Master's Degree
3D Hard Surface Modeling

tech global university

Master's Degree
3D Hard Surface Modeling

» Modality: **online**
» Duration: **12 months**
» Certificate: **TECH Global University**
» Credits: **60 ECTS**
» Schedule: **at your own pace**
» Exams: **online**

Website: **www.techtitute.com/us/information-technology/master-degree/master-3d-hard-surface-modeling**

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01
Introduction

Hard Surface modeling is a field within three-dimensional modeling that encompasses the detailed finishing of surfaces. It can be applied to audiovisual design, animation, video games, as well as industrial production. 3D design has multiple applications both in the virtual dimension and in the physical dimension, see the case of the evolution of 3D printing. For all these reasons, professionals qualified in three-dimensional Hard Surface modeling are increasingly in demand, as they are needed as all the above-mentioned sectors change, grow and evolve. This fully online program brings together all the key points that are essential for the user to be able to create shapes and provide the best finishes.
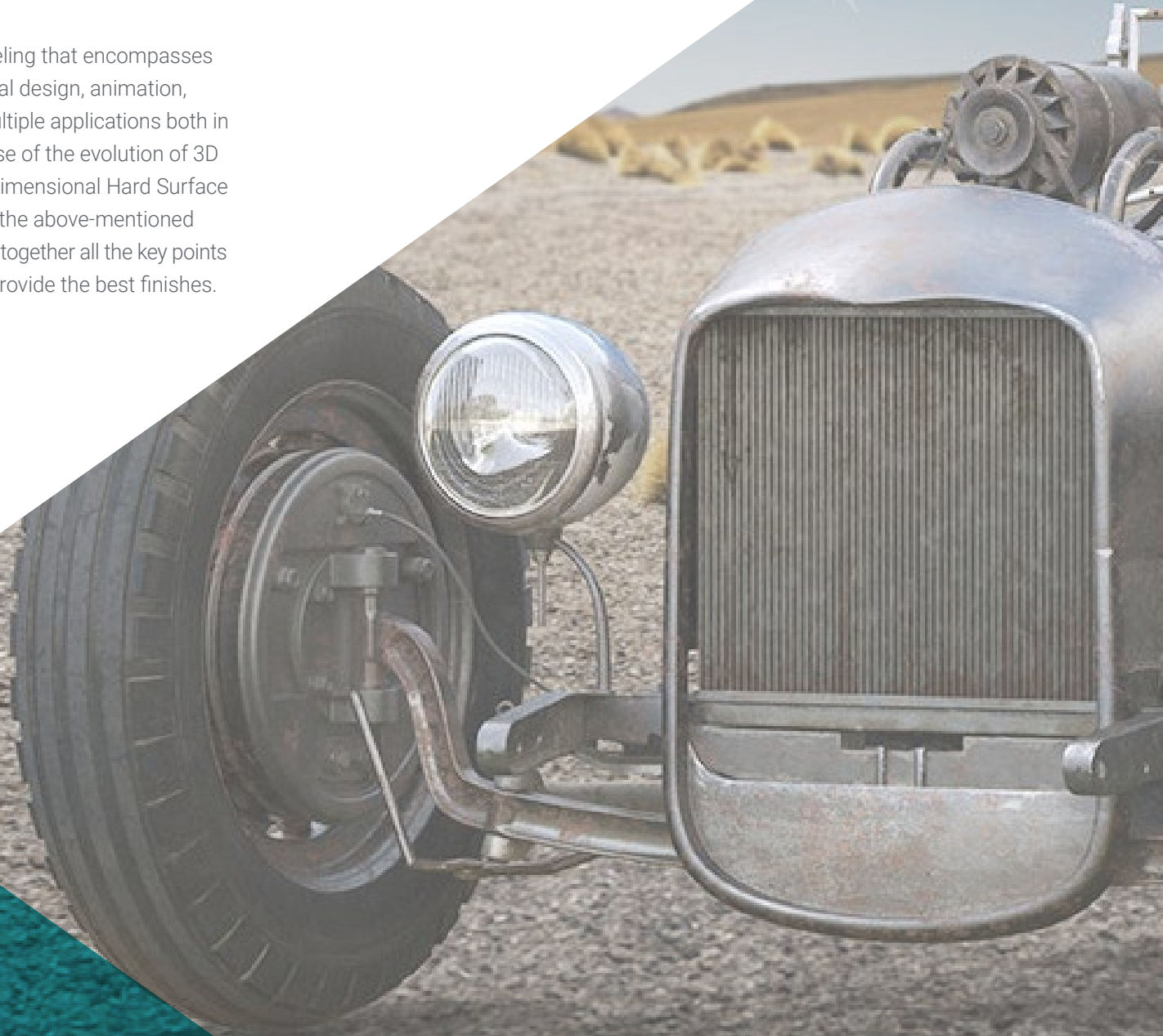
> *Apply yourself in three-dimensional Hard Surface modeling to tackle any new professional challenge in this field with this fully online educational plan"*

