

# Postgraduate Certificate Modeling Techniques and Application in Rhino



## Postgraduate Certificate Modeling Techniques and Application in Rhino

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

Website: [www.techtute.com/us/design/postgraduate-certificate/modeling-techniques-application-rhino](http://www.techtute.com/us/design/postgraduate-certificate/modeling-techniques-application-rhino)

# 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

Certificate

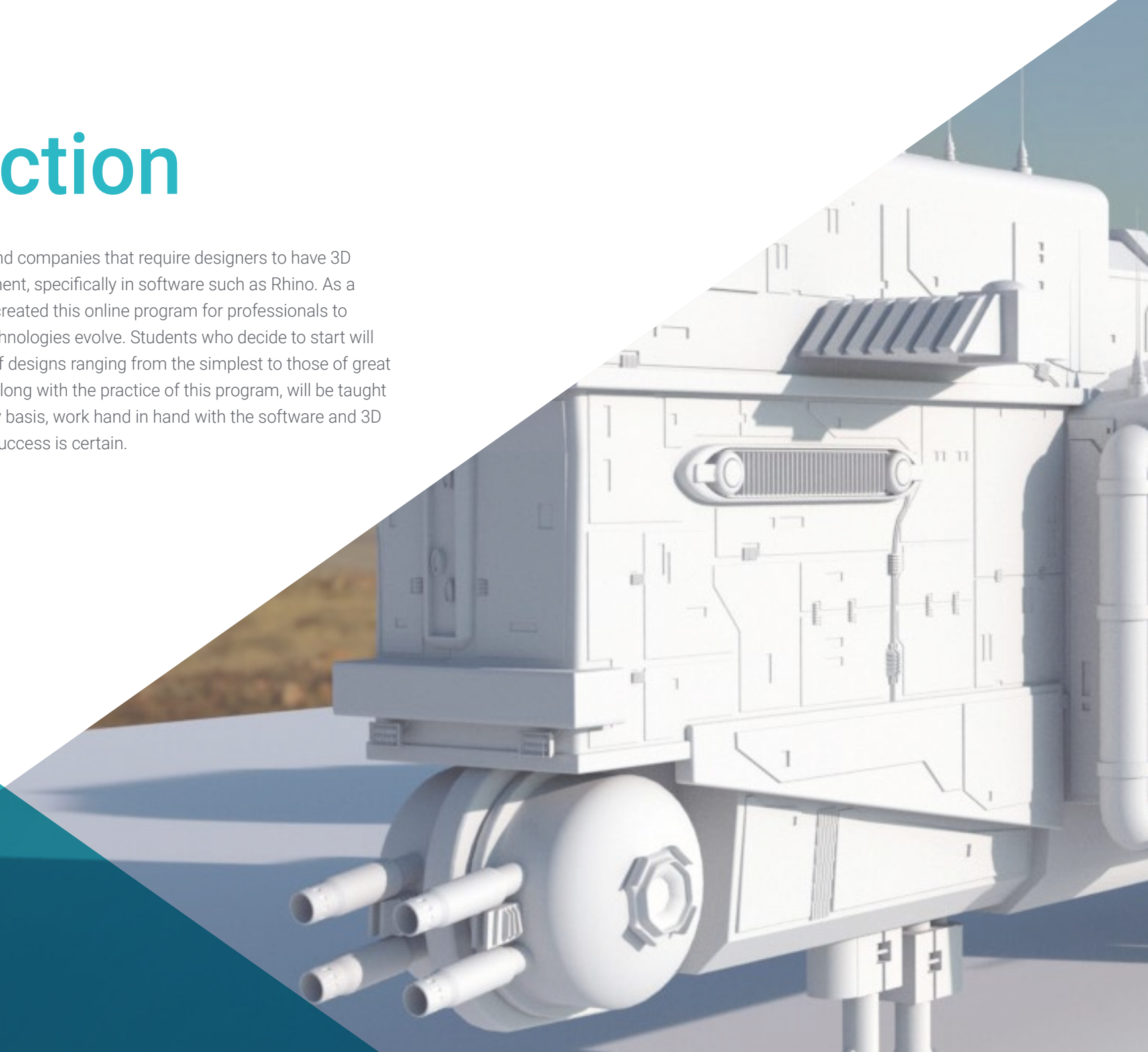
---

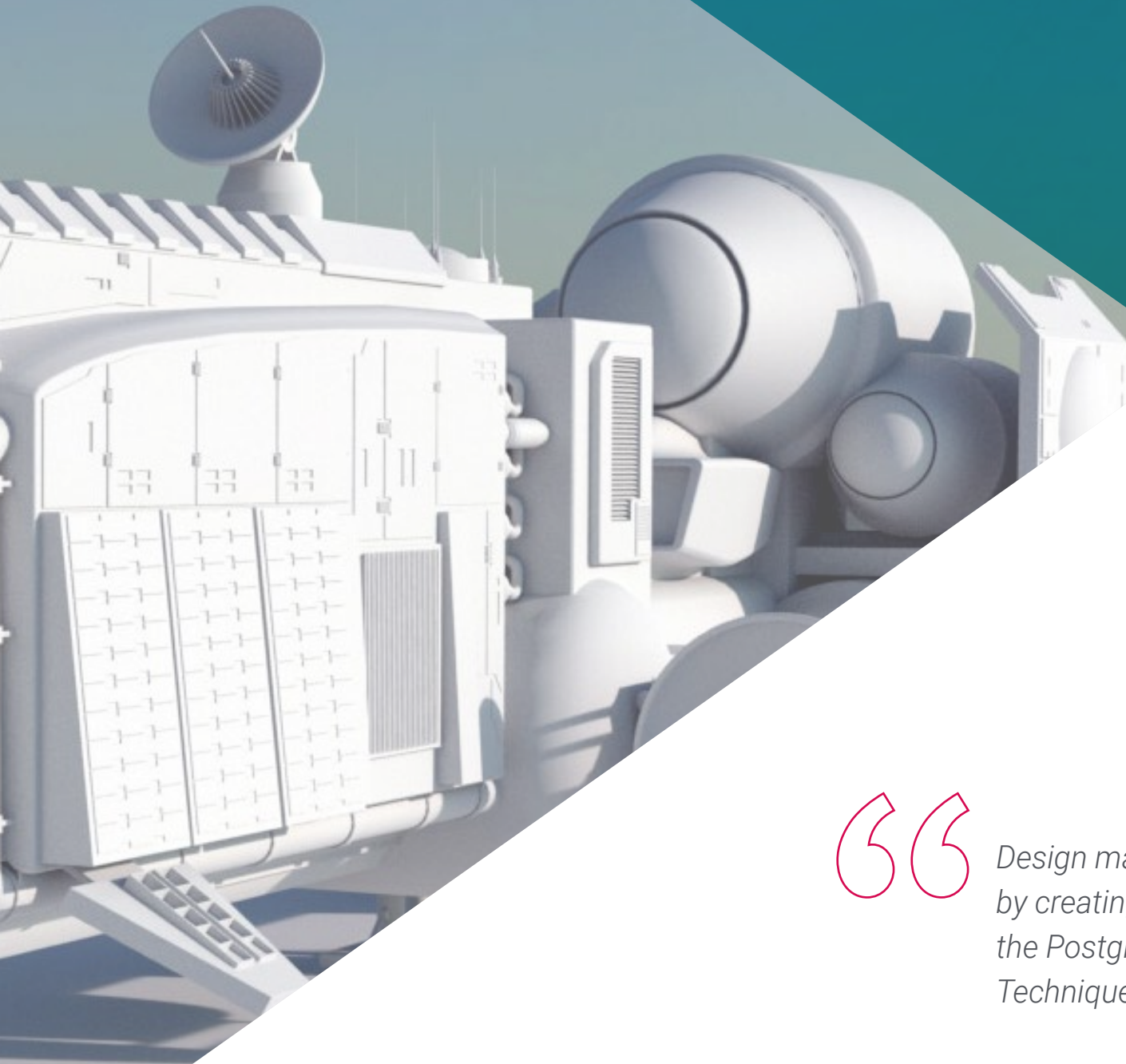
*p. 28*

# 01

# Introduction

Currently, there are many studios and companies that require designers to have 3D modelling skills as a hiring requirement, specifically in software such as Rhino. As a result, TECH Global University has created this online program for professionals to evolve at the same time as new technologies evolve. Students who decide to start will be able to generate a wide variety of designs ranging from the simplest to those of great geometric complexity. The theory, along with the practice of this program, will be taught by the best teachers who, on a daily basis, work hand in hand with the software and 3D modelling. Therefore, the learning success is certain.





