

# Postgraduate Certificate

## Polygonal Modeling in 3D Studio Max



## Postgraduate Certificate Polygonal Modeling in 3D Studio Max

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

Website: [www.techtute.com/in/information-technology/postgraduate-certificate/polygonal-modeling-3d-studio-max](http://www.techtute.com/in/information-technology/postgraduate-certificate/polygonal-modeling-3d-studio-max)

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# 01

# Introduction

The 3D Studio Max three-dimensional polygonal modeling software is a cutting-edge tool used for design for various purposes: animation and video game design, infoarchitecture, planning and layout, and several others that have a place in today's technological society. This has also increased the need for professionals who are experts in the use of this software. This educational program is focused on managing all its functionalities in the most comfortable way: in a completely online format, which also allows to make compatible other personal and professional projects. Likewise, the teaching staff will accompany the student throughout the process and is made up of the best professionals and experts of the highest prestige.





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*This online program is the most practical and convenient way to learn polygonal modeling with 3ds Max in the academic market"*

This Postgraduate Certificate designed by TECH Technological University is intended for those who wish to have extensive knowledge in the use of the leading 3D Studio Max software, as well as to exploit all its settings and possibilities of working with 3D shapes and figures. This prepares the graduate student to generate designs for different industries, learn a tool that concerns the profession of 3D modeler and acquire skills for the development of textures and FX of 3D models.

The syllabus focuses on delving into the uses and applications of 3ds Max, as well as working with customized configurations. In addition, it also focuses on mesh smoothing, devising geometries through various methods and developing an understanding of how a mesh behaves. Finally, it delves into the application of object transformation techniques and knowledge of the creation of UV maps.

This online Postgraduate Certificate in Polygonal Modeling in 3D Studio Max, is taught entirely online and provides access to multimedia content from anywhere and at any time to make it easier to reconcile learning with work and professional routine. In addition, the student will be supported by a teaching team made up of experts and professionals of the highest prestige in the sector.

This **Postgraduate Certificate in Polygonal Modeling in 3D Max** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ The development of case studies presented by experts in Engineering focused on Polygonal Modeling in 3D Studio Max
- ♦ The graphic, schematic, and practical contents with which they are created, provide scientific and 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



*This Postgraduate Certificate offers the keys to get into 3D polygonal modeling for video games"*

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*In just 6 weeks and totally online, you will be able to master 3D Studio Max and apply it to new professional challenges”*

The program’s teaching staff includes professionals from the sector who contribute their work experience to this educational 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. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

*Learn the different configurations and utilities that 3ds Max offers in three-dimensional modeling.*

*Take this online educational program and become an expert in the state-of-the-art 3ds Max software.*





# 02 Objectives

This Postgraduate Certificate aims to convert the student in a solvent user of 3ds Max, focused on the development of shapes and figures for any field that is required. In addition, students will acquire skills and extensive knowledge of the use of this software, understand in depth how mesh smoothing works and develop knowledge of how these behave. You will also work on custom program settings, as well as editing and transforming geometry, organizing scenes and learning to model with 3ds Max.





