Postgraduate Certificate

Applications from Modeling to 3D Printing, VR, AR and Photogrammetry

tech technological university

Postgraduate Certificate

Applications from Modeling to 3D Printing, VR, AR and Photogrammetry

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

Website: **www.techtitute.com/pk/videogames/postgraduate-certificate/applications-modeling-3d-printing-vr-ar-photogrammetry**

Index

01
Introduction

The application of virtual or augmented reality technologies in entertainment projects, such as video games, is revolutionizing the world and is increasingly in demand. Bringing characters, customized models and any kind of prototypes to life is possible and creates greater expectations for companies that want to impress their users with new creations. Therefore, it is important for professionals to practise and keep up to date with such a competitive and changing world; this is how this program arises, where all the necessary knowledge to master the applications of modeling to printing in various formats such as 3D, VR, AR and photogrammetry will be taught. All this through a learning system 100% online and led by experts, who will make you live the best study experience.

"Are you ready for what's ahead? Start specializing now with the most advanced 3D printing, VR, AR and photogrammetry techniques"

3D modeling has opened up infinite possibilities of creation in different types of industry. It has been used in animation, video games or infoarchitecture. Therefore, developing new skills is essential for the professional who wants to evolve within the current and future labor market, where the virtual is becoming increasingly important.

The graduate of the Postgraduate Certificate in Applications from Modeling to 3D Printing, VR, AR and Photogrammetry, will know how to implement the latest in CGI. Import your projects in the correct formats and you will master the polygon reduction and projection tools. Obtaining the best results with low polygonization.

Likewise, you will be able to create efficient and low-cost systems by making insets so that figures can be printed and, at the same time, serialized by means of molds. You will have knowledge of Agisoft Metashape software. Handling, in addition, models that require cleaning and polygon reduction treatment with Decimation Master. And having visible models in classic 3D software, 3D printing or interactive visualizations in Realtime.

Undoubtedly, an excellent academic opportunity for today's professional, thanks to the best content selected by experts, supported by an advanced online study system and based on *Relearning,* the most avant-garde methodology promoted by TECH. Therefore, it allows the student to integrate the knowledge in an optimal way and successfully achieve the learning results, in just 6 weeks. In addition, you can connect from any device and place, which gives a seal of quality and permeability to the program.

This **Postgraduate Certificate in Applications from Modeling to 3D Printing, VR, AR and Photogrammetry** contains the most complete and up-to-date program on the market. The most important features include:

- The development of practical cases presented by experts in 3D modeling and digital sculpture
- 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 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

Self-assessment is key in TECH's learning system"

"Learn how to implement forms of dynamic web programming, the latest in CGI in your developments"

With this Postgraduate Certificate you will be able to generate 3D models through photography, using Agisoft Metashape software.

The best content selected by renowned teachers. Available from day one on the most modern and secure study platform.
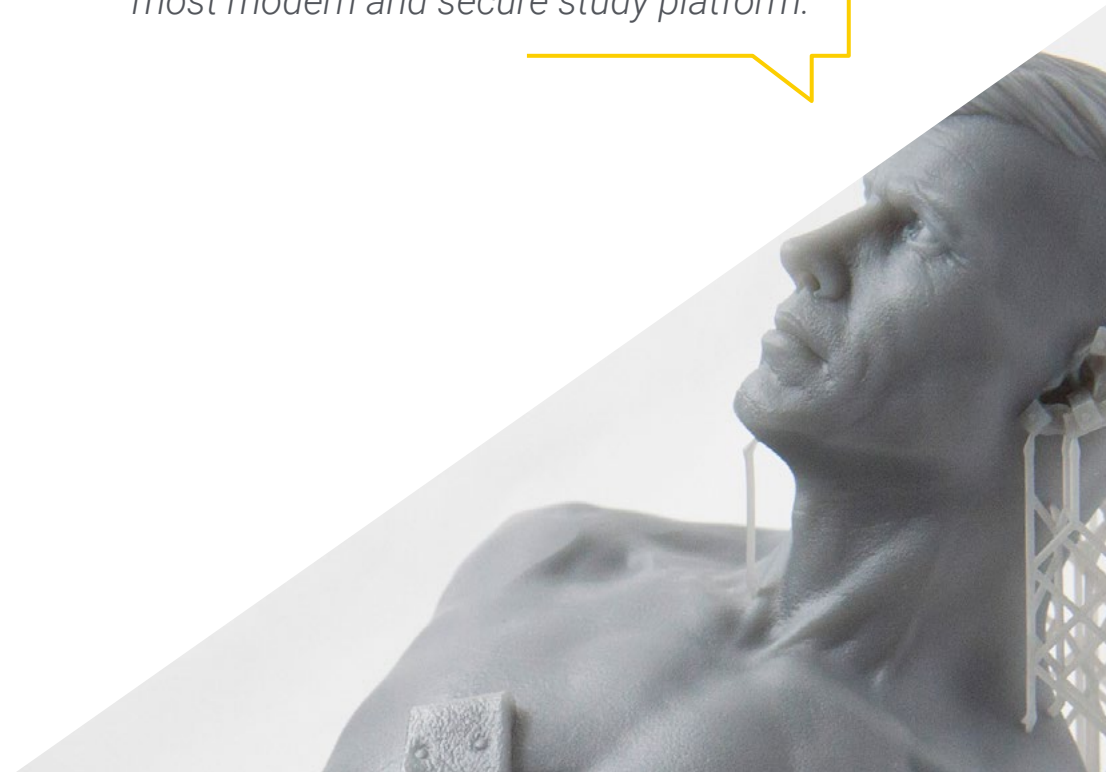
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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.