“

*Design makes technology shine. Get inspired by creating 3D modelling in Rhino. Enroll in the Postgraduate Certificate in Modeling Techniques and Application in Rhino”*

Rhinoceros is becoming more and more popular in architecture, design and engineering studios worldwide. The reason is due to the wide variety of designs that can be created, modified, and rendered from the software. Therefore, this Postgraduate Certificate of TECH Global University aims to boost the career of all those professionals who wish to delve into 3D modeling techniques, leaning towards the computer-aided design tool: Rhino.

This program will provide students with the most detailed and necessary techniques to be able to create any figure, character, object or quality product. Experts in the sector have developed all the syllabus to which the students will have access. However, in programs like this, it is essential to know how to put all the knowledge into practice. Therefore, they go hand in hand during each class.

A person skilled in 3D modeling can work in various companies that are not necessarily related to those mentioned above. The field of work has expanded over the years and now doors are open to professionals in: advertising agencies, large multimedia companies or even as a freelance digital artist, making cartoons.

In other words, the program stands out for the scope of its content. And also because it is useful for those people who want to get new job opportunities and for those professionals who decide to be more competent in their job. Being up to the new demands of the market is the main characteristic that companies look for in their personnel.

A positive point is the convenience in which the student will receive the education, since it's fully online. The program adjusts to the schedules and times of the student, since TECH Global University can contribute to the education of professionals wherever they are. All they need is a device with an Internet connection to take their career one step further.

This **Postgraduate Certificate in Modeling Techniques and Application in Rhino** contains the most complete and up-to-date program on the market. Its most notable features are:

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



*Although there are no secrets to success, there are tricks to get there, and prior preparation is one of them. Get prepared with TECH Global University and reach your goals”*

“

*3D modeling helps you to create three-dimensional images. At TECH Global University too: we equip you with knowledge, show you how to apply it and boost your success”*

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 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.

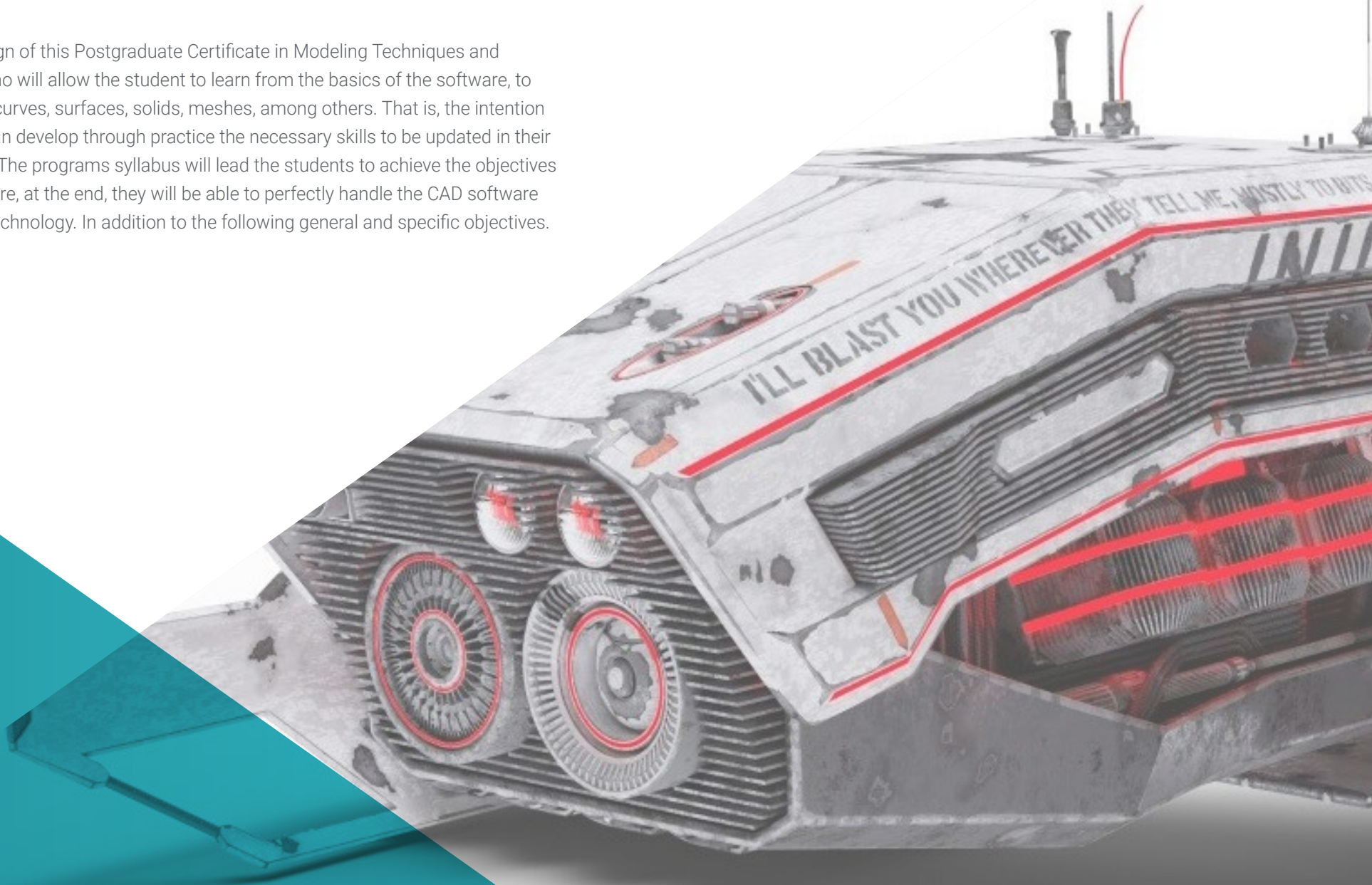
*Think not only about what makes sense, but also about what you are passionate about. Invest in your education and you will be rewarded tomorrow.*

