Professional Master's Degree
3D Animation and Virtual Reality

tech global university

Professional Master's Degree
3D Animation and
Virtual Reality

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

Website: **www.techtitute.com/us/design/professional-master-degree/master-3d-animation-virtual-reality**

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01
Introduction

Among the professional opportunities that design offers is animation, a field that is currently in great demand in the digital and videogame sectors. However, it is a field that, with technological advances, has undergone substantial evolution, implementing increasingly complex and specific strategies and tools in its practice. For this reason, TECH and its team of experts have considered it necessary to develop a program that allows more graduates to specialize in this subject, adding skills of a true creative expert in the creation of virtual reality and 3D projects to their profile. All this through a 100% online, multidisciplinary, dynamic and intensive program that will elevate your talent to the top of the industry in just 12 months.

A forward-looking program designed for creative people looking to succeed in the 3D Animation and Virtual Reality sector"

Virtual reality and 3D animation are here to stay, at least until technology and digital development discover a strategy that offers more possibilities such as those offered by the creation of increasingly specialized and complex audiovisual projects. For that reason, for any design professional, getting a background in this field can be a unique opportunity to open a path to a successful future in the digital or video game industry.

To do so, you can count on this innovative and intensive program designed by a group of experts in the area, backed by the prestige of TECH Global University. This is a multidisciplinary, immersive and dynamic academic experience through which students will be able to learn the ins and outs of the animation and 3D industry applied to different sectors. In addition, students will delve into the use of the most sophisticated tools for the creation of specific projects, as well as the use of the main creative techniques that are currently showing the best results.

All this through 1,500 hours of the best theoretical, practical and additional content, including detailed videos, research articles, complementary readings, dynamic summaries and self-knowledge exercises, thanks to which you will be able to delve into the different sections of the syllabus in a personalized way. In conclusion: everything you need to become a true expert in less than 12 months and 100% online.

This **Professional Master's Degree in 3D Animation and Virtual Reality** contains the most complete and up-to-date program on the market. The most important features include:

- The development of practical cases presented by Virtual Reality experts
- 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
- Special emphasis on 3D modeling and animation in virtual environments
- 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

It includes the latest and most comprehensive syllabus and the best academic tools to make this Professional Master's Degree a unique and highly empowering experience"

"This program will allow you to perfect your competence in 2D and 3D video game development through the austere knowledge of the main animation systems, materials and shaders"

A program that adapts to your availability, allowing you to access your program from any device with internet connection and without restricted schedules.

You will master 3D Max through the thorough handling of each of its tools. From zero to expert level.

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

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

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise 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 growing demand for professionals in the design sector who master, in addition to digital creative techniques, project management related to 3D animation and virtual reality is what has led TECH to develop this Professional Master's Degree. Therefore, the objective is to provide students with the most exhaustive and austere information that will allow them to adapt their profile to the demand, through expanding their knowledge and specializing their skills.

"A program designed to help you achieve your most ambitious career goals through an austere program that is tailored to today's job market"

General objectives

- Provide specialized knowledge about the 3D industry
- Use 3D Max software to generate different contents
- Propose a series of best practices and organized and professional work.
- Generate specialized knowledge in Virtual Reality
- Determine assets , characters and Virtual Reality integration
- Analyze the importance of audio in video games
- Use the ZBrush program for 3D sculpting
- Develop organic modeling and retopology techniques
- Finalize 3D characters for portfolios
- Animate biped and quadruped 3D characters
- Discover 3D Rigging
- Analyze the importance of the animator's body movement in order to have animation references
- Provide specialized technical knowledge to develop prototypes quickly and efficiently
- Make the most of the potential of Unity and the different technologies associated with video game development
- Develop advanced programming techniques and best practices
- Delve into the development of elements, visual components and systems related to the 3D environment
- Generate particle systems and Shaders to enhance the artistic finish of the game

- Develop immersive environments whose visual components can be optimally managed and executed
- Develop advanced characters for 3D video games
- Use animation systems and other resources as libraries in professional projects
- Prepare projects for proper export
- Apply acquired knowledge to the VR environment
- Adapting the behavior of video game components to VR
- Integrate the designed and implemented content into a complete playable project
- Elaborate the sound identity of a 3D video game project
- Design the appropriate type of audio for the project such as vocals, soundtrack or special sound effects
- Estimate the audio creation effort to work within an appropriate production plan and timing
- Develop the Scrum and Agile methodology applied to video games to manage projects
- Establish a system for calculating effort, in the form of estimates, based on hours
- Generate material to present projects to investors

