Postgraduate Diploma
Rhino Modeling

tech global university

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Postgraduate Diploma

Rhino Modeling

- Modality: **online**
- Duration: **6 months**
- Certificate: **TECH Technological University**
- Credits: **18 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: www.techtitute.com/us/design/postgraduate-diploma/postgraduate-diploma-rhino-modeling

Index

01

Introduction

Since its invention in 1998, Rhino has become the 3D modeling tool of choice for designers, architects and engineers. Over the years, it has evolved to allow the creation, editing, analysis, documentation, rendering and translation of any surface and solids, no matter how complex. Therefore, it is essential to have a firm knowledge and optimal management of this software, if you want to aim at the top within this sector. With this program, the student will have the most current information required to perform technical and advanced modeling of different objects.

A unique opportunity to develop as a 3D artist using Rhino Modeling"

This Postgraduate Diploma is designed to enable the student to create, edit, analyze, document, render and translate any surface using the industry's leading software: Rhino. A series of practical exercises will familiarize the students with the Rhino interface and provide them with a better understanding of the fundamentals of technical modeling. Students will also learn how to execute different commands and edit geometric transformations.

Then, they will be able to develop their technique to solve specific cases in modeling, incorporating important aspects of mechanics to develop more realistic models. Finally, the student will be fully capable of approaching advanced modeling, where different objects will be made, such as a tire, brakes, engine, mechanical bodies, among others.

All this will be condensed in a 100% online program, making it easy for the students to do it comfortably, wherever and whenever they want. In addition, they adapt their learning pace to their professional activities. It is worth mentioning that this Postgraduate Diploma has a direct diploma, so the students do not have to submit a final paper to obtain their university title.

This **Postgraduate Diploma in Rhino Modeling** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in 3D modeling on Hard surface
- 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

Make different mechanical bodies, perfect each part and render your final work, thanks to this program of TECH Technological University"

This program is a pioneer in the academic panorama thanks to the Relearning methodology, allowing you to learn at your own pace and with the educational material appropriate to the world of design"

This program will allow you to become the Rhino specialist that many companies are looking for. Do not hesitate and enroll now.

You will have a 100% online program to study where and when you prefer.

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.

02

Objectives

The main objective of this Postgraduate Diploma focuses on providing the student with a solid knowledge to perform a Rhino Modeling, a pioneer tool in the world of design. To this end, we have designed a syllabus that includes all the aspects that will help you become familiar with the software, as well as a series of practical exercises to face any project with extreme expertise.

In this program, you will acquire the necessary skills to order a complex model, such as the parts of an engine or the mechanical axle of an automobile"

General Objectives

- Learn in depth 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 shape creation 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

Model clocks, engines, turbines and a host of machinery using a system of lines and points as reference"

Specific Objectives

Module 1. Technical Modeling in Rhino

- Broadly understand how NURBS odelling software works
- Work with precision modeling systems
- Learn in detail how to execute commands
- Create the basis of geometries
- Edit and transform geometries
- Work with an organization in the scenes

Module 2. Modeling Techniques and their Application in Rhino

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

Module 3. Advanced Modeling in Rhino

- Learn in depth about the application of techniques to advanced models
- Understand in detail how the component parts of an advanced model
- Work with different parts of a complex model
- Acquire skills to sort a complex model
- Identify how details are adjusted

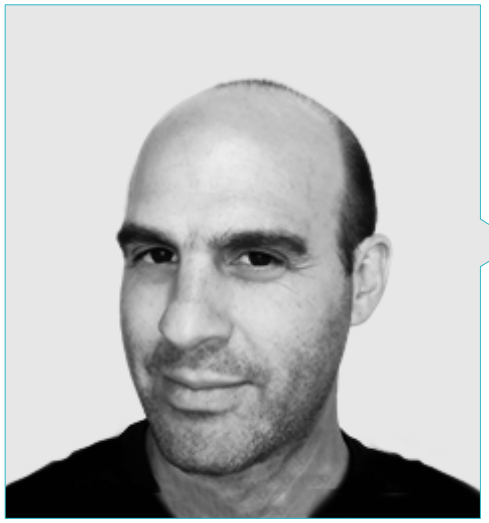
03

Course Management

This Postgraduate Diploma has a team of specialists who have devised and designed to the millimeter each content of the syllabus. In addition, they have carried out every exercise and practical guide to help the student become familiar with Rhino. Their extensive experience in the odelling world enables them to help the student to position himself as a first level designer in this highly competitive sector.

This group of experts will reveal their secrets and tricks to master Rhino Modeling to perfection"

Management



Mr. Salvo Bustos, Gabriel Agustín

- 9 years of experience in Aeronautical 3D odelling
- 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 content of this Postgraduate Diploma covers, in a structured way, all the areas of knowledge that the student requires to perform odelling and texturing with Rhino. In this way, after addressing the technical and theoretical aspects, you will be ready to recreate from scratch different objects, such as clocks, turbines, heavy machinery and even the smallest part of a car. Therefore, you will be positioned at the top thanks to this program.