02
Objectives

Part of the purpose of this program is to show the employability of Applications of Modeling to 3D Printing, VR, AR and Photogrammetry in the present and future world of the video game industry. As well as teaching the professionals the latest techniques and tools that allow them to generate their own models in an optimal way. Accompanied by a specialized teaching team that will guide you throughout your learning process, through a secure and modern online platform that combines the best technology and methodology.

The online format of this program allows you to balance your day-to-day life, with achievable study goals in 6 weeks"

General Objectives

- Apply modeling, texturing, lighting and rendering processes accurately.
- Implement development technologies running CGI
- Learn how to import models into formats for 3D printing, VR and AR
- Employ photogrammetry to generate 3D models
- Understand the need for good topology at all levels of development and production
- Understand current film and video game industry systems to deliver great results

Specific Objectives

- Use organic modeling for the preparation of models for 3D printing and milling
- Generate 3D models through photography and their treatment to integrate them in 3D printing, video games and cinema
- Sculpt in virtual reality in a free, creative and interactive way using Quill and its import into Arnold, Unreal and Unity
- Visualize work in real environments using augmented reality

With this program, you will learn about new trends in the creation of 3D models using photogrammetry"

03
Course Management

In order to design and teach this Postgraduate Certificate in Applications from Modeling to 3D Printing, VR, AR and Photogrammetry, TECH Technological University has chosen the most specialized teachers in the discipline of 3D modeling and Concept Art, who have exhaustively selected each of the topics of study, and will be accompanying the student throughout the learning process. Through a 100% online environment and the most avant-garde, secure and dynamic study platform.

For your education, TECH chooses the best specialists in each subject of study and with an outstanding professional background"

Management

Mr. Sequeros Rodríguez, Salvador

- Freelance 2D/3D modeler and generalist
- *Concept Art* and 3D Models for Slicecore, Chicago
- Videomapping and modeling Rodrigo Tamariz, Valladolid
- Professor of Higher-Level Training Cycle in 3D Animation. Higher Education School of Image and Sound ESISV, Valladolid
- Professor of Higher-Level Training Cycle GFGS in 3D Animation. European Institute of Design IED Madrid
- 3D modeling for the falleros Vicente Martinez and Loren Fandos, Castellón
- Degree in Fine Arts at the University of Salamanca (specializing in Design and Sculpture).
- Master's Degree in Computer Graphics, Games and Virtual Reality. URJC University. Madrid