Hard Surface modeling allows, through texturing, lighting and rendering, to create any three-dimensional element from scratch, therefore, a hard surface modeler has the ability to create three-dimensional objects from scratch and give them a good finish. Nowadays, it is a skill required by a growing sector and it is also rewarded, since it allows the delivery a realistic idea of what the project will be in the physical dimension.

This Master's Degree in 3D Hard Surface Modeling covers all the necessary elements for the study of the shape and the analysis of the composition, which allows you to generate a realistic modeling of any object. From the most technical to the most artistic issues, you will learn about the different fields in which this discipline is applicable, such as commercial animation, aeronautical engineering, and the automotive sector, among others.

The educational plan begins with the conceptualization and theorization of key issues such as the study of the figure and shape, knowing in detail the development of the original figures and how, from them, different geometric bodies can be created. It continues to delve into the applicable modeling techniques and their principles, which will favor the development of the criteria for mapping and 3D mesh texturing, an indispensable element in three-dimensional Hard Surface modeling.

The student will also learn to perform advanced technical modeling in Rihno, one of the most popular pieces of software in the design world, which allows the creation of unimaginable shapes with great precision and detail. Finally, special emphasis will be placed on the production of characters using Hard Surface, understanding the parameters for sculpting them.

This Master's Degree is taught online, the ideal option to balance the updating of knowledge with other personal and professional projects. In addition, it has the support and backing of a faculty made up of experts of the highest prestige in three-dimensional modeling with Hard Surface.

This **Master's Degree in 3D Hard Surface Modeling** 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 Hard Surface Modeling
- 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

A Master's Degree in 3D Hard Surface Modeling that will give you the keys to become a true expert in the field"

A fully online program that favors the autonomous learning of the student and focuses on the development of practical skills and abilities.

Apply yourself in the best and most cutting-edge three-dimensional Hard Surface modeling software with this Master's Degree.

"*With a faculty made up of experts of the highest prestige in their field, this Master's Degree is what you need to know everything related to three-dimensional Hard Surface modeling*"

The program includes, in its teaching staff, professionals from the sector who bring to this program the experience of their work, in addition to recognized specialists from prestigious reference societies and 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. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

02
Objectives

This educational program aims to teach the user in depth the different types of Hard Surface modeling, as well as the different concepts and features to apply them in the 3D modeling industry. You will have the most current and practical content, with which you will have a variety of exercises to edit and transform geometries, organize scenes, model with Rhino and much more. In addition, the syllabus offers knowledge in specific software, such as Low Poly for automotive design or Nurbs for engineering.

This comprehensive syllabus offers knowledge in specific software such as Low Poly for automotive design or Nurbs for engineering"

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

Module 1. Study of Figure and Shape

- Conceive and apply constructions of geometric figures
- Understand the basics of three-dimensional geometry
- Knowing in detail how it is represented in technical drawing
- Identify different mechanical components
- Apply transformations through symmetries
- Develop an understanding of how shapes are developed
- Work through shape analysis

Module 2. *Hard Surface* Modeling

- 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

Module 3. Technical Modeling in Rhino

- Broadly understand how Nurbs modeling 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 4. 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 modeling process
- Work with analysis tools
- Develop strategies to approach a model

Module 5. 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
- Work with different parts of a complex model
- Acquire skills to sort a complex model
- Identify how the details fit

Module 6. Polygonal Modeling in 3D Studio Max

- Possess extensive knowledge of using 3D Studio Max
- Work with custom settings
- Have an in-depth understanding of how mesh smoothing works
- Conceive geometries through a variety of methods
- Develop an understanding of how a mesh behaves
- Apply object transformation techniques
- Have knowledge of creating UV maps