Specific objectives

Module 1. The 3D Industry

◆ Examine the current state of the 3D industry, as well as its evolution over the last few years

◆ Generate specialized knowledge about the software commonly used within the industry to generate professional 3D content

◆ Determine the steps to develop this type of content through a pipeline adapted to the video game industry

◆ Analyze the most advanced 3D styles, as well as their differences, advantages and disadvantages for subsequent generation

◆ Integrate content developed in both the digital world (video games, VR, etc.) and the real world (AR, MR/XR)

◆ Establish the key points that differentiate a 3D project in the video game industry, cinema, TV series or the world of advertising

◆ Generate professional quality 3D assets using 3D Max and learn how to use the tool

◆ Maintain an organized workspace and maximize the efficiency of time spent generating 3D content

Module 2. Art and 3D in the Video Game Industry

- Examine 3D mesh creation and image editing software
- Analyze the possible problems and resolution in 3D VR projects
- Be able to define the aesthetic line for the generation of the artistic style of a video game
- Determine the reference sites for the search for aesthetics
- Evaluate the time constraints for the development of an artistic style
- Produce *Assets* and integrate them into a scenario
- Create characters and integrate them into a scenario
- Value the importance of audio and sounds of a video game

Module 3. Advanced 3D

- Master the most advanced 3D modeling techniques
- Develop the necessary knowledge for 3D texturing
- Export objects for 3D and Unreal Engine software
- Specialize students in digital sculpture
- Analyze the different digital sculpting techniques
- Research character retopology
- Examine how to pose a character to loosen the 3D model
- Refine our work with advanced high-polygon modeling techniques

Module 4. 3D Animation

- Develop specialized knowledge in the use of 3D animation software
- Determine the similarities and differences between a biped and a quadruped
- Develop several animation cycles
- Internalize Lipsync, Rig Facial
- Analyze the differences between animation made for film and for video games
- Develop customized skeletons
- Master camera and shot composition

Module 5. Unity 3D and Artificial Intelligence Proficiency

- Analyze decision history from the technological point of view of video game evolution
- Plan a sustainable and flexible technological development
- Generate specialized knowledge on Scripting and use of third party Plugins in the development of our content
- Implement physics and animation systems
- Master rapid prototyping and basic shape techniques for structuring scenes and study the proportions of Assets
- Delve into the specific techniques of advanced videogame programming
- Apply the knowledge acquired to develop video games with different technologies such as AR, AI, etc.

Module 6. 2D and 3D Video Game Development

- Learn how to use raster graphic resources to integrate into 3D video games
- Implement interfaces and menus for 3D video games, easy to apply to VR environments
- Create versatile animation systems for professional video games
- Use Shaders and materials to give a professional finish
- Create and configure particle systems
- Use optimized lighting techniques to reduce the impact on game engine performance
- Generate professional quality VFX
- Know the different components to manage the different types of audio in a 3D video game

Module 7. Programming, Mechanics Generation and Video Game Prototyping Techniques

- Work with Low-poly and High-poly models in professional developments under Unity 3D environment
- Implement advanced functionalities and behaviors in video game characters
- Correctly import character animations into the working environment
- Control Ragdoll systems y skeletal meshes
- Master the available resources such as Asset libraries and functionalities and import them into the project configured by students
- Discover the key points of teamwork for technical professionals involved in 3D programming and animation
- Configure the project to export it correctly and ensure that it works correctly

Module 8. VR Immersive Game Development

- Determine the main differences between traditional video games and video games based on VR environments
- Modify interaction systems to adapt them to Virtual Reality
- Manage the physics engine to support player actions performed with VR devices
- Apply the development of UI elements to VR
- Integrate the developed 3D models into the VR scenario
- Configure avatars with the appropriate settings for a VR experience
- Optimize the VR project for its correct execution

Module 9. Professional Audio for 3D VR Video Games

- Analyze the different types of audio styles in video games and industry trends
- Examine methods for studying project documentation to build audio
- Study the main references in order to extract the key points of the sound identity
- Design the complete 3D video game sound identity
- Determine the key aspects of creating the video game soundtrack and sound effects for the project
- Develop the key aspects of working with voice actors and actresses and recording game voices
- Compile video game audio export methods and formats using current technologies
- Generate complete sound libraries to be marketed as professional Asset packs for development studios