04
Structure and Content

The content of this Postgraduate Certificate has been designed to be presented in an accessible way to the professional, who will be able to consult it from the virtual campus as many times as necessary, from the first day. The structure of the topics allows to combine the practical part with the theoretical part and to speed up the assimilation of contents due to the innovative study methodology implemented. The variety of multimedia resources and presentation of exercises will allow students to give free rein to their creativity.
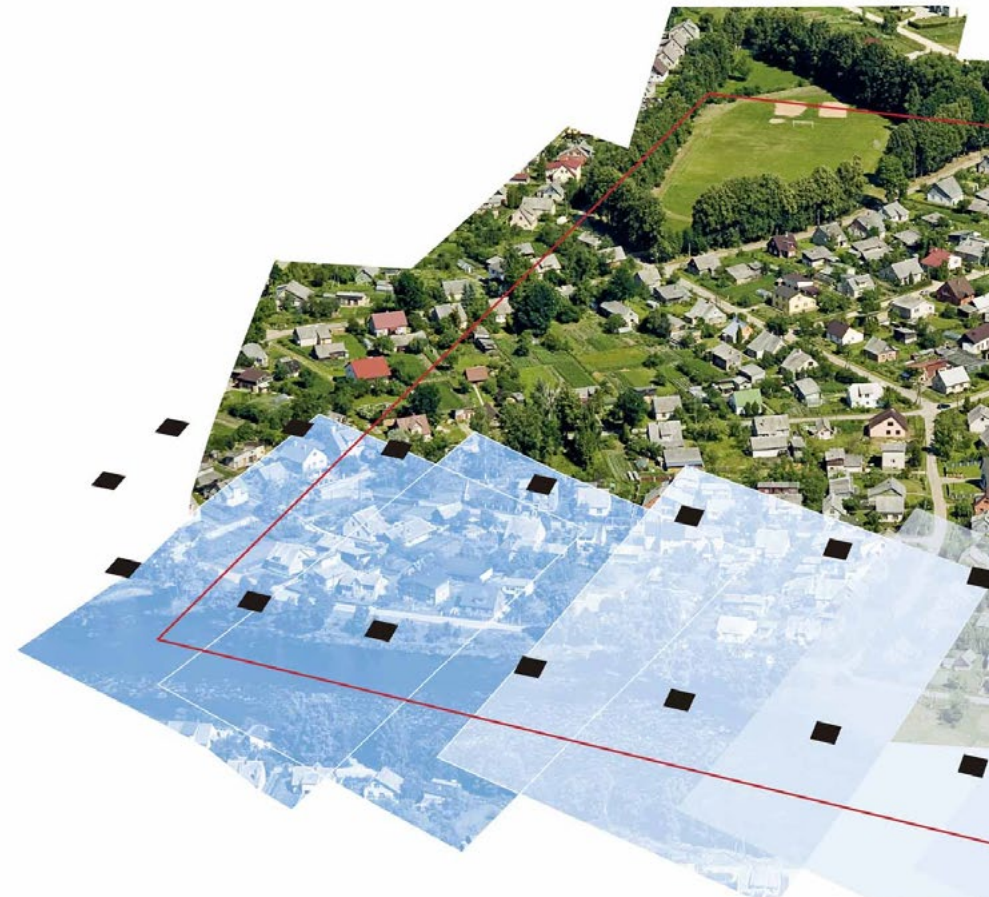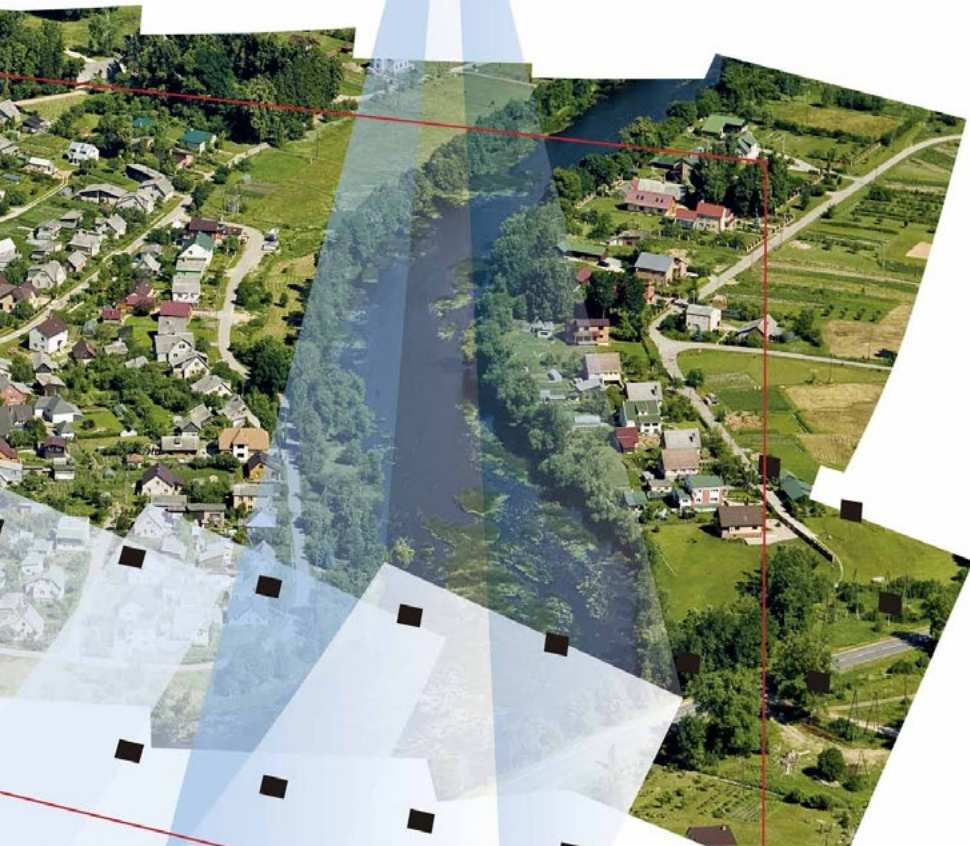
The variety of multimedia resources available in this program allows you to pause, review, replay and share each session as many times as you want"

