Postgraduate Diploma
Modeling in Rhino

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Postgraduate Diploma
Modeling in Rhino

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

Website: www.techtitute.com/in/videogames/postgraduate-diploma/postgraduate-diploma-modeling-rhino

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01

Introduction

The Rhino editing program, used for the graphic representation of the radius of elements in design, animation or industrial production, among others, has taken a new direction towards the development of the video game industry. This has led to the consequent need for experts in the use of this tool applied to this field. This educational program aims to respond to this need, offering a complete online program to promote professional specialization in a sector that is on the rise and in search of up-to-date professionals.

TECH has developed this educational program so that in only 6 months you will be able to perform Modeling in Rhino like a real professional"

Modeling with Rhino is an activity that, although it already has a certain trajectory, nowadays it has been reconverted and transformed more and more towards video game creativities. This Postgraduate Diploma is ideal for those who also need to update their knowledge of this program or go directly into it.

The educational plan is organized in modules that focus entirely on the introduction, application and deepening of modeling in Rhino. Following this order, the first section is based on understanding how the most basic aspects of the program work, such as learning how to execute commands or create, edit and transform geometries.

Subsequently, work is done on the development of techniques, therefore, progressing to an intermediate level of use of the program, and delving into the resolution of specific cases, applying solutions to different types of requirements, learning about the main tools or, for example, incorporating mechanical knowledge into modeling.

Ultimately, in the last phase of the study plan, the application of techniques to advanced models, working with different parts of a complex model and acquiring skills to organize them, as well as identifying how to adjust the details.

Students only need an Internet connection to take this training course and, once enrolled, all multimedia content can be accessed from the online platform. With the best pedagogical resources, the management of this Postgraduate Diploma has proposed a comprehensive study plan, which can be addressed during the 6 months that the course lasts.

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

- The development of practical cases presented by experts in 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 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

This Postgraduate Diploma has been designed as a comprehensive curriculum with the best pedagogical resources to learn how to model in Rhino in only 6 months”

The educational program is designed to make a gradual acquisition of knowledge, so that it goes from a more introductory process to the deepening of modeling in Rhino"

The Modeling program in Rhino applied to the field of video games will allow you to rediscover this excellent tool.

Specialize in Modeling in Rhino for the video game design sector.

The program's teaching staff includes professionals from the sector who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