Module 7. Advanced Polygonal Modeling in 3D Studio Max

- Apply all the techniques for specific product development
- In-depth understanding of component parts development
- Understand the topology of an aircraft in modeling in depth
- Apply knowledge of technical components
- Creating complex shapes through the development of simple shapes
- Understand the physiognomy of a bot form

Module 8. Low Poly 3D Studio Max Modeling

- Working with basic shapes for mechanical models
- Develop the ability to decompose elements
- Understand in depth how detail makes for realism
- Solve different techniques to develop details
- Understand how mechanical parts are connected

Module 9. Hard Surface Modeling for Characters

- How Sculpt modeling works
- Know extensively the tools that will make our performance
- Conceive what type of Sculpt will be developed on our model
- Understand how character props will play a role in our concept
- Learn in detail how to clean up meshes for export
- Presenting a Hard Surface character model

Module 10. Texture Creation for Hard Surface

- Apply all texturing techniques for Hard surface models
- Work on real cases in the application of textured details
- Identify variations in PBR materials
- Have extensive knowledge of the differences in metallic materials
- Resolve technical details using maps
- Learn how to export materials and maps for different platforms

Learn how to design, texture and render 3D models in Hard Surface like a real expert"

03
Skills

Aimed at those students who want to specialize in three-dimensional Hard Surface modeling, this Master's Degree will help to know the tools and programs to carry out any task related to the modeling of hard surfaces. Therefore, you will be able to take on new professional challenges with the greatest responsibility and expertise in the field. With all this, you will be able to generate and develop any project that is requested in your professional career. Focused to all those people who need or wish to implement this form of modeling in their design projects, animation, video game design or industrial process.
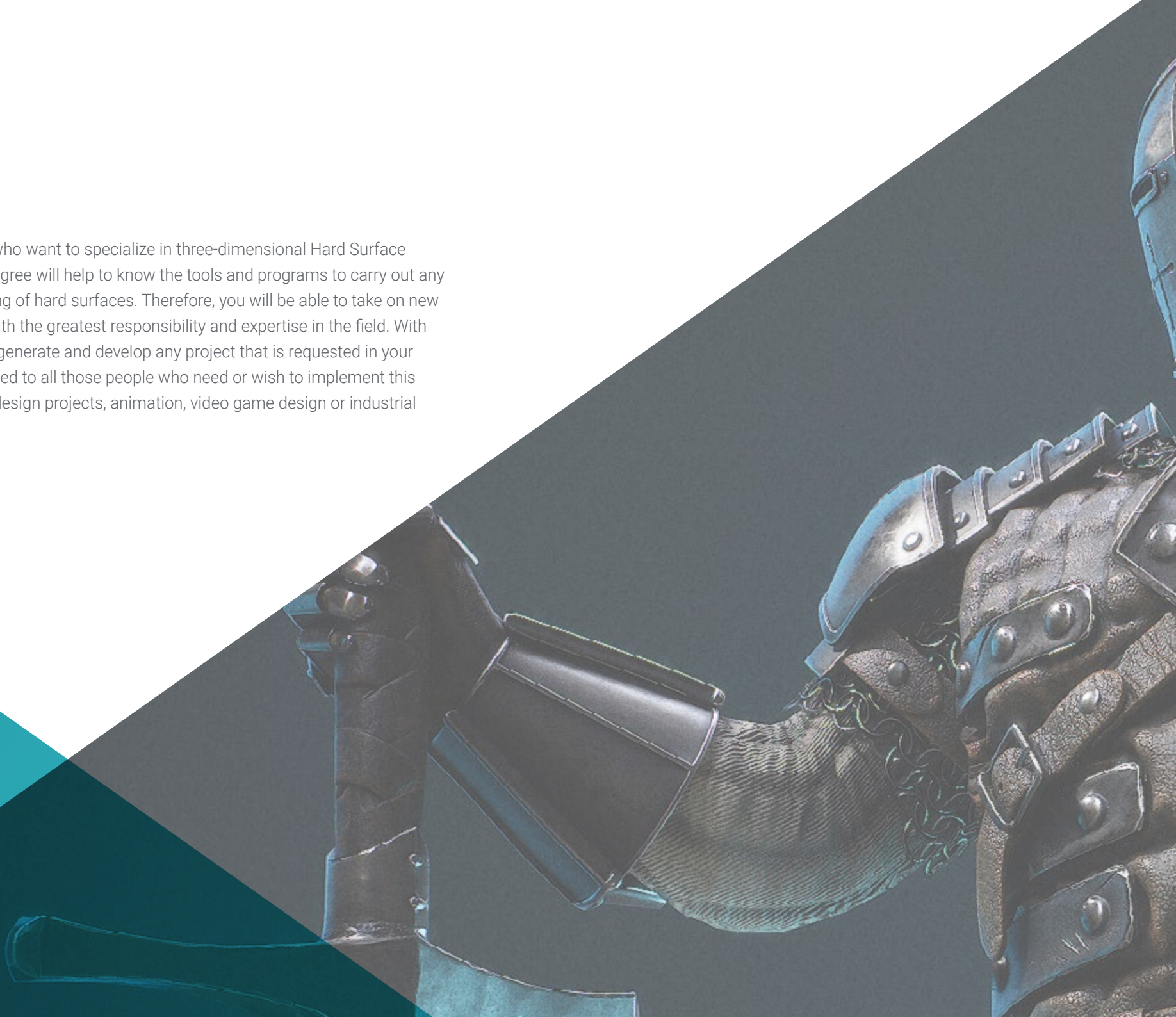
This program develops the skills necessary for professionals who wish to master three-dimensional modeling in Hard Surface"