Module 10. Video game production and financing

- Determine the differences between production methodologies prior to SCRUM and their evolution to the present day

- Apply Agile thinking to any development without losing project management

- Develop a sustainable framework for the entire team

- Anticipate production HR needs and develop a basic personnel cost estimate

- Conduct prior analysis to obtain key information for communication about the most important values of our project

- Support the project's sales and financing arguments with numbers that demonstrate the project's potential solvency

- Determine the necessary steps to approach Publishers and investors

In-depth knowledge of the 3D industry will enable you to create projects tailored to the most demanding requirements of companies in the animation sector"

03
Skills

By the end of this Professional Master's Degree, professionals will be able to develop and create environments, objects and characters in fully digitized spaces. This is possible thanks to the high level of in-depth teaching with tools such as Unity or Unreal Engine, as well as instruction in efficient rendering and optimization processes to further increase students' performance. All this knowledge is highly valued in the leading companies in the video game industry, so students will be able to broaden both their job prospects and projection.

Your position in the labor market will improve thanks to all the skills you will learn in this Professional Master's Degree"

General skills

- Obtain an in-depth knowledge of the 3D industry applied to video games
- Develop an advanced knowledge of the creation process of specializes 3D animation projects
- Generate Assets and 3D elements
- Create 3D animated elements
- Integrate Unity 3D generated content
- Apply a detailed pipeline tailored to today's industry needs
- Discover different styles of 3D art and their main advantages and disadvantages
- Know what the key factors are when it comes to applying the knowledge acquired to the video game, film and series industries and the world of advertising

Don't hesitate any longer and give that extra quality to your résumé with advanced knowledge in virtual reality and 3D design that you will acquire in this program"

Specific skills

- Master 3D Max
- Organize the workspace in a professional manner and apply a set of best practices, based on the teachers' experience in real companies
- Create interactive 3D scenarios, where you will be able to integrate the material created throughout the course
- Create animated 3D characters
- Delve into advanced texturing techniques, use of different types of brushes, etc.
- Specialize in Digital Sculpting with ZBrush
- Master the creation of cinematics
- Analyze the operation to create Facial Rigs, Lip Sync, etc.
- Use Unity 3D and Unreal Engine to test content created within a fully interactive game environment
- Generate prototypes of both 2D and 3D video games with mechanics and physics
- Develop prototypes for augmented reality and mobile devices
- Program artificial intelligence in an efficient way
- Apply Ragdoll simulation technology to characters
- Organize projects using an effective version control system
- Become familiar with the production process of these characteristics, as well as with the main notions of management
- Determine the reasons why agile methodologies are used in companies and professional development teams

04
Course Management

In order to prepare the faculty of this Professional Master's Degree, TECH has made a careful selection of professionals with extensive professional experience in project management and direction related to 3D Animation and Virtual Reality. In addition, they are active specialists, so they know the latest developments in the sector in detail, which will give the syllabus a critical, unique and highly capacitating quality for students.

A unique opportunity to specialize with real experts in design and animation and live an academic experience that will mark a before and after in your professional career"

Management
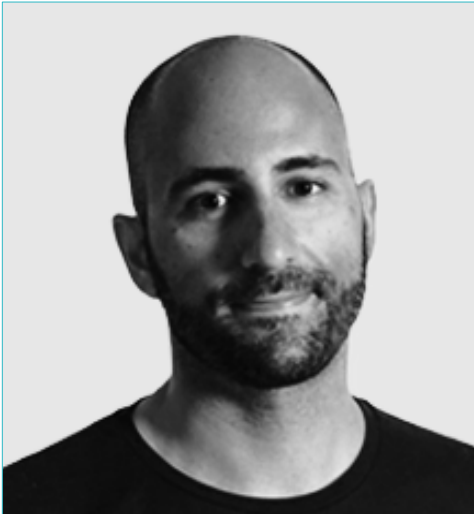
Mr. Ortega Ordóñez, Juan Pablo

- Director of Engineering and Gamification Design for the Intervenía Group
- Member of the Advisory Board of Nima World
- Professor at ESNE of Video Game Design, Level Design, Video Game Production, Middleware, Creative Media Industries, etc.
- Advisor in the foundation of important companies such as Avatar Games or Interactive Selection