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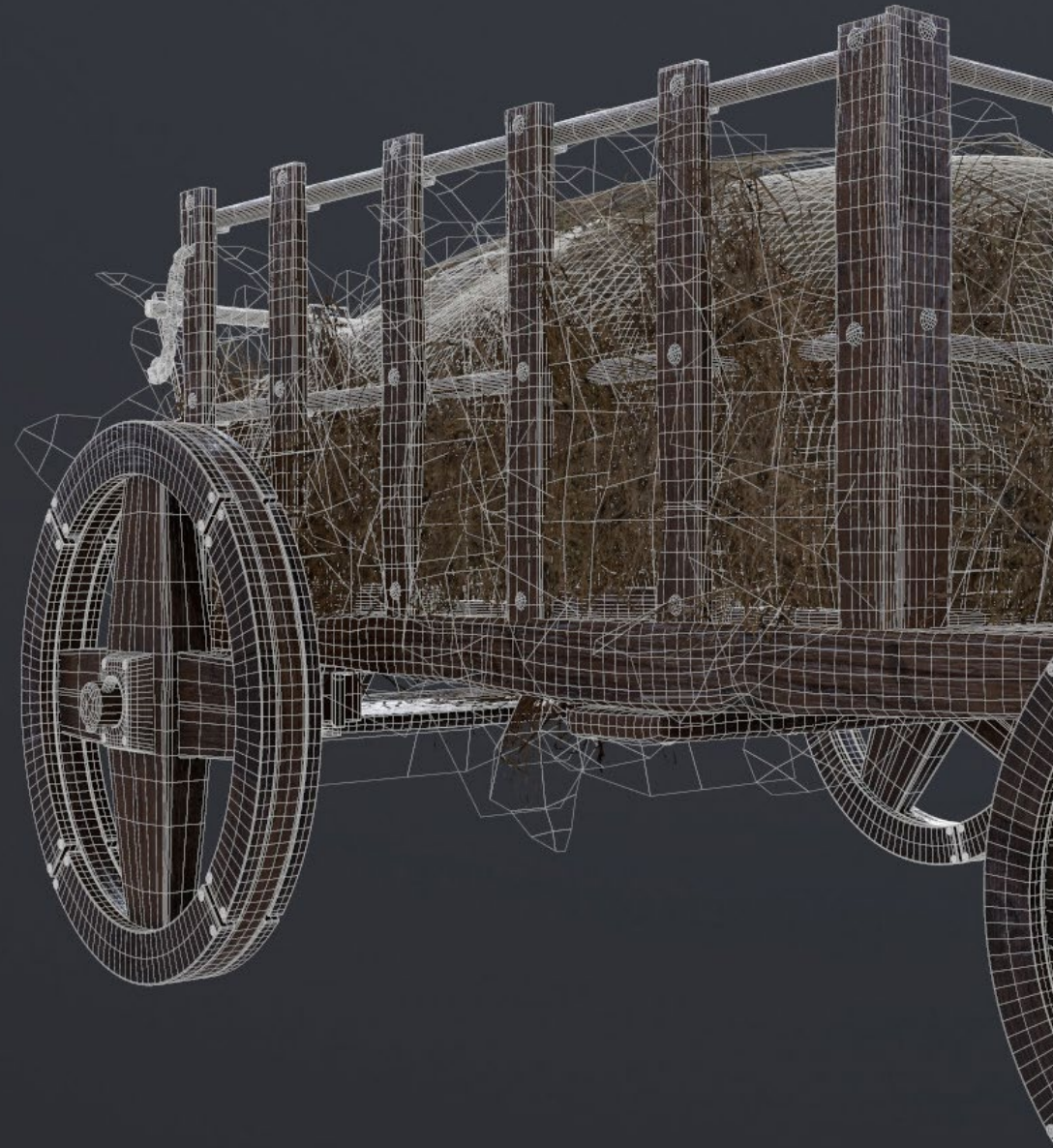
*Graduates will be proficient in the creation of shapes and figures with 3ds Max”*