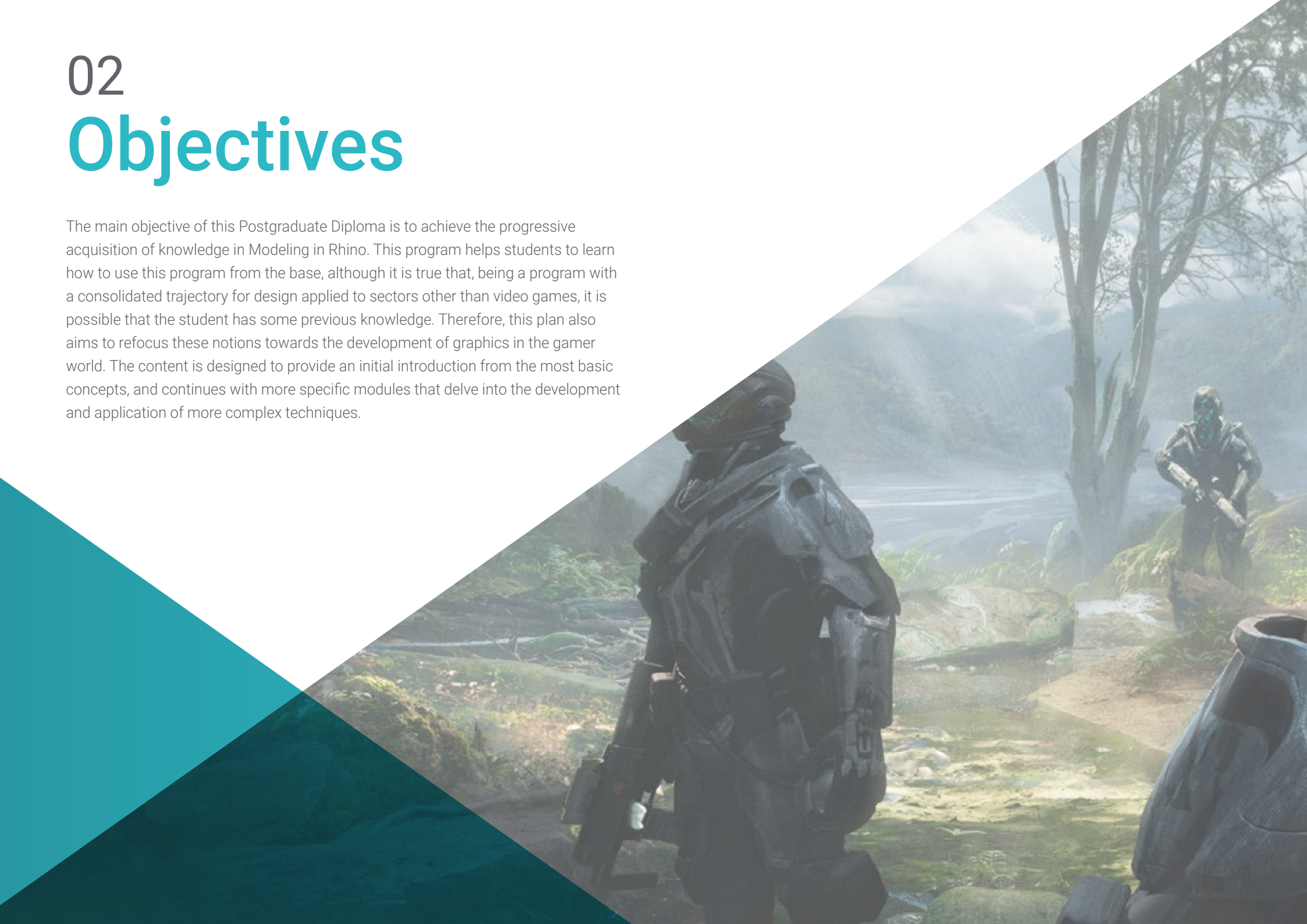
The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