Professors

Mr. Martínez Alonso, Sergio
- Co-founder and lead programmer at NoobO Games
- VET teacher of video games at Implika
- Porting for PlayStation4, XboxOne and Nintendo Switch at Stage Clear Studios
- Experience at the University School of Design, Innovation and Technology
- Graduate in Video Game Design and Development ESNE

Mr. Ferrer Mas, Miquel
- Senior Unity Developer at Quantic Brains
- Lead programmer at Big Bang Box
- Co-founder and audiovisual programmer at Carbonbyte
- Audiovisual Programmer at Unkasoft Advergaming
- Computer Science Technician by Na Camel-la Master in Video Game Programming by CICE

Dr. Pradana, Noel
- Video Game Developer at Wildbit Studios Rigger and Freelance Animator for Video Games and Animated Films
- Doctorate in Fine Arts from the Complutense University of Madrid
- Graduate in Videogame Design and Development from ESNE University
- Teaching experience in ESNE and in the CFGS in 3D Animation: games and educational environments
- Master's Degree in Teacher Training in Audiovisual Communication and Processes from the Universidad Rey Juan Carlo
- Voxel School Rigging and 3D Animation Professional

Mr. Núñez Martín, Daniel
- Higher Technician in Professional Sound Training from the Francisco de Vitoria University
- Music producer Composition and design of original music for audiovisual media and videogames
- Producer at Cateffects S.L.
- Content creator for the Talentum Master in Video Game Creation at Telefónica Educación Digital
- Audio designer and music composer at Risin' Goat S.L.
- Sound technician for audiovisual dubbing at SOUNDUB S.A.
- Content creator for the Talentum Master in Video Game Creation at Telefónica Educación Digital
- Middle Grade of Official Music Education. Manuel de Falla Conservatory. Piano and Saxophone

05
Structure and Content

The development of this program has been based on the teaching staff's criteria, who have been in charge of searching for and selecting information, as well as preparing the additional material. In addition, the theoretical section has been written following the guidelines of the prestigious and effective *Relearning* methodology, thanks to which it has been possible to reduce the teaching load of this Professional Master's Degree without sacrificing the slightest bit of academic quality.

In the Virtual Classroom you will find detailed videos, practical exercises, research articles and much more additional material to further explore the aspects of the syllabus that you consider most relevant"

Module 1. The 3D Industry

1.1.   3D Animation and Video Game Industry
    1.1.1.   3D Animation
    1.1.2.   3D Animation and Video Game Industry
    1.1.3.   3D Animation Future
1.2.   3D in Video Games
    1.2.1.   Video Games Limitations
    1.2.2.   3D Video Game Development Difficulties
    1.2.3.   Solutions to Video Game Development Difficulties
1.3.   3D Software for Video Games
    1.3.1.   Maya. Pros and Cons
    1.3.2.   3Ds Max. Pros and Cons
    1.3.3.   Blender. Pros and Cons
1.4.   Pipeline in 3D Asset Generation for Video Games
    1.4.1.   Idea and Assembly from a Modelsheet
    1.4.2.   Modeling with Low Geometry and High Detailing
    1.4.3.   Projection of Textured Details
1.5.   Key Artistic 3D Styles for Video Games
    1.5.1.   Cartoon Style
    1.5.2.   Realist Style
    1.5.3.   Cel Shading
    1.5.4.   Motion Capture
1.6.   3D Integration
    1.6.1.   2D Digital World Integration
    1.6.2.   3D Digital World Integration
    1.6.3.   Real-World Integration (AR, MR/XR)

1.7.   Key 3D Factors for Different Industries
    1.7.1.   3D in Film and Series
    1.7.2.   3D in Video Games
    1.7.3.   3D in Marketing
1.8.   Real-time Rendering and Pre-Rendering
    1.8.1.   Lighting
    1.8.2.   Shadow Definition
    1.8.3.   Quality vs Speed
1.9.   3D Asset Generation in 3D Max
    1.9.1.   3D Max Software
    1.9.2.   Interface, Menus, Toolbars
    1.9.3.   Controls
    1.9.4.   Scene
    1.9.5.   Viewports
    1.9.6.   Basic Shapes
    1.9.7.   Object Generation, Modification and Transformation
    1.9.8.   3D Scene Creation
    1.9.9.   3D Professional Asset Modeling for Video Games
    1.9.10.   Material Editors
        1.9.10.1. Creation and Material Editing
        1.9.10.2. Light Application to Materials
        1.9.10.3. UVW Map Modifier. Mapping Coordinates
        1.9.10.4. Texture Creation
1.10.   Workspace Organization and Best Practices
    1.10.1.   Creating a Project
    1.10.2.   Folder Structure
    1.10.3.   Personalized Functionality