*Designing is thinking about making something visual. At TECH, we help you not only to shape your ideas, but to carry them out.*



# 02 Objectives

The program design of this Postgraduate Certificate in Modeling Techniques and Application in Rhino will allow the student to learn from the basics of the software, to model efficiently: curves, surfaces, solids, meshes, among others. That is, the intention is that students can develop through practice the necessary skills to be updated in their profession or job. The programs syllabus will lead the students to achieve the objectives proposed. Therefore, at the end, they will be able to perfectly handle the CAD software based on Nurbs technology. In addition to the following general and specific objectives.







“

*What you get out of achieving your goals is not as important as what you become: be a 3D modeling specialist and learn all about Rhino”*



## General Objectives

---

- ◆ Learn in depth the different modeling techniques and their application in Rhino 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 Rhino 3D modeling artist
- ◆ Know all the tools involved in the 3D modeling profession





## Specific Objectives

---

- ◆ Develop techniques for solving specific cases
- ◆ Apply solutions to different types of requirements
- ◆ Know the main software tools
- ◆ Incorporate mechanical knowledge into the modeling process
- ◆ Work with analysis tools
- ◆ Develop strategies to approach a model



*It doesn't matter the time availability or where you are. All you need is the desire to learn. Start acquiring new knowledge today with our Postgraduate Certificate"*

# 03

# Course Management

Offering a good education is easier when you work hand in hand with experts specialized in their fields. This Postgraduate Certificate is no exception. At TECH Global University we assure our students a qualified faculty that demonstrates its high experience and background in the field. In addition, we select those teachers who know how to put into practice all the knowledge provided to the student and, also, those who bring added value to our company. That is to say, teachers that always provide a view to an international market in which the professional is apt and has developed the necessary skills to succeed.