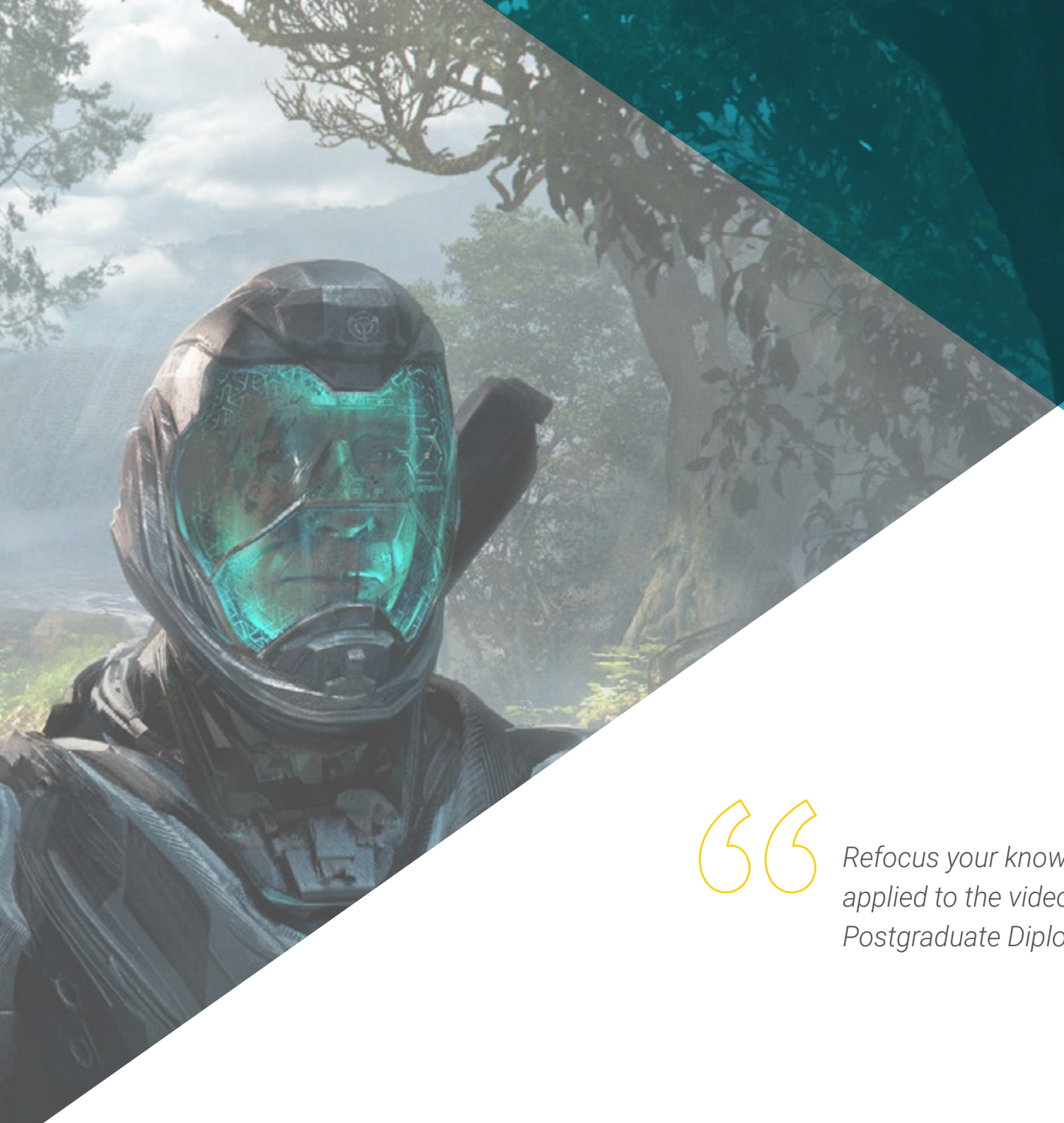
This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise throughout the program. This will be done with the help of an innovative system of interactive videos made by renowned experts.

02

Objectives

The main objective of this Postgraduate Diploma is to achieve the progressive acquisition of knowledge in Modeling in Rhino. This program helps students to learn how to use this program from the base, although it is true that, being a program with a consolidated trajectory for design applied to sectors other than video games, it is possible that the student has some previous knowledge. Therefore, this plan also aims to refocus these notions towards the development of graphics in the gamer world. The content is designed to provide an initial introduction from the most basic concepts, and continues with more specific modules that delve into the development and application of more complex techniques.





Refocus your knowledge on graphic design applied to the video game industry with this Postgraduate Diploma in Modeling in Rhino"

General Objectives

- 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

Work with the different parts of a complex model and acquire the skills to arrange it”

Specific Objectives

Module 1. Technical Modeling in Rhino

- Have a broad understanding of how the NURBS modeling software works
- Work with precision modeling systems
- Learn in detail how to execute commands
- Create the basis of the geometries
- Edit and transform geometries
- Work with an organization in the scenes

Module 2. Modeling Techniques and their Application in Rhino

- Develop techniques to solve specific cases
- Apply solutions to different requirements
- Know the main software tools
- Incorporate mechanical knowledge into modeling
- Work with analysis tools
- Develop strategies to address a model