General Skills

- Master the tools for the design of hard surfaces
- Apply knowledge appropriately to make 3D modelings
- Employ theory to create realistic shapes
- Generate new designs for any industry
- Master all the tools and programs of the profession

Become skilled in the creation of realistic surfaces using different three-dimensional modeling software"

Specific Skills

◆ Develop to the maximum the necessary skills to use different modeling techniques

◆ Be able to make realistic surfaces using different polygonal modeling software

◆ Perfectly use two or more editing forms depending on the modeling objective

◆ Perfectly master the Low Poly 3D Studio Max interface to simplify the mechanical components of any object

◆ Be able to perfectly use Hard Surface parameters to create characters with Sculpt modeling

◆ Be able to carry out a texturing project using different variations of PBR materials

◆ Extrapolate basic shapes to create realistic mechanical models

04
Course Management

With a management and teaching staff made up of professionals of the highest level, this program has been designed thanks to their expertise. They are interested in providing the most current and cutting-edge content in the design sector. This way, the student learns autonomously, but always accompanied, to make different surfaces regardless of the field in which they specialize, completing their studies in a sector of great demand at an international level.
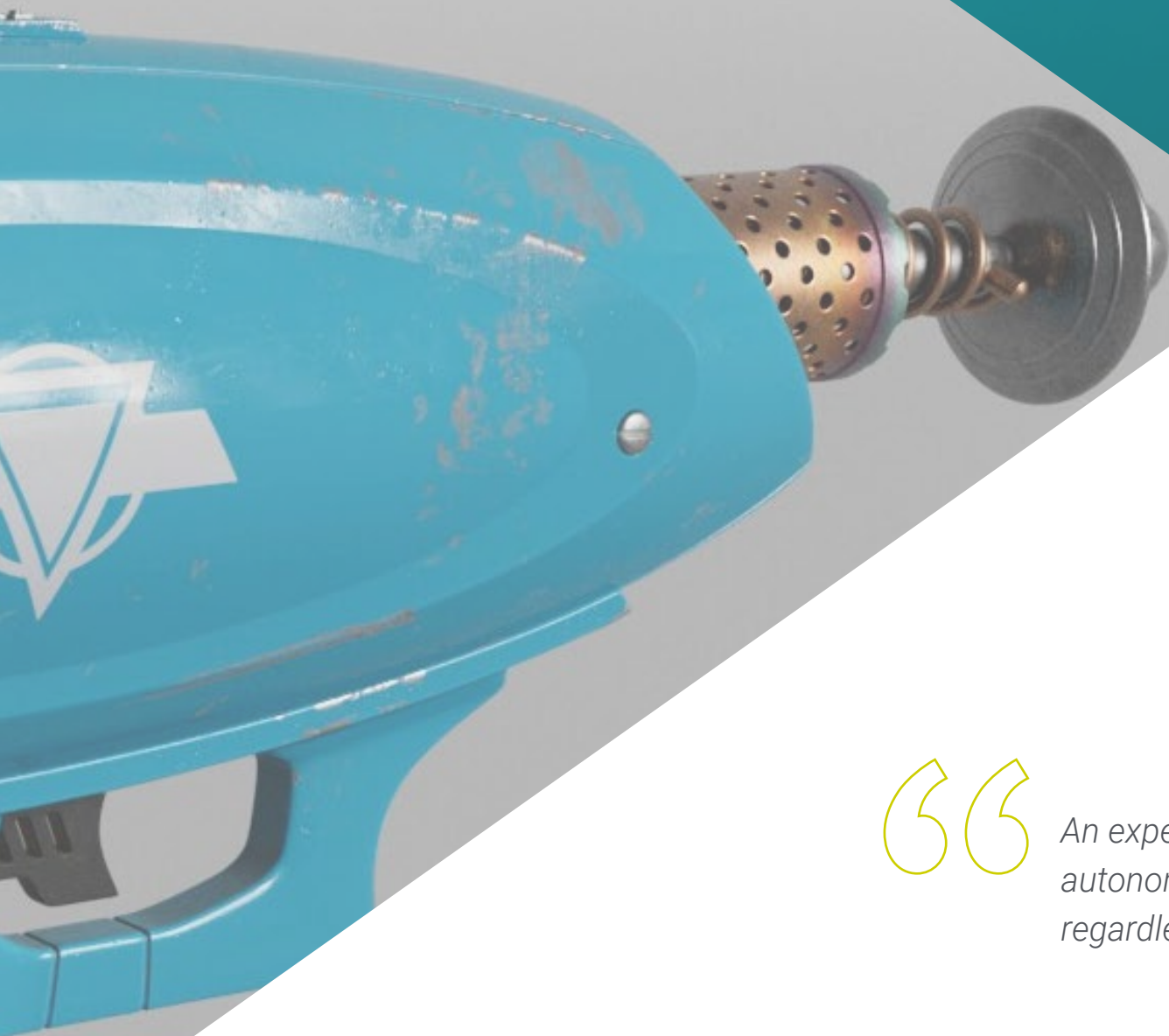
An expert teaching staff will help you learn autonomously to make different surfaces regardless of the field in which they specialize"

Management