“

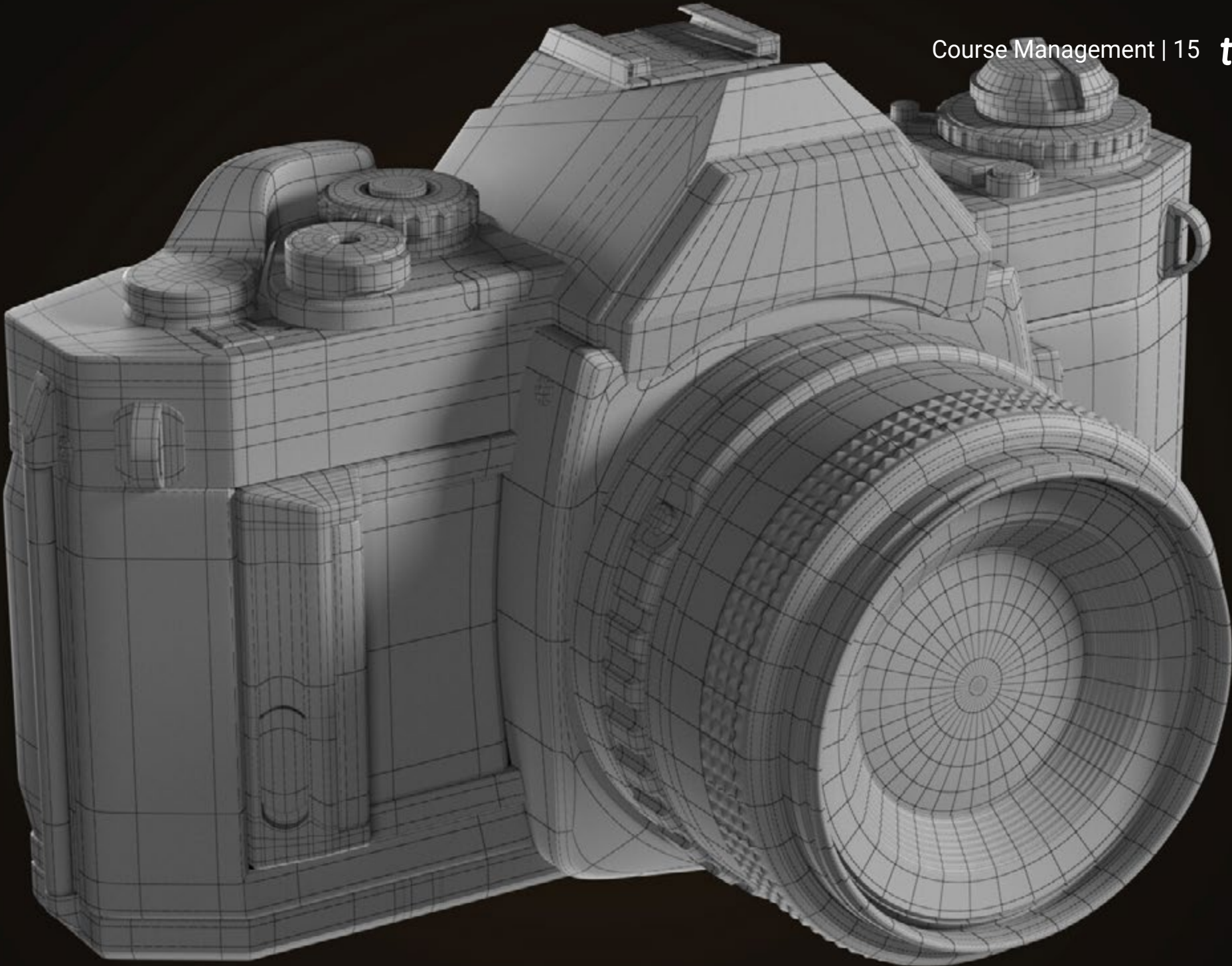
*Education is the most powerful weapon we human beings can use to change the world. At TECH we make sure you receive it from the best professionals in the international market”*

## Management



### Mr. Salvo Bustos, Gabriel Agustín

- CEO at D- SAVE 3D services
- 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 the Mendoza Late Contest
- Exhibitor at the Regional Visual Arts Salon Vendimia
- Digital Composition Seminar. National University of Cuyo
- National Congress of design and production. CPRODI