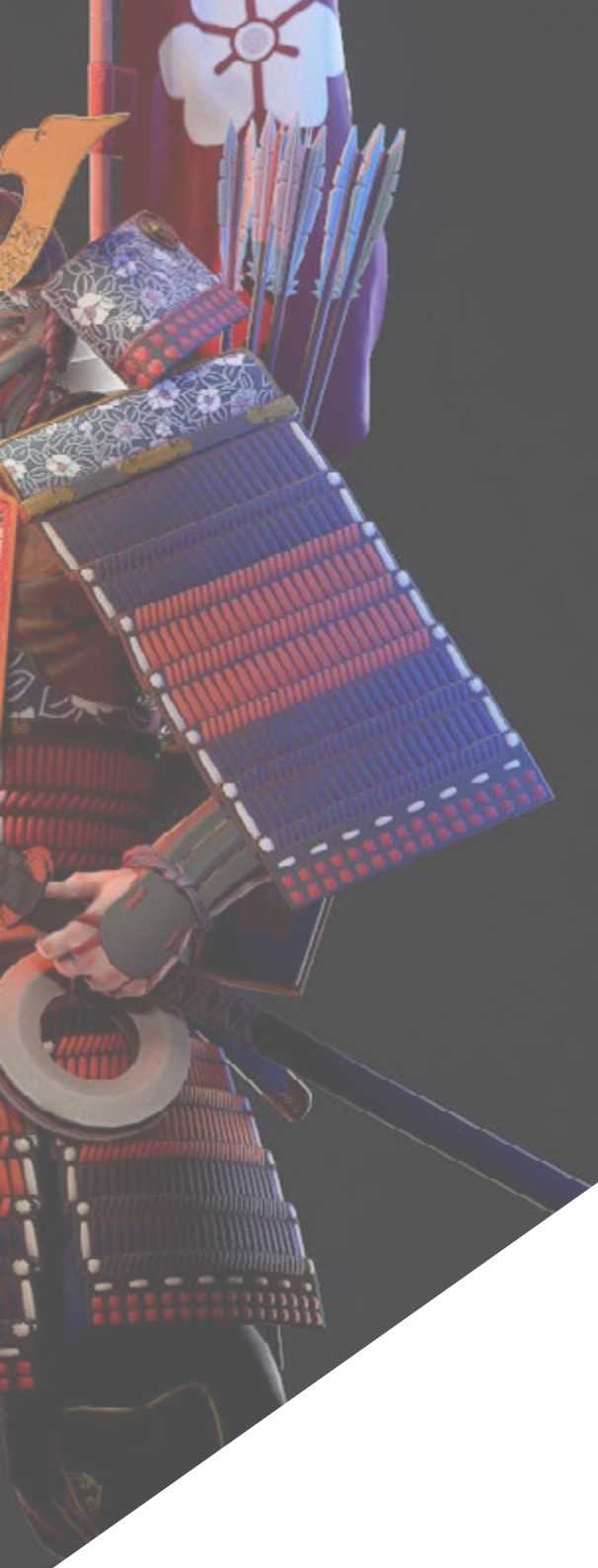
Module 3. Advanced Modeling in Rhino

- Study further the application of techniques in advanced models
- Understand in detail how the components of an advanced model work
- Learn to work with different parts of a complex model
- Acquire skills to order a complex model
- Identify how details fit

03

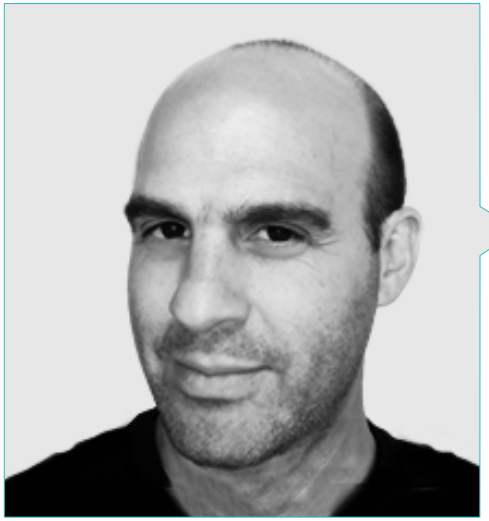
Course Management

This Postgraduate Diploma has a management and teaching staff made up of top-level professionals. All of them highly specialized to prepare students for the challenges of a sector in constant growth and transformation and adapted to the programming and development of video games. Thanks to their many years of experience, they will be able to provide examples and practical exercises to hone the skills in each class.