TECH provides you with the most up-to-date content to help you aim for the top in your profession as a 3D designer and modeler"

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. SmartTrack
- 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. Organisation
- 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

Enroll now in this program and you will be able to improve your odelling technique with the pioneer program in the industry: Rhino"

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

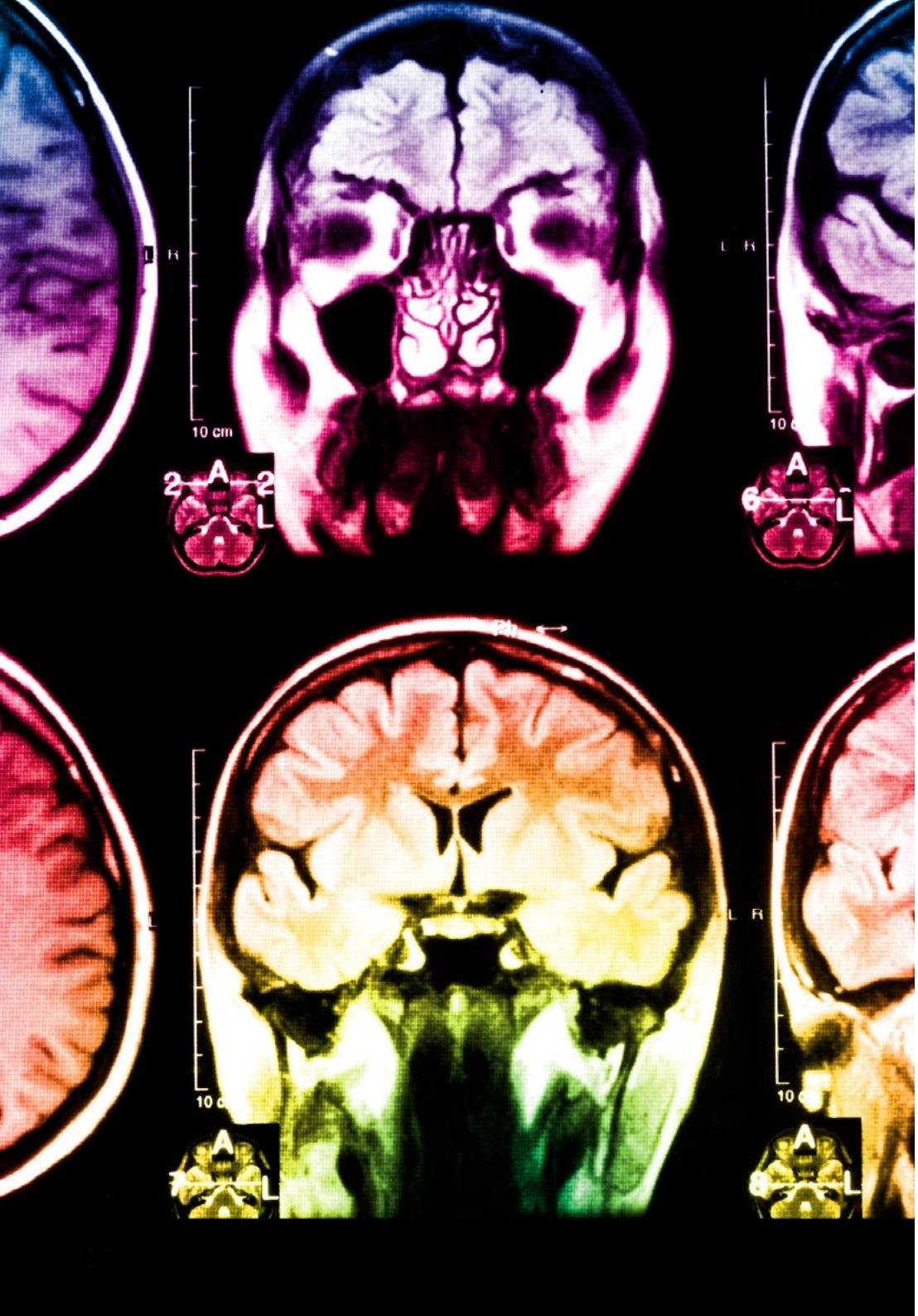
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

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.