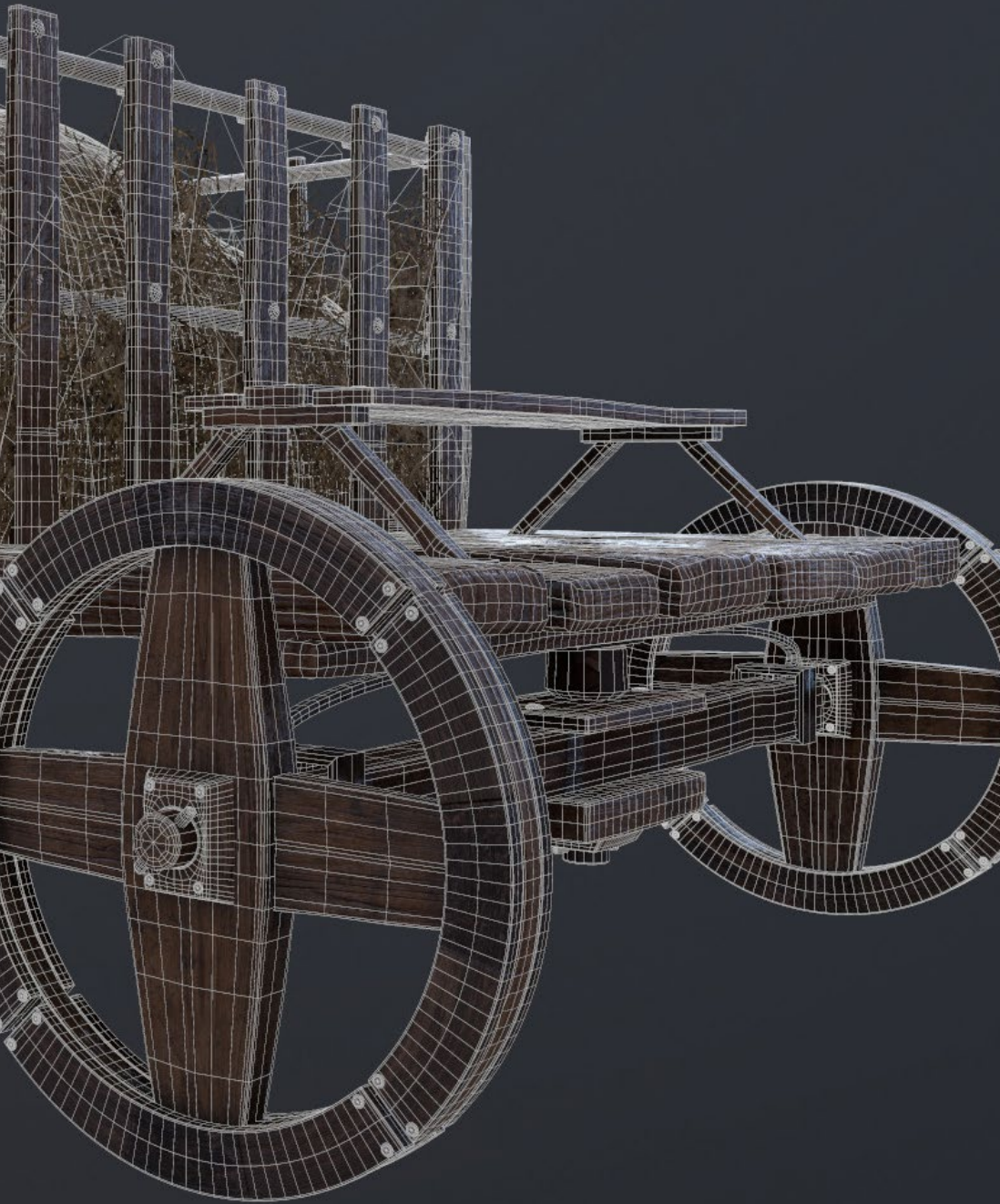
## General Objectives

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- ♦ 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
- ♦ Know all the tools involved in the 3D modeling profession
- ♦ Acquire skills for the development of textures and FX of 3D models







### Specific Objectives

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- ◆ 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