This Postgraduate Diploma has a management and teaching staff made up of top-level professionals"

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

04

Structure and Content

Designed to introduce and update designers in the field of video game graphics and modeling in Rhino, this program has been developed by a faculty composed of industry professionals. The content is structured in 3 different modules that cover from the most basic and introductory notions of technical modeling in Rhino, to the most profound and complex techniques and applications. Like all study programs designed and structured by TECH, this one is also formulated with the best pedagogical resources and, in addition, always including theoretical and practical knowledge.

All curriculum offered by TECH includes a theoretical and practical dimension to learning"

Module 1. Technical Modeling in Rhino

1.1. Rhino Modeling
- 1.1.1. Rhino Interface
- 1.1.2. Types of Objects
- 1.1.3. Navigating the Model

1.2. Fundamental Notions
- 1.2.1. Editing with Gumball
- 1.2.2. *Viewports*
- 1.2.3. Modeling Support

1.3. Precision Modeling
- 1.3.1. Input by Coordinates
- 1.3.2. Distance and Angle Restriction Input
- 1.3.3. Object Restriction

1.4. Command Analysis
- 1.4.1. Additional Modeling Support
- 1.4.2. *Smart Track*
- 1.4.3. Construction Planes

1.5. Lines and Polylines
- 1.5.1. Circles
- 1.5.2. Free-Form Lines
- 1.5.3. Helix and Spiral

1.6. Geometry Editing
- 1.6.1. Fillet and Chamfer
- 1.6.2. Mixture of Curves
- 1.6.3. *Loft*

1.7. Transformations I
- 1.7.1. Move - Rotate - Scale
- 1.7.2. Join - Prune - Extend
- 1.7.3. Separate - Offset - Formations

1.8. Creating Shapes
- 1.8.1. Deformable Shapes
- 1.8.2. Modeling With Solids
- 1.8.3. Transformation of Solids

1.9. Creating Surfaces
- 1.9.1. Simple Surfaces
- 1.9.2. Extrusion, Lofting and Surface Finishing
- 1.9.3. Surface Sweeping

1.10. Organization
- 1.10.1. Layers
- 1.10.2. Groups
- 1.10.3. Blocks

Module 2. Modeling Techniques and their Application in Rhino

2.1. Techniques
- 2.1.1. Support Intersection
- 2.1.2. Creation of a Space Helmet
- 2.1.3. Pipelines

2.2. Application I
- 2.2.1. Creating a Car Tire
- 2.2.2. Creating a Tire
- 2.2.3. Modeling a Watch

2.3. Basic Techniques II
- 2.3.1. Use of Isocurves and Edges for Modeling
- 2.3.2. Making Apertures in the Geometry
- 2.3.3. Working with Hinges

2.4. Application II
- 2.4.1. Creation of a Turbine
- 2.4.2. Creation of Air Inlets
- 2.4.3. Tips for Imitating Edge Thickness

2.5. Tools
- 2.5.1. Tips for Using Mirror Symmetry
- 2.5.2. Use of Fillets
- 2.5.3. Use of Trims

2.6. Mechanical Applications
- 2.6.1. Creating Gears
- 2.6.2. Pulley Construction
- 2.6.3. Construction of a Shock Absorber

2.7. File Import and Export
- 2.7.1. Send Rhino Files
- 2.7.2. Export Rhino Files
- 2.7.3. Import to Rhino from Illustrator

2.8. Analysis Tools I
- 2.8.1. Graphical Curvature Analysis Tool
- 2.8.2. Curve Continuity Analysis
- 2.8.3. Curve Analysis Problems and Solutions