Module 1. Applications from Modeling to 3D Printing, VR, AR and Photogrammetry

You will have forums, meeting rooms and private chat sessions with your teachers, as well as the availability of downloading the syllabus for consultation without an Internet connection"

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"
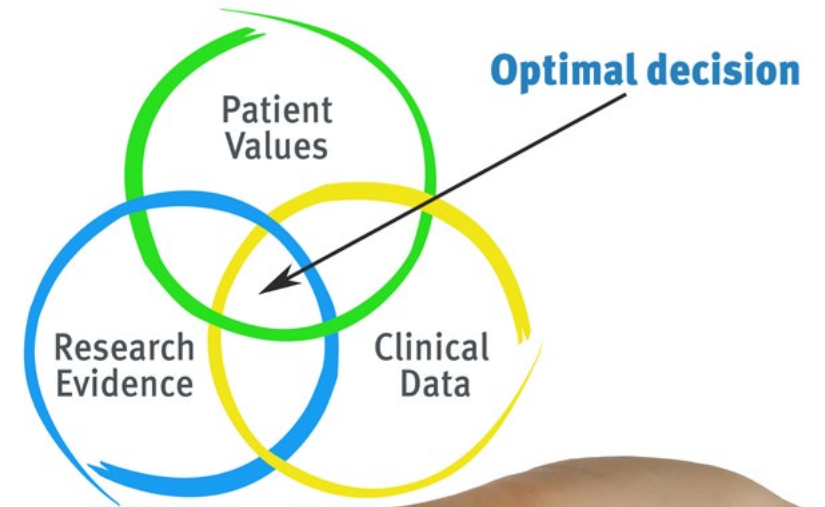
You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

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. You will have to combine all your knowledge, and research, argue, and defend your ideas and decisions.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

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.

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 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.

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 Postgraduate Certificate in Applications from Modeling to 3D Printing, VR, AR and Photogrammetry guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate 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 Certificate in Applications from Modeling to 3D Printing, VR, AR and Photogrammetry** contains the most complete and up-to-date program on the market.

AAfter 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 Applications from Modeling to 3D Printing, VR, AR and Photogrammetry**

Official Nº of Hours: **150 h.**

tech technological university

Awards the following
CERTIFICATE
to

Mr./Ms. _____, with identification number _____.
For having passed and accredited the following program

POSTGRADUATE CERTIFICATE
in

Applications from Modeling to 3D Printing, VR, AR and Photogrammetry

This is a qualification awarded by this University, equivalent to 150 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.

Postgraduate Certificate
Applications from Modeling
to 3D Printing, VR, AR
and Photogrammetry

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

Postgraduate Certificate
Applications from Modeling to 3D Printing, VR, AR and Photogrammetry

tech technological university