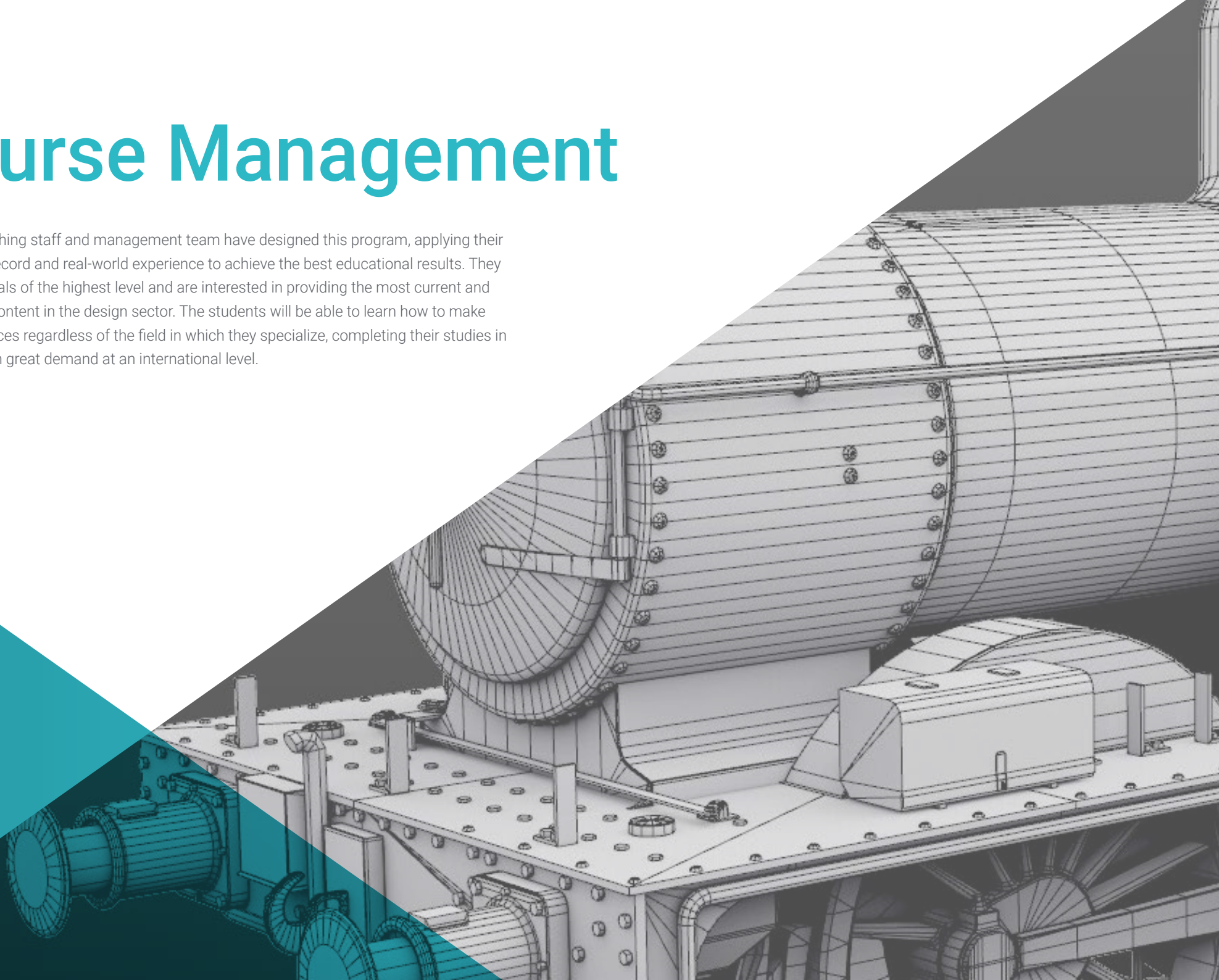


*Understand in depth how mesh smoothing works, as well as develop knowledge of how meshes behave, thanks to this online Postgraduate Certificate"*

03

# Course Management

An expert teaching staff and management team have designed this program, applying their proven track record and real-world experience to achieve the best educational results. They are professionals of the highest level and are interested in providing the most current and cutting-edge content in the design sector. The students will be able to learn how to make different surfaces regardless of the field in which they specialize, completing their studies in a field that is in great demand at an international level.