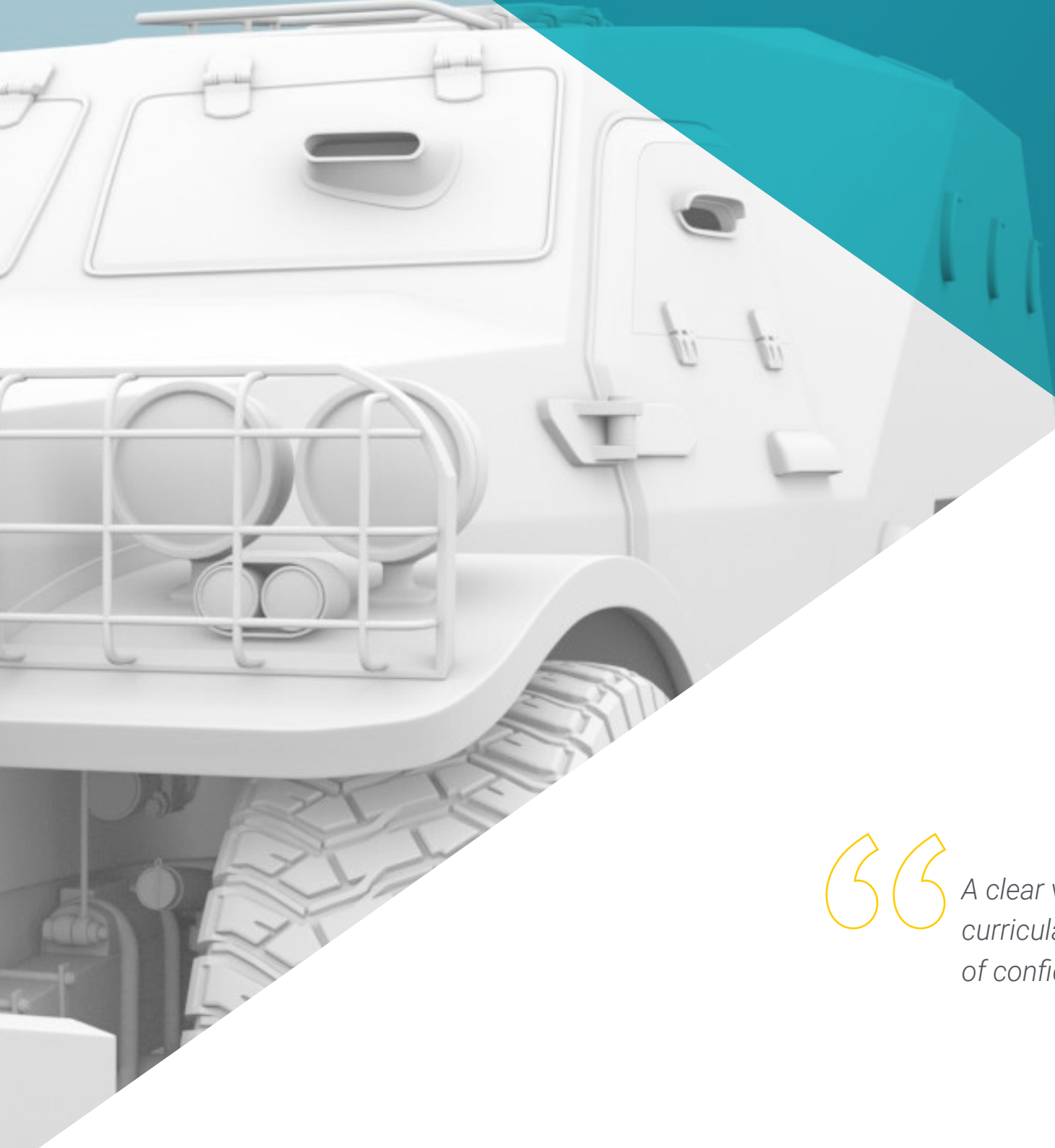
# 04

## Structure and Content

The syllabus, made available to the student, has been developed based on the requirements of 3D modeling and the use of Rhino software. Likewise, the teachers of this Postgraduate Certificate have established a study plan that combines theory and practice, the latter being the most outstanding. Therefore, students will create, model and analyze different figures, shapes and objects in 3D from the first section. The intention is to perfect the techniques and to show the students, through the tasks, the different sectors for which they can apply the acquired knowledge.