Mr. Salvo Bustos, Gabriel Agustín

- 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
- 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

05
Structure and Content

This Professional Master includes all the knowledge and methods that the student needs to tackle any hard texture modeling project. The content of the 10 topics that make up this syllabus is structured and elaborated following the guidelines of an excellent teaching staff, supported by numerous examples to facilitate the consolidation of knowledge.

With a perfectly structured content, in 10 sections you will acquire all the necessary knowledge and tools to face new professional challenges in three-dimensional Hard Surface modeling"

Module 1. Study of Figure and Shape

1.1. The Geometric Figure
- 1.1.1. Types of Geometrical Figures
- 1.1.2. Basic Geometric Constructions
- 1.1.3. Geometric Transformations on the Plane

1.2. Polygons
- 1.2.1. Triangles
- 1.2.2. Quadrilaterals
- 1.2.3. Regular Polygons

1.3. Axonometric System
- 1.3.1. System Fundamentals
- 1.3.2. Types of Orthogonal Axonometry
- 1.3.3. Sketches

1.4. Three-Dimensional Drawing
- 1.4.1. Perspective and Third Dimension
- 1.4.2. Essential Elements of Drawing
- 1.4.3. Perspectives

1.5. Technical Drawing
- 1.5.1. Basic Notions
- 1.5.2. Disposition of Views
- 1.5.3. Cuts

1.6. Fundamentals of Mechanical Elements I
- 1.6.1. Axis
- 1.6.2. Joints and Bolts
- 1.6.3. Springs

1.7. Fundamentals of Mechanical Elements II
- 1.7.1. Bearings
- 1.7.2. Gears
- 1.7.3. Flexible Mechanical Elements

1.8. Laws of Symmetry
- 1.8.1. Translation, Rotation, Reflection, Extension
- 1.8.2. Touch, Overlay, Subtract, Intersect, Join
- 1.8.3. Combined Laws