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*The students will be able to learn how to make different surfaces regardless of the field in which they specialize, completing their studies in a field that is in great demand at an international level”*

## 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







# 04

## Structure and Content

The Postgraduate Certificate in Polygonal Modeling in 3D Studio Max has been designed for the student to progressively delve deeper into the content and first become familiar with the concepts and utilities. Subsequently, the specific subject matter is further developed based on the need to introduce these contents, following the specificity of a sector and the requirements proposed by the teaching team. In this way, the Postgraduate Certificate provides students with the necessary tools to put learning into practice, as well as the necessary knowledge in case they would like to continue advancing within the same program.



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*Develop your critical and professional sense thanks to this Postgraduate Certificate designed for you to become a solvent user in 3ds Max"*

## Module 1. Polygonal Modeling in 3D Studio Max

- 1.1. 3D Studio Max
  - 1.1.1. 3ds Max Interface
  - 1.1.2. Custom Settings
  - 1.1.3. Modeling with Primitives and Deformers
- 1.2. Reference Modeling
  - 1.2.1. Reference Image Creation
  - 1.2.2. Hard Surface Smoothing
  - 1.2.3. Scene Organization
- 1.3. High Resolution Meshing
  - 1.3.1. Basic Smoothed Modeling and Smoothing Groups
  - 1.3.2. Modeling with Extrusions and Bevels
  - 1.3.3. Using the Turbosmooth Modifier
- 1.4. Spline Modeling
  - 1.4.1. Modifying Curvatures
  - 1.4.2. Configuring Polygon Faces
  - 1.4.3. Extruding and Spherizing
- 1.5. Creating Complex Shapes
  - 1.5.1. Setting Up Components and Work Grid
  - 1.5.2. Duplicating and Welding Components
  - 1.5.3. Cleaning Polygons and Smoothing
- 1.6. Modeling With Edge Cuts
  - 1.6.1. Creating and Positioning the Template
  - 1.6.2. Making Cuts and Cleaning Topology
  - 1.6.3. Extruding Shapes and Creating Folds
- 1.7. Modeling from Low Poly Model
  - 1.7.1. Starting with the Basic Shape and Adding Chamfers
  - 1.7.2. Adding Subdivisions and Generating Edges
  - 1.7.3. Cutting, Welding and Detailing







- 1.8. Edit Poly I Modifier
  - 1.8.1. Workflows
  - 1.8.2. Interface
  - 1.8.3. Sub Objects
- 1.9. Creating Compounds Objects
  - 1.9.1. Morph, Scatter, Conform and Connect Compound objects
  - 1.9.2. BlobMesh, ShapeMerge and Boolean Compound Objects
  - 1.9.3. Loft, Mesher and Proboolean Compound Objects
- 1.10. Techniques and Strategies to Create UVs
  - 1.10.1. Simple Geometries and Arc-Like Geometries
  - 1.10.2. Hard Surfaces
  - 1.10.3. Examples and Applications



*Don't wait any longer and enroll in this online program: discover in 6 weeks all the advantages of modeling with 3ds Max"*

# 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.





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*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.

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*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.





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.