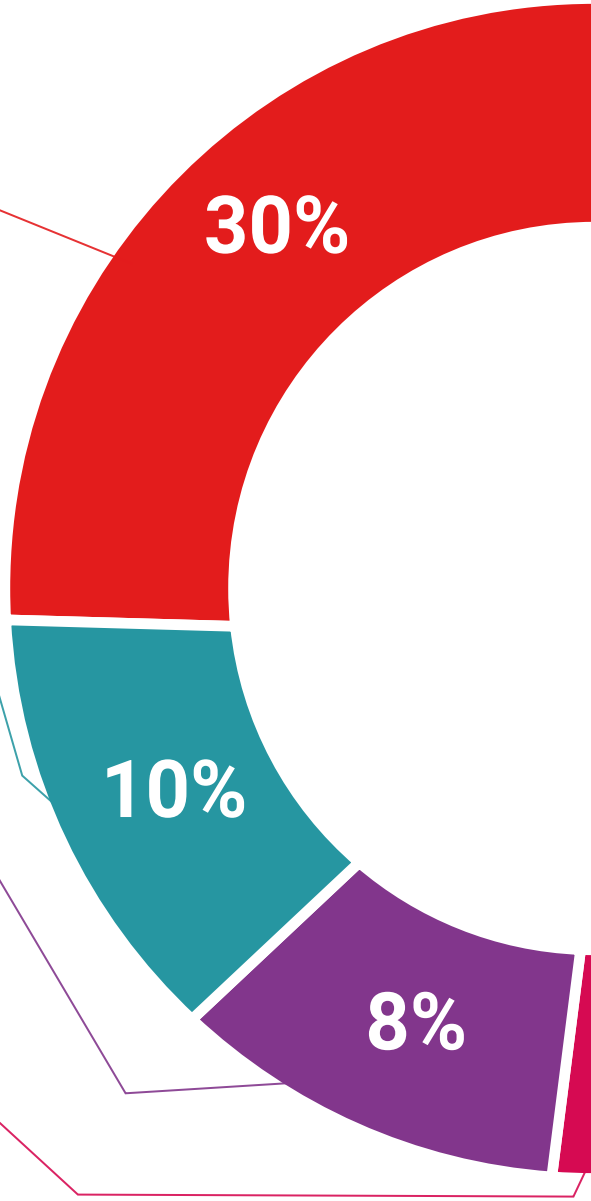
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

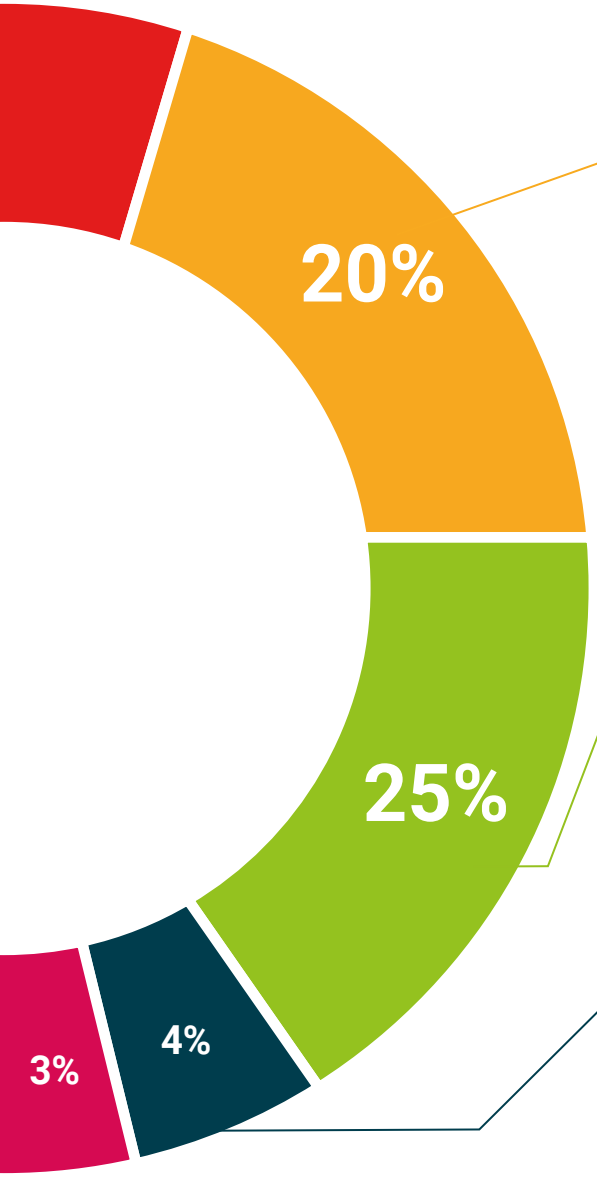
Practising Skills and Abilities

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 Diploma in Rhino Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Diploma 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 Diploma in Rhino 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 Diploma in Rhino Modeling**

Modality: **online**

Duration: **6 months**

Accreditation: **18 ECTS**


tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Diploma in Rhino Modeling

This is a program of 450 hours of duration equivalent to 18 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
Dean

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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