2.9. Analysis Tools II
- 2.9.1. Surface Directional Analysis Tool
- 2.9.2. Environment Surface Mapping Analysis Tool
- 2.9.3. Edge Display Analysis Tool

2.10. Strategies
- 2.10.1. Construction Strategies
- 2.10.2. Surface per Curve Grid
- 2.10.3. Working with Blueprints

Module 3. Advanced Modeling in Rhino

3.1. Motorcycle Modeling
- 3.1.1. Importing Reference Images
- 3.1.2. Modeling of Rear Tire
- 3.1.3. Modeling of Rear Rim

3.2. Mechanical Components of Rear Axle
- 3.2.1. Creating the Braking System
- 3.2.2. Building the Transmission Chain
- 3.2.3. Modeling the Chain Cover

3.3. Engine Modeling
- 3.3.1. Creation of the Body
- 3.3.2. Adding Mechanical Elements
- 3.3.3. Incorporating Technical Details

3.4. Modeling the Main Deck
- 3.4.1. Modeling Curves and Surfaces
- 3.4.2. Modeling the Deck
- 3.4.3. Cutting the Frame

3.5. Modeling the Upper Area
- 3.5.1. Building the Seat
- 3.5.2. Creating Front End Details
- 3.5.3. Creating Back End Details

3.6. Functional Parts
- 3.6.1. Gasoline Tank
- 3.6.2. Rear Lights
- 3.6.3. Front Lights

3.7. Building the Front Axle I
- 3.7.1. Brake System and Wheel Rim
- 3.7.2. Fork
- 3.7.3. Handlebar

3.8. Building the Front Axle II
- 3.8.1. Grips
- 3.8.2. Brake Cables
- 3.8.3. Instruments

3.9. Adding Details
- 3.9.1. Refining the Main Body
- 3.9.2. Adding the Muffler
- 3.9.3. Adding the Pedals

3.10. Final Components
- 3.10.1. Modeling the Windshield
- 3.10.2. Modeling the Support
- 3.10.3. Final Details

Become a true expert in the area of Modeling in Rhino for the field of video games thanks to this Postgraduate Diploma"

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 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. Students will have to combine all their knowledge, and research, argue, and defend their ideas and decisions.