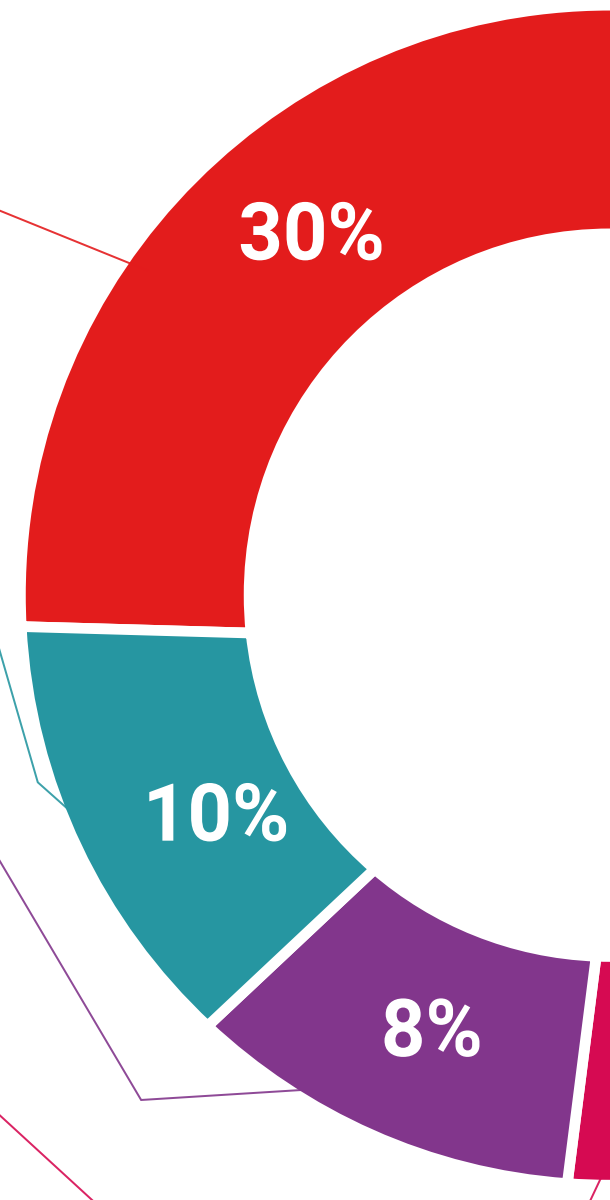
#### Practising Skills and Abilities

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.

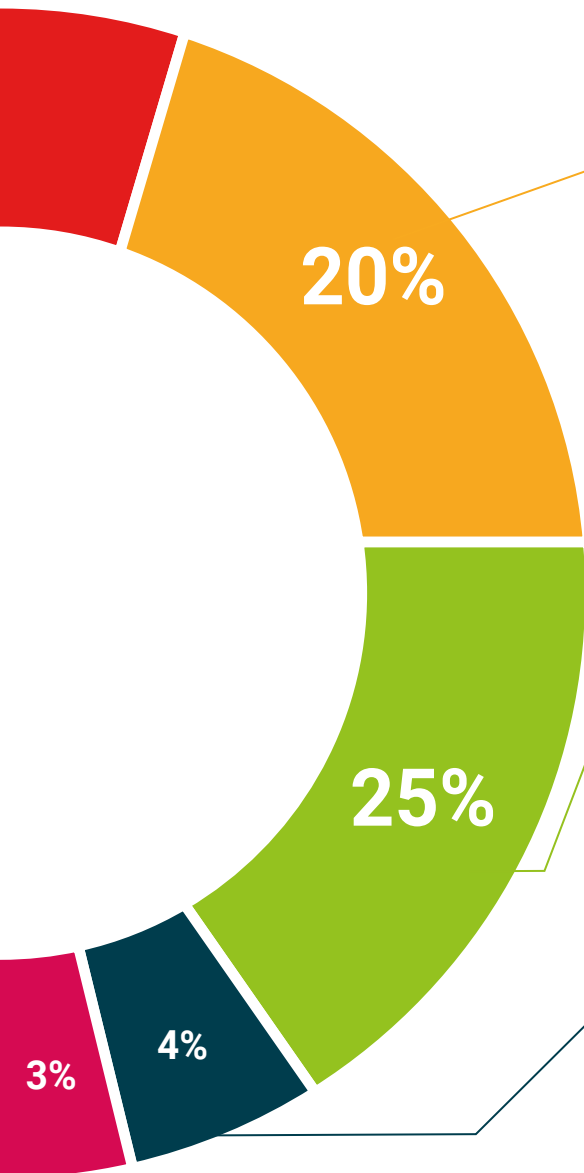


#### Additional Reading

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.







#### 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 Polygonal Modeling in 3D Studio Max guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Technological University.



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*Successfully complete this program  
and receive your university qualification  
without having to travel or fill out  
laborious paperwork”*

This **Postgraduate Certificate in Polygonal Modeling in 3D Studio Max** 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 Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: **Postgraduate Certificate in Polygonal Modeling in 3D Studio Max**

Official N° of Hours: **150 h.**





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- » Schedule: at your own pace
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