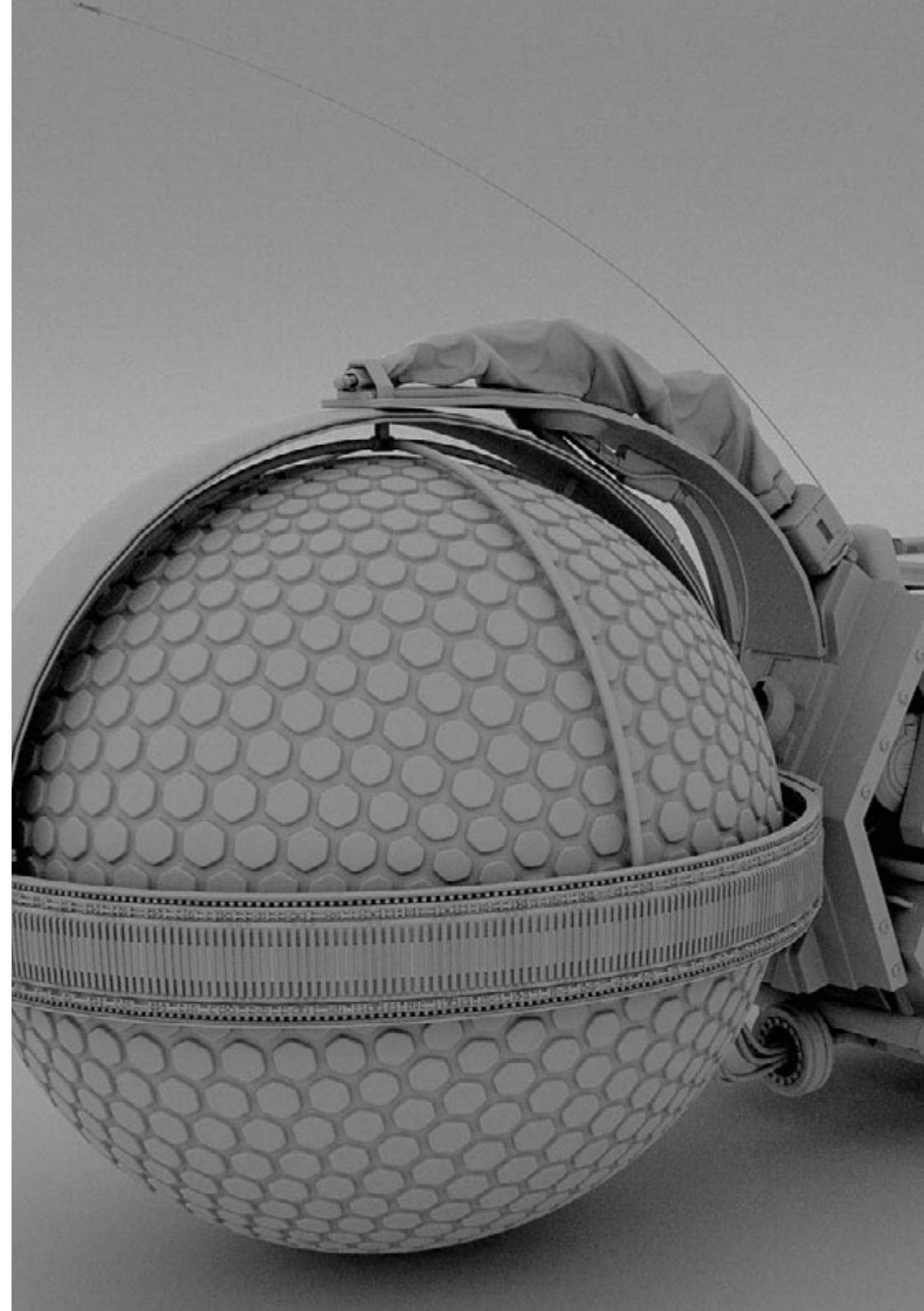




“A clear vision, backed by defined curricula, will always generate a sense of confidence and personal power”