Relearning Methodology

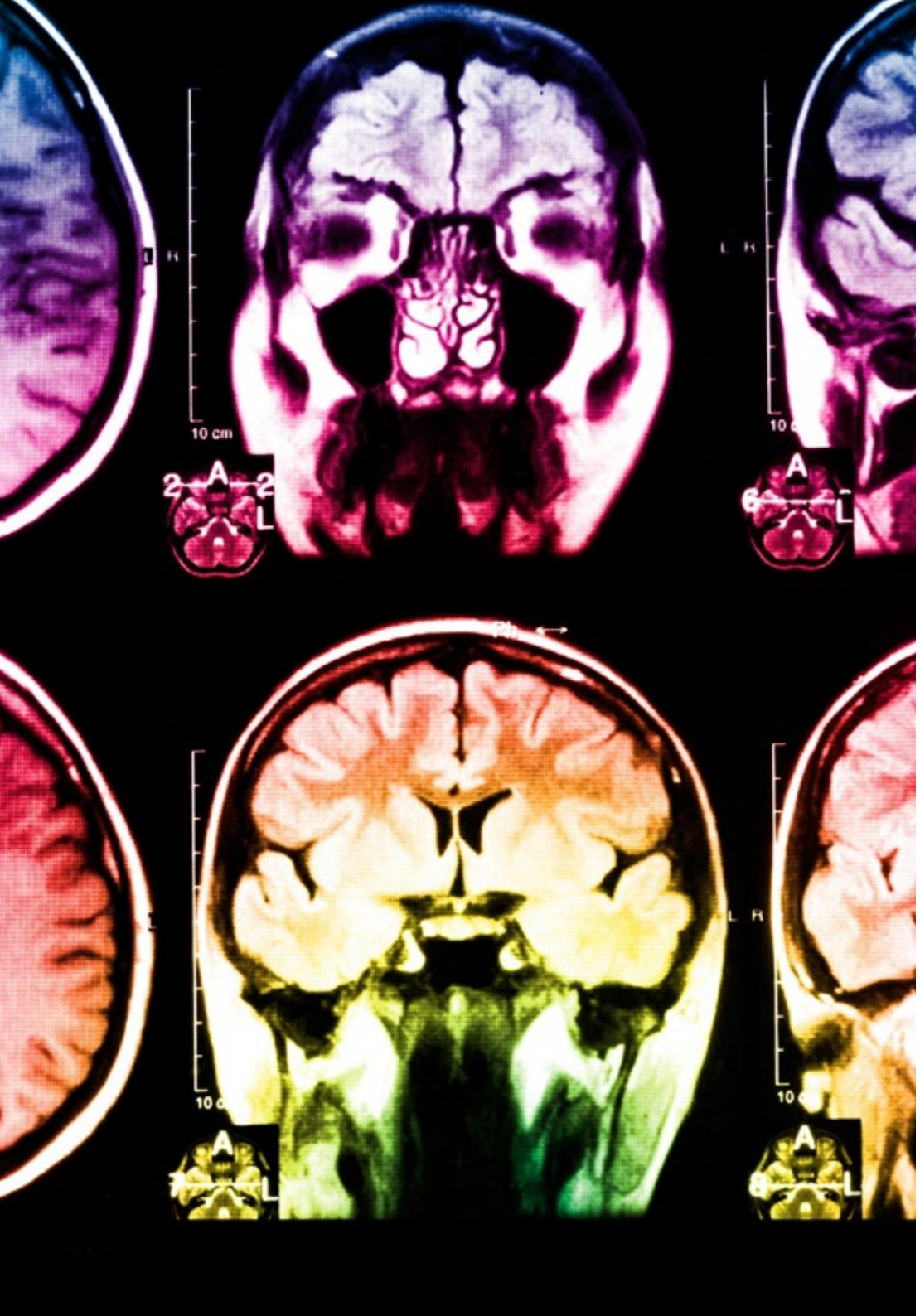
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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. 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.

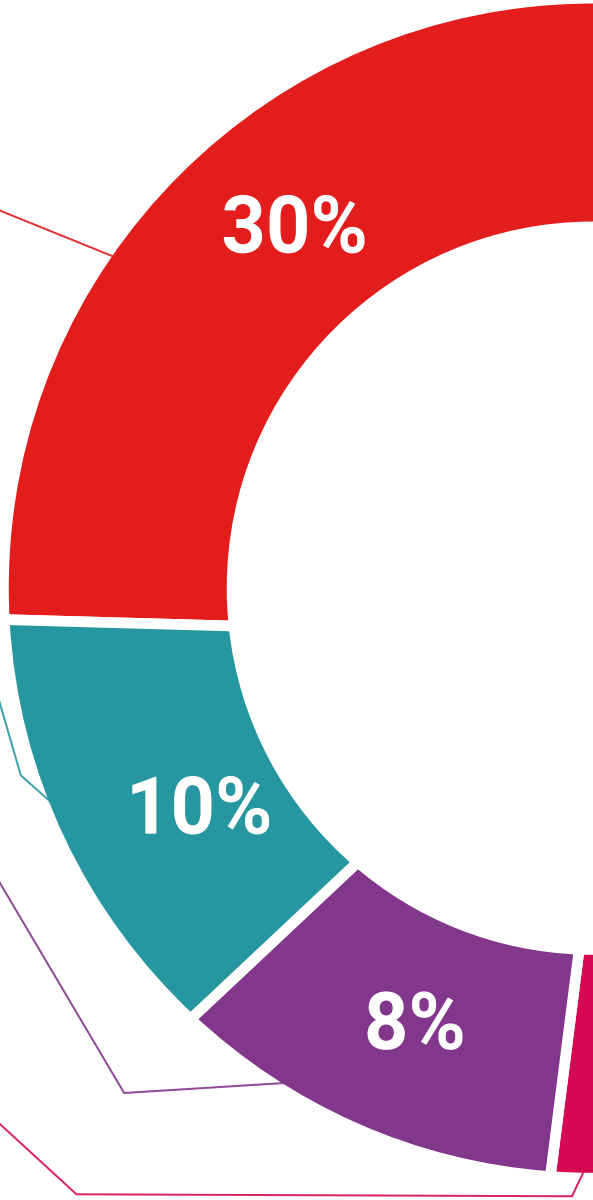
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

