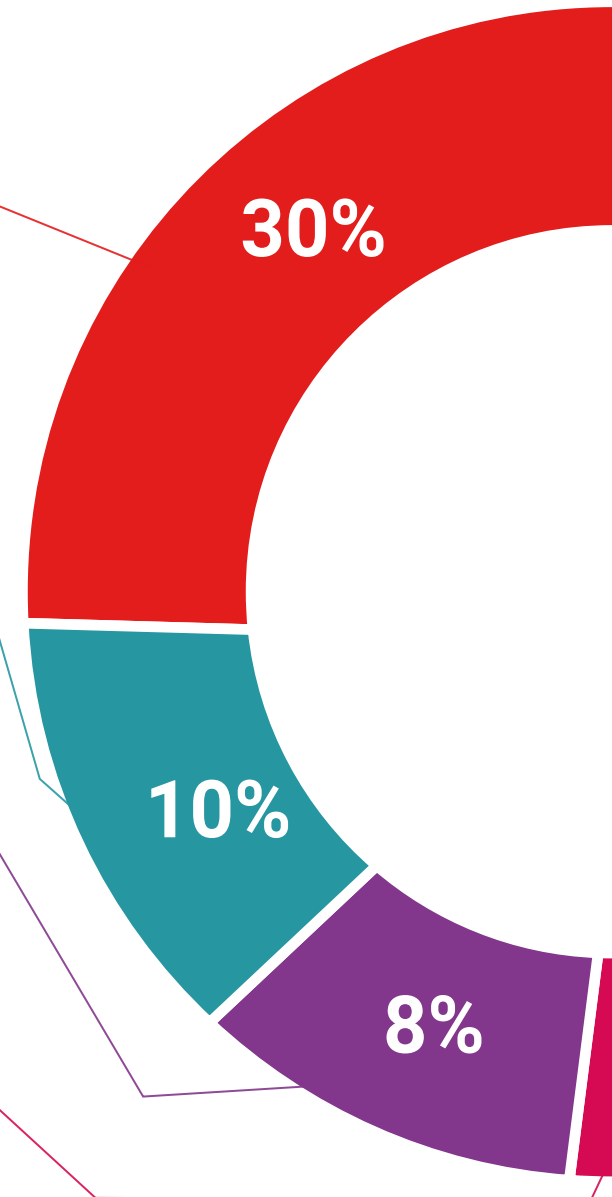
Case Studies

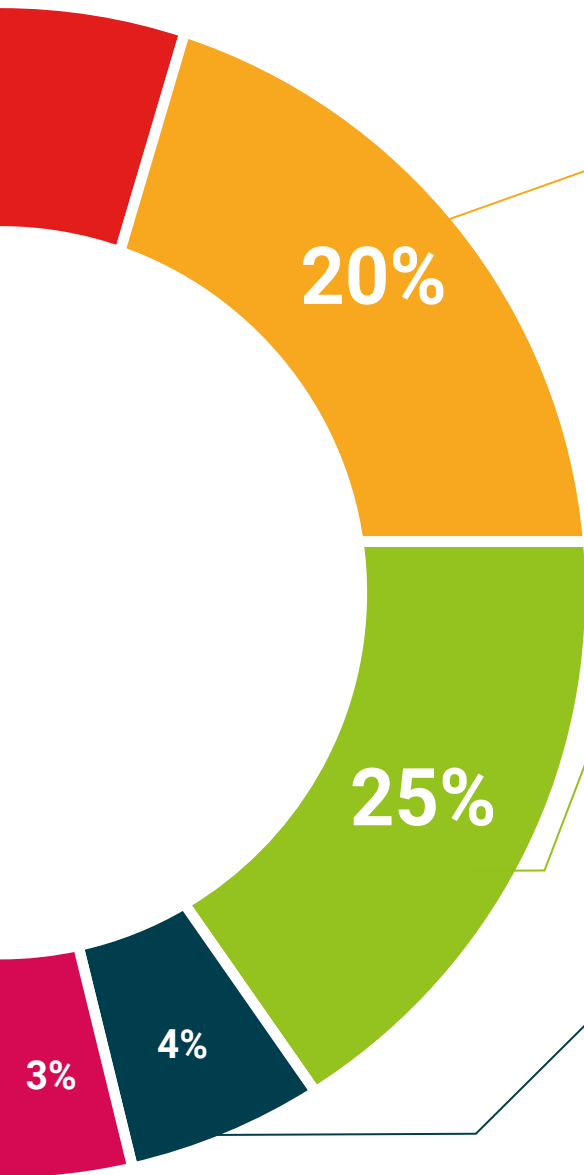Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.

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.

Certificate

The Postgraduate Certificate in Creation of Machines through Digital Sculpture guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

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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 Creation of Machines through Digital Sculpture** 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 Creation of Machines through Digital Sculpture**

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 Creation
of Machines through Digital Sculpture**

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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