Module 2. Art and 3D in the Video Game Industry

2.1. 3D VR Projects
   2.1.1. 3D Mesh Creation Software
   2.1.2. Image Editing Software
   2.1.3. Virtual Reality
2.2. Typical Problems, Solutions and Project Needs
   2.2.1. Project Needs
   2.2.2. Possible Problems
   2.2.3. Solutions
2.3. Aesthetic Line Study for the Artistic Style Generation in Video Games: From Game Design to 3D Art Generation
   2.3.1. Video Game Target Choice. Who Do We Want to Reach?
   2.3.2. Developer's Artistic Possibilities
   2.3.3. Final Definition of the Aesthetic Line
2.4. Aesthetic Benchmarking and Competitor Analysis
   2.4.1. Pinterest and Similar Sites
   2.4.2. Modelsheet Creation
   2.4.3. Competitor Search
2.5. Bible Creation and Briefing
   2.5.1. Bible Creation
   2.5.2. Bible Development
   2.5.3. Briefing Development
2.6. Scenarios and Assets
   2.6.1. Production Asset Planning at Production Levels
   2.6.2. Scenario Design
   2.6.3. Asset Design
2.7. Asset Integration in Levels and Tests
   2.7.1. Integration Process at All Levels
   2.7.2. Texture.
   2.7.3. Final Touches

2.8. Characters
   2.8.1. Character Production Planning
   2.8.2. Character Design
   2.8.3. Character Asset Design
2.9. Character Integration in Scenarios and Tests
   2.9.1. Character Integration Process in Levels
   2.9.2. Project Needs
   2.9.3. Animations
2.10. 3D Video Game Audio
   2.10.1. Project Dossier Interpretation for Sound Identity Generation of Video Games
   2.10.2. Composition and Production Processes
   2.10.3. Soundtrack Design
   2.10.4. Sound Effect Design
   2.10.5. Voice Design

Module 3. Advanced 3D

3.1. Advanced 3D Modeling Techniques
   3.1.1. Interface Configuration
   3.1.2. Modeling Observation
   3.1.3. High-Speed Modeling
   3.1.4. Organic Video Game Modeling
   3.1.5. Advanced 3D Object Mapping
3.2. Advanced 3D Texturing
   3.2.1. Substance Painter Interfaces
   3.2.2. Materials, Alphas and Brush Use
   3.2.3. Particle Use
3.3. 3D Software and Unreal Engine Export
   3.3.1. Unreal Engine Integration in Designs
   3.3.2. 3D Model Integration
   3.3.3. Unreal Engine Texture Application

Module 4. 3D Animation

4.1.   Software Management
    4.1.1.   Information Management and Work Methodology
    4.1.2.   Animation
    4.1.3.   Timing and Weight
    4.1.4.   Basic Object Animation
    4.1.5.   Direct and Inverse Cinematics
    4.1.6.   Inverse Cinematics
    4.1.7.   Cinematic Chain

4.2.   Anatomy. Biped vs. Quadruped
    4.2.1.   Biped
    4.2.2.   Quadruped
    4.2.3.   Walking Cycle
    4.2.4.   Running Cycle

4.3.   Facial Rig and Morpher
    4.3.1.   Facial Language. Lip-Sync, Eyes and Focal Points
    4.3.2.   Sequence Editing
    4.3.3.   Phonetics. Importance

4.4.   Applied Animation
    4.4.1.   3D Animation for Film and Television
    4.4.2.   Video Game Animation
    4.4.3.   Animation for Other Applications

4.5.   Kinect Motion Capture
    4.5.1.   Motion Capture for Animation
    4.5.2.   Movement Sequence
    4.5.3.   Blender Integration

4.6.   Skeleton, Skinning and Setup
    4.6.1.   Skeleton and Geometry Interaction
    4.6.2.   Mesh Interpolation
    4.6.3.   Animation Weights