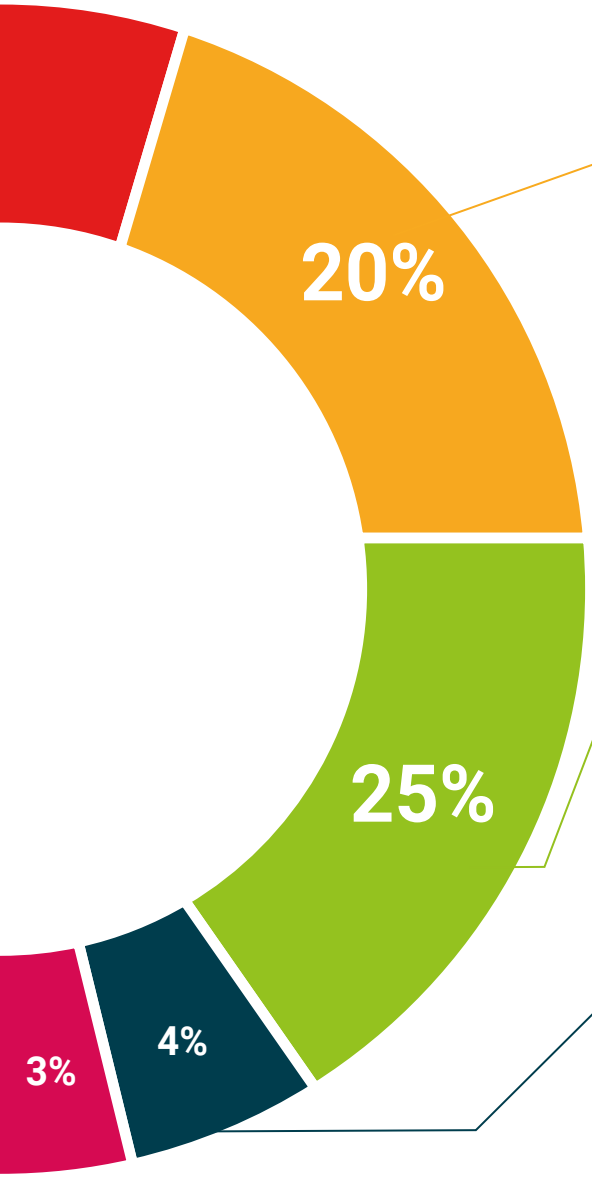
Practising Skills and Abilities

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 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

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 Diploma in Modeling in Rhino guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Modeling in Rhino** 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 Diploma issued by **TECH Technological University** via tracked delivery.

The certificate issued by **TECH Technological University** will reflect the qualification obtained in the Postgraduate Diploma, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Postgraduate Diploma in Modeling in Rhino**

Official Nº of Hours: **450 hours.**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Awards the following

CERTIFICATE

to

Mr./Ms. _____, with identification number _____.

For having passed and accredited the following program

POSTGRADUATE DIPLOMA

in

Modeling in Rhino

This is a qualification awarded by this University, equivalent to 450 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

*Apostille Convention. In the event that the student wishes to have their paper certificate issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

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