## Module 1. Modeling Techniques and their Application in Rhino

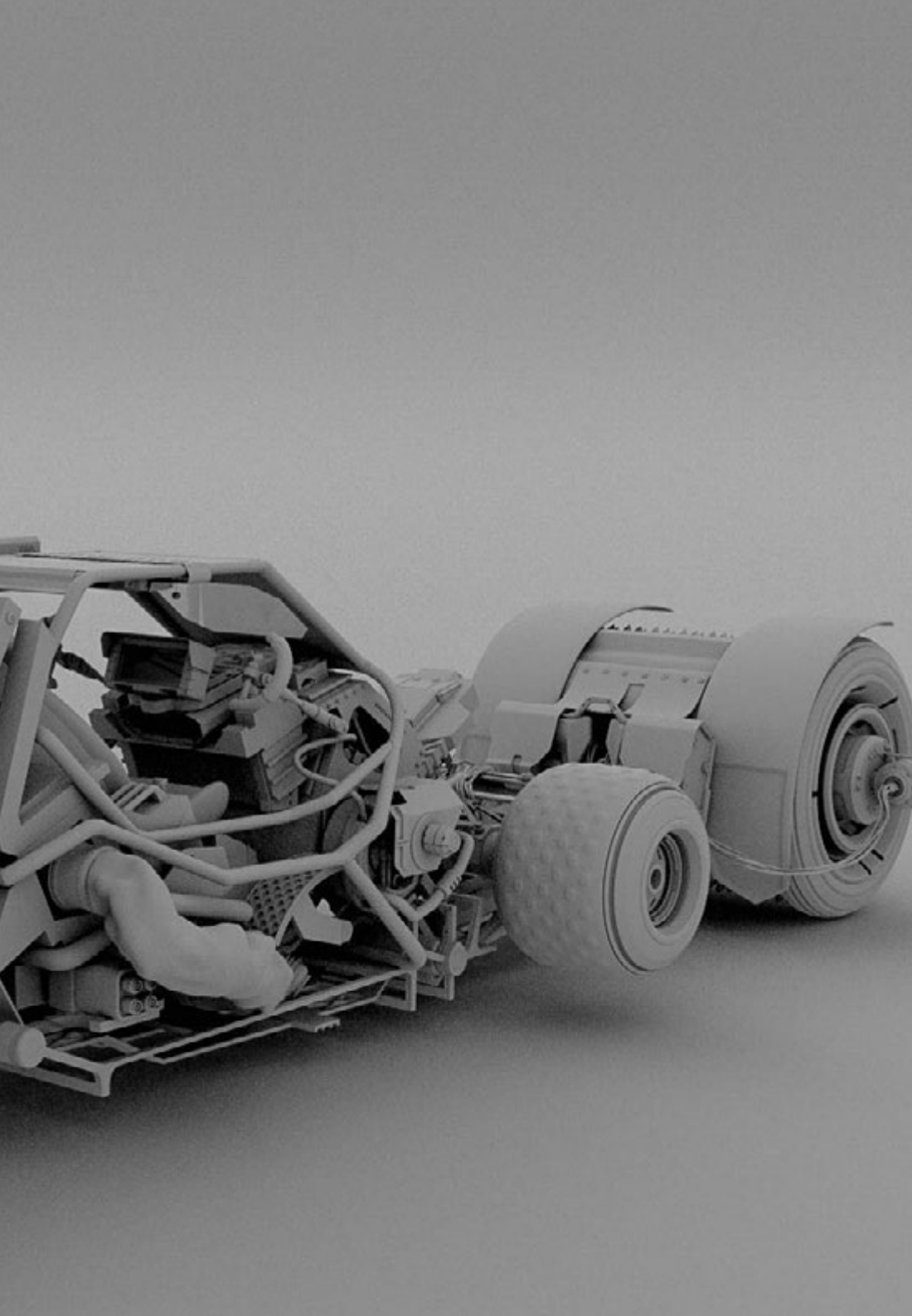
- 1.1. Techniques
  - 1.1.1. Support Intersection
  - 1.1.2. Creation of a Space Helmet
  - 1.1.3. Pipelines
- 1.2. Application I
  - 1.2.1. Creating a Car Tire
  - 1.2.2. Creating a Tire
  - 1.2.3. Modeling a Watch
- 1.3. Basic Techniques II
  - 1.3.1. Use of Isocurves and Edges for Modeling
  - 1.3.2. Making Apertures in the Geometry
  - 1.3.3. Working with Hinges
- 1.4. Application II
  - 1.4.1. Creation of a Turbine
  - 1.4.2. Creation of Air Inlets
  - 1.4.3. Tips for Imitating Edge Thickness
- 1.5. Tools
  - 1.5.1. Tips for Using Mirror Symmetry
  - 1.5.2. Use of Fillets
  - 1.5.3. Use of Trims
- 1.6. Mechanical Applications
  - 1.6.1. Gear Creation
  - 1.6.2. Pulley Construction
  - 1.6.3. Construction of a Shock Absorber
- 1.7. File Import and Export
  - 1.7.1. Send Rhino Files
  - 1.7.2. Export Rhino Files
  - 1.7.3. Import to Rhino from Illustrator



- 1.8. Analysis Tools I
  - 1.8.1. Graphical Curvature Analysis Tool
  - 1.8.2. Curve Continuity Analysis
  - 1.8.3. Curve Analysis Problems and Solutions
- 1.9. Analysis Tools II
  - 1.9.1. Surface Directional Analysis Tool
  - 1.9.2. Environment Surface Mapping Analysis Tool
  - 1.9.3. Edge Display Analysis Tool
- 1.10. Strategies
  - 1.10.1. Construction Strategies
  - 1.10.2. Surface per Curve Grid
  - 1.10.3. Working with Blueprints



*TECH Global University designs study plans for you, a professional who aspires to more and more and is looking for quality programs”*



# 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.





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 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.





#### 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 Modeling Techniques and Application in Rhino 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 Modeling Techniques and Application in Rhino** 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 Modeling Techniques and Application in Rhino**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present  
development lang  
classroom



## Postgraduate Certificate Modeling Techniques and Application in Rhino

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

# Postgraduate Certificate Modeling Techniques and Application in Rhino