4.7.   Acting
    4.7.1.   Body Language
    4.7.2.   Poses
    4.7.3.   Sequence Editing

4.8.   Cameras and Plans
    4.8.1.   Cameras and Environments
    4.8.2.   Shot Composition and Characters
    4.8.3.   Finishes

4.9.   Visual Special Effects
    4.9.1.   Visual Effects and Animation
    4.9.2.   Types of Optical Effects
    4.9.3.   3D VFX L

4.10.   The Animator as an Actor
    4.10.1.   Expressions
    4.10.2.   Actors' References
    4.10.3.   From Camera to Program

Module 5. Unity 3D and Artificial Intelligence Proficiency

5.1.   Video Games. 3D Unity
    5.1.1.   Video Games
    5.1.2.   Video Games. Errors and Hits
    5.1.3.   Video Game Applications in Other Areas and Industries

5.2.   Video Game Development. 3D Unity
    5.2.1.   Production Plan and Development Phases
    5.2.2.   Development Methodology
    5.2.3.   Patches and Additional Content

5.3.   3D Unity
    5.3.1.   Unity 3D. Applications
    5.3.2.   Unity 3D Scripting
    5.3.3.   Asset Store and Third-Party Plugins

5.4. Physics, Inputs

    5.4.1. InputSystem

    5.4.2. Unity 3D Physics

    5.4.3. Animation and Animator

5.5. Unity Prototyping

    5.5.1. Blocking and Colliders

    5.5.2. Pre-Fabs

    5.5.3. Scriptable Objects

5.6. Specific Programming Techniques

    5.6.1. Singleton Model

    5.6.2. Resource Load When Running Windows Games

    5.6.3. Performance and Profiler

5.7. Video Games for Mobile Devices

    5.7.1. Games for Android Devices

    5.7.2. Games for IOS Devices

    5.7.3. Multi-Platform Developments

5.8. Augmented Reality

    5.8.1. Augmented Reality Game Types

    5.8.2. ARkit and ARcore

    5.8.3. Vuforia Development

5.9. Artificial Intelligence Programming

    5.9.1. Artificial Intelligence Algorithms

    5.9.2. Finite State Machines

    5.9.3. Neural Networks

5.10. Distribution and Marketing

    5.10.1. The Art of Publishing and Promoting a Video Game

    5.10.2. The Person Responsible for Success

    5.10.3. Strategies

Module 6. 2D and 3D Video Game Development

6.1. Raster Graphic Resources

    6.1.1. Sprites

    6.1.2. Atlas

    6.1.3. Texture

6.2. Interface and Menu Development

    6.2.1. Unity GUI

    6.2.2. Unity UI

    6.2.3. UI Toolkit

6.3. Animation System

    6.3.1. Animation Curves and Keys

    6.3.2. Applied Animation Events

    6.3.3. Modifiers

6.4. Materials and Shaders

    6.4.1. Material Components

    6.4.2. RenderPass Types

    6.4.3. Shaders

6.5. Particles

    6.5.1. Particle Systems

    6.5.2. Transmitters and Sub-Transmitters

    6.5.3. Scripting

6.6. Lighting

    6.6.1. Lighting Modes

    6.6.2. Light Baking

    6.6.3. Light Probes

6.7. Mecanim

    6.7.1. State Machines, SubState Machines and Transitions between Animations

    6.7.2. Blend Trees

    6.7.3. Animation Layers and IK

6.8. Cinematic Finish

    6.8.1. Timeline

    6.8.2. Post-Processing Effects

    6.8.3. Universal Render Pipeline and High-Definition Render Pipeline

Module 7. Programming, Mechanics Generation and Video Game Prototyping Techniques

Module 8. VR Immersive Game Development

Module 10. Video game production and financing

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.

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. 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:
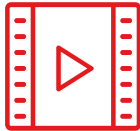
Study Material

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.

30%

10%

8%

20%

25%

4%

3%
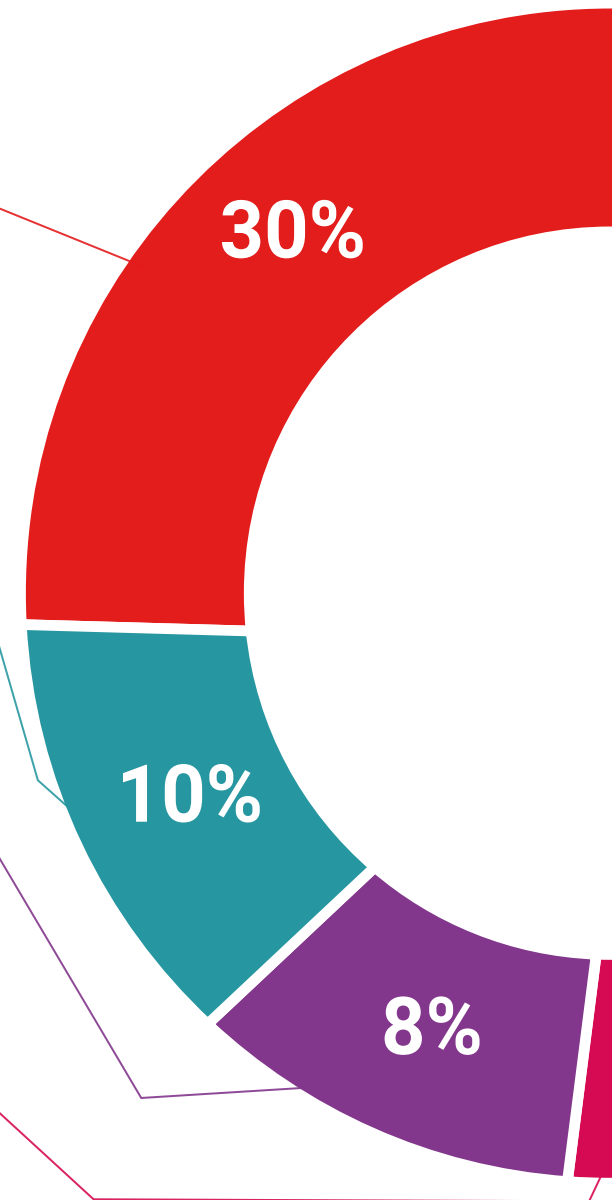
Case Studies

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.

07
Certificate

This Professional Master's Degree in 3D Animation and Virtual Reality guarantees students, in addition to the most rigorous and up-to-date education, access to a Professional Master's Degree 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 **Professional Master's Degree diploma in 3D Animation and Virtual Reality** 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: **Professional Master's Degree in 3D Animation and Virtual Reality**

Modality: **online**

Duration: **12 months**

Accreditation: **60 ECTS**
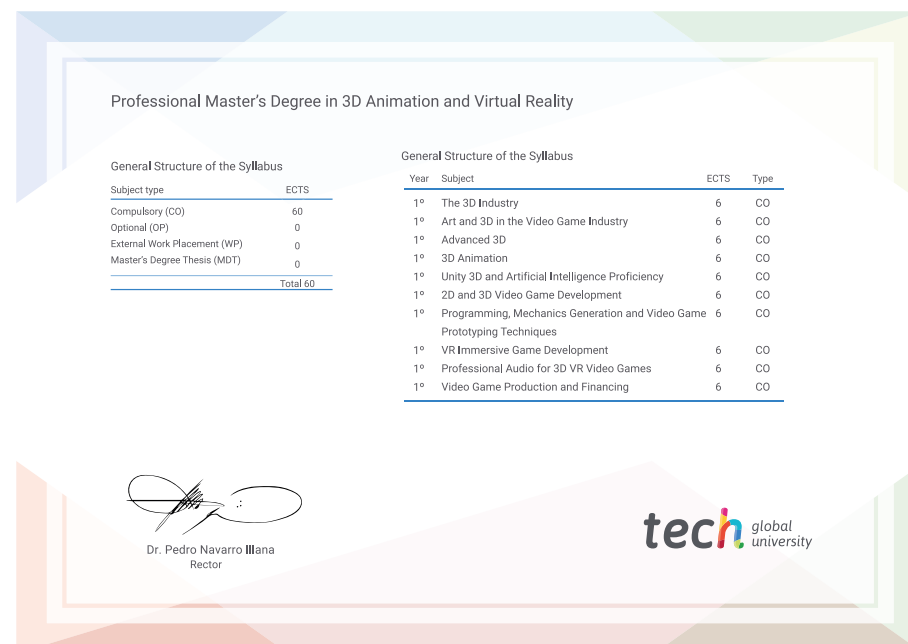
*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

Professional Master's Degree
3D Animation and Virtual Reality

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

Professional Master's Degree
3D Animation and Virtual Reality

tech global university