1.9. Form Analysis
- 1.9.1. Form and Function
- 1.9.2. Mechanical Form
- 1.9.3. Types of Shapes

1.10. Topological Analysis
- 1.10.1. Morphogenesis
- 1.10.2. Composition
- 1.10.3. Morphology and Topology

Module 2. Hard Surface Modeling

2.1. Hard Surface Modeling
- 2.1.1. Topology Control
- 2.1.2. Function Communication
- 2.1.3. Speed and Efficiency

2.2. Hard Surface I
- 2.2.1. Hard Surface
- 2.2.2. Development
- 2.2.3. Structure

2.3. Hard Surface II
- 2.3.1. Applications
- 2.3.2. Physical Industry
- 2.3.3. Virtual Industry

2.4. Types of Modeling
- 2.4.1. Technical Modeling / Nurbs
- 2.4.2. Polygonal Modeling
- 2.4.3. Sculpt Modeling

2.5. Deep Hard Surface Modeling
- 2.5.1. Profiles
- 2.5.2. Topology and Edge Flow
- 2.5.3. Mesh Resolution

2.6. Nurbs Modeling
- 2.6.1. Dots, Lines, Polylines, Curves
- 2.6.2. Surfaces
- 2.6.3. 3D Geometry

Module 3. Technical Modeling in Rhino

Module 4. Modeling Techniques and their Application in Rhino

4.1. Techniques
- 4.1.1. Support Intersection
- 4.1.2. Creation of a Space Helmet
- 4.1.3. Pipelines

4.2. Application I
- 4.2.1. Creating a Car Tire
- 4.2.2. Creating a Tire
- 4.2.3. Modeling a Watch

4.3. Basic Techniques II
- 4.3.1. Use of Isocurves and Edges for Modeling
- 4.3.2. Making Apertures in the Geometry
- 4.3.3. Working with Hinges

4.4. Application II
- 4.4.1. Creation of a Turbine
- 4.4.2. Creation of Air Inlets
- 4.4.3. Tips for Imitating Edge Thickness

4.5. Data Science
- 4.5.1. Tips for Using Mirror Symmetry
- 4.5.2. Use of Fillets
- 4.5.3. Use of Trims

4.6. Mechanical Applications
- 4.6.1. Creating Gears
- 4.6.2. Pulley Construction
- 4.6.3. Construction of a Shock Absorber

4.7. File Import and Export
- 4.7.1. Send Rhino Files
- 4.7.2. Export Rhino Files
- 4.7.3. Import to Rhino from Illustrator

4.8. Analysis Tools I
- 4.8.1. Graphical Curvature Analysis Tool
- 4.8.2. Curve Continuity Analysis
- 4.8.3. Curve Analysis Problems and Solutions

4.9. Analysis Tools II
- 4.9.1. Surface Directional Analysis Tool
- 4.9.2. Environment Surface Mapping Analysis Tool
- 4.9.3. Edge Display Analysis Tool

4.10. Strategies
- 4.10.1. Construction Strategies
- 4.10.2. Surface per Curve Grid
- 4.10.3. Working with Blueprints

Module 5. Advanced Modeling in Rhino

5.1. Motorcycle Modeling
- 5.1.1. Importing Reference Images
- 5.1.2. Modeling of Rear Tire
- 5.1.3. Modeling of Rear Rim

5.2. Mechanical Components of Rear Axle
- 5.2.1. Creating the Braking System
- 5.2.2. Building the Transmission Chain
- 5.2.3. Modeling the Chain Cover

5.3. Engine Modeling
- 5.3.1. Creation of the Body
- 5.3.2. Adding Mechanical Elements
- 5.3.3. Incorporating Technical Details

5.4. Modeling the Main Deck
- 5.4.1. Modeling Curves and Surfaces
- 5.4.2. Modeling the Deck
- 5.4.3. Cutting the Frame

5.5. Modeling the Upper Area
- 5.5.1. Building the Seat
- 5.5.2. Creating Front End Details
- 5.5.3. Creating Back End Details

5.6. Functional Parts
- 5.6.1. Gasoline Tank
- 5.6.2. Rear Lights
- 5.6.3. Front Lights

Module 6. Polygonal Modeling in 3D Studio Max

Module 7. Advanced Polygonal Modeling in 3D Studio Max

7.1. Sci-Fi Spacecraft Modeling
  7.1.1. Creating our Workspace
  7.1.2. Starting with the Main Body
  7.1.3. Configuration for the Wings
7.2. The Cabin
  7.2.1. Development of the Cabin Area
  7.2.2. Modeling the Control Panel
  7.2.3. Adding Details
7.3. The Fuselage
  7.3.1. Defining Components
  7.3.2. Adjusting Minor Components
  7.3.3. Developing the Underbody Panel
7.4. The Wings
  7.4.1. Creation of the Main Wings
  7.4.2. Incorporation of the Tail
  7.4.3. Adding Inserts for the Ailerons
7.5. Main Body
  7.5.1. Separation of Parts into Components
  7.5.2. Creating Additional Panels
  7.5.3. Incorporating the Spring Doors
7.6. The Engines
  7.6.1. Creating the Space for the Engines
  7.6.2. Building the Turbines
  7.6.3. Adding the Exhaust
7.7. Adding Details
  7.7.1. Lateral Components
  7.7.2. Characteristic Components
  7.7.3. Refining General Components
7.8. Bonus I - Creation of the Pilot's Helmet
  7.8.1. Head Block
  7.8.2. Detail Refinements
  7.8.3. Helmet Neck Modeling

7.9. Bonus II – Creation of the Pilot's Helmet
  7.9.1. Helmet Neck Refinements
  7.9.2. Steps for Final Details
  7.9.3. Mesh Finishing
7.10. Bonus III – Creation of a Co-Pilot Robot
  7.10.1. Development of the Shapes
  7.10.2. Adding Details
  7.10.3. Supporting Edges for Subdivision

Module 8. Low Poly 3D Studio Max Modeling

8.1. Heavy Machinery Vehicle Modeling
  8.1.1. Creation of the Volumetric Model
  8.1.2. Volumetric Modeling of the Crawler Tracks
  8.1.3. Volumetric Construction of the Shovel
8.2. Incorporating Different Components
  8.2.1. Cab Volumetry
  8.2.2. Volumetry of the Mechanical Arm
  8.2.3. Volumetry of the Mechanical Shovel Sword
8.3. Adding Subcomponents
  8.3.1. Creating Shovel Teeth
  8.3.2. Adding the Hydraulic Piston
  8.3.3. Connecting Subcomponents
8.4. Incorporating Details to Volumetries I
  8.4.1. Creating Caterpillars
  8.4.2. Incorporating Track Bearings
  8.4.3. Defining the Track Housing
8.5. Incorporating Details to Volumetrics II
  8.5.1. Chassis Subcomponents
  8.5.2. Bearing Covers
  8.5.3. Adding Parts Cuts
8.6. Incorporating Details to Volumetrics III
  8.6.1. Creating Radiators
  8.6.2. Adding the Hydraulic Arm Base
  8.6.3. Creating the Exhaust Pipes

Module 9. Hard Surface Modeling for Characters

Module 10. Texture Creation for Hard Surface

Take a turn in your professional career and develop yourself in a field that is highly demanded by the market in this sector"

06
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 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.

Certificate

The Master's Degree in Hard Surface 3D Modeling guarantees students, in addition to the most rigorous and up-to-date education, access to a Master's Degree issued by TECH Global University.

tech

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 **Master's Degree diploma in 3D Hard Surface 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: **Master's Degree in 3D Hard Surface Modeling**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**

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tech global university

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

Master's Degree in 3D Hard Surface Modeling

This is a program of 1,500 hours of duration equivalent to 60 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

Master's Degree in 3D Hard Surface Modeling

General Structure of the Syllabus

Subject type	ECTS
Compulsory (CO)	60
Optional (OP)	0
External Work Placement (WP)	0
Master's Degree Thesis (MDT)	0
Total 60	

General Structure of the Syllabus

Year	Subject	ECTS	Type
1º	Study of Figure and Shape	6	CO
1º	Hard Surface Modeling	6	CO
1º	Technical Modeling in Rhino	6	CO
1º	Modeling Techniques and their Application in Rhino	6	CO
1º	Advanced Modeling in Rhino	6	CO
1º	Polygonal Modeling in 3D Studio Max	6	CO
1º	Advanced Polygonal Modeling in 3D Studio Max	6	CO
1º	Low Poly 3D Studio Max Modeling	6	CO
1º	Hard Surface Modeling for Characters	6	CO
1º	Texture Creation for Hard Surface	6	CO

Dr. Pedro Navarro Illana
Rector

tech global university

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*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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- » Exams: **online**

Master's Degree

3D Hard Surface